



Environmental Awareness and Attitude among Secondary School Students

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Abstract

Environment refers to the surrounding areas of any form of life and it is more pertinent with regard to human beings. The environmental education is connected formidably with nature and it consists of both inorganic and organic substances. Among the organic substances we have microbes, animals, plants, birds etc. With regard to the inorganic substances we have water, air, minerals, land etc. The environmental degradation which has been the culmination of mindless usage of natural resources, unrelenting growth of population, and controlled industrialisation, uninhibited urbanisation and putting science and technology to bad use has resulted in the looming environmental crisis. In order to protect the environment from further damage it is highly essential that awareness must be imparted to the people with the help of education for making them know about the environmental degradation that is taking place and which is going to put all forms of life in quandary.

Objectives of the study were to find out the significant differences in the environmental awareness and attitude among the secondary school students due to variation in their gender and community. As a result, it can be understood that there is vast scope for providing orientation, and training programmes to the secondary school students for acquire environmental awareness and attitude and to greater extent. Similarly, the government must make efforts to incorporate content pertaining to environmental education in secondary school curriculum.

Keywords: environmental education, environmental degradation, environmental awareness, attitude, etc.

Introduction:

Atmosphere refers to the gas that envelops the planet. While imparting education pertaining to the environment to the people the connectedness that exists between the organisms persisting in the biosphere among themselves and also with their surrounding environment is given. This kind of environmental education helped us to understand and appreciate the ecological balance that persists on the plan. The ecological balance is something that is inherent in the world and all the components related to the environment maintain a harmonious balance among them. It is the man, out of his ignorance and foolishness coupled with carelessness indulges in unsustainable exploitation of the resources of the earth and in the process disturbs the ecological balance. Environmental education provides the human beings with much needed awareness regarding the kind of role that he is assigned for inhibiting pollution and for protecting and conserving the resources of the earth. Human beings should also be taught that ecological balance is of prime importance for his own sustenance along with other life forms and he has to indulge in judicious and careful use of the resources of the earth so that they may last longer and help the future generations to survive and sustain. The environment which is free from all manifestations of pollution should be the primary goal and concern of the environmental education. For that to materialise, it is highly essential that awareness is created among the people and they should be educated about the environmental disasters that are about to happen along with the hazards that are consequences of unbridled environmental pollution. Awareness must also be created among the people that the harm and damage that is inflicted on the biosphere cannot be repaired completely at the subsequent stage.

Awareness constitutes the ability to feel, perceive ought to be conscious of the objects, events, emotions, thoughts, or sensory patterns. At this level of consciousness it is easy for the observer to come from the sense data without necessarily implying to understand it. In other words, it can be stated as the quality of State where one is aware of something. The “Environmental Education Awareness” refers to the increasing the perception of people at all levels with regard to the relationship between the environment and the human beings and also to create and enhance the skills/Abilities for improving and giving protection to the environment. The primary concern of the environmental education awareness should be to generate suitable and appropriate awareness in all sections of the society and also for mobilizing the participation of the people for the conservation and preservation of environment.

Attitude refers to an expression that is favorable or unfavorable towards an event, think, place or person. The contemporary perspectives pertaining to attitude can also allow the people to have ambivalent or conflicted feeling by holding simultaneously both of the negative and positive attitudes towards the same object. This is resulted in some discussions as to whether an individual is capable of holding multiple attitudes at the same time to the same object. One of the underlying assumptions regarding the connection that exists between the behaviour and attitude is that of consistency. It means that we often expect are

usually perceive the behaviour of a person to be stable and consistent with regard to the attitudes that they hold.

Review of related Literature

Dhanunjaya Naidu and Yashoda (2017) undertook a research study on ‘Attitude of Students towards Environmental Education-A Study of Secondary School level.’ The objectives of the research study consisted of studying the attitude of the students with regard to environmental education, studying the significant differences if any with regard to the environmental attitude of secondary school students with regard to variations in locality, gender, community and management.

Kuldeep Singh (2017) conducted a research study on the “Awareness and Attitude of School Students towards the Environment”. Survey method was used in this research study. The preponderant objectives of this research study were: to make a comparative study of the environmental awareness of female and male students of grade IX, to make a comparative study of the environmental attitude of the female and male students of grades IX. The sample for this research study consisted of 160 students who were studying in grade IX. Among them 80 were boys and the rest was girls. The sample respondents were selected randomly from different schools in Simla. The data was collected from the sample respondents by administering the questionnaires namely, Environmental Awareness Test and Environmental Attitude Scale. The data was collected personally from the schools by the principal investigator.

Mohamad and Ibrahim (2020) conducted a research study entitled, “Reflection on Environmental Awareness for School Management.” The results of the research study also indicated that there existed no significant difference with regard to environmental awareness pertaining to the races in knowledge. Similarly, there was no significant difference with regard to attitude and behavior. In addition to that, it was also revealed that by the correlation analysis that there was a positive correlation between attitude and behavior. In contrast, the awareness of knowledge was negatively correlated with attitude along with the behavior. The research study, in its conclusions has stated that the administrator must be aware of the significance and importance of environmental conservation.

The present study is a humble attempt to fill the research gap. Keeping these lacunae in view, the present research study has been undertaken to explore the terrain to understand the environmental awareness and attitude among secondary school students.

Objectives of the Study

The objectives of the study are the attainable goals for the attainment of the research work towards which it is directed. The following are the objectives of the present study.

1. To find out the significant differences, if any, in the environmental awareness and attitude among secondary school students due to variation in their gender.

2. To find out the significant differences, if any, in the environmental awareness and attitude among secondary school students due to variation in their community.

Method used in the Study

The method that has been adopted by the investigator in the present research study is the survey method.

Tool used in the Study

The investigator developed her own tools to assess the environmental awareness and attitude among secondary school students. For measuring environmental awareness and attitude among secondary school students, the researcher developed, validated and employed the following tools in the present study:

1. Rating Scale to Assess the Environmental Awareness among the Secondary School Students.
2. Rating Scale to Assess the Environmental Attitude of Secondary School Students.

Locale and Sample of the Study

The researcher selected 10 secondary schools from Ongole division, 8 secondary schools from Markapuram division, 8 secondary schools from Kandukur division and 8 secondary schools from Parchoor division were by using simple random technique considering government, aided and private schools. Thus, the total number of the secondary schools selected is 34. Total sample of the study is 610 secondary school students studying in government, aided and private primary schools, at the time of collection of data for the study.

Data Collection

The investigator got permission from the Headmaster/Principal of the respective secondary schools to collect data from the students. Good rapport was established with the students before administering the tools. They were explained in detail about the purpose of the study. It was emphasized that the data will be kept confidential and they were requested not to leave any item without rating. The developed rating scales were administered to the secondary school students to know their environmental awareness, attitude and participation among secondary school students. The students were directed to go through the instructions carefully before rating the statements of the tools. No time limit was set to respond to the rating scale. The investigator collected the filled-in rating scales personally from the respondents of the study.

Statistical Techniques Used in the Study

The collected data were analyzed by using appropriate statistical techniques such as mean, S.D, t-test and F-test with the help of SPSS package.

Data Analysis and Interpretation

Objective-1: Effect of 'Gender' on the Environmental Awareness and Attitude among Secondary School Students

Table-1 represents the mean and standard deviation scores of environmental awareness and attitude of boys and girls studying in secondary schools- dimension wise and as a whole along with the calculated t-values.

Table-1: Mean and S.D. of Environmental Awareness and Attitude scores of Boys and Girls studying in Secondary Schools and the calculated t-values

| Dimensions | Gender | | | | Calculated t-value |
|---|---------------|-------|----------------|-------|--------------------|
| | Boys (N= 327) | | Girls (N= 283) | | |
| | Mean | S.D. | Mean | S.D. | |
| Environmental Awareness | | | | | |
| Concerns of Environment | 32.22 | 6.18 | 32.39 | 6.12 | 0.336@ |
| Causes for Environmental Pollution | 23.87 | 5.03 | 24.13 | 5.05 | 0.650@ |
| Measures to protect Environment | 27.60 | 5.67 | 27.63 | 5.44 | 0.066@ |
| Strategies to promote Environmental Education | 39.02 | 8.04 | 39.65 | 8.22 | 0.952@ |
| Environmental Awareness as a whole | 122.70 | 24.07 | 123.80 | 24.03 | 0.559@ |
| Environmental Attitude | | | | | |
| Concerns of Environment | 50.28 | 10.01 | 50.72 | 10.28 | 0.530@ |
| Causes for Environmental Pollution | 37.18 | 8.22 | 37.57 | 7.93 | 0.591@ |
| Measures to protect Environment | 43.24 | 8.94 | 43.76 | 8.81 | 0.714@ |
| Strategies to promote Environmental Education | 61.72 | 13.04 | 62.34 | 12.95 | 0.586@ |
| Environmental Attitude as a whole | 192.43 | 38.37 | 194.39 | 38.28 | 0.629@ |

Note: @ Not significant at 0.05 level

From table-1, it is clear that the obtained t-values with respect to the environmental awareness dimensions- concerns of environment (0.336), causes for environmental pollution (0.650), measures to protect environment (0.066), strategies to promote environmental education (0.952) and environmental awareness as a whole (0.559) are not significant at 0.05 level. It means, the boys and girls studying in secondary schools did not experience either the environmental awareness as a whole nor its dimensions. Hence, the formulated hypothesis '*there exists significant difference in the environmental awareness among the secondary school students due to variations in their gender*' is rejected with respect to the above said dimensions. These findings are in acceptance with the results of Ghosh (2014), Kalpana Takur (2012), Kant and Sharma (2013), Mohamad and Ibrahim (2020), Pillai (2012), Ranju (2018), and Sengupta and Madhumala (2005). There was no significant difference between boys and girls studying in secondary

schools with regarding to the environmental awareness. This may be because of the fact that both the boys and girls are made to take active part only in academic activities and they are also taught only those things which are related to their academic pursuits. Both the teachers and the school management are under a strong impression that imbuing students with environmental awareness is in no way going to help them in examinations and as a result there is no significant difference with regard to gender among the students of secondary schools with regard to environmental awareness.

The variable 'gender' did not influence the environmental attitude among secondary school students. The obtained t-values for the dimensions- concerns of environment (0.530), causes for environmental pollution (0.591), measures to protect environment (0.714), strategies to promote environmental education (0.586) and environmental attitude as a whole (0.629) were not significant at 0.05 level. This indicates the students' gender i.e. boys and girls did not have their impact on environmental attitude as a whole and also on its dimensions. Hence, the formulated hypothesis '*there exists significant difference in the environmental attitude among secondary school students due to variations in their gender*' is rejected with respect to the above said dimensions. This result is supported by the studies of Aminrad et. al (2010), Bhardwaj and Anjana (2011), Dahiya and Ritu (2013), Kuldeep Singh (2017), Nagarajan, Sultana, Hossen and Khatun (2017). No significant difference was witnessed regarding the attitude of the students with regard to environment because there is hardly any difference between the boys and girls with regard to environmental awareness and the same is getting reflected in attitude also. Because, both the teachers and students are preoccupied with their academic pursuits and activities, they hardly have any time to evince any interest in environmental activities and as a result no significant difference was found between the boys and girls with regard to attitude in relation to environment.

Objective-2: Effect of 'Community' on the Environmental Awareness and Attitude among Secondary School Students

Table-2 shows the mean and standard deviation scores of environmental awareness and attitude among secondary school students- dimension wise and as a whole based on students' community along with the calculated F-values.

Table-2: Mean and S.D. of Environmental Awareness and Attitude scores of students studying in Secondary Schools based on their Community and the calculated F-values

| Dimensions | Community | | | | | | Calculated F-value |
|---|---------------|-------|----------------|-------|--------------------|-------|--------------------|
| | OC (N=180) | | BC (N= 265) | | SC & ST (N=165) | | |
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Environmental Awareness | | | | | | | |
| Concerns of Environment | 33.19 | 6.38 | 32.25 | 6.07 | 31.39 | 5.91 | 3.76* |
| Causes for Environmental Pollution | 24.51 | 5.17 | 24.14 | 5.00 | 23.19 | 4.89 | 3.14* |
| Measures to protect Environment | 28.34 | 5.61 | 27.69 | 5.51 | 26.69 | 5.48 | 3.87* |
| Strategies to promote Environmental Education | 39.97 | 8.31 | 39.48 | 8.11 | 38.32 | 7.90 | 1.90@ |
| Environmental Awareness as a whole | 126.01 | 24.62 | 123.56 | 23.90 | 119.59 | 23.29 | 3.15* |
| Environmental Attitude | | | | | | | |
| Concerns of Environment | 51.68 | 10.50 | 50.51 | 10.14 | 49.14 | 9.58 | 2.73@ |
| Causes for Environmental Pollution | 37.99 | 7.89 | 37.56 | 8.08 | 36.35 | 8.26 | 1.92@ |
| Measures to protect Environment | 44.59 | 9.05 | 43.58 | 8.62 | 42.12 | 8.96 | 3.40* |
| Strategies to promote Environmental Education | 63.42 | 13.50 | 62.03 | 12.83 | 60.45 | 12.58 | 2.25@ |
| Environmental Attitude as a whole | 197.68 | 39.19 | 193.67 | 37.96 | 188.06 | 37.48 | 2.75@ |

Note: @ Not significant at 0.05 level; and * Significant at 0.05 level

From table-2, it is clear that the obtained F-values with respect to the environmental awareness dimensions- concerns of environment (3.76), causes for environmental pollution (3.14), measures to protect environment (3.87) and environmental awareness as a whole (3.15) were significant at 0.05 level. It means that basing on the community i.e. OC, BC and SC & ST, the students significantly differed in their environmental awareness. Hence, the formulated hypothesis '*there exists significant difference in the environmental awareness among the secondary school students due to variations in their community*' is accepted with respect to the above said dimensions. On the other hand, no significant difference was observed with respect to the strategies to promote environmental education (1.90) and it was not significant at 0.05 levels. Hence, the above said hypothesis is rejected with respect to this dimension. The significant differences that exist between the students depending upon their community are because of the fact that most of the students from the OC community hailed from farming community and as a result they are relatively close to environment and environmental -related activity and as a result, they have more awareness with regard to environment apart from that the parents of the students who hailed from OC community have better education when compared to the parents of the students of other communities and because of better education, the parents of the OC students also help them to acquire appropriate

environmental awareness and this is really contributed for the significant difference between the students of the OC community and the students of other communities.

The variable 'community' influences the environmental attitude towards secondary school students. The obtained F-value for the dimension- measures to protect environment (3.40) was significant at 0.05 level. It means that basing on the community i.e. language, OC, BC and SC & ST, the students significantly differed in their environmental attitude. Hence, the formulated hypothesis '*there exists significant difference in the environmental attitude among secondary school students due to variations in their community*' is accepted with respect to the above said dimension. On the other hand, no significant difference was observed with respect to the concerns of environment (2.73), causes for environmental pollution (1.92), strategies to promote environmental education (2.25) and environmental attitude as a whole (2.75) were not significant at 0.05 level. Hence, the above said hypothesis is rejected with respect to these dimensions. These results are supported by the findings of Dhanunjaya Naidu and Yashoda (2017). The significant difference that exists between the OC community and the other communities with regard to environmental attitude is because of the fact that the students of OC community come from families which have agricultural background and as a result, they are related to environment in one way or the other and that helps them to foster appropriate environmental attitude and in addition to that, the parents of the students of OC community are also better educated when compared to the parents of the students of other community and this has given the added advantage to the students of OC community to get appropriate environmental attitude from that parents.

Implications of the Study

The research investigator is of the firm belief that the observations and the findings of this research study would certainly culminate in presenting implications which will be of great significance, utility and relevance for the stakeholders of the school education, the government authorities and the educational planners.

- Imparting environmental education to the students holds a lot of significance and must be accorded topmost priority because environmental education helps in fostering not only awareness among the students but also helps them to develop responsible behaviour towards the total environment.
- The study curriculum of the students must be framed in such a way that it helps in developing a consummate commitment among the students for providing their best for the protection of the environment and also for the conservation of the nature along with its resources. The relevance that the environmental education holds for the situations in real life can be stressed later at the secondary stage.
- For creating and generating awareness among the students with regard to the issues pertaining to conservation and protection along with problems of environment, co-curricular activities should be organized and conducted on a regular basis in all the colleges and schools.

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