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A STUDY ON PRO-ENVIRONMENTAL BEHAVIOR AND ENVIRONMENTAL ATTITUDE OF SECONDARY SCHOOL STUDENTS

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ABSTRACT:

The present study is an attempt to investigate the pro-environmental behavior and environmental attitude of secondary school students in relation to gender. A sample of 100 (50 boys and 50 girls) secondary school students of Sivasagar district of Assam State was selected randomly. The investigators selected pro-environmental behavior scale (PEBS-SA) 2012 developed by Dr. Anjali Suhane and environmental attitude scale (EAS-TH) developed by Dr Haseen Taj 2001 as a tool to study the level of pro-environmental behavior and environmental attitude of secondary school students. The collected data was analyzed by applying appropriate statistical techniques Mean, SD, t-test, and Correlation. The findings of the study revealed that majority of the students came under the category of average level of pro-environmental behaviour and environmental attitude. Moreover, girls have more pro-environmental behavior in comparison to boys. There exists significant difference between boys and girls in respect to their pro-environmental behavior. Regarding environmental attitude, it was found that there exists no significant difference between boys and girls secondary school students. In conclusion the present study shows that there exists a negative correlation between pro-environmental behavior and environmental attitude of secondary school students.

KEYWORDS:

PRO-ENVIRONMENTAL BEHAVIOR, ENVIRONMENTAL ATTITUDE, SECONDARY SCHOOL STUDENTS, GENDER.

INTRODUCTION

All living beings on the Earth live in interaction in a certain environment. Living beings are influenced by their surroundings while they maintain their vital activities and this surrounding is called habitat or environment (Alim, 2006). Environment has influenced and shaped our lives since the time immemorial. It is from the environment where we get our food to eat, water to drink, air to breath and all the other necessities of day today life, thus constituting it is a life support system. Through the process of natural selection and elimination it is only environment which has caused the evolution of biological spectrum, the biosphere as it exists today. Today environment has become the concern of all; the academicians, intellectuals, scientists, policymakers, and government across the countries (Kant and Sharma, 2013).

Science and technology have made an overall progress and advancement in many areas during the 20th century, especially during the last two decades. On the one hand this advancement has given many comforts to man and improve the standard of living but on the other hand, this progress has disrupted the ecosystem, natural balance of the environment and affecting the planet earth in several ways.

Global environmental problems of shrinking natural resources, pollution and population growth challenge the ways people live. It is predicted by the environmental specialists that India is one of the important developing countries, which will be suffering a lot due to the environmental pollution within the next 20 years. Therefore, it is important to create environmental awareness among the people; otherwise, we will be paying a heavy price (Tung, 2002). As with many other disciplines, psychology attempts to develop human societies less exploitive in their use of the earth's natural resources (Stern, 1992 and Kruse, 1995). Because psychologists refer to individual behaviour rather than to behaviour of whole societies, they ask questions such as what determines an individual's ecological behaviour (Axelord & Lehman, 1993) or how can behaviour be changed in a more ecological direction. In answering these questions, environmental attitude is considered one of the most promising concepts (Newhouse, 1990).

STUDY AREA

Sivasagar city is the district headquarters of the Sivasagar district. It holds a special importance in Assam for its Ahom palaces and historical monuments. The district occupies an area of 2668 square kilometres. The total population of Sivasagar district was 1151050 where male comprises 589216 while female comprises 561834. (According to 2011 Census report). The literacy rate of Sivasagar district a per Census report is 80.4% of where 85.8% is for males and 74.7% is for females.

NEED OF THE STUDY

For survival and prosperity man has to deal with his environment every day. Today all over the world there is growing issue about the degradation of the quality of environment and efforts are being made to stop the widespread abuse of environment by improving the

quality of the environment. Due to advancement of science and technology different changes can take place which impacts very badly on our environment. people experience a lot of problems due to environmental pollution, global warming, climate change, scarcity of resources etc. It is very necessary to know about various components, characteristics of natural environment and also to understand the impact of environment on human life.

Pro-environmental behaviour is the behaviour of individuals that contributes towards environmental preservation. It can be defined as an individual effort to reduce the negative impact due to the destruction of nature by improving and protecting the environment. human attitudes and behaviour determine the good condition of an environment. Most current environmental issues are essentially a result of people's activities and their attitude towards the environment.

Human behavior and human attitude towards their environment play a very significant role and helps to determine the quality or sustainability of the environment. If students are able to develop environmentally responsible behavior and positive attitude towards their environment it will help to protect or save our planet earth. It is our behavior and attitude which need to be changed not the environment. Hence the investigators feel the need of this study to find out the pro-environmental behavior and environmental attitude of the students.

OBJECTIVES OF THE STUDY

The objectives of the present study are as follows:

1. To study the pro-environmental behavior of the Secondary School students.
2. To study the environmental attitude of the Secondary School students.
3. To compare the pro-environmental behavior of the students in relation to gender.
4. To compare the environmental attitude of the students in relation to gender.
5. To find out whether there exists any significant relationship between pro-environmental behavior and environmental attitude of the students.

HYPOTHESES OF THE STUDY

The hypotheses of the present study are as given below:

H_{01}: There exists no significant difference between boys and girls Secondary School students as far as their pro-environmental behavior are concerned.

H_{02}: There exists no significant difference between boys and girls Secondary School students as far as their environmental attitude are concerned.

H_3: There exists significant and positive relationship between pro-environmental behavior and environmental attitude of the students.

DELIMITATION OF THE STUDY

- The present study has covered only five Government schools, under Amguri Educational Block of Sivasagar District, Assam.
- Only the students studying in the 9th standard has been considered for the present study.
- The present study has covered only the boys and girls.

TERMS DEFINED

PRO-ENVIRONMENTAL BEHAVIOR:

The term pro-environmental behavior can be understood as any active responsiveness that a person chooses in order to minimize the negative impact of their actions on environment. it is a kind of positive behavioral effort which harms the environment as little as possible and protect the environment.

In the present study context pro-environmental behavior refers to the actions related to conservation of natural resources, control of noise pollution, conservation of water and energy, cleanliness and sanitation, use of poly products which contribute towards to protect or preserve the environment.

ENVIRONMENTAL ATTITUDE:

The term environmental attitude means the beliefs and values of individuals or societies with respect to nature, ecology, or environmental issues. It can be defined as "the collection of beliefs, which affect behavioural intention a person holds regarding environmentally related activities or issues" (Schultz Shriver, Tabanico, & Khazian, 2004).

Here the term environmental attitude involves the individual's attitude regarding population explosion, health and hygiene, polluter, wild life, forests and environmental concerns.

DESIGN OF THE STUDY

METHOD

In the present study researcher used descriptive survey method to study pro-environmental behavior and environmental attitude of the students. In the present study an attempt has been made to see the relationship between pro-environmental behavior and environmental attitude of the students and to find out the gender difference between male and female students in respect to pro-environmental behavior and environmental attitude.

POPULATION

The population of the study comprised of all the students studying in 9th standard in different high schools and higher secondary schools of Amguri Educational Block of Sivasagar District, Assam, India.

SAMPLE

In the present study the sample consisted of 100 students (20 from each school) were selected randomly.

FIGURE 1. DISTRIBUTION OF SAMPLE

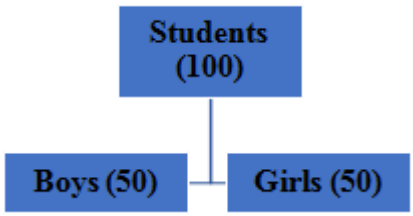


FIGURE 1. SHOWS THE SAMPLE DISTRIBUTION BASED ON GENDER.

SAMPLING TECHNIQUE

In the present study Simple Random Sampling technique was used for selecting the representative sample.

SOURCES OF DATA

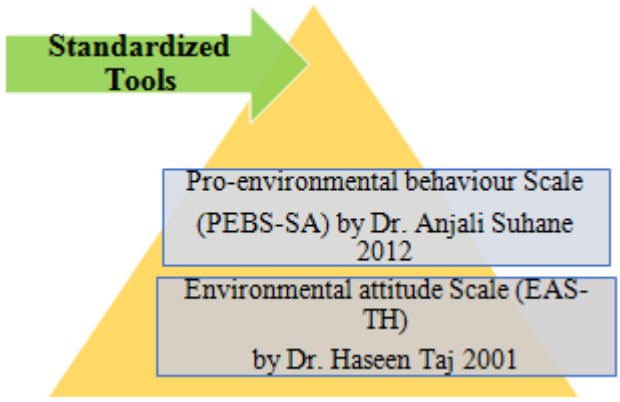
In the present study both primary and secondary sources of data have been used. The responses of the students were collected through primary sources with the help of Pro-environmental behavior Scale and Environmental attitude Scale.

Secondary data were collected from various Books, Journals, Dissertation, Govt. Reports, and Newspaper etc.

TOOLS USED FOR DATA COLLECTION

In the present study two standardized tool used i.e. Pro-environmental behavior Scale and Environmental attitude Scale.

FIGURE 2. STANDARDIZED TOOLS



STATISTICAL TECHNIQUES FOR DATA ANALYSIS

In the present study, the following statistical measures were used:

- Mean
- Standard Deviation
- Skewness and kurtosis
- 't' test
- Correlation

ANALYSIS AND INTERPRETATION OF DATA

After collection, the data were analyzed systematically.

OBJECTIVE NO 1: THE LEVEL OF PRO-ENVIRONMENTAL BEHAVIOUR OF THE SECONDARY SCHOOL STUDENTS

Table 1 shows that mean, standard deviation, skewness and kurtosis of the distribution are 68.42, 6.45, -1.82 and 3.86 respectively. Thus, the distribution is negatively skewed means the scores are massed at the right side of the curve and are gradually spread out towards the left side of the curve. The value of kurtosis is 3.86 which is greater than 0.263 thus the distribution is platykurtic.

TABLE 1 PRO-ENVIRONMENTAL OF THE SECONDARY SCHOOL STUDENTS

No of students	Mean	SD	Skewness	Kurtosis
100	68.42	6.45	-1.82	3.86

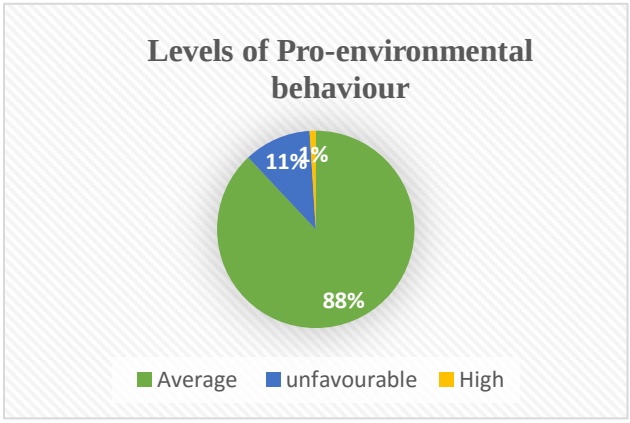


FIGURE 3. SHOWS THE LEVELS OF PRO-ENVIRONMENTAL BEHAVIOUR

Now, figure 3 shows the levels indicating pro-environmental behavior scores obtained by the secondary school students of Sivasagar district. From the figure it has been clear that majority of the students (88%) belong to average level of pro-environmental behaviour and 11% of students belong to unfavourable level of pro-environmental behaviour. Only 1% of students shows high pro-environmental behavior.

OBJECTIVE NO 2: THE LEVEL OF ENVIRONMENTAL ATTITUDE OF THE SECONDARY SCHOOL STUDENTS

Table 2 shows that mean, standard deviation, skewness and kurtosis of the distribution are 170.07, 16.14, -0.38 and 0.45 respectively. Thus, the distribution is negatively skewed it means the scores are massed at the right side of the curve and are gradually spread out towards the left side of the curve. The value of kurtosis is 0.45 which is greater than 0.263 thus the distribution is platykurtic.

TABLE 2 ENVIRONMENTAL ATTITUDE OF THE SECONDARY SCHOOL STUDENTS

No of students	Mean	SD	Skewness	Kurtosis
100	1170.07	16.14	-0.38	0.45

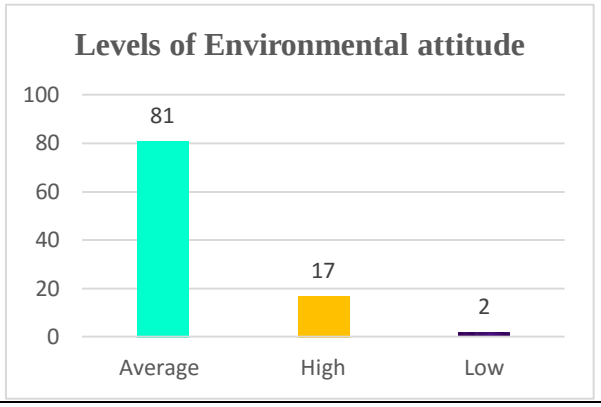


FIGURE 4. SHOWS THE LEVELS OF ENVIRONMENTAL ATTITUDE.

Now, figure 4 shows that majority of the students (81) secured the scores ranges from 123-184. Only two (2) students secured scores in between 61-122 and (17) no of students secured in between 123-184 in Environmental attitude scale.

OBJECTIVE NO 3: COMPARISON OF PRO-ENVIRONMENTAL BEHAVIOUR OF THE BOYS AND GIRLS SECONDARY SCHOOL STUDENTS

Hypothesis : *"There exists no significant difference between boys and girls Secondary School students as far as their pro-environmental behavior are concerned."*

TABLE 3. COMPARISON OF PRO-ENVIRONMENTAL BEHAVIOUR OF THE BOYS AND GIRLS SECONDARY SCHOOL STUDENTS

Category	Boys	Girls
Mean	66.92	69.92
SD	7.68	4.52
N	50	50
t- value	2.38	
df	98	
Level of Significance	*Significant at 0.05 level*	

Table 3 reveals that regarding the pro-environmental behaviour of boys and girls secondary school students of Sivasagar district the t-value is 2.38 which is more than the table value (1.96 at 0.05 level) but less than the table value at 0.01 level.Thus the null hypothesis is rejected at 0.05 level of significance and it is concluded that there exists significant difference between boys and girls secondary school students of Sivasagar district as far as their pro-environmental behaviour is concerned.

OBJECTIVE NO 4: COMPARISON OF ENVIRONMENTAL ATTITUDE OF THE BOYS AND GIRLS SECONDARY SCHOOL STUDENTS

Hypothesis: *"There exists no significant difference between boys and girls Secondary School students as far as their environmental attitude are concerned."*

TABLE 4. COMPARISON OF ENVIRONMENTAL ATTITUDE OF THE BOYS AND GIRLS SECONDARY SCHOOL STUDENTS

Category	Boys	Girls
Mean	168.10	172.04
SD	14.97	17.16
N	50	50
t- value	1.22	
df	98	
Level of Significance	*Significant at 0.05 level*	

Regarding the environmental attitude of boys and girls secondary school students of Sivasagar district the Table 4 shows that the t-value is 1.22 which is less than the table value (1.96 at 0.05 level) of significance, and therefore it is not significant at 0.05 level. Thus, the null hypothesis is accepted, and it is concluded that there exists no significant difference between boys and girls secondary school students of Sivasagar district as far as their environmental attitude is concerned

OBJECTIVE NO 5: RELATIONSHIP BETWEEN PRO-ENVIRONMENTAL BEHAVIOUR AND ENVIRONMENTAL ATTITUDE

Hypothesis: "There exists no significant relationship between pro-environmental behavior and environmental attitude of the students."

TABLE 5. RELATIONSHIP BETWEEN PRO-ENVIRONMENTAL BEHAVIOUR AND ENVIRONMENTAL ATTITUDE

Variables	Mean	SD	N	Product-moment Coefficient of Correlation (r)	Significance
Pro-environmental behaviour	68.42	6.45	100	-0.14	Significant at 0.05 level
Environmental Attitude	170.07	16.14			

Data represented in the Table 5 indicates that correlation between pro-environmental behaviour and environmental attitude as -0.14 which means that there is a negative correlation between the between pro-environmental

behaviour and environmental attitude. The calculated value of correlation ishigher than the table value of of 'r' (.113), with 98 df, and is considered to be significant at 0.05 level but not significant at 0.01level of significance. Hence the hypothesis "*There exists no significant relationship between pro-environmental behavior and environmental attitude of the students.*" is rejected.

MAJOR FINDINGS OF THE STUDY

- Percentage analysis has shown that majority of the students that is 88% have average pro-environmental behaviour and 11% have unfavourable and only 1% have high pro-environmental behaviour.
- Regarding environmental attitude it was found that 88 no of students have average environmental attitude and 17 no of students have high environmental attitude and only 2 no of students show low level of attitude towards their environment.
- The study has also found that mean score of girl students is higher than the mean score of boy students as far as their pro-environmental behaviour is concerned. The girl students were more responsible pro environmental behaviour than boy students. However further analysis has shown that there exists significant difference in this respect.
- The analysis of data revealed that in respect to environmental attitude the mean score of girl students is higher in comparison to the mean score of boy students. It may be assumed that girl students possess positive attitude towards their environment than the boys. However the result has shown that there exists no significant difference between boys and girls secondary school students of Sivasagar district as far as their environmental attitude is concerned.

CONCLUSION

The present study has made an attempt to know about pro-environmental behaviour and environmental attitude of secondary school students. It has been found that there exists significant difference between boys and girls Secondary School students as far as their pro-environmental behavior are concerned. However, it was found that gender did not play any significant role in the level of environmental attitude of secondary school students. Thus, the findings cannot be generalized into all secondary school students of Sivasagar district at national or regional level. Further studies can be carried out with larger population to explore the pro-environmental behavior and environmental attitude of the secondary school students. It is the duty of the teacher, school authority, government, parents as well as society to develop environmentally responsible behavior and positive attitude among the students towards their environment which helps to protect and preserve our environment.

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