

CHAPTER-V

CONCLUSION AND SUGGESTIONS

5.0.0 INTRODUCTION

The first chapter deals with the introduction, conceptual framework, rationale of the study, objectives, hypotheses and delimitations of the research. The second chapter deals with the review of related literature. The methodology, sample, design, tools and procedure of data collection and statistical techniques used for the analysis of data have been presented in detail in Chapter–III. The fourth chapter is about to the presentation of data, analysis, results and their interpretations. This chapter is a brief summary of the study, the result obtained and the conclusions drawn from the various analyses are being presented. This chapter is followed by the educational implication based on the following to the study. Suggestion and recommendation for further research on related topic environmental awareness have been outlined.

The study is complete. The treatment was implemented; the data collected and analyzed; but what does it mean? The discussion in this chapter is designed to make meaning out of the information that was gathered. The chapter begins with major findings of the study, followed by sections which address summary, implications, limitations and suggestions for future research and conclusions.

5.1.0 MAJOR FINDINGS OF THE STUDY

- There is significant difference in environmental awareness of class IX students across gender i.e. boys (Mean = 155.26, N = 31) and girls (Mean = 146.37; N = 41) with regard to Environmental Awareness ($t=3.153$).
- There is non-significant difference in environmental awareness of class IX students across locale rural (Mean = 149.04, N = 51) and urban (Mean = 153, N = 21) with regard to Environmental Awareness ($t=1.219$)
- There is significant difference in environmental awareness of class IX students across Boys and Girls, that Boys are more aware about environment.

5.4.0 EFFECT OF GENDER ON ENVIRONMENTAL AWARENESS OF CLASS IX STUDENTS

Sivakumar (2012) made a study on the environmental awareness of high school students, related to their gender (boys/girls), locale (rural/urban) and type of school (govt./private). Results show that (i) gender does not play any role on Environmental awareness i.e. there is no significant difference between boys and girls regarding environmental awareness (ii) Localities of the schools play an important role on environmental awareness. In this case, he found urban students to be more aware than rural students on the measure of environmental awareness.(iii) The types of secondary schools also play an important role on environmental awareness with private secondary school students taking the lead in comparison to their government secondary school counterparts.

In my research, the mean score of Environmental Awareness in Boys is more than the mean score of Girls. The SD of Environmental Awareness in Boys is more than the SD of Girls.

Therefore it can be said that the score of Boys was more concentrated around the mean as compared to the Girls scores of Environmental Awareness.

There is no significant difference between Boys and Girls with regards to Environmental Awareness is rejected. We may say that Boys and Girls differ significantly in their awareness for environment. This shows that the Boys are more expose to the Environmental Awareness then the girls.

5.5.0 SUMMARY

The purpose of the study was to examine the class IX students that they are how aware of environmental awareness. Environmental awareness and environmental protection is the need of the time because as the world moves in to the part of destruction and havoc it is the right step to make them aware about environment and environmental protection and how it is important.

After permission was obtained from the school authority, students were contacted and introduced about the all procedure and then assigned to the survey method. Students were requested to participate in the method and do their best. Teachers consent and students assent were collected and then the survey was given to all participating students of class IX of three different schools that from Bhadrak district, one was from urban area and other two were from rural area. The survey was continued for one week per school, in this pandemic situation of covid-19 students were not that many available in the schools. The survey was administered for final time before the school's vacation.

5.5.1 Statement of the Topic

“A Study of Environmental Awareness of Class IX Students of Bhadrak District, Odisha”

5.5.2 Rationale of the Study

Environmental problems are capturing our attention these days the governments of various developed countries have now shown their concern over environmental issues. There are many adverse effects of environmental degradation which are seen these days. Many health problems and deadly diseases are striking the people all over the world. Diseases like T.B., cancer and asthma find their causes in environment. The deformation of environment is the result of tremendous modernization, industrialization and urbanization. There are larger numbers of forest based industries by which trees are cut down and this leads to deforestation. The present time needs environmentally conscious citizens who can save the environment from disasters. Public awareness is required to that effect. Attitude will create positive awareness towards environment. Gakkhar, S.C et al. (1993) conducted a study, “Environmental awareness of the 10th class students” and found that high intelligent youth have high awareness of environmental pollution both in rural and urban areas. Environmental pollution awareness among urban school going youth was significantly better than that of rural school going youth. They found that sex difference was significant on awareness of environmental pollution.

After 1960s, when “environment” evolved as the issue of prime and utmost concern at international arena, a number of initiatives were made in this direction by all

nations in order to ensure sustainable development. Acts and policies were framed; projects and programmes were launched; special drives, campaign and activities were organized across the nations. “Environment Education” as subject was introduced at school and university level to educate the students about the environment and the allied issues. But still we found that the environment is deteriorating day by day as level of pollutants is increasing across the globe. Despite all such efforts from various governmental, non-governmental and other agencies there found some studies by the researcher that are reporting contradictory and contrasting results in this direction.

Arunkumar (2012) reported average level of environmental awareness among teacher trainees in Teacher Training Institutes in Trichy, District Tiruchirapalli, Tamilnadu. Average level of participation in extension activities relating to environment and also an average level in various dimensions of environment like pollution, population health and hygiene, biodiversity, energy, concern and sustainable development was reported by the researcher. Abbas and Singh (2014) also reported higher proportion of university students possessing high level of environmental awareness but low level of participation in environmental activities. Similarly, high level of environmental awareness among secondary school students in Balikesir city of Turkiye by Altin et. al., (2014) and fairly good environmental awareness was reported by Sharma (2014) among degree college students of Dharamshala (Himachal Pradesh).

Regarding relationship of level of environmental awareness with area of residence, Altin et. al., (2014) through their study on „Environmental awareness level of secondary school students: A case study in Balikesir (Turkiye)” reported that level of environmental awareness and active participation in environmental activities increases with family income and family education. Fisman (2005) also showed that the local environmental awareness found only among students living in high socio-economic neighborhood [In Ghosh, 2014]. Sharma (2014) in a study conducted on degree college students of Dharamshala (Himachal Pradesh) found significant difference in environmental awareness ability of rural and urban students. Similar results were reported by Ghosh (2014) that there was a significant difference between rural and urban secondary school students of Golaghat district of Assam and also by Vashist (2001) [In

Sharma, 2014]. Ali and Sinha (2013) through a study conducted in Kolkata on female B.Ed. students reported that urban female B.Ed. students were found more aware of environmental issues. Similar results were also reported by Mondal and Mete (2010) that urban boys possessed higher level of environmental awareness as compared to rural boys [In Ali and Sinha, 2013]. But Budak et al. (2005) [In Ali and Sinha, 2013] reported contradictory results and on the other hand Bhardwaj (2004) [In Sharma, 2014] and Suneetha (2007) reported that the locality of respondents (scholars) have no bearing on environmental awareness [In Ali and Sinha, 2013].

5.5.3 Objectives

1. To study the Environment Awareness of class IX students of BHADRAK district.
2. To compare the Environmental Awareness of class IX students of urban and rural areas.
3. To compare the Environmental Awareness of boys and girls students of class IX.

5.5.4 Hypothesis

1. There is no significant difference between boys and girls students in their environmental awareness.
2. There is no significant difference between Rural & Urban boys with regards to Environmental Awareness.
3. There is no significant difference between Rural and urban girls with regards to Environmental awareness

5.5.5 Methodology

Descriptive survey method has been used as a method study.

5.5.6 Design

Design of the study: - Under a broad canvas of survey method of research a questionnaire is made for survey.

5.5.7 Tools Used

In order to know the Environmental Awareness to class IX students researcher used Environment Awareness Measurement tool by Dr. Mishra and Dr. Pandya named as:

“Environmental Awareness Measurement scale”

It contains 50 items.

Administration of Research tools:

Samples were taken from the three different schools from urban and rural areas of Bhadrak district and the total sample of 72 students.

Treatment of tools:

Out of the maximum marks student were given numbers according to their performance. The scoring was based on the question that belongs to positive and negative questions. The marking system for positive question was from 5 to 1 i.e. from strongly agreed response to strongly disagree response and for negative question that is vice versa.

5.5.8 Variables

The study based on environmental awareness.

- Depended variables:
 1. Environmental Awareness
- Independent Variables:
 1. Gender - Boys and Girls.
 2. Area - Urban and Rural.

5.5.9 Procedure of Data Collection

The data has been collected by visiting three different schools of Bhadrak district personally. By using the tool that named Environmental Awareness Measurement Scale made by Dr. Mishra and Dr. Pandya, the data collected on the basis of the students performances.

5.5.10 Sample:

In the present study for sampling the student of class IX of Bhadrak District School has been randomly selected. The detail of sample of the study drawn from the school is given in the following table:

Table No. 3.1: List of schools selected for sample

Sl. No.	School Name	Students	Boys	Girls
1	St. Xavier's High School, Bhadrak	21	14	7
2	Siddheswar Girls High School, Haladia, Bhadrak	29	00	29
3	Aparti Charan High School, Gopinathpur, Bhadrak	22	17	5

5.5.11 Statistics Used

- For comparing different groups to Urban and Rural Schools Students mean, standard deviation and t-test was applied.
- Statistical analysis was undertaken with the help of computer

5.5.12 Findings

The findings from the research are the Environmental Awareness of class IX students of Bhadrak District showed that the knowledge of Environmental Awareness was higher in Boys than the Girls of class IX students. There is no significant difference between Rural and Urban students with regards to Environmental Awareness is retained means Urban and Rural students do not differ in their Environmental Awareness. However both the groups have a high level of Environmental Awareness this may be due to inclusion of environment contact in the integrated curriculum of EVS and role of media. This may be that now rural area is very close to urban area and most of the

teachers come from urban area. The knowhow of the students is very vast. They used to listen Radio, watch T.V. and movies and also read newspapers.

5.6.0 EDUCATIONAL IMPLICATIONS

Educational research enhances knowledge and provides new insights into the human endeavor and planning. In the present day global scenario where global warming and other environmental issues are engaging the attention of world leaders, political as well as social and of our scientists, it is extremely important that teachers should be well aware of the problem.

Environmental Education connects the entire world globally and it solves many problems faced by the human beings on this planet and Environmental Pollution and degradation being one of such problems.

Education, especially Environmental Education develops awareness in human beings towards environment and it also enhances the concern of the people towards their immediate surroundings as well as towards the entire world.

The review of related literature and other researchers have highlighted this point again and again that the government, the Policy makers and the educationists all have to come on one platform to propagate Environmental Education in order to increase awareness of people towards the environment. The print and electronic media are also playing an important role in developing awareness towards the environmental problems and its related issues.

Teachers play a pivotal role in generating knowledge and assimilating it as well. They also play a significant role in generating awareness among students of any issue of concern. Secondary School teachers are concerned with such a group of students which are supposed to be a greater human resource and potential for nation as well as for the whole world.

However, there is not any way of knowing for sure that they equally used the new technologies and strategies with their students. Also, the extra effort and time required have been an additional commitment for the treatment teacher beyond what was required for the study.

5.8.0 SUGGESTIONS FOR FURTHER STUDIES

The present investigation has been carried with due care and thought, but still there is a scope for further research in different directions. The present investigation may serve as a threshold for further studies considering different aspects related to the problem.

Taking into consideration the present studies and its findings the following studies may further be conducted.

1. The study may be conducted by taking the different samples of different classes of different level taking into consideration the other cognitive and psychomotor variables.
2. Studies may be conducted in e-content developed by different agencies for studying its effectiveness.
3. Studies may be conducted for making comparison of different methods by taking selected variables.
4. Studies may be conducted in the area of inclusive education and studying effectiveness of the approach in terms of cognitive and other demographic variables.
5. The sample for present study was made in limited area but the same study can also be done at large regional area respectively.
6. A study can be done on students with different personality traits of students of environmental awareness.
7. A study can be done on effect of multimedia in environmental awareness.
8. A study can be done on gifted, creative and normal children with their environmental awareness.

9. A study can be done on environmental awareness as a compulsory subject in school education and its impact on students' social life.
10. A study can also be done about the environmental awareness of students residing at industrial, agricultural, coastal and normal area.
11. A study can also be done by taking larger sample from different culture and geographical area.
12. A study can also be done about the environmental awareness of students at primary, secondary, higher secondary and college level.

A linear combination of all independent variables, viz; Gender, Type of Subject, Type of School and Socio-economic Status against the dependent variable, which is Environmental Awareness, could be taken for further studies.

However, the present investigation may serve as a starting point for further research in various directions. Certain variables have still not been covered such as rural-urban areas, due to obvious financial and time limitations. The present studies and the future studies that should be undertaken have also shown to impact a person's views and mould the attitude accordingly due to the parent's professional and economic environment.

The investigator therefore suggests that future researches in this area may take care of the above mentioned variables which have not been covered in this research due to paucity of time and limited resources on the part of the investigator, especially financial and spatial resources.

5.9.0 CONCLUSION

The researcher in this present study came to the conclusion that there is no significant difference in environmental awareness between boys and girls of class IX students and in compulsion to girls boys were found more environmentally aware.

When two groups were made on the basis of locality i.e. Urban and Rural School then significant difference is found. It was also found that there were no significant

difference in Environmental Awareness between boys and girls of class IX in Urban School.

Hence a clear cut difference is seen in rural and urban school in Environmental Awareness. *However it is to be stressed that Environmental awareness should respond to the changing needs of the rapidly changing environmental globally.*

It is necessary on the part of teacher not only to mould the environmental awareness of the student but to see that if they also follow the best environmental attitude. This means that the multi disciplinary approach of environmental education through integrated teaching methods leads to development of the cognitive and affective domain but it has no significant role to play in the development of the psychomotor domain regarding the environment and its components. So, with the help of this study we can conclude that students must be aware the environment and its importance globally.

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