

Awareness on Protection of Environment for Sustainable Development among Higher Secondary School Students

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I. Introduction

Education means both the acquisition of knowledge and experience as well as the development of skills, habits and attitudes which help a person to lead a full and worthwhile life in this world. Education is the backbone of every nation and plays an important role in the overall development of individuals and in the progress of the society. Education is the asset of an individual, the possession which makes one qualitatively different from those who are deprived of it.

Sustainable development depends upon the provision of specialized training programs to ensure that all the sectors of society have the skill necessary to perform their work in a sustainable manner.

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1.1. Need And Significance Of The Study

Our resource is depleting day by day mainly because of human greed. Awareness concerning Sustainable development is one of the remedial measures to break all kinds of depletion of natural resources. The quality of its citizens and students are considered as the natural builders and they should have the Awareness about environmental crisis.

1.2. Statement Of The Problem

The problem for the present investigation is titled as “AWARENESS ON PROTECTION OF ENVIRONMENT FOR SUSTAINABLE DEVELOPMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS”

1.3. Operational Definition Of Key Terms

Awareness on Environment

Awareness on Environment means being conscious of the nature and depletion of Environment.

1.4. Sustainable Development

"Development that meets the need of the present without compromising the ability of future generations to meet their own needs"

Higher Secondary School Students

Higher Secondary School refers to any school recognized by Government of Kerala imparting instructions to school education comprising of standards XI and XII.

II. Objectives Of The Study

The objectives of the study are the following:

- 1) To test the level of awareness of Higher Secondary School students on protection of the Environment for Sustainable Development
- 2) To compare the level of awareness of Higher Secondary School students on protection of Environment for Sustainable Development with respect to:
 - Gender
 - Locale

1.5. Hypotheses Of The Study

The hypotheses formulated in the study are:

- 1) Higher Secondary School students have different levels of Awareness on Conservation of Environment for Sustainable Development.

2) There exists significant difference in Awareness on Conservation of Environment for Sustainable Development with respect to Gender.

III. Methodology In Brief

Normative Survey method which is undoubtedly the most popular and most widely used research method is adopted in the present study to check the Awareness on protection of Environment for Sustainable Development among Higher Secondary School students.

Sample

The sample for the present study comprises of 480 students of various Government Higher Secondary Schools in Thiruvananthapuram and Malappuram district.

Variables

The **dependent variable** is student's Awareness towards protection of Environment for Sustainable Development and the **independent variable** is Conservation of Environment for Sustainable Development.

Tools Used for the Study.

The tool used for the present study is a Sustainable Development Awareness Test for Higher Secondary School students, prepared and standardized by the investigator. " Tools used for the present study are presented below:

- An Environmental Awareness Test prepared and standardized by the investigator.
- Personal data sheet.

1.7.5 Statistical Techniques Used

I. Arithmetic Mean

II. Standard Deviation.

III. Test of significance of difference between means (t - test).

IV. Scope Of The Study

The investigator is of the view that the teachers should take efforts to improve the quality of environmental education and take more efforts to change the awareness of Higher Secondary School students on conservation of environment towards sustainable development.

V. Limitations Of The Study

- i. The present study is conducted only among Higher Secondary School students.
- ii. Due to lack of time the investigator has limited the study to a sample of 480 Higher Secondary School students.
- iii. Higher Secondary School students.
- iv. The present study is limited to find out the environmental awareness only.

VI. Theoretical Overview

Sustainable development provides a systematic model for the whole world, as it involves the economic management of resources. Since 1960 there have been numerous problems associated with environmental degradation.

At present environmental problems has become one of the burning issues in society. People are not aware of environmental degradation. Thus, there is urgent need for internalization of values to make people fully concerned about involvement and may be motivated, to save the environment.

VII. Environmental Education

Environmental education is a process of developing a citizen the knowledge about the natural world and man - made environments and about the ecological relationships between human beings and their environment.

Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges develops the necessary skills and expertise to address the challenges and foster attitudes, motivations and commitment to make informal decisions and take responsible action.

VIII. Review Of Related Literature

Torb jorntson, Molin, and Kariberg (2011) conducted a study on measuring attitudes towards three values that underlie sustainable development. The study reveals that there exists significant difference in the attitude of students based on gender and locale

Hassan (2012) conducted a study on the relationship between environmental awareness and scientific attitudes among Higher Secondary students. The findings of the study revealed that Science group students are more aware to their environment as compared to arts group.

Indumati (2013) conducted a study on environmental awareness among Secondary School students. The results revealed that there is no environmental awareness among ninth standard students at Higher level. Also it was found that there is no significant gender difference in environmental awareness but there is a significant difference between environmental awareness means scores of students in relation to qualification of their parents

IX. Sample Selected For The Study

. Details of schools selected for administering the final test

Sl.No.	Name of the school	Boys/Girls/Mixed	Type of school	Locality
1	Government HSS Thiruvalli	Mixed	Government	Rural
2	GHSS Malappuram	Mixed	Government	Urban
3	Government HSS, Thattathumala	Mixed	Government	Rural
4	GHSS,Pookottur.	Mixed	Government	Urban

X. Analysis And Interpretation

Objective 1

To test the level of awareness of Higher Secondary School students on protection of the Environment for Sustainable Development

Table .1 Awareness on Conservation of Environment for Sustainable Development of total Sample

Category	No. of Students	Mean (M)	Standard Deviation (SD)
Total Sample	480	35.23	9.6

The Mean (M) of Awareness on Conservation of Environment for Sustainable Development of the total sample is 35.23 and Standard deviation (SD) is 9.6. Based on the scores, the whole sample was classified into high, average and low levels of Environmental Awareness. The distribution of score of Awareness at different levels (M±SD) is given in Table 2

Table 2 Percentage of Awareness on protection of Environment for Sustainable Development of total Sample

Sl No	Level of Awareness	No. of students	Percentage of Sample (%)
1	High	102	21.25
2	Average	300	62.5
3	Low	78	16.25
Total		480	100

From the Table, it is clear that majority of Higher Secondary School students possess average level of Awareness on Conservation of Environment for Sustainable Development (62.5%), 21 % possess high level of Awareness on Conservation of Environment for Sustainable Development and only 16% of students possess low level of Awareness.

To compare the Awareness of Higher Secondary School students on protection of Environment for Sustainable Development with respect to Gender

This was done by categorizing the total sample into sub samples based on gender. To analyze the Awareness on Conservation of Environment for Sustainable Development of Higher Secondary School students in terms of Gender, the data were collected from 226 girls and 254 boys. This was done by calculating the mean (M), Standard deviation (SD) and test of significance of difference between two means (t- test). The details of the

comparison of Awareness on protection of Environment for Sustainable Development of Higher Secondary School students with respect to Gender is shown in Table 3.

Table 3 Details of the comparison of Awareness on protection of Environment for Sustainable Development of Higher Secondary School students with respect to Gender

Variable	Gender	No	Mean	SD (□)	t-value	level of significance
Awareness on protection of Environment	Girls	226	37.21	8.81	4.38	Significant at 0.01 level
	Boys	254	33.47	9.96		

From the Table, it is clear that the Mean (M) of Awareness on protection of Environment for Sustainable Development of girls is 37.21 and Standard deviation (SD) is 8.81. While the mean (M) of Awareness on protection of Environment for Sustainable Development of boys is 33.47 and Standard deviation (SD) is 9.96. The t-value obtained for the main effect of gender on Awareness of protection of Environment for Sustainable Development is 4.38. The calculated value is higher than the critical value 2.59 at 0.01 level for degrees of freedom 478. Hence it is significant at 0.01 level.

To compare the Awareness of Higher Secondary School students on protection of Environment for Sustainable Development with respect to Locale

This was done by categorizing the total sample into subsamples based on locale. To analyze the Awareness on protection of Environment for Sustainable Development of Higher Secondary School students with respect to locale, the data were collected from 240 urban and 240 rural students. The difference between them was tested using the t-test. The details are presented in Table 4.

Table 4 Details of the comparison of Awareness on protection of Environment for Sustainable Development of Higher Secondary School students with respect to Locale

Variable	Locale	N	Mean	SD (□)	t-value	level of significance
Awareness on Conservation of Environment	Rural	240	36.73	8.65	3.43	Significant at 0.01 level
	Urban	240	33.75	10.29		

From the Table, it is clear that the Mean (M) of Awareness on protection of Environment for Sustainable Development of Higher Secondary School students having rural educational background is 36.73 and Standard deviation (SD) is 8.65 and the mean (M) of Awareness on protection of Environment for Sustainable Development of Higher Secondary School students having urban educational background is 33.75 and Standard deviation (SD) is 10.29. The t-value obtained for the effect of locale on Awareness of protection of Environment for Sustainable Development is 3.43. The calculated value is higher than the critical value 2.59 at 0.01 level for degrees of freedom 478. Hence it is significant at 0.01 level.

XI. Tenability Of Hypotheses

Hypotheses

1. Higher Secondary School Students have different level of Awareness on protection of Environment for Sustainable Development
2. There exists significant difference in the Awareness on protection of Environment for Sustainable Development with respect to Gender
3. There exists significant difference in the Awareness on protection of Environment for Sustainable Development with respect to Locale

Tenability Of Hypothesis 1

The first hypothesis of the study states that “Higher Secondary School Students have different level of Awareness on protection of Environment for Sustainable Development”

Here the above analysis denotes that Higher Secondary School students have different level of Awareness on protection of Environment for Sustainable Development. Hence **hypothesis 1** is accepted.

Tenability Of Hypothesis 2

The second hypothesis of the study states that “there exists significant difference in the Awareness on protection of Environment for Sustainable Development of Higher Secondary School students with respect to Gender”. The test revealed that there exists significant difference in the Awareness on protection of Environment for Sustainable Development of boys and girls. Hence in this context **hypothesis 2** is accepted.

Tenability Of Hypothesis 3

The third hypothesis of the study states that “there exists significant difference in the Awareness on protection of Environment for Sustainable Development of Higher Secondary School students with respect to locale”. The test revealed that there exists significant difference in the Awareness of Sustainable Development of urban and rural Higher Secondary School students. Hence in this context **hypothesis 3** is accepted.

XII. Summary, Conclusion And Suggestions

Findings Of The Study

Based on the objectives of the study major findings were drawn:

1. To study the level of awareness of Higher Secondary School students on protection of Environment for Sustainable Development, the investigator conducted an awareness test of environment to a sample of 480 Higher Secondary School students of Thiruvananthapuram and Malappuram district. It is very clear majority of the students possess average awareness on environmental protection.
2. To compare the awareness of Higher Secondary School students on protection of environment for sustainable development with respect to gender, the investigator conducted an awareness test of environment to a sample of 254 boys and 226. It is revealed that girls possess high awareness on conservation of environment for sustainable development than boys. Thus it becomes clear that there is significant difference in the awareness of Higher Secondary School students based on gender.
3. To compare the awareness on protection of environment for sustainable development based on locale, 240 students of rural Schools and 240 students of urban Schools were selected. The test of significance value obtained is 3.43 which is significant at 0.01 level. It is also analyzed that there is significant difference in the awareness on conservation of environment for sustainable development with respect to locale.

XIII. Conclusion Of The Study

The conclusions emerged out of the study are given below:

1. The present study highlighted that Higher Secondary School students have average level of awareness on protection of environment for sustainable development.
2. Environmental awareness is significantly higher among the female Higher Secondary School students than the male Higher Secondary School students.
3. Environmental awareness is significantly higher among the rural Higher Secondary School students than the urban Higher Secondary School students.

Educational Implications

The implications based on the findings are;

1. Curriculum should support educational programmes to promote awareness on protection of environment for sustainable development.
2. Teachers should have better idea and ideologies about how they can improve the awareness on protection of environment for sustainable development
3. Teachers should prompt their students to develop sustainable awareness.
4. Government should take necessary actions to make education eco – friendly.
5. Teachers can play an important role in educating the future generation about environmental awareness and awareness on Sustainable development.

XIV. Suggestions For Improvement

1. The syllabus must to be enriched with programmes of environmental protection.
2. Students should be provided with projects, activities and case studies in local context.
3. Students should be given provision for exposure to different kinds of community projects.
4. Excursions and picnics should be conducted to wildlife sanctuaries and national parks to inculcate the importance of conservation of wildlife.
5. In environmental education, more emphasis should be given to Sustainable development.

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