

Development of Environmental Value among Secondary Students

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Abstract

The present study has been conducted to compare the environmental value of boys and girls of 9th and 11th class students respectively. Sample consisted of 160 students. It included 40- 40 boys and girls from both 9th and 11th class. It was found that there is no significant difference in environmental value of IX class boys and girls and XI class boys and girls respectively. There is no significant difference in the environmental value of boys of 9th and 11th class and there is no significant difference in environmental value of girls of 9th and 11th class too. It indicates that no development has been taken place in the environmental value of students in relation to their grades.

Introduction:-

Mahatma Gandhi has observed, “*Nature has enough for our need but not any body’s greed.*” It emphasized that man is an integral part of nature and must find ways and means to live in harmony with nature and be educated about the importance of interdependence of man and nature. In recent years, ‘environment’ has become a very important issue because of the emergence of many environmental problems all over the world. Air and water pollution, global warming, greenhouse effects, ozone toxicology, population growth, environmental disasters, energy shortage, and etc. can be given as an example of some environmental problems (World Commission on Environment and Development, 1987). According to the studies conducted in the field of environmental education, environmental problems are the most important social problems of the day (Dunlap, 1991). It has also been recognized that environmental problems are only beginning and that in the coming years their severity will increase (Dunlap & Saad, 2001). With the increasing effects of environmental problems the importance of the environmental education and awareness of the environmental issues have gained much more importance. Although the awareness about the harmful actions of human toward the natural environment is increasing (Schultz, Gouveia, Cameron, Tankha, Schmuck, & Franek, 2005), human behavior is still considered to be one of the most important contributor of these problems (Gardner & Stern, 2002). As stated by Arnocky, Stroink, and DeCicco (2007) that when the harmful consequences of environmentally destructive human behavior have become more evident, people worldwide are expressing increased awareness and concern for environmental issues.

Values are desirable goals, which vary in importance and which serve as guiding principles in a person’s live (Schwartz, 1992). Values influence beliefs, norms, attitudes and behaviours. Furthermore, they direct the knowledge which is accessible at a specific moment as well as how a situation is going to be evaluated or what is going to be noticed by a person. Through this influence values can affect actual behaviour. High values lead to objective, fair, correct decisions and actions and ensure the welfare of all concerned. Environmental value education has been an important factor in the scenario of growing environmental pollution and environmental

imbalances. (Sathapathy, 2007) Unfortunately, values education is often neglected in most EE curricula.

The environmental crisis is fundamentally a crisis of values. Therefore, the future of human sustainable development depends fundamentally on a change in our values, especially on our recognizing and preserving our environmental values. (Yu & Lei, 2007)

Unesco-UNEP International Environmental Education Programme (IEEP) has undertaken the preparation of a series of publications dealing with strategies for the integration of an environmental dimension into school and out-of-school education. Among the principal questions related to the content of EE is that of the treatment of environmental values during educational processes. In fact, the development of a spirit of responsibility and solidarity enabling society to cope with environmental problems implies, besides proper knowledge and skills, new attitudes and behavioural patterns towards the environment. These changes cannot be really brought about until most members of a given society have freely interiorized more constructive attitudes on values, which will constitute the basis for a self-discipline ruling relationships between man and the environment. EE should, with this aim in view, strive to analyse and correlate the concerns and values of individuals and communities insofar as these affect the environment.

The Draft National Curriculum Framework (2005) brought out by NCERT states that 'making children sensitive to environment and its protection is an important curricular concern'. Hence, teaching of environmental education with a view of achieving the goals for which it is included in the school curriculum has been a concern and researches have been undertaken to find efficient ways of doing so.

Szagan and Mesenholl (1993) assessed environmental ethics, attitudes, and reasoning among 830 German adolescents and found a high degree of ethical concern for nature. According to Lai and Tao (2003), gender differences in favour of female regarding hazards related to the environmental value orientation, females being more concerned about environmental issues and holding a stronger belief that environmental quality would have important consequences for the well-being of human being.

Gupta, Gupta and Chauhan (2011) has conducted a study to compare the level of environment ethics of adolescent male and female students (class IX, X, and XI) and found that there is no significant difference between the environmental ethics of adolescent male and female students. Misra (2009) has constructed 'environmental value scale' and divided the environmental value in five components according to the responses of the students namely- caring, sharing, protecting, balancing and conserving. Pandey and Sagar (2009) made an attempt to investigate the development of environmental values among secondary students and found that there is no significant difference between the environmental value of class IX and class XI students

Deb and Srivastava (2009) found that there is a positive relationship between environmental values and environmental responsibility towards environmental values and environmental responsibility. They suggests that students who realize their responsibility towards environment.

Current study revealed a statistically significant gender difference on students' value orientations in favour of girls. Environmental education plays a vital role for creating environmental values among children. Here, an attempt has been made to study the development of environmental value among secondary students.

Objectives:

1. To compare the environmental values of class IX boys and IX class girls.
2. To compare the environmental values of class XI boys and XI class girls.
3. To compare the environmental values of boys of class IX and XI.
4. To compare the environmental values of girls of class IX and XI.

Methodology:

The descriptive type survey method has been used. The population of the study comprised of secondary students of Allahabad city studying in UP Board schools. The sample of this study consisted of 160 students randomly selected from 3 UP Board schools of Allahabad city. 'Environmental value scale' developed by K. S. Misra has been used. t- test has been used for analysis of data.

Results:**Table 1**

Mean SD and t-value showing differences in the environmental value of students of class IX boys & class IX girls and class XI boys & class XI girls respectively

| S.No. | Group | N | Mean | SD | t- ratio |
|-------|----------|----|------|------|----------|
| 1. | IX Boys | 39 | 4.07 | 0.34 | 1.13 |
| | IX Girls | 40 | 3.89 | 0.97 | |
| 2. | XI Boys | 40 | 4.00 | 0.91 | 0.18 |
| | XI Girls | 40 | 4.04 | 0.92 | |

Table 1 shows that differences between class IX boys and IX class girls is not significant at 0.05 level ($t=1.13$). So, the null hypothesis that 'there is no significant difference between environmental value class IX boys and class IX girls' can be accepted. . It means that boys of class IX do not differ from girls of class IX.

Table 1 also shows that the obtained t- value ($=0.18$) is not significant at 0.05 level and 'the hypothesis that there is no significant difference between the environmental value of class XI boys and class XI girls' is accepted. It means that boys of class XI do not differ than girls of class XI. Findings of Gupta, Gupta and Chauhan (2011) lend support to these findings.

Table 2

Mean SD and t-value showing differences in the environmental value of students of class IX and class XI

| S.No. | Group | N | Mean | SD | t- ratio |
|-------|----------|----|------|------|----------|
| 1. | IX Boys | 39 | 4.07 | 0.34 | 0.210 |
| | XI Boys | 40 | 4.00 | 0.91 | |
| 2. | IX Girls | 40 | 3.89 | 0.97 | 0.44 |
| | XI Girls | 40 | 4.04 | 0.92 | |

Table 2 shows that differences between boys of class IX and class XI is not significant at 0.05 level ($t=0.210$). It means that there is no significant difference in environmental value of boys of class IX and class XI.

Table 2 also shows that the obtained t - value of 0.44 is not significant at 0.05 level and the hypothesis that there is no significant difference between the environmental value of girls of class IX and class XI. It means that girls of class IX do not differ from those of class XI

Discussion:

Results have shown that there is no development in the environmental value of secondary students with respect to their grade. It seems to reflect lack of attention being paid to development of environmental value among students. Secondary school environmental education curriculum covers only a small section of science subject which is can impart awareness about environment and environment related- issues but it does not help them to develop environmental values. There is a gap in the environmental awareness and translation of this awareness into action. A well-planned and deliberate program of moral education about environmental education, conducted with human warmth and understanding, can help us to nurture individuals who possess environmental value.

First of all, teachers should have sound understanding of environmental and concepts and appreciate the nature of environment. In addition, they should be well prepared to teach these concepts to their students. They should be aware of instructional strategies and their applications in science classes. In other words, they should be well equipped to address the environmental issues as well as to learn how to deal with student' lack of knowledge, awareness, concerns about the environment. Curriculum and textbooks should be revised by taking the findings of the study into consideration. Activity based environmental education can better develop the values related to environment. Palmerg and Kuru (2000) reported that students who had experienced in outdoor activities, tended to show better social behaviour and higher moral judgment since such activities offer great possibilities for the development of a strong empathic relationship to nature. Therefore such programmes should be prepared under the supervision of scientist and environmental educators to prevent occurrence of misconceptions and to raise the concern and awareness level of the young generation.

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