



A Study of Environmental Awareness among Senior Secondary Students

Dr. Umesh Chandra

Assistant Professor, Department of Teacher Education,
Ganjdundwara College Ganjdundwara, Kasganj, U.P., India
umeshucb@gmail.com

Dr. Praveen Kumar

Assistant Professor, Department of Teacher Education,
Shivpati P.G. College Shohratgarh, Siddharthnagar, U.P., India

ARTICLE DETAILS

Research Paper

Keywords:

*Environment,
Environmental Education
& Awareness.*

ABSTRACT

The environment is now a major concern for academics, intellectuals, scientists, policymakers, and the government on every continent. Globally, there has been a growing and systematic awareness of environmental challenges, especially since the 1960s. The world community places a high priority on the environment, as evidenced by events such as United Nation World Conference (1972) on the Environment in Stock 01March 1992 Earth Summit in Rio de Janeiro, and world NGO convention. Concerns over the environment have increased among people. Since strip mining is destroying the terrain and causing floods, the environmental movement has concentrated notice on issues such as the standard of our breathing water and air, the harm new dam building brings to wildlife, and more. We are starting to understand that our health and wellbeing can be significantly impacted by anything in our environment, possibly in a bad way. Evaluating senior secondary school student's level of environmental awareness in the Aligarh region of Uttar Pradesh was one of the study's purposes. The current study used a descriptive survey approach to gather data. Dr. P.K. Jha's EAAM, a standardized instrument, was employed. The

survey found that, in comparison to UP Board students, senior secondary school students from the CBSE Board had a higher level of awareness regarding the surroundings. The level of awareness regarding the surroundings, boys and girls in CBSE Board students did not significantly differ from one another. However, when it came to environmental awareness, the computed t-value showed significant differences between the boys & girls of the UP Board & the CBSE Board's boys & girls.

DOI : <https://doi.org/10.5281/zenodo.14843660>

INTRODUCTION

The environment is deteriorating daily as a result of human irresponsibility, industrialization, greater consumption of goods and services, and the rapid rate of progress. All essential life-supporting systems on Earth, including the air, water, forests, and soil, have been deteriorated by humans. Ozone layer depletion in the stratosphere is a result of global warming brought on by environmental deterioration. The ongoing environmental degradation has made it necessary to consider environmental issues on a regular basis. Globally, people are becoming more conscious of the need to protect the surroundings & promote long-term development. The degradation of the surroundings are causing not only technical but also behavioral and attitude changes in customers.

ENVIRONMENTAL EDUCATION AND AWARENESS

The necessity for environmental education has been highlighted by widespread concern over the environment's continued degradation. Since 1970, people all across the world have come to realize how important education is for understanding environmental protection and finding solutions to connected challenges. The main goal of environmental education is emphasized in the Belgrade Charter, which was adopted during the environmental education workshop in Belgrade, Yugoslavia, in 1975. "To develop a world population that is aware of and concerned about the environment and its associated problems so that the population will have the knowledge, social, attitudes, motivation, and commencement of work individually and collectively towards the solutions of current problems and prevention of new ones." Whether formal or informal, this quotation clarifies the long-term goal of education about the environment. (Environmental Education Series 6, 1990, UNESCO-UNEP).



The Vedic era recognized the fundamental connection that exists between the environment and humankind. Furthermore, the idea of non-violence towards all living organisms and inanimate items in the biosphere is firmly ingrained in Indian psychology. As a result, everyone in society should have the utmost care for environmental awareness and education. The first step in protecting the environment is raising public awareness so that it permeates daily life. The ultimate objective of educational programs on ecology is to increase people's participation in green conservation as well as improve their awareness, understanding, mindsets, and abilities.

REVIEW OF THE RELATED LITERATURE

Through a review of the literature, the investigator can establish the parameters of the field and the extent of the investigation. By reviewing existing literature, the researcher can more succinctly and clearly articulate their aims.

Zafar (2002) investigated how senior secondary school students' knowledge of the environment related to their gender, academic track, IQ, and socioeconomic status. He discovered that female students had a greater environmental awareness than male students. The identical outcomes were found in Investigative endeavors in Uttar Haryana by Surekha (2011) and West Garo Hills by Dakshin Haryana and Marak (2013). But still, as a result of examining the relationship between educational parameters and environmental awareness in higher secondary students, Astin (2011) discovered that boys were more conscious of environmental issues than girls.

Rout and Agarwal (2006) looked at an investigation regarding environmental consciousness and attitude among tenth standard students in Moradabad city after finding revealed that urban and rural students have significantly different levels of environmental consciousness, with the former having a higher level than the latter. Similar results were also observed by studies conducted in the districts of Chennai and Kancheepuram by Sarojini (2010), Gurgoan and Rewari district by Roa, K. (2010), Uttar Haryana and Dakshin Haryana by Surekha (2011), and West Garo Hills by Marak (2013).

Rajput and Gupta (2008) looked into the environmental consciousness of students in Madhya Pradesh and Maharashtra's non-formal education institutions as well as those attending rural and urban schools. They found that when comparing rural and urban students, the former have a greater knowledge of the environment. Studies by Das (2013) and Amarjyothi, A.R. (2009) also reported similar results.

Anabalagan and Santhi (2015), Environmental problems are a serious worldwide issue that should be taken seriously because of the growing human population and advancements in every industry. Recent years have seen an increase in environmental issues, with a wide range of issues concentrating



on the essential seed for alternative, sustainable solutions to protect Mother Nature. It is crucial to choose policies and programmes that support the efficient use of resources and implement technologies that demonstrate how to reduce environmental damage in order to achieve sustainable development. Humans' desire for modern technologies and changing lifestyle patterns has put the environment at serious risk, and this is because pollution levels are alarmingly high.

NEED AND SIGNIFICANCE OF THE STUDY

The present work is foremost for the environment. This study could be helpful in examining the environmental side of human-related issues. The most essential application of this is that it helps pupils become more knowledgeable and conscious of environmental awareness. One crucial instrument for addressing environmental issues is environmental awareness. A student is regarded as the architect of the nation. Since students are the ones who lead a country to success, addressing environmental issues among them indicates that we have addressed half of the issues at hand. We are aware that environmental factors have a major role in both sustainable development and life quality. Our understanding of the environment can assist us in turning a dirty environment into a clean one. As the next generation of citizens, without students' awareness, the concerns surrounding energy and the environment cannot be resolved. Before beginning this study, the same consideration was taken into account. It is intended that this study will serve as a helpful manual and database for environmental policy makers, environmental managers, environmentalists, NGO's, and other relevant parties. Environmental problems can be resolved by identifying their underlying causes and combining the efforts of society and governments. This will assist to understand the current state and future prospects of environmental awareness in youth. We hope that students who care about the environment will contribute to the creation of an eco-friendly nation and society.

STATEMENT OF THE STUDY

The study under the investigation was stated as “A Study of Environmental Awareness among Senior Secondary Students”.

OPERATIONAL DEFINITIONS OF THE TERMS USED

- A. Environment:** The term "environment" refers to the entirety of human development and life, as well as the lives of other organisms.
- B. Awareness:** Being aware, focused, or in a state of knowing or having knowledge of something.



- C. Environmental Awareness:** Understanding the surroundings, the effects of human activity on it, and the significance of protecting it is known as environmental awareness.
- D. Senior Secondary School Students:** Students in the eleventh and twelfth grades are referred to as senior secondary students in this study.

OBJECTIVES OF THE STUDY

The ensuing purposes were pursued in conducting the present work:

1. To investigate the environmental awareness of C.B.S.E and U.P. Board Senior Secondary Students.
2. To find out the environmental awareness of C.B.S.E. Board Senior Secondary Students, Boys and Girls.
3. To find out the environmental awareness of U.P. Board Senior Secondary Students, Boys and Girls.
4. To examine the environmental awareness of Senior Secondary Students, Boys from the C.B.S.E. & U.P. Board.
5. To examine the environmental awareness of Senior Secondary Students, Girls from the C.B.S.E. & U.P. Board.
6. To explore the environmental awareness of Senior Secondary Students, Boys of C.B.S.E & Girls of U.P. Board.
7. To explore the environmental awareness of Senior Secondary Students, Girls of C.B.S.E & Boys of U.P. Board.

HYPOTHESES

The current investigation developed the following null hypotheses:

1. There is no significant difference between C.B.S.E & U.P. Board Senior Secondary Students.
2. There is no significant difference between Boys & Girls of C.B.S.E Board Senior Secondary Students.
3. There is no significant difference between Boys & Girls of U.P Board Senior Secondary Students.
4. There is no significant difference between Boys of C.B.S.E & U.P Board Senior Secondary Students.
5. There is no significant difference between Girls of C.B.S.E & U.P Board Senior Secondary Students.
6. There is no significant difference between Boys of C.B.S.E & Girls of U.P Board Senior Secondary Students.



7. There is no significant difference between Girls of C.B.S.E & Boys of U.P. Board Senior Secondary Students.

DELIMITATIONS OF THE STUDY

Due to the vastness of populating the present work is delimited in terms of the following:

1. The area of the study is confined to Aligarh only.
2. The sample is confined to two hundred students only.
3. The present work is confined to senior secondary students only.
4. The study is delimited to C.B.S.E and U.P Board only.

METHOD AND PROCEDURE OF THE STUDY

For the present Research work, the descriptive research survey method has been used.

SAMPLE AND SAMPLING TECHNIQUES

The sample structure can be described in the following way. Simple random sampling procedures were employed for this research work. Two hundred senior secondary students make up the study's total sample. One hundred senior secondary school students from the C.B.S.E. Board of Aligarh and one hundred from the U.P. Board of Aligarh District were selected as a sample for this study.

DESCRIPTION OF TOOL AND TECHNIQUES

The Environmental Awareness Ability Measure (EAAM), prepared by P.K. Jha (2005), was employed for the present investigation. The test consists of 51 items that measure environmental awareness in five dimensions. The EAAM uses one-point scales for self-reporting, and agree/disagree categories are used to score the replies. After that, a list of 51 items 43 positive and 8 negative words is assessed. A set of numerical classifications that indicate agreement for good things and disagreement for negative ones. Consequently, a higher score indicates a greater level of environmental awareness on the scale.

ADMINISTRATION OF THE TEST

Five C.B.S.E & five U.P. Board Senior Secondary Schools were chosen for the collecting of awareness data. The awareness exam was developed and dispersed at random throughout these schools. The questionnaire had clear instructions on the top page, with two options for each item. After reading



the items, students marked them on the questionnaire. The investigator then gathered the completed forms and reviewed them to determine whether the students were aware of them.

RELIABILITY OF THE TEST

Three reliability indices were identified: first, split-half reliability was found to be 0.61; second, reliability was computed using the K-R method and found to be 0.84; and third, reliability was evaluated using the test-retest method. Two test-retest reliabilities were calculated; the results showed values of 0.74 and 0.71 for the three- and six-month intervals, respectively. As a result, the EAAM has a sufficient level of reliability.

VALIDITY OF THE TEST

In order to assess the validity of the EAAM, correlation coefficients between the current scales' scores and Tarija's environment awareness scale were calculated. An analysis of the data revealed a 0.83 coefficient of correlation. Due to expert judgment on each item, the scale also has face and content validity.

FINDINGS AND DISCUSSION

1. There is no significant difference between C.B.S.E & U.P. Board Senior Secondary Students.

Mean, S.D., CR test of environmental awareness of total students of C.B.S.E & U.P Board students.

Table – 1

Board of Students	N	Mean	S.D.	CR	Level of Significance
C.B.S.E.	100	43.66	4.984	2.73	Significant at 0.01
U.P.	100	41.41	6.556		

After the observation of the above **Table-1** it is clear that mean of environmental awareness of C.B.S.E & U.P Board students is **43.66** and **41.41** respectively. The S.D of C.B.S.E students is found to be **4.98** and U.P Board is **6.556**. The significant difference between these students has been tested at 0.01 and 0.05 level of significance. The obtained CR value is **2.73**. It is significant at **0.01** level.



2. There is no significant difference between Boys & Girls of C.B.S.E Board Senior Secondary Students.

Mean, S.D., C.R. test of environmental awareness of C.B.S.E Boys & Girls Senior Secondary students

Table- 2

Students	N	Mean	S.D.	CR	Level of Significance
C.B.S.E. Board Boys	50	43.84	5.17	0.36	Insignificant
C.B.S.E. Board Girls	50	43.48	4.79		

After the observation of the above **Table -2** it is clear that mean of environmental awareness of C.B.S.E Boys & Girls students of C.B.S.E is **43.84** and **43.48** respectively. The S.D. of Boys students of C.B.S.E are found to be **5.17** and Girls students of C.B.S.E is **4.79**. The significant difference between these students has been tested at 0.01 and 0.05 level of significance. The obtained CR value is 0.36. It is insignificant at both level **0.01** and **0.05** level of significance.

3. There is no significant difference between Boys & Girls of U.P Board Senior Secondary Students.

Mean, S.D. and CR test of environmental awareness of Boys & Girls of U.P Board Senior Secondary Students

Table- 3

Students	N	Mean	S.D.	CR	Level of Significance
U.P. Board Boys	50	41.82	5.96	0.63	Insignificant
U.P. Board Girls	50	41.00	6.98		

After the observation of the above **Table 3** it is clear that mean of environmental awareness of Boys & Girls of U.P Board Senior Secondary Students is **41.82** and **41.00** respectively. The S.D. of Boys students of U.P Board are found to be **5.96** and Girls of U.P Board is **6.98**. The significant difference between these students has been tested at 0.01 and 0.05 level of significance. The obtained CR value is 0.63. It is insignificant at both level **0.01** and **0.05** levels of significance.



4. There is no significant difference between Boys of C.B.S.E & U.P Board Senior Secondary Students.

Mean S.D. and CR test of environmental awareness of Boys of C.B.S.E & U.P Board Senior Secondary students.

Table - 4

Board of Boys	N	Mean	S.D.	CR	Level of Significance
C.B.S.E	50	43.84	5.17	1.81	Insignificant
U.P	50	41.82	5.96		

After the observation of the above **Table 4** it is clear that mean of environmental awareness of Boys of C.B.S.E & U.P Board students are **43.84** and **41.82** respectively. The S.D. of Boys of both Boards is found to be **5.17** and **5.96**. The significant difference b/w these students has been tested at 0.01 and 0.05 level of significance. The obtained CR value is **1.81**. It is insignificant.

5. There is no significant difference between Girls of C.B.S.E & U.P Board Senior Secondary Students.

Mean, S.D. and CR test of environmental awareness of Girls of C.B.S.E Board & U.P Board Senior Secondary Students.

Table- 5

Board of Girls	N	Mean	S.D.	CR	Level of Significance
C.B.S.E.	50	43.48	4.79	0.07	Significance at 0.05
U.P.	50	41.00	6.98		

After the observation of the above **Table 5** it is clear that mean of environmental awareness of Girls of C.B.S.E. & U.P Board Senior Secondary Students are **43.48** and **41.00** respectively. The S.D. of Girls students of C.B.S.E Board are found to be **4.79** and Girls student of U.P Board is **6.98**. The significance difference between these students has been tested at 0.01 and 0.05 level of significance the obtained CR value is 2.07. It is significant at **0.05** level of significance.



6. There is no significant difference between Boys of C.B.S.E & Girls of U.P Board Senior Secondary Students.

Mean S.D. and CR test of environmental awareness of Boys students of C.B.S.E & Girls of U.P. Board Senior Secondary Students.

Table - 6

Students	N	Mean	S.D.	CR	Level of Significance
C.B.S.E Boys	50	43.84	5.17	2.32	Significance at 0.05
U.P Girls	50	41.00	6.98		

After the observation of the above **Table 6** it is clear that Mean of environmental awareness of students of C.B.S.E & Girls of U.P Board Senior Secondary is **43.84** and **41.00** respectively. The standard deviation of Boys students of C.B.S.E is found to be **5.17** and Girls of U.P Board is **6.98**. The significant difference between these students has been tested at 0.01 and 0.05 level of significance. The obtained CR value is **2.32**. It is significant at **0.05** level.

7. There is no significant difference between Girls of C.B.S.E & Boys of U.P. Board Senior Secondary Students.

Mean S.D. and CR test of environmental awareness of Girls students of C.B.S.E & Boys students of U.P Board Senior Secondary Students.

Table – 7

Student	N	Mean	S.D.	CR	Level of Significance
C.B.S.E Girls	50	43.48	4.79	1.55	Insignificant
U.P Boys	50	41.82	5.96		

After the observation of the above **Table 7** it is clear that Mean of environmental awareness of Girls students of C.B.S.E & Boys students of U.P Board is **43.48** and **41.82** respectively. The standard deviation of Girls students of C.B.S.E Board is found to be **4.79** and Boys students of U.P Board is **5.96**. The significant difference between these students has been tested at **0.01** and **0.05** level of significance. The obtained CR value is **1.55**. It is insignificant.



CONCLUSION

There is no question about the necessity of environmental consciousness in all spheres of society, particularly among students who will be the future of humanity given the rate at which our environment is deteriorating and being depleted. The first step towards maintaining the environment is raising people's awareness of it. This is done through teaching them about the current status of the environment, its components and how they interact, as well as the problems that exist now and potential solutions. The study's conclusions demonstrate that, in comparison to UP Board students, senior secondary school pupils from the CBSE Board have a higher degree of environmental awareness. With regards to environmental awareness, there was no significance difference between the genders of CBSE Board Students. The calculated t-value, however, revealed a significant difference in the degree of environmental awareness between the boys & girls from the UP Board & the CBSE Board.

EDUCATIONAL IMPLICATION OF THE STUDY

1. The study's conclusions may be used to modify the environmental studies curriculum in senior secondary schools.
2. The study's conclusions can assist educators in raising pupils' knowledge of environmental issues, particularly UP Board students.
3. The result may also be beneficial to non-governmental organizations and other groups involved in environmental issues.

REFERENCES

1. Astalin P.K. (2011). A study of environmental awareness among College students and some educational factors affecting it. *International Journal of Multi-disciplinary research*, Vol. 1, issue. 7.
2. Khan, S.H., (2013). A Study of attitude towards environmental awareness in relation to certain variables among College students. *Scholarly research Journal for Interdisciplinary Studies*, Vol. 1, Issue V, p. 1258-1264.
3. Ghosh, K., (2014). Environmental Awareness among secondary school students of Golaghat District in the state of Assam and their attitude towards Environmental Education. *IOSR Journal of Humanities and Social Science*, Vol. 19, Issue 3, pp. 30-34.
4. Kumar, A., (2012). A Study on Assessment of Environmental Awareness among Teacher train in Teacher Training Institute. *IJRSS*, Vol. 2, Issue 3, p. 312.



5. Poonam, (2012). A Comparative Study of Environmental Awareness among Government and Private Secondary School Students. *International Journal of Educational Planning and Administration*, Vol. 2, Number 2, pp. 125-127.
6. Abbas, M.Y., and Singh, R., (2014). A Survey of Environmental Awareness, Attitude and Participation amongst University Students. *International Journal of Science and Research*, Vol. 3, Issue 5.
7. Singh, A., and Dogra, B., (2014). A Study of Environmental Awareness among Muslim Girls pursuing Graduation Course in Bareilly region. *G-Journal of Environmental Science and Technology*, 1(5), p. 112.
8. Asthana, B., *Measurement and evaluation in psychology and education*, Vinod Pathak Mandir, Agra (Latest Edition).
9. Garret, H.E., (1989). *Statistics in psychology and education* Kalyani Publishers, Ludhiana (Eleventh Edition).
10. Kapil H.K., *Elements of statistics in social science*, Vinod pastak Mandir, Agra (Latest Edition).
11. Rai, P.N., (1995). *Anusandhan Parichaya*, Laxmi Harayana Agarwal, Agra (Fifth Edition).
12. Rajput and Gupta.(2008).Environmental Awareness among children of Non-formal Education Centres of Madhya Pradesh and Maharashtra.*Indian Education Review NCERT*.119-125.
13. Rout, S.K and Agarwal, S. (2006). Environmental awareness and environmental attitude of students at high school level.*Edutracks*, 6,(1), 25-26.
14. Zafar S. (2002). Environmental awareness among senior secondary school children in relation to their gender, academic stream intelligence and socio-economic background(Unpublished doctoral thesis).Department of Education.Aligarh Muslim University. India.