
Research Papers



“Environmental Attitude among the Secondary School Students”.

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Abstract

Today man is living in a world of crises. The social, economic, political and value crises are some of the threats which are quite alarming. Added to this, in the recent decades, the environmental crisis has become another important factor that has made everyone in the world to think of its gravity. Ever since man has been on this earth, there has been a constant interaction between him and the natural world. In the beginning man lived in harmony with nature, but as his numbers grew and his scientific discoveries and inventions led him on the path of industrialization, he became the predator and his increasing demands on the environment and its resources has led to its exploitation and degradation

His attitude towards nature has changed a lot and it is the need of the hour to develop favourable attitude towards Environment among the students community. As a result present investigation was undertaken to study the environmental attitude among the high school students, related to their Sex (Boys/Girls), Locality (Rural/Urban) and types of schools (Govt./Private). The study was conducted in Davangere district of Karnataka. The sample of the study comprised of 1440 students of standard IX studying in urban and rural areas and in different types of schools selected by stratified random sampling. The proportion of the sample of urban and rural secondary school students is almost in the ratio of 1:1(770:680); boys and girls sample is also in the ratio of 1:1 (720:720). The tool used for the study is Taj Environmental Attitude Scale prepared by Haseen Taj, 2001. The data were analysed by using Mean, S D,'t' test and Two Way ANOVA. The results of the study revealed that, 1) The gender does not play any role

on Environmental attitude. 2) The students belonging to urban background are comparatively better in terms of their environmental attitude as compared to the students belonging to rural background. 3) The students of private schools have more favourable environmental attitude than the students of government schools. 4) Gender and locality have interaction effect on Environmental Attitude of the secondary school students. 5) Gender and types of secondary schools does not have any interaction effect on Environmental Attitude of the secondary school students. 6) Locality and types of schools have interaction effect on Environmental Attitude of the secondary school students.

INTRODUCTION:

Limitless greed, reckless consumption of natural resources and unkind treatment meted out to environment has increasingly damaged the world. The earth is fast losing its treasures. The soil we cultivate, the water we drink and the air we

breathe are all polluted. This has caused a global concern about the conservation and protection of the earth's environment. A number of world conferences have emphasized the need for generating, through education, awareness and sensitivity towards this alarming situation in order to protect the environment.

The environment in which the children live and plays an important role in which the acquisition of environmental concepts and there by an environmental attitude develops in children. The goal of environmental education is to develop a world population that is aware of, and concerned about, the environmental and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.

The role of younger generation is crucial in achieving these objectives. Hence it is necessary to know about the awareness of younger generations about environment and environmental problems. In the present study, the researcher has made an attempt to analyze the environmental attitude among secondary school students of different localities.

STATEMENT OF THE PROBLEM:

The problem of the present investigation is –“An Investigation into the Environmental Attitude among the Secondary School Students of Davangere District”

RATIONALE OF THE STUDY:

Around the world there are several crises- there is an environmental crisis, an energy crisis, a food crisis and a population crisis. There is intense competition among growing populations for limited resources. Modern industrial and economic growth was fueled by abundant resources, obtained either domestically or from less developed countries in Asia and Africa. Natural resource consumption patterns vary widely, the affluent consume a grossly disproportionate share of the world's resources. It is estimated that doubling of living standards in rich countries would increase the consumption of world resources six times as much as doubling of population in poor countries. High levels of consumption of natural resources are leading to depletion. Forests considered as carbon sinks of the world, are shrinking, particularly rain forests.

India faces significant challenges in protecting the environment from further damage. Population growth and urbanization make the task all the more difficult for the Indian government. It has made

significant efforts in the field of environmental protection, and developing environmental standards for both products and processes. The Indian government's ability to safeguard the countries environment depends on polices and educational systems. The quality of life of people living in urban areas has declined considerably because of pollution. Protection of the environment is one of the major challenges facing the world. Hence human beings are asked to reduce, reuse and recycle their resources. Even the learned people do not know which object are to be reduced, reused and recycled. These three words if followed each and every person would be helpful to protect our environment. Hence it is very important to identify and develop environmental attitude among the children.

SCOPE AND DELIMITATIONS OF THE STUDY:

In the present study the investigator has tried to identify the environmental attitude among the secondary school students and studied the relationship of the environmental attitude among the Boys and Girls, Urban and Rural, Government and Private secondary school students of Davangere District.

The present study is confined to the secondary school (9th standard) students studied during the year 2007 Davangere District.

METHODOLOGY:

Objectives of the study

The present study was undertaken with the following broad objectives,

1. To find out the environmental Attitude among the secondary school Boys and Girls of Davangere District.
2. To find out the environmental Attitude among the Rural and Urban Secondary school students of Davangere District.
3. To find out the environmental Attitude among the secondary school students of Government and Private secondary schools of Davangere District.
4. To find out the interaction effect of Gender and Locality on Environmental attitude of secondary school students.
5. To find out the interaction effect of Gender and Types of schools on Environmental attitude of secondary school students.
6. To find out the interaction effect of Locality and Types of school on Environmental attitude of secondary school students.

Hypotheses

Based upon the discussion of variables and also keeping in view the objectives of the study, the following research hypotheses have been formulated.

1. There is no significant difference in the environmental attitude among the secondary school Boys and Girls.
2. There is no significant difference in the environmental attitude among the Rural and Urban Secondary school students.
3. There is no significant difference in the environmental attitude among the Students of Government and Private Secondary schools.
4. There is no significance interaction effect of Gender and Locality on environmental attitude.
5. There is no significance interaction effect of Gender and Types of secondary schools on environmental attitude.
6. There is no significance interaction effect of Types of schools and Locality on environmental attitude.

Method:

The survey technique under 'Descriptive method of Research' was used in the present investigation.

Sample:

For the purpose of present study, 1440 students were selected from the 9th standard classes of Davangere District. Stratified random sampling technique was used to select the sample. Totally 36 secondary schools were selected proportionately on random basis; 14 were government secondary schools and 22 were private secondary schools. Among the 14 government schools, 7 were urban government secondary schools and remaining 7 were of rural.

Among the 22 private secondary schools, 12 were urban and 10 were rural. The proportion of the sample of urban and rural secondary school students is almost in the ratio of 1:1 (770:680); boys and girls sample is also in the ratio of 1:1(720:720).

Tool used:

To measure the Environmental Attitude, the investigator has used the "Taj Environmental Attitude Scale" (Haseen Taj, 2001).

ANALYSIS AND INTERPRETATION OF THE DATA:

The data was analysed by using descriptive statistics. The normality of the data (Environmental attitude scores) was assessed by calculating Mean and Standard Deviations, test of

significance i.e. paired 't' test was calculated to compare the independent variables in between the groups and the hypotheses of interaction effect were tested using the Two Way ANOVA.

In order to study the significant difference in mean environmental attitude scores between secondary school boys and girls, 't' test was employed.

Table -I: Significance of Difference in Mean Environmental Attitude Scores between Secondary School Boys and Girls

Variable	Group	No of Students	Environmental Attitude Scores		Mean difference	t-value
			Mean	S D		
Gender	Boys	720	164.0	23.1	2.1	1.52 Ns
	Girls	720	166.1	30.0		

Ns- Non significant

As indicated in the table-I, the significant difference was checked at 0.05 level of significance. The analysis of the data revealed that, the mean value of the environmental attitude scores of boys was 164.0 with standard deviation of 23.1 and that of the girls' was 166.1 with a standard deviation of 30.0. This indicates that, there is no significant difference in mean Environmental attitude scores among boys and girls. Therefore the hypothesis, which states that there is no significance difference in environmental attitude among the secondary school boys and girls was accepted.

Table-II: Significance of Difference in Mean Environmental Attitude Scores between Rural and Urban Secondary School Students

Variable	Group	No of Students	Environmental Attitude Scores		Mean difference	t-value
			Mean	S D		
Locality	Rural	680	157.3	25.5	10.9	8.26*
	Urban	760	168.2	24.5		

*Significant at 0.05 level of significance

The obtained't' value 8.26 is significant at 0.05 level of significance. Hence the hypothesis is rejected, further when means were compared environmental awareness of urban students (M=168.2) is better than the environmental awareness of rural students (M=157.3).

Table-III: Significance of Difference in Mean Environmental Attitude Scores between Government and Private Secondary School Students

Variable	Group	No, of Students	Environmental Attitude Scores		Mean difference	t-value
			Mean	S D		
Types of Schools	Govt.	560	159.9	33.1	8.5	6.00*
	Private	880	168.4	24.5		

Further when the mean Environmental attitude scores of Government and Private schools are compared as shown in table-III, it is found that environmental attitude of students of private schools (168.4 with S.D. 24.5) is better than the students of Government schools (159.9

with S.D.33.1) and the obtained 't' value 6.00 is significant at 0.01 level and it is more than the table value 2.58. Hence the null hypothesis is rejected.

Table-IV: Summary of the 2 way ANOVA of Girls and Boys of Rural and Urban Secondary School Students with respect to Environmental Attitude.

Source	SS	df	MSS	F	P	F-table value
Between Gender	452	1	452	0.73	0.39 Ns	3.85
Between Locality	42545	1	42545	68.3	<0.01*	6.65
Interaction Gender X Locality	190	1	190	0.30	0.58 Ns	3.85
With in groups	895202.4	1436	623.4			
Total	938389.4	1439				

NS=Non significant

The Two Way ANOVA details of scores of girls and boys of rural and urban secondary schools with respect to environmental attitude as shown in the table-IV indicates that the interactions of the variables, gender and locality of the school is not significant as the F-ratio is 0.30 which is less than the table value 3.85. Hence it is concluded that gender and locality does not have joint effect on environmental attitude of secondary school students as a result the above mentioned hypothesis is accepted.

Table-V: Summary of 2 way ANOVA of Girls and Boys of Government and Private Secondary Schools Students with respect to Environmental Attitude

Source	SS	df	MSS	F	P	F-table value
Between Gender	1657	1	1657	2.37	0.12 Ns	3.85
Between Type of School	25182	1	25182	36.07	<0.01*	6.65
Interaction Gender X Type of School	2648	1	2648	3.79	0.06 Ns	3.85
With in groups	1002615.2	1436	698.2			
Total	1032102.2	1439				

Ns=Non significant

From the table-V, it indicates that the interaction of variables, gender and types of school is not significant as the F-ratio 3.79, which is less than the table value 3.85 at 0.06 levels of significance. Hence it is concluded that gender and type of school does not have any joint effect on secondary school students, as a result the above mentioned hypothesis is accepted.

Table-VI: Summary of 2 way ANOVA of Government and Private school students of Rural and Urban locality with respect to Environmental Attitude

Source	SS	df	MSS	F	P	F-table value
Between Locality	67432	1	67432	107.8	<0.01*	6.65
Between Type of School	25182	1	25182	40.3	<0.01*	6.65
Interaction Locality X Type of School	43109	1	43109	68.9	<0.01*	6.65
With in groups	898361.6	1436	625.6			
Total	1034084.6	1439				

As indicated in the table-VI, i.e. locality and types of schools is significant as the F-ratio is 68.9 which is more than the table value 6.65 and it is significant at 0.01 level. Hence it is concluded that the locality and types of schools have interaction effect on environmental attitude of secondary school students. Hence the mentioned null

hypothesis is rejected.

FINDINGS:

From the present study it is found that,

1. Gender does not play an important role on environmental attitude.
2. Localities of the schools play an important role on environmental attitude.
3. Types of secondary school play an important role on environmental attitude.
4. Gender and locality does not have any interaction effect on environmental attitude.
5. Gender and type of secondary school does not have any interaction effect on environmental attitude.
6. Locality and type of school have interaction effect on environmental attitude.

CONCLUSIONS:

Environmental attitude of the students in rural areas is due to lack of better exposure to information via all kinds of media. Hence they must be provided better opportunities to gather information regarding environment by conducting symposiums, seminars and exhibitions. The results of the study also indicate that the students belonging to urban background are comparatively better in terms of their environmental attitude as compared to the students belonging to rural background. This difference is due to the difference in the educational level of the parents of urban and rural students and the approaches of the media is also an important factor and also the poor environmental quality in urban areas leads to individuals facing serious health problems. Hence individuals adopt measures to improve their environment quality only if they perceive the associated health problems.

The study revealed that, lower environmental attitude of government school students is due to lack of better facilities. Hence it is very important to arrange community activity programmes and make students to actively participate in them. Government and other policy makers should invite authors, field workers and artists to work with creativity to produce special modules to promote environmental attitude.

RECOMMENDATIONS:

- 1) Environmental attitude is significantly and positively related to locality of the schools. Lower environmental attitude of the students in rural areas is due to lack of better exposure to information via all kinds of media. Hence they must be provided better opportunities to gather information regarding environment by conducting

symposiums, seminars and exhibitions.

2) The students belonging to urban background are comparatively better in terms of their environmental attitude as compared to the students belonging to rural background. This difference is due to the difference in the educational level of the parents of urban and rural students. Hence it is very important to arrange community activity programmes and make students to actively participate in it. Government and other policy makers should invite authors, field workers and artists to work with creativity to produce special modules to promote environmental attitude.

3) Training for government schools students and teachers must be given top priority and programmes may be chalked out accordingly.

4) Teachers must be given special orientations with updated technology.

5) Students must be involved in activity based programmes in Environmental Education like motivating them to undertake some projects about the environment aspects in their locality.

6) Role of children's family is important on Environmental Educational Process, hence it is very important to arrange environmental educational seminars for parents.

7) Eco club activities must be strengthened as they play an important role in creating environmental attitude amongst the future generation.

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