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A STUDY OF ENVIRONMENTAL SENSITIVITY AMONG HIGHER SECONDARY SCHOOL STUDENTS IN THIRUVALLUR DISTRICT

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ABSTRACT

The study was conducted that the Environmental Sensitivity among higher secondary school students in Thiruvallur District. These study adopted normative survey methods of research participant's were 300 higher secondary school students randomly selected from various schools in Thiruvallur District. The Research Instruments used for data collection was Environmental Sensitivity Scale developed by Levi Immanuel tested at 0.05 and 0.01 level of significance. The main objectives of the study are to find out the level of significant Environmental Sensitivity among the higher secondary school students moderate in nature. The result showed that there exists the Environmental Sensitivity among the Higher Secondary School students is Moderate. It is found that there exists a positive relationship between Male and Female Higher Secondary School students with regard to their Environmental Sensitivity.

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INTRODUCTION

The word environmental sensitivity is used for explaining the characteristics and identifying the parameters of weak and fragile ecosystem; an integration of various environmental indicators to diagnose degradation risk in the most representative and powerful measure to assess the risk of vulnerability to land degradation. A methodology has been proposed by Kosmos et. al. (1998) based on environmental sensitive areas to desertification and suggested four broad categories defining the qualities of soil,

climate, vegetation, and land management. In the present study, selected indicators have been taken into consideration to assess the nature and impact of these pressure elements on land sustainability. It has been hypothesized that separate environmental components respond directly but with varying intensity and magnitude. An attempt has been made to examine the impact of integration of environmental indicators or pressure elements on land sustainability. The study area is a part of Indian Arid Lands which is highly sensitive and fragile ecosystem. There is need to

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examine the impact of pressure element on sensitive environment of desert landscape. Sensitivity of landscape requires regular monitoring of interaction of activities of man with different components of environment; Issues of sustainability in a sensitive environment has a different meaning for land sustainability.

SIGNIFICANCE OF THE STUDY

The science of environmental problems is complex. We are dealing with many inter-related dynamic systems, within which and between which feedback mechanisms occur. Secondly, there are many stakeholders involved in both the causes and the solutions to environmental problems. Organizing all of these stakeholders to act in a co-ordinate manner is difficult. Thirdly, resolving global environmental issues will require changes in our own consumption and pollution of natural resources, which will mean changes in life styles. This will require commitment at the personal level, which not everyone is willing to make.

Earlier, environmental problems have been considered as technical and economic problems, while in recent decades the social dimensions of environmental problems such as people's attitudes towards environment have been one of the areas in environmental psychology. In the 1970, the insight that environmental problems are the consequences of maladaptive behaviour (Maloney and Ward, 1973) motivated social scientists to engage in the analysis of individual motives underlying this behavior. The students of today are the key to the future when we talk about solving environmental questions. Studying young people's environmental attitudes is particularly important since they are the ones who will be affected by those environmental problems that will arise from our current actions of today. They also have to provide solutions for these problems and pay costs of development.

Children have previously been studied mainly as objects and not as persons with their own opinions and knowledge. Their knowledge and opinions have been studied mostly in the developed world (e.g. Connell et al 1999; Palmgren, 2000). Children's and adolescent's opinion and knowledge concerning the environment have been under researched although children's environmental education has existed for many years. However, from educational point of view, attitudes and perceptions of the future generation are crucially important. Their views and awareness should be understood as they will be responsible for demands on the remaining natural resources (Karhonen, 2004).

STATEMENT OF THE PROBLEM


"A study of Environmental Sensitivity among higher secondary school students in Thiruvallur District."

Environmental Sensitivity

Environmental Sensitivity refers to an empathetic perspective towards the environment. It includes the affective domain as well as the cognitive domain. Individuals must have some cognitive knowledge of the environment to develop an intelligent concern for their natural surroundings. In this study, Sensitivity towards the environment refers to the attributes of feeling, beliefs and emotions about environmental concerns viz. population explosion, health and hygiene, environmental pollution, wildlife & forests and concern for the conservation of environment

OBJECTIVE OF THE STUDY

1. To find out the level of Environmental Sensitivity among the higher secondary school students moderate in nature.
2. To find out significant difference between the Higher Secondary School students Environmental Sensitivity based on their Background Variables
 1. Gender.
 2. Location.
 3. Type of Management.
 4. Medium.

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5. Family Types.
6. Family Income.
7. Father's Qualification.
8. Mother's Qualification.
3. To find out significant relationship between the Male and Female Higher Secondary School students with regard to their Environmental Sensitivity.
4. To find out significant relationship between the Government and Aided Higher Secondary School students with regard to their Environmental Sensitivity.
5. To find out significant relationship between the Government and Private Higher Secondary School students with regard to their Environmental Sensitivity.
6. To find out significant relationship between the Aided and Private Higher Secondary School students with regard to their Environmental Sensitivity.

HYPOTHESIS OF THE STUDY

1. The level of Environmental Sensitivity among the higher secondary school students moderate in nature.
2. There is no significant difference between the Higher Secondary School students Environmental Sensitivity based on their background variables.
 1. Gender.
 2. Location.
 3. Type of Management.
 4. Medium.
 5. Family Types.
 6. Family Income.
 7. Father's Qualification.
 8. Mother's Qualification.
3. There is no significant relationship between the Male and Female Higher Secondary School students with regard to their Environmental Sensitivity.
4. There is no significant relationship between the Government and Aided Higher Secondary School students with regard to their Environmental Sensitivity.

5. There is no significant relationship between the Government and Private Higher Secondary School students with regard to their Environmental Sensitivity.
6. There is no significant relationship between the Aided and Private Higher Secondary School students with regard to their Environmental Sensitivity.

RESEARCH DESIGN

Methodology

The study was conducted through the Normative Survey Method of Research and also it turned out to be the most suitable method for the present study.

Sample size and Sampling Techniques of the study

A stratified random sampling technique was adopted for the selection of sample 300 Higher Secondary school students only.

RESEARCH TOOL USED IN THE STUDY

To verify the framed hypothesis the following tool was used in the present study

- ❖ Environmental Sensitivity Scale developed by **Levi Immanuel (1999)**.

STATISTICAL TECHNIQUES

The collected data were analyzed statistically by the investigator. For the interpretation of the data collected suitable descriptive and inferential statistical techniques were used to draw appropriate findings and results. The statistical techniques used are as follows:

- ❖ MEAN.
- ❖ STANDARD DEVIATION.
- ❖ CRITICAL RATIO.
- ❖ ANALYSIS OF VARIANCE.
- ❖ CORRELATION COEFFICIENT.

RELIABILITY AND VALIDITY OF THE ENVIRONMENTAL SENSITIVITY

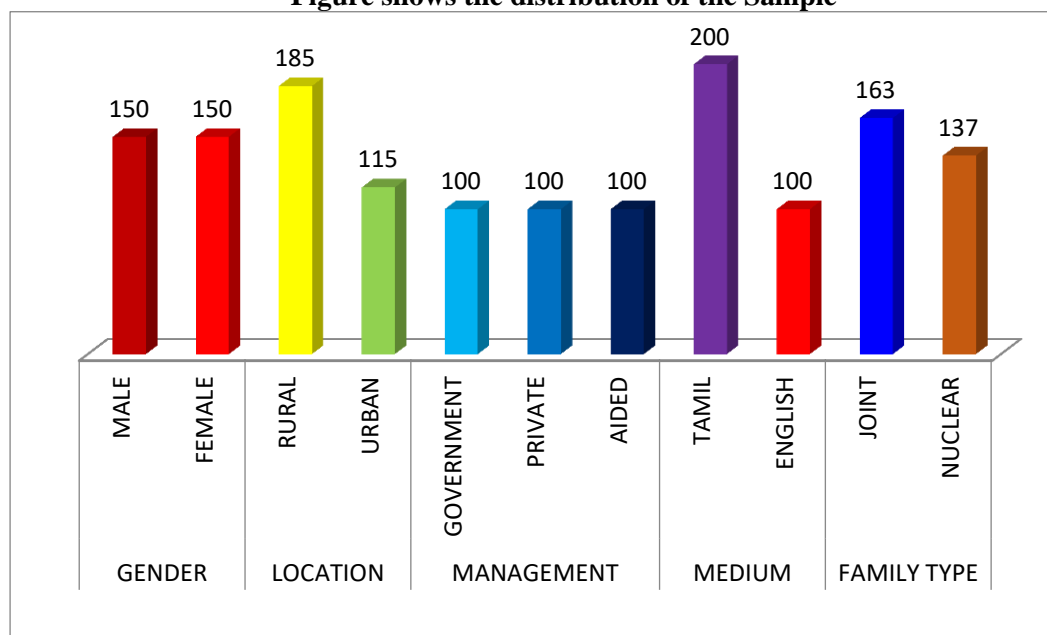
The correlation coefficient was estimated to find the reliability for the scale constructed. It was found to be 0.89. and the intrinsic validity of the coefficient was

established by taking the square root of the reliability, which is equal to . Hence the tool constructed is highly reliable and valid.

TABLE-1 SAMPLE DISTRIBUTIONS

GENDER	MALE	150	300
	FEMALE	150	
LOCATION	RURAL	185	300
	URBAN	115	
MANAGEMENT	GOVERNMENT	100	300
	PRIVATE	100	
	AIDED	100	
MEDIUM	TAMIL	200	300
	ENGLISH	100	
FAMILY TYPE	JOINT	163	300
	NUCLEAR	137	

Figure shows the distribution of the Sample



MAJOR FINDINGS

1. It is found that there exists the Environmental Sensitivity among the Higher Secondary School students is Moderate.
2. It is found that there exists significant difference between the Higher Secondary School students

3. Environmental Sensitivity based on their Gender.
3. It is found that there exists significant difference between the Higher Secondary School students Environmental Sensitivity based on their Location.

4. It is found that there exists significant difference among the Higher Secondary School students Environmental Sensitivity based on their Type of Management.
5. It is found that there exists significant difference between the Higher Secondary School students Environmental Sensitivity based on their Medium.
6. It is found that there exists no significant difference between the Higher Secondary School students Environmental Sensitivity based on their Family Type.
7. It is found that there exists no significant difference between the Higher Secondary School students Environmental Sensitivity based on their Family Income.
8. It is found that there exists no significant difference between the Higher Secondary School students Environmental Sensitivity based on their Father's Qualification.
9. It is found that there exists no significant difference between the Higher Secondary School students Environmental Sensitivity based on their Mother's Qualification.
10. It is found that there exists a positive relationship between Male and Female Higher Secondary School students with regard to their Environmental Sensitivity.
11. It is found that there exists a positive relationship between Government and Aided Higher Secondary School students with regard to their Environmental Sensitivity.
12. It is found that there exists a positive relationship between Government and Private Higher Secondary School students with regard to their Environmental Sensitivity.
13. It is found that there exists a positive relationship between Aided and Private Higher Secondary School students with regard to their Environmental Sensitivity.

TABLE-2

Showing the Frequency and Percentage for the Variable Environmental Sensitivity among the Higher Secondary School students

Variable	No. of Samples	RANGE	Category	Frequency	Percentage
Environmental Sensitivity	300	Below 87	Low	41	13.66
		87-133	Moderate	204	68.00
		Above 133	High	55	18.33

Figure Showing the Frequency for the Variable Environmental Sensitivity among The Higher Secondary School Students

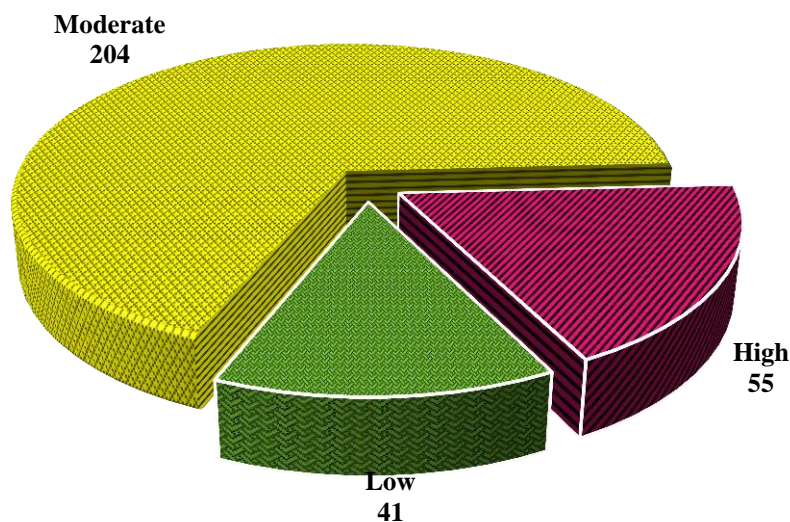


Table-3

Table shows the significant difference between the Higher Secondary School students Environmental Sensitivity based on their Gender mean scores.

VARIABLE	GENDER	N	MEAN	SD	t - value	L.S
Environmental Sensitivity	Male	150	106.80	25.103	2.800	0.01
	Female	150	114.14	19.933		

Figure Showing Difference Between the Higher Secondary School Students Environmental Sensitivity based on their Gender Mean Scores

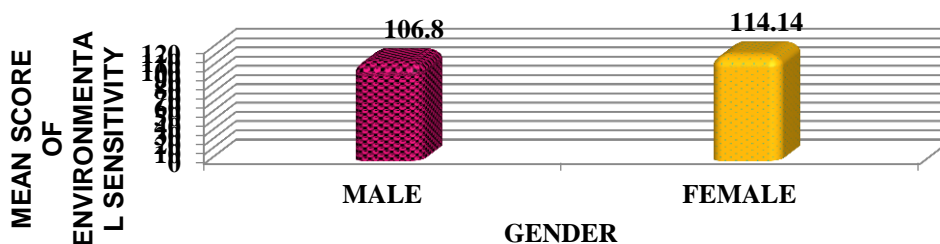


Table-4
Table showing the relationship between the Male and Female Higher Secondary School students with regard to their Environmental Sensitivity.

Variable	Number	Correlation
Male Vs Female	150	0.660


EDUCATIONAL IMPLICATIONS

Environmental Awareness is about being aware of the environment. This refers to all flowers and animals and includes all marine and wildlife. The planet is currently facing an increasing number of environmental challenges, which include climate change, global warming, droughts, water scarcity, floods, and pollution. Environmental education enables the child to become sensitive and aware of the environmental hazards such as pollution, deforestation, conservation of environment, environmental health problems etc. To realize the relationship between various concepts, children must visualize as they read. But, it is too difficult to visualize what has been read when it is not within the experience of the children.

Environmental awareness is the need of the hour. Inculcating sensitivity, awareness, ethics and positive attitudes about the environment among children is the responsibility of the teachers and to carry out this noble task, education is the perfect instrument. If positive attitudes related to environment are induced in children, these attitudes will be transmitted to later generations also by them. Therefore, every curriculum should emphasize the importance of environment protection and management. The students even at the secondary level do not have enough awareness regarding environmental issues and aspects. The activities for enhancing

environmental sensitivity, awareness and cultivation of environmental ethics are limited in our educational institutions. Therefore, it is very essential that necessary changes are made in the curriculum on all the levels of education, so that environmental sensitivity and awareness can be enhanced and thus, environmental ethics can also be developed among the students.

In order to acquire with the knowledge of environmental suitable well organized curriculum need to be organized at all level of education more specifically at the higher secondary level; A special programme on environmental education need to make compulsory at levels of education. Series of workshops, seminars, conferences, exhibitions, field visit may be organized to create an awareness among the students just knowledge on environmental issues alone is no use but they should be informed of how to uphold the values to maintain the environmental without disturbing its equilibrium, educational institutions can organize environmental clubs/association to involve the student community to practice all the skill they have learnt in relation to environment awareness programme may be organized intensively for the student community and a new teaching-learning technique in the form of programmed instruction for the fun of knowledge of higher secondary school students can be developed for environmental awareness and academic achievement, this study will help to produce

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talent and caliber of higher secondary school students learners who will be environmental literate citizens in preserving the global environmental for a sustainable community such sustained efforts should be made to improve the coverage of adult education.

RECOMMENDATIONS

Following recommendations can be given from the investigator's perspectives:


1. Schools must lead the conversation. Environmental sensitivity should be a part of the curriculum in all schools. This will encourage young people to engage in their environment to protect it and can help communities become more environmentally aware.
2. Introduce the 3 R's: reduce waste, reuse resources, and recycle materials
3. The role of the teacher is very significant in protecting the environment from the health hazards and hence the teachers should be the role models for the students.
4. Organize tree planting days at school and tell them why trees are important to the environment.
5. Teachers can arouse interest in the minds of students about their environment and raise of few challenging problems connected to environmental pollution and health hazards.
6. The study of environmental education and its practical aspects should be the part of the syllabus.
7. Teachers can be given proper awareness regarding the environmental issues.
8. Students can involved in cleaning the river, ponds and other water bodies, which ensures clean and safe drinking water.
9. Waste water recycling to be taught to students and district enforcement of environmental laws, relating to industrial effluent discharges is to be considered seriously.

10. Teacher can arrange co-walks and trips to hills and forest to conserve the environment. Male students can involve effectively to know more about environment and its awareness.

CONCLUSION

Environmental Education an integral part of formal education can do a lot to develop a storehouse of knowledge about the environment that helps to make a better place for tomorrow. In practice, Environmental Education should deal with the harmonious interaction between the biophysical environment and man himself, his societies and culture. Environment is a global concept today. Environmental education is an approach to learning. It makes the pupil's education problem related to understanding the environment and hazards of its pollution. It helps us as how unchecked and unplanned development pollutes air, water and soil and thereby threatening our subsistence and existence. As the problem is one, of the people, for the people, a proper understanding and support of the people will go a long way in carrying out antipollution measures. A number of environmental problems related to use of water, electricity, detergents, chemicals, plastic, wood, sanitation etc. have just a local dimension both in rural and urban areas people, Should be made aware of these. People should be encouraged in tree plantation and maintenance, social forestry, environment education, extension programmes etc. In industrial towns the problems of industrial wastes and effluents on the one hand and growth of slums and related urbanization problems on the other, assume importance. In the fast changing world, human being tried to make use of all this scientific and technological means to conquer and modified the nature for their conveniences. Such a human activities drastically affected the nature.

The potential group of the future country; From the present study, It is inferred that the student community of the higher secondary school students levels and need lot of

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orientation and other forms of inputs to develop awareness about the environment condition preservation and protection of the equilibrium of the environment such aspects program is more essential to save the environment unable to peacefully live and promote sustainable development of the human kind. The economic man derives and utilizes resources from the physical and biotic environment with his skills and technologies. The economic function makes the man an environment/ geomorphic process as he transports matter and energy from one component of the ecosystem to the other. His exploitative functions may be in harmony with the natural environment. Such, functions do not necessarily involve change in the working of the ecosystem. These functions may exceed the critical limit. Consequently, the equilibrium of the environment/ecosystem is disturbed and a great number of environment and ecological problems crop up. These are deterring mental to man him besides to whole population of human species in a given ecosystem.

The most important step is to initiate a serious long-term planning process that begins with envisioning sustainable practices appropriate for local conditions. Local governments and civic groups can reach out to academic communities for assistance. Municipalities and local community organizations should serve as „catalysts“ for initiating partnerships and helping build consensus to infuse the principles of sustainable development into the educational curricula of local schools. In additions, civic groups in particular should seek out opportunities to interact with students in the classrooms, to teach them how important environmental education is at the present day context.

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