



## Assessment of environment awareness behaviour among adult and adolescence

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### Abstract

The purpose of this research study was to examine the level of environmental awareness between the youth group (age 18 to 25) and the adult group (age 40 to 50). This research was conducted on 60 individuals. The sample included 30 individuals from the youth group and 30 individuals from the adult group. The random sampling method was used to select the sample for the study. The Environmental Awareness Maturity Scale (EAS) developed by Praveen Kumar Jha (Madhupura, Bihar) was used to assess the level of environmental awareness in the youth group and the adult group. The obtained data were subjected to analysis using Mean, SD, and T-test. The analysed data shows that environmental awareness is almost equal in the youth group and the adult group.

**Keywords:** Study, environment awareness, adolescence & adults

### Introduction

Generally, the environment is defined in the context of humans, where the human is declared a separate entity and everything else surrounding them is their environment. However, it is noteworthy that there are still many human civilizations on this earth that do not consider themselves separate from the environment; in their eyes, all nature is a single unit of which humans are also a part. Essentially, those who consider humans separate from the environment are technically developed and capable of bringing significant changes to their natural conditions through the extensive use of science and technology.

Based on human intervention, the environment is divided into two segments: 'Natural Environment' and 'Man-made Environment'. This division merely indicates the degree of human intervention in natural processes. Extensive interference with nature by technical humans for economic goals and luxury has destroyed the balance of the natural environment, threatening the existence of the natural system. Such problems are called environmental degradation.

Environmental problems like pollution and climate change are prompting humans to reconsider their lifestyle, and now there is a discussion about environmental conservation and management. How capable humans are of reducing the damage through scientific and technical changes, how much attention is being paid to the environment amidst the conflict of economic and political interests, and how aware humanity is of its environment—these are the burning questions of today.

The land, water, air, trees, plants, and group of animals found on Earth surround us. These biotic and abiotic components of the environment interact with each other to establish a complete process known as an ecosystem.

### Types of Environment

Similarly, the environment exists externally in three forms.

#### 1. Physical Environment

A major part of the environment is composed of the physical environment, which includes air, water, food substances, land, sound, heat, light, river, mineral substances, and other materials. Human beings are in

constant contact with it. Due to constant contact with these components, they directly affect human health. If the harmony of the normal state is broken, human beings are affected by the side effects of the environment.

#### 2. Biological Environment

The biological environment in the universe is a very large component that remains around humans. Even for one human, another human is also a part of the environment. It has been divided into two parts.

- **Animal Community:** This includes all living beings from microscopic organisms like Amoeba of Protozoa to the Chordata group.
- **Plant Community:** This includes all trees and plants from microscopic plants and medicines to the Cinchona tree group existing on Earth.

#### 3. Psychosocial Environment

Psychosocial environment is revealed through human social relationships. Within this, we study the development of human personality in social, economic, spiritual, and political fields. Man is a social animal; he has to maintain relationships with other classes, castes, neighbours, community, state, and nation in society. With the help of his social relationships, man proves helpful in fulfilling his goal later on. The ways of living, lifestyle, food habits of human life, festivals, ceremonies, and rituals that affect various dimensions of human life are called social and cultural environment.

### Various Environmental Challenges

1. **Population Explosion:** India's current population has reached approximately 1.34 billion with a growth rate of 1.2%. Reasons include illiteracy, poverty, high birth rates, low death rates, and infiltration from neighbouring countries. This puts massive pressure on natural resources. Female literacy and awareness are measures that need strict implementation.
2. **Poverty:** The relationship between the environment and poverty is centuries old. Poverty eradication was a

key agenda of the UN Millennium Development Goals (MDGs) and is the first goal of the 2030 Agenda for Sustainable Development. 0]. Although poverty is decreasing in India, approximately 270 million people are still below the poverty line. Most poor people depend directly on natural resources for basic needs like food, fodder, fuel, and shelter.

3. **Agricultural Development:** The Green Revolution aimed to make the country self-sufficient in food, but its strategies had harmful effects on rural and urban communities. Excessive use of fertilizers and pesticides led to resistant varieties of flora and fauna, reduced soil fertility, and disturbances in the ecosystem. Lack of knowledge about banned chemicals has led to serious diseases like cancer.
4. **Groundwater:** Rational use of groundwater is necessary as aquifers are limited and the water level is decreasing daily. Leakage of chemical fertilizers and industrial waste has polluted surface water and affected groundwater quality. Corporate Social Responsibility (CSR) and strict laws against non-compliant industries are helpful.
5. **Deforestation:** Heavy deforestation is occurring due to industrialization. Displacement of local people and damage to flora and fauna have occurred due to dam construction for hydroelectric plants. Awareness movements like the 'Narmada Bachao Andolan' have played a significant role in highlighting environmental integrity.
6. **Land Degradation:** Land is a limited resource. Out of India's 329 million hectares, only 266 million have potential productivity. About 30% of land in India is already degraded due to overgrazing and soil erosion.
7. **Technological Advancement:** People are interested in using the latest gadgets without knowing the potential harmful effects. While they are an essential part of life, there is a need for caution and management of natural resources alongside security and sensitivity.
8. **Genetic Diversity:** Wild populations have decreased significantly due to urbanization and deforestation, leading to a dangerous disappearance of the genetic pool. Conservation efforts in protected areas like sanctuaries and national parks are necessary because every creature is important for maintaining balance in nature.
9. **Urbanization:** Urbanization and industrialization have given rise to various environmental problems like solid waste disposal, slum development, and sewage disposal 6]. Clean towns and cities are a major challenge requiring joint efforts from the government and the people.
10. **Air and Water Pollution:** Many industrial establishments do not follow established environmental standards for waste disposal. Strict implementation of environmental policies and public support are mandatory.

## Objectives

- To explain the environment,
- To explain environmental challenges,
- To explain environmental awareness,
- To explain the importance of environmental awareness,
- To explain key methods of fostering environmental awareness.

## Literature Review

### 1. Importance of Environmental Protection in India

A research paper titled "Importance of Environmental Protection: A Study in the Context of India" by Shiv Shankar and Veena Devi Singh states that according to the Constitution of India (Articles 48, 51-A), protecting the environment is the responsibility of both citizens and the state.

This study analyses government efforts such as the activities of the Central and State Pollution Control Boards, the 1992-93 National Conservation Strategy, and the 1993 Environmental Action Program, and shows their impacts.

### 2. Panna Biosphere Reserve - Role of Media and Local Culture

Research by Ambrish Tripathi and Dr. J.K. Panda shows that the tribes of the Panna region of Madhya Pradesh live a harmonious life with nature and forests. The media has an important role in increasing local-national awareness, but it currently shows limited impact.

### 3. Azamgarh Study: Improving Environmental Degradation

A recent study found that rapid population growth, deforestation, agriculture, industry, and technological changes are the main factors of environmental degradation. The study suggested measures such as social forestry, organic farming, industrial-urbanization balance, and population control.

### 4. Himachal Pradesh: Challenges of Afforestation

The Himachal Group reviewed forest diversion and compensatory afforestation (CAMPA) in the Kinnaur district of Himachal Pradesh between (2012-16). It was found that only 2011 plants could grow successfully, while social and geographical challenges - such as planting trees in pastures - historically hinder the implementation of policies in a normal manner.

### 5. Bishnoi Sect and Traditional Environmental Love

Dr. Om Prakash Saini's research highlights environmental protection, respect and empathy for wildlife, and the protection of natural resources through the teachings of the Bishnoi sect - such as "Ahimsa Paramo Dharma" (Non-violence is the supreme religion)

### 6. Population Growth and Environmental Impact (Geographical Study)

Jalesingh Yadav's (2025) research states that India's rapid population growth has given rise to problems such as land erosion, deforestation, loss of biodiversity, and increased energy requirements. Resulting in air pollution, groundwater crisis, and global warming have emerged.

## 7. Cultural Environment and Sociological Perspective

A study (Social Research Foundation) understood environmental protection not just from a technical perspective, but from a social and cultural viewpoint.

It explained that excessive exploitation of natural resources also affects social inequality and pollution, therefore it is necessary to include cultural knowledge - especially indigenous practices - in conservation policies.

### Scope of Public Awareness

Environmental quality and integrity can be protected through public awareness. A declining environment is the biggest threat to human existence. The loss of valuable natural resources and pollution cause harmful effects on flora and fauna, along with abiotic stress. Public awareness is one of the fundamental principles of environmental management. It includes:

1. Developing sensitivity and awareness toward environmental issues.
2. Assimilating the strict need for conservation of natural resources and the surrounding environment.
3. Encouraging active participation of people in environmental conservation and development.
4. Developing expertise for active identification and finding solutions to environmental problems.
5. Evaluating the socio-economic, ecological, and aesthetic aspects and impacts of various environmental programs launched for improving environmental health.

### Need for Public Awareness in Environmental Management

It is crucial to make people aware of the fatal consequences of environmental degradation because if ignored and no corrective measures are taken, it will lead to large-scale extinction. We are facing various environmental challenges that need to be strictly addressed for sustainable growth and development. Every country needs to adopt an environment-friendly approach to become familiar with the threats generated in the name of industrialization and development. Natural resources in the world are limited. We depend on natural ecosystems for products from forests, grasslands, oceans, and agriculture, as well as water, air, soil, minerals, oil, etc., which are essential parts of our life support systems. Life would be impossible without these substances. Population growth puts pressure on these limited natural resources, and the Earth cannot meet the ever-increasing demand.

Additionally, the misuse of resources is another factor contributing to environmental decline. The waste and pollution of water resources and the production of non-biodegradable materials like plastic, non-recyclable electronic waste, and nuclear waste are other serious threats. Manufacturing processes release solid waste, chemicals, and gases that pollute the environment. The hazardous increase in waste production cannot be managed by natural processes because most synthetic waste is non-biodegradable. These accumulate in our environment, causing various diseases and adverse effects. Air pollution causes chronic respiratory diseases, while water pollution causes gastrointestinal diseases and many toxic pollutants cause cancer.

This dire situation can only be tackled through initiatives taken daily by every individual toward the conservation of environmental resources. Neither the government alone nor

a group of environmentalists can manage and protect the environment or stop degradation. Sensitivity can only be created to build self-responsibility. Therefore, efforts at the individual level can lead to sustainable development.

### The Importance of Public Awareness in Environmental Management

Depletion of natural resources and environmental degradation necessitate an action plan for environmental protection. Climate change, loss of biodiversity, depletion of the ozone layer, illegal trade of endangered species, habitat destruction, land degradation, groundwater depletion, invasive species, environmental pollution, solid waste and sewage disposal pose serious threats to forest, marine, freshwater, and other land ecosystems. Ignorance and lack of concern regarding environmental issues hinder environmental management. The government alone cannot manage all issues without public support. Every individual must be an integral part of the campaign to prevent environmental degradation because only we can reap the benefits of a clean environment. Prevention is always better than cure. Reducing the waste of natural resources and staying vigilant about the sources responsible for pollution and the degradation of our environment allows us to [protect the environment. Will empower the government to inspire action. This is only possible through widespread public awareness. Newspapers, radio, and television strongly influence public opinion. Press and television strongly influence public opinion. The press and media contribute to public efforts and force politicians to react positively to a strong public movement. Non-governmental organizations and small support groups are working continuously to make people aware of the environment. Various green policies made by the government are the result of public efforts alone. Making society aware of environmental issues and challenges develops skills and expertise in individuals, leading to proper solutions for environmental issues. The idea of 'development without destroying the environment' can only be fulfilled by public awareness. The public can play a significant role in making laws and their implementation.

### Objectives of Environmental Education (Unesco Tbilisi Conference, 1977)

1. **Awareness:** Making people sensitive to the environment and the problems caused by its misuse.
2. **Knowledge:** Helping people gain basic understanding and experience about the environment and related problems.
3. **Skills:** People should acquire skills to identify and solve environmental problems.
4. **Attitude:** Developing values and concern for the environment and encouraging participation in keeping it clean and safe.
5. **Participation:** Providing opportunities for involvement at all levels in solving environmental problems.

### Guiding principles established by UNESCO ICEEE Tbilisi in 1977 were as follows

There is a need to view the environment holistically, i.e., natural, technological, social, economic, political, cultural, moral, historical, and aesthetic environment.

1. There is a need for environmental education to be a continuous life process from pre-school level to formal and non-formal education levels.
2. An interdisciplinary approach is necessary to spread awareness and knowledge about environmental problems.
3. Major environmental issues should be examined from a local, national, regional, and international perspective.
4. Recognizing the complex nature of environmental problems will have to develop critical thinking and problem-solving skills in people.
5. The importance of local, national and international cooperation in solving environmental problems should be highlighted.
6. There is a need to use the available knowledge about the environment and the various teaching and learning methods available.
7. Learners should be familiarized with the real causes of environmental problems and how they manifest, and they should be encouraged to participate in the prevention and solution of environmental problems.
8. There is a need to incorporate aspects of environmental sensitivity, environmental knowledge and problem solving in school level education.
9. Current as well as potential environmental conditions. emphasis also needs to be placed on.

Environmental aspects should be considered in all schemes of social, economic, and other types of growth and development. In our country, various government and non-government organizations are involved in environmental protection and promotion. Some famous government organizations include the Ministry of Environment, Forest and Climate Change, the Botanical Survey of India (BSI) and the Zoological Survey of India (ZSI), the Wildlife Institute of India (WII), the Salim Ali Centre for Ornithology and Natural History (SACON), and non-government organizations such as the Bombay Natural History Society (BNHS), the World-Wide Fund for Nature (WWF-I), and the Uttarakhand Seva Nidhi (UKASN). Various environmental activists have played a significant role in the protection and promotion of the environment and have led large-scale revolutionary movements for the conservation of nature. Some famous people are MS Swaminathan, Medha Patkar, Sunderlal Bahuguna, RK Pachauri, etc.

### **Promoting environmental awareness among all sections of society**

To effectively promote environmental literacy, this strategy focuses on a multi-pronged approach that bridges the gap between formal and informal learning. By integrating specialized training materials into schools and leveraging the expertise of existing scientific and research institutions, the initiative ensures a robust foundation for academic environmental study. Simultaneously, it prioritizes widespread public engagement by empowering non-governmental organizations and mass media to reach diverse audiences. This is achieved through a creative mix of traditional and modern communication tools—ranging from films, theatre, and advertisements to interactive seminars and workshops—ensuring that environmental awareness becomes a shared social value across all levels of society. Increasing public participation for the protection

and enhancement of the environment. The objectives of this plan are being achieved through the implementation of the following programs started in the last few years:

### **1. National Environmental Awareness Campaign (NEAC)**

NEAC was started in 1986 with the aim of creating environmental awareness at the national level. In this campaign, nominal financial assistance is provided to schools, universities, research institutes, colleges, women and youth organizations, non-governmental organizations, army units, government departments etc. across the country for raising awareness and conducting action-oriented activities. The activities of NEAC are monitored and supervised by thirty-four Regional Resource Agencies (RRA). 11754 from across the country during NEAC 2013-2014.

### **2. National Green Corps (NGC)**

NGC is a major initiative of the Ministry of Environment and Forests to create environmental awareness among young children. This scheme has demonstrated the grassroots importance of broadly increasing environmental awareness. Launched in 2001-02, the scheme aims to sensitize young minds towards environmental conservation and sustainable development. Over 14 years, the scheme has created a network of more than 1,00,000 eco-clubs across the country, making it one of the largest conservation networks. This program provides school children with intensive field experience and opportunities to translate their ideas into creative action.

### **3. Swachh Bharat Abhiyan**

Swachh Bharat Abhiyan is a major initiative by the current government towards a clean and safe environment. The objectives of Swachh Bharat include household and community owned It involves eliminating open defecation through the construction of toilets and initiating a responsible mechanism for monitoring toilet usage. The goal of this mission, run by the Government of India, is to achieve an Open Defecation Free (ODF) India by October 2, 2019, the 150th birth anniversary of Mahatma Gandhi, with an estimated cost of ₹1.96 lakh crore (US\$30 billion) by constructing 12 million toilets in rural India. The mission includes two sub-missions: Swachh Bharat Abhiyan ("Gramin" or rural), which operates under the Ministry of Drinking Water and Sanitation; and Swachh Bharat Abhiyan (Urban), which operates under the Ministry of Housing and Urban Affairs. The mission includes ambassadors and activities such as national real-time monitoring and updates from non-governmental organizations (NGOs) working towards their visions of a clean India. The government has selected various public figures and brand ambassadors to propagate this message. Due to large-scale volunteer work and government determination, the overall national rural "access to household toilet" coverage increased to 62.45 percent and its usage became 91.29 percent in 2017.

### **Ten way to promote environmental awareness**

we must raise environment awareness for sake of our planet and future generations. Many simple yet impactful actions can help spread this importance message. HERE ARE 10 Practical ways to promote environmental awareness in your community and beyond.

### 1. Organize Local Clean-Up Events-

Community clean-up efforts are an excellent way to raise awareness while improving the local environment. Encourage people to join and make a difference. These events can also help develop a sense of environmental responsibility among participants. You can start by selecting areas that need cleaning, like parks or beaches. Involve schools, businesses, and local authorities for broader participation. The more people involved, the greater the impact on spreading awareness.

### 2. Use Social Media for Environmental Campaigns

Social media is a powerful tool for promoting environmental causes and reaching a wider audience. Share facts, tips, and stories that inspire others. Use hashtags to connect with global movements and campaigns. Creating engaging content, such as videos and infographics, can increase the message's reach. Collaborate with influencers or groups to amplify your campaign. This digital presence helps build a community committed to protecting the planet.

### 3. Promote Sustainable Living Workshops

Workshops on sustainable living teach practical ways to reduce environmental impact. These sessions can cover topics like recycling, energy conservation, and zero-waste living. Educating people about sustainability creates long-lasting habits.

### 4. Encourage Tree-Planting Initiatives

Tree-planting campaigns are impactful in both awareness and tangible environmental benefits. Encourage local businesses and organizations to support these efforts. Trees help combat climate change and enhance urban spaces. Work with schools, nonprofits, and city planners to organize tree-planting events. It's a visible, community-focused action that benefits future generations. The more trees planted, the more awareness spread.

### 5. Organize Educational Seminars

Hosting educational seminars with experts can raise environmental awareness on critical issues. These events allow for deep discussions and engagement. Seminars also provide opportunities to address local environmental concerns. Invite professionals like scientists or activists to share insights on pressing environmental issues. Participants learn about causes, effects, and solutions. Seminars offer valuable knowledge to those committed to making changes.

### 6. Promote Eco-Friendly Products

Supporting eco-friendly products can help raise awareness while encouraging sustainable shopping habits. Highlight businesses that offer green alternatives. Consumers are more likely to adopt changes when they see viable options.

### 7. Collaborate with Local Schools

Schools are ideal places to start promoting environmental awareness. Engage students through ecological projects, clubs, and competitions. Instilling awareness in young minds creates lifelong, eco-conscious individuals. Incorporating environmental topics into school curriculums can make a significant impact partner with educators to develop engaging, hands-on lessons. Students can spread awareness to their families and communities.

### 8. Host Green Challenges

Hosting environmental challenges can inspire individuals and businesses to adopt eco-friendly practices. Challenges like reducing waste or saving energy motivate people to act. Make the challenges fun and rewarding to increase participation. Set clear goals for participants and track their progress. Reward successful challengers with eco-friendly prizes or recognition. This approach spreads awareness and encourages long-term behaviour changes.

### 9. Create Art and Music for Awareness

Art and music can convey powerful messages about the environment. Hosting events that feature eco-themed performances can attract attention. These creative methods resonate with people on an emotional level. Invite local artists or musicians to create works focused on environmental themes. This can include concerts, gallery shows, or public murals. Creativity helps connect people to environmental issues in unique ways.

### 10. Promote Car-Free Days

Car-free days encourage people to reduce their carbon footprint by choosing alternative transportation options. These events raise awareness about air pollution and sustainable travel. Promote walking, cycling, or using public transport for the day. Cities around the world host car-free days as part of broader environmental efforts. Getting local government and communities involved increases the event's impact. The result is reduced emissions and heightened awareness of eco-friendly choices.

In brief Raising environmental awareness is crucial for the planet's survival and a sustainable future for all. By implementing the 10 ways mentioned above, individuals and communities can make a significant difference in combating environmental challenges. Whether organizing clean-up events, hosting seminars, or spreading the word through social media, every small effort contributes to the larger goal of environmental preservation. Conferences also provide valuable knowledge and partnerships to amplify these actions. Together, through collective efforts and informed decisions, we can protect the environment and inspire future generations to follow in our footsteps.

### Design and Method

The presented short research study is a non-experimental design, i.e., a single group design. In this design, the survey method has been used to collect data using a comparative group i.e. Youth – 30; Adults – 30.

### Scoring

This is a three-point scale; this scale has a total of 51 statements, out of which 43 are positive and 8 are negative statements. In positive statements, 2 marks are given for agree, 1 mark for uncertain, and 0 marks for disagree. And in negative statements, 0 marks are given for agree, 1 mark for uncertain, and 2 marks for disagree.

### Result

Measurement of environmental awareness level in 30 adolescents (age 18 to 25) and 30 adults (age 40 to 55) individuals:

## Result Table

Group	Mean	Standard Deviation SD	df	t-value	p-value
Youth group	72.97	15.53	58	-0.23	0.82
Adult group	73.83	13.55			

### Interpretation (Comparison)

**Youth Group:** Mean = 72.97

SD=15.53

- The average score of adolescents is 72.97.
- And their scores are spread approximately  $\pm 15$  points up and down.
- This shows that some children scored very well, while some scored very low. That is, there is more diversity in scores

**Adult Group:** Mean =73.83; SD=13.55

The average score of adults is 73.83, which is very close to that of adolescents. But their SD is slightly less, meaning their scores are slightly less. The average of both groups is almost the same. Meaning both performed at the same level. But there is a little more diversity in the scores of the youth group. Mean shows that the average performance of both groups is almost similar. SD and Variance show that the score of adolescents is more spread out, while the performance of adults is slightly stable.

### These results mean that

**T-Value = -0.23**

This shows that there is only a very small difference in the average of both groups, which is not significant.

**P-value = 0.82**

- This means that there is an 82% chance that this difference happened purely by chance, and not for any real reason.
- Statistically, if the p-value was less than 0.05, we would consider the difference significant, but here 0.82 means that there is no significant difference

### Conclusion

There is no statistical difference in the average scores of both adolescent and adult groups. Even though there is diversity in their individual scores (the youth group is more spread out), on average both perform almost the same. In this particular measurement or test, the average performance of both adolescents and adults is the same.

Environmental education is a method that creates awareness and understanding of the connection between humans and environment. It is concerned with knowledge, values and attitudes, and its aim is accountable environmental behaviour. According to Belgrade Charter 1875, the objective of environmental education is to develop a world population that is responsive of and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and obligation to work individually and collectively toward solution of current problems and obstacle of new ones. Today more than ever, society needs high quality environmental education programs that succeed in moving values and changing behaviours in the direction of sustainability and

environmental conservation.

### Limitations

1. This study was limited to youth and adults.
2. This study was limited to the Naurangabad area of Aligarh.
3. The socio-economic level of youth and adults was kept roughly the same in the study.
4. The age limit for youth was taken from 18 to 25 and the age limit for adults was taken from 40 to 55.
5. The study was based on a very small sample.

### Suggestions

1. This study can also be done on other classes besides youth and adults.
2. The study can be done not only in the Naurangabad area of Aligarh but also in other places.
3. The socio-economic level of youth and adults can be kept different in the study.
4. Youth and adult groups can be kept as one group instead of keeping them separate.
5. The number of samples in the study can also be increased so that accurate results can be obtain

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