Effect of Environmental Awareness on the Attitude of Secondary School Students

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Abstract:

The increasing uses of science, technology and unawareness of the negative sides of these two brought different issues. Mother Earth is threatened by human behaviour. In this scenario, the most required thing is having ideas of environmentalism and promoting the awareness as well as doing sustainable activities. Environmental awareness is having sense about the environment and natural resources. We have to understand the impacts of our each and every activity. Numerous ways are there to promote environmental awareness, one among all is promoting through schools and students. The researchers want to analyse the effect of Environmental awareness on the attitude of school students. For this, one key factor is sustainable behaviour. The researchers took 200 sample from North 24 parganas and Nadia district, through stratified random sampling. Among these 200 samples, 100 were boys and 100 were girls. 100 students were from urban area and rest 100 were from rural area. The result unfolded that there is a positive relationship between environmental awareness and sustainable behaviour.

Keywords: Environmental Awareness, Attitude, Sustainable Behaviour, Environmentalism, Secondary School Students.

Introduction:

Environmental Awareness: Environmental awareness is a concept that refers to the understanding of how our socio-economic actions harm the environment and what are the various steps we can take to rectify this negative impact on the environment. In other words, environmental awareness refers to knowing how our actions affect the environment and knowing what we can do to fix the problem. To put it another way, environmental awareness is the knowledge that our actions have consequences for the environment and that we also have control over how those consequences play out. Our ecosystem, despite being resilient and able to heal itself, has become increasingly fragile in recent years and is currently balanced in a precarious way as a direct result of the detrimental influence that human activities have had over the course of the past few decades. This precarious balance is due to the fact that our ecology has become highly fragile in recent years. Because protecting the environment is the only way for humans to assure that they will continue to exist on this planet, doing so is not an act of philanthropy but rather of self-interest on the part of those who do it. An ideology known as environmentalism is one that works to instil a sense of responsibility in human beings to take action to protect the natural world from the adverse effects of human activity. Environmental consciousness is inextricably linked to the political philosophy of environmentalism, which has the same overarching goal in mind.

Environmental Awareness in India: In addition, India has been the epicentre of a variety of environmental initiatives, in which people have been concerned about the preservation of the native flora and fauna in their immediate environs. The Narmada Bachao Aandolan, the Save Silent Valley Movement, and the Chipko Movement are just a few examples of the numerous environmental movements taking place around the country that have contributed to the movement's trajectory moving ahead. The fact that there are people who are eager to fight for India's ecosystem and wildlife has been shown by each and every action, regardless of whether it gained unusual notice or was a brave endeavour. This is the case regardless of whether the action was a heroic venture or not.

Need of Environmental Awareness: Pollution, deforestation, and the excessive use of available resources are just some of the unintended consequences that can result from human activity. These behaviours have the potential to degrade the environment, which can have significant effects not only for humans but also for the environment. These repercussions include, among other things, a shift in the

climate, the elimination of natural habitats, and the depletion of natural resources. Because of this very reality, it is extremely important to have a good awareness of the effect that one has on the surrounding environment. The vast majority of people are unaware of how easy it is to contribute to the preservation of the world. Taking better care of the environment may be accomplished in a variety of ways, some of which include lowering our usage of resources like water and electricity as well as the amount of waste we produce.

The world provides all of the resources we need to live, thus protecting it is essential. Earth's teeming plant and animal life, as well as its unadulterated air, water, and soil, all fall under this category. To encourage healthy habits, environmental awareness is also crucial. People can better safeguard themselves and their family if they are aware of the dangers posed by air pollution, water poisoning, and toxic chemicals.

Necessity of Environmental Awareness among students:

The primary goal of environmental education is to develop citizens who are knowledgeable about the world around them and involved in working toward a more liveable future. Environmental education includes such basic under standings as: (1) people and wildlife have the same basic needs, (2) living and nonliving elements are interdependent, (3) people affect the environment while the environment affects people, and (4) people are accountable for their effects on the environment (O' Brien & K. Stoner, 1987). Schools can help students to learn more about the environment by including environmental topics in the curriculum, giving student's chances to learn outside, forming partnerships with local groups, and holding events and activities connected to the environment. This could make persons think more about the environment and act more responsibly, which is beneficial for the long-term health of both people and the world.

Environmental education must help students to search for truth and meaning in their own lives and practices. They must learn the importance of cherishing and extending life-affirming connectedness. To save the global community from wanton destruction, it is important that truth, meaning, and advocacy interface to rekindle our spiritual and life-affirming "connectedness" to the land, to other life forms, and to the world in which we live. Environmental education can help students to recognize a larger self, one that recognizes the importance of bio centricity and one that believes that the destruction of life at any one place on life's continuum has the potential to significantly alter or destroy all life forms (Bryant, 1996). **Review of the Related Literature:**

Eilam E. and Trop T. (2012) in their article focus on the prevailing perception in the field of Environmental Education that acquisition of Environmental Behaviour is an ultimate goal of educational process in comparison to acquisition of Environmental Attitude. They showed the result obtained from two studies that give light on the relationship between influences on Environmental Behaviour and influences on Environmental Attitudes.

The results made grounds for questioning the prevailing belief that individual acquisition of responsible Environmental Behaviour can drive changes on the global context. So, focusing on Environmental Education in very much needed for construction of Environmental Attitudes.

Nkaizirwa J., Nsanganwimana F. and Aurah C. (2021) started their research with question that whether there is adequate coverage of the current environmental issues in the existing scales measuring environmental attitudes and behaviors. To achieve the United Nations sustainable development goals (SDGs), sustainable efforts need to be invested to shape human interaction with nature. the research reveals that some critical environmental issues such as climate change and inclusiveness of science and technology have largely been neglected. It stresses on the transitional approach for

environmental psychologists to rethink the measurement approaches that enhances sustainable development globally.

Jaramillo P., Tábora-Sarmiento S., Millares-Forno C. and Boren-Alpízara A. (2022) found in research thar awareness of people towards environment ensure positive behavior gained through education. Using the Theory of Reasoned Action (TRA), a survey was implemented to college students from Texas, Louisiana, and Honduras Results showed that Honduras and Louisiana students' environmental attitudes, behavior, and subjective norms are significantly different than Texas students. Understanding interactions between behaviour, attitude, knowledge among college students from different universities may help assess environmental interventions and design successful programs based on group needs.

Rettie R., Burchell K. and Riley, D. (2012) in their paper showed a new approach to sustainability marketing: to encourage the adoption of more sustainable consumer practices. The research involved a survey of 1000 UK respondents' attitudes to 15 specific activities, and identifies marketing strategies for (re)positioning these activities as either normal or not normal, as appropriate. Also, the paper provides guidance for targeting these normalization strategies at specific demographic groups.

Eagles P. and Demare, R. (2010) found that ecologistic and moralistic attitudes towards environment correlated with talking about the environment at home, watching nature and reading about the environment. Girls of 6^{th} grade showed higher moralistic attitude scores. Results suggest that the students entered a camp programme with moderate levels of these attitudes, derived from several influences, including family, media, and previous school-based environmental education programmes.

Mosler, H., and Martens, T. (2008) in their work show that every kind of campaign aims at introducing behavioral change in individual. Campaigning strategies and community characteristics were varied systematically to understand and test their impact on attitudes towards environmental protection. The results show that strong arguments influence environmentally concerned people with many contacts most effectively, while peripheral cues have the greatest impact on a non-green population with fewer contacts. Campaigns involving person-to-person communication are superior to mass-media campaigns.

Sengupta M., Das J. and Maji P. (2010) searched the effect of different Stream (Arts, Science and Commerce) and Gender on Twelfth Grade Students' Environmental Awareness and environment related behaviour in Kolkata. The observation on the effect of streams or courses of higher secondary syllabus is somewhat different. It showed that science students' scores on environmental awareness and behaviour were less than that of arts students. The girl students are observed to be more environmentally aware.

Panth M., Verma P. and Gupta, M. (2015) explored undergraduate students' attitudes towards environment at the end of the course. Results shows that undergraduate students had positive attitudes toward the environment. Female students were more sensitive towards environment than male students.

Benckendorff P., Moscardo G. and Murphy L., (2012) focus in their research that there has been growing recognition of the need for sustainability education in programmes for business and tourism students. The development of such programmes needs to be based on a understanding of the existing values and attitudes of current students. The study explored the environmental attitudes of a sample of Generation Y students in a business and tourism programme using the New Environmental Paradigm Scale.

Watson K. and Halse C., (2005) showed some of the similarities and differences in environmental attitudes amongst pre-service teachers in Australia, Republic of Maldives and Indonesia. The three communities exhibited a similar range of environmental attitudes but significant differences emerged when the interview data were analyzed. These differences reflect diversity within and across cultural groups that cannot be satisfactorily explained by the theory.

Statement of the problem: Effect of Environmental Awareness on the attitude of Secondary School Students.

Operational definitions:

Environmental Awareness: Environmental awareness involves comprehending natural environment conservation and harmful behaviours.

Attitude: The way a person feels about something or someone, or a certain sentiment or perspective **Secondary School**: Secondary School begins in grade 9 and lasts until grade 12.

Student: A person who is enrolled in classes at a school or other institution of higher education.

Sustainable behaviour: Sustainable behavoiur is the effective actions that results in the conservation of natural resources for the future days but not hampering the needs of the present times.

Hypotheses:

- 1. There is no significant difference between the level of environmental attitude of boys and girls of secondary schools.
- 2. There is no significant difference between the level of practice of sustainable behaviour of boys and girls of secondary schools.
- 3. There is no significant difference between the level of environmental attitude of urban sudents and rural students of secondary schools.
- 4. There is no significant difference between the level of practice of sustainable behaviour of urban students and rural students of secondary schools.

- 5. There is no significant relationship between environmental attitude and practice of sustainable behaviour of the students of secondary schools on the basis of their sex.
- 6. There is no significant relationship between environmental attitude and practice of sustainable behaviour of students of secondary schools on the basis of their locality.
- 7. There is no significant relationship between environmental attitude and practice of sustainable behaviour of secondary schools' students.

Methodology:

The researchers used descriptive survey method for this study. 200 samples (100 boys and 100 girls) were selected through stratified random sampling from North 24 Parganas and Nadia district of West Bengal. Among 200 samples, 100 were selected from the Rural areas and 100 from urban areas. The data was collected through two self-developed standardized scales, namely Environmental Attitude Scale and Sustainable Behaviour Scale. The EAS scale consists 30 test items and SBS scale consists 15 test- items. Descriptive statistics and correlation analysis were used for analysing the data.

	\mathbf{M}_1	M_2	SD ₁	SD_2	t-value	Remarks
H_{01}	122.4	122.8	14.7	14.7	0.195	Accepted at 0.05 level (df-198)
H_{02}	60.8	60.74	2.44	2.64	0.168	Accepted at 0.05 level (df-198)
H_{03}	118.88	122.8	13.96	14.01	1.99	Rejected at 0.05 level (df-198)
H_{04}	58.9	59.7	2.18	2.22	2.58	Rejected at 0.05 level (df-198)
	Sample	Sample	r- value			Remarks
H_{05}	100	100	0.45			Rejected at 0.05 level (df-198)
H ₀₆	100	100	0.48			Rejected at 0.05 level (df-198)
H_{07}	100	100	0.46			Rejected at 0.05 level (df-198)

Table 1: Tabular form of results of all hypoth

Data Analysis and Interpretation:

t- table value is 1.96 (0.05 level) and 2.58 (0.01 level) at df- 198.

Hypothesis 1: There is no significant difference between the level of environmental attitude of boys and girls of secondary schools.

The general table of data analysis (Table 1) is showing that the mean of the level of environmental attitude of the boys is 122.4 and that of the girls is 122.8. The t value is 0.195 which is less than the table value (at 0.5 level). So, the t ration is not significant and thus, the hypothesis was accepted that there does not exist any significant difference between the level of environmental attitude of boys and girls of secondary schools.

Hypothesis 2: There is no significant difference between the level of practice of sustainable behaviour of boys and girls of secondary schools.

The general table of data analysis (Table 1) is showing that the mean of the level of practice of sustainable behaviour of the boys is 60.8 and that of the girls is 60.74. The t value is 0.168 which is less than the table value (at 0.5 level). So, the hypothesis was accepted that there does not exist any significant difference between the level of practice of sustainable behaviour of boys and girls of secondary schools.

Hypothesis 3: There is no significant difference between the level of environmental attitude of urban students and rural students of secondary schools.

The general table of data analysis (Table 1) is showing that the mean of the level of environmental attitude of the urban students is 118.88 and that of the rural students is 122.8. The t value is 1.99 which is higher than the table value 0.5 level. So, the t ratio is significant at 0.05 level. But the t ratio is less than the table value at 0.01 level. So, the hypothesis that there does not exist any significant difference between the level of environmental attitude of urban and rural students of secondary schools, was rejected at 0.05 level. Though, it was accepted at 0.01 level.

Hypothesis 4: There is no significant difference between the level of practice of sustainable behaviour of urban students and rural students of secondary schools.

The general table of data analysis (Table 1) is showing that the mean of the level of practice of sustainable behaviour of the urban students is 58.9 and that of the rural students is 59.7. The t value is 2.58 which is higher than the table value both at 0.05 and 0.01 level. So, the hypothesis that there does not exist any

significant difference between the level of practice of sustainable behaviour of urban and rural students of secondary schools, was rejected.

Hypothesis 5: There is no significant relationship between environmental attitude and practice of sustainable behaviour of the students of secondary schools on the basis of their sex.

The co-efficient of correlation between environmental attitude and practice of sustainable behaviour of the students of secondary schools on the basis of their sex was 0.45, which is higher than the table value. So, the value was significant and thus the hypothesis was rejected. So, there exists relationship between environmental attitude and practice of sustainable behaviour.

Hypothesis 6: There is no significant relationship between environmental attitude and practice of sustainable behaviour of students of secondary schools on the basis of their locality.

The co-efficient of correlation between environmental attitude and practice of sustainable behaviour of the students of secondary schools on the basis of their locality was 0.48, which is higher than the table value. So, the value was significant and thus the hypothesis was rejected. So, there exists relationship between environmental attitude and practice of sustainable behaviour.

Hypothesis 7: There is no significant relationship between environmental attitude and practice of sustainable behaviour of secondary schools' students.

The co-efficient of correlation between environmental attitude and practice of sustainable behaviour of the students of secondary schools was 0.46, which is higher than the table value. So, the value was significant and thus the hypothesis was rejected. So, there exists relationship between environmental attitude and practice of sustainable behaviour.

Findings and Discussion:

Analyzing all the hypothesis it was found that there does not exist any significant difference between the level of environmental attitude of boys and girls of secondary schools and between the level of practice of sustainable behaviour of boys and girls of secondary schools. But there exists difference between the level of environmental attitude of urban students and rural students of secondary schools. That means the level of environmental attitude of the urban students is different from that of rural students. Also, it was found that difference exists between the level of practice of sustainable behaviour of urban and rural students of secondary schools. The researchers found positive relationship between environmental attitude and practice of sustainable behaviour of the secondary school students on the basis of sex and locality of the students.

Conclusion:

In today's world, environmental attitude is a real point of anxiety to the concern people. World is at its marginal position in this perspective. Environmental awareness means understanding the need of the environment, the impacts of human behaviour on the environment, being aware about the natural resources, and ways to protect them. Environmentalism is the ideology that elicits the responsibility of human beings towards the nature and natural resources. Sustainability is one another key factor of healthy living in future days. Before make other people aware about the issues of environment, it is important to make oneself aware of it. Environmental awareness, positive attitude towards the natural resources and sustainable behaviour are, thus, most important part of social life of every human.

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