

# A Study On Eco-Friendly Technologies and Sustainable Practices in Chennai City

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## Abstract

This study investigates the level of awareness regarding eco-friendly technologies and sustainable practices among the general public in Chennai City. The researchers employ a survey instrument (n=84) data. The study aims to identify the extent of awareness, adoption, sources of information, and barriers hindering adoption of eco-friendly measures across various socio-demographic groups (age, gender, education and income). Preliminary findings indicate varying levels of awareness, with younger and more educated participants showing greater knowledge of specific eco-friendly technologies like solar panels and rainwater harvesting. However, a significant gap exists in the practical implementation of these technologies. Furthermore, the study identifies the influence of factors such as proclamation, persuasiveness, forefend and effectuation as key determinants in the adoption of sustainable practices. These findings will contribute to the development of tailored strategies to promote wider adoption of eco-friendly practices within Chennai's diverse urban population. This research will help inform policy-makers, NGOs, and local communities about awareness gaps and areas needing interventions.

**Keywords:** Eco-friendly Technologies, Sustainable Practices, Environmental Awareness, Public Perception, Socio-demographic Factors.

## 1. Introduction

The escalating climate crisis and environmental degradation necessitate a global transition towards sustainable living. In urban centers, the adoption of eco-friendly technologies and practices is crucial for mitigating environmental impact and ensuring a healthier future (United Nations, 2022). India, as a rapidly urbanizing nation, faces unique challenges in this transition, and cities like Chennai, a major metropolitan hub, are critical areas for targeted intervention. While global policies and technological advancements are imperative, the extent to which these translate into public awareness and behavioural change at the local level remains a subject of considerable research. This study focuses on Chennai, the capital of Tamil Nadu, India, to explore the awareness levels of its diverse urban population concerning eco-friendly technologies and sustainable practices. Chennai faces significant environmental pressures,

including water scarcity, air pollution, and increasing waste generation (Greater Chennai Corporation, 2023). Understanding the level of awareness is essential for developing effective strategies that encourage the adoption of more environmentally sound behaviours.

## ECO-FRIENDLY TECHNOLOGY

Eco-friendly technology is the term for cutting-edge instruments, frameworks, and methods intended to reduce environmental damage, preserve natural resources, and advance sustainability. Reducing ecological footprints, improving energy efficiency, and lessening the negative consequences of human activity on the environment are the goals of these technologies.

## CHARACTERISTICS OF ECO-FRIENDLY TECHNOLOGY

**Energy Efficiency:** Uses less energy to perform the same function (e.g., LED lighting, energy-efficient appliances).

**Sustainable Resource Use:** Relies on renewable resources and reduces dependency on non-renewable resources.

**Low Emissions:** Produces minimal greenhouse gases and pollutants (e.g., electric vehicles, solar power).

**Waste Reduction:** Promotes recycling, reusability, and the minimization of waste generation.

**Innovation for Environmental Protection:** Incorporates advanced technology to address specific environmental challenges (e.g., water purification systems, air quality monitors).

## INSTANCES OF ECO-FRIENDLY TECHNOLOGY

Renewable Energy Systems (solar panels, wind turbines and Hydropower and Geothermal energy), Green Transportation (Electric Vehicles, Hybrid Vehicles, Public Transit Innovations (eco-friendly buses or trains), Sustainable Building Materials and Construction ( Use of materials like bamboo, recycled metal, and eco-bricks,energy-efficient building designs with proper insulation, ventilation, and renewable energy integration and water conservation technologies), Rainwater harvesting systems (wastewater treatment and recycling systems), Smart Agriculture ( drip irrigation systems to conserve water and vertical farming and hydroponics to grow crops with minimal resources), Waste Management and Recycling Technologies (advanced recycling methods for plastic and electronic waste), Air and Water Purification Systems ( air filters and purifiers for cleaner indoor and outdoor air and desalination and advanced filtration systems for clean drinking water).

## BENEFITS OF ECO-FRIENDLY TECHNOLOGY

- **Environmental Protection:** Reduce pollution and preserves ecosystems.
- **Economic Savings:** Reduces long-term energy and resource expenses.
- **Health Benefits:** Lowers health risks by improving air and water quality.
- **Energy Independence:** Less reliance on imported fossil fuels is achieved
- **Sustainability:** Guarantees that vital resources will be available to future generations.

## REVIEW OF LITERATURE

**Marleny Quispe Layme et.al. (2025)**, analysed eco-friendly business practices and their impact on environmental sustainability in companies in a region of the Peruvian Amazon. The authors used a quantitative, non-experimental approach was considered, with an explanatory design. They found that eco-friendly business practices have a positive impact on environmental sustainability in companies.

**Ruchit Parekh and Charles Smith (2024)**, in their study, “Eco-friendly urban design: An analysis of sustainable building practices and their community impact”. They noted that eco-friendly urban design is essential in tackling the challenges arising from rapid urban growth and the increasing pressure on natural resources. The authors highlighted that how these practices can enhance community spirit, elevate residents’ quality of life, and support social equity. Finally, the authors concluded that embracing eco-friendly building practices, communities can lessen their environmental footprint and foster healthier, more resilient and inclusive urban spaces.

**Sangeetha Choudhary et.al. (2022)**, highlighted that technology used for construction of eco-friendly home reduces its carbon footprint and lowers its energy needs. They also noted that ecological and social potential of eco-homes are being undermined by a technocratic focus, the capacity and behaviour of occupants, and weakening of design as developments are scaled up. The authors emphasized that, in order to maintain the continuance of sustainability housing programs, the programs need to always evaluate the economic viability, socio-cultural acceptability, technical feasibility and environmental compatibility.

## NEED FOR THE STUDY

The necessity of this study, the world is facing unprecedented environmental challenges such as climate change, resource depletion, pollution and loss of bio-diversity. Cities, as hubs of population and economic activity, are significant contributors to environmental degradation. Chennai is a urbanizing city were experiencing significant environmental pressures such as increased energy demand, waste management issues, water scarcity and air pollution. To address these issues, it is imperative to adopt eco-friendly technologies and sustainable practices that reduce environmental impact while supporting economic and social development.

## OBJECTIVES OF THE STUDY

- To assess the demographic profile of the respondents.
- To identify the various factors on awareness and adoption of eco-friendly technology and sustainable practice.
- To examine the barriers in adoption of eco-friendly technology and sustainable practices in Chennai City.

## RESEARCH METHODOLOGY

For this research study, primary data were collected through a well-structured questionnaire distributed among general public in Chennai City. The sample size comprised 84public, and the convenience sampling method was employed to gather responses.

**EMPIRICAL RESULTS AND DISCUSSION**

In this section, the data collected through a structured questionnaire were analysed and interpreted utilizing percentage analysis, factor analysis and descriptive techniques. The outcomes of the analysis are elucidated and presented.

**OBJECTIVE 1: TO STUDY THE GENERAL PUBLIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

**Table:1 Demographic Profile of the Respondents**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age:</b>		
18-25	73	87%
26-35	02	02%
36-45	02	02%
Above 45	07	09%
<b>Gender:</b>		
Male	44	52%
Female	40	48%
<b>Level of Education</b>		
High School	13	16%
Under Graduate	39	46%
Post Graduate	25	30%
Other	07	08%
<b>Monthly Income</b>		
Below 20,000	41	49%
20,000 – 50,000	15	18%
50,001 – 1,00,000	20	24%
Above 1,00,000	08	09%

**Source: Computed Data, N=84**

The above table shows, the demographic profile of general public in Chennai City. 87% are found in the age group of 18-25 years. It can be identified that males constitute 52% and 48% are female respondents. The table has indicated that 46% of the respondents are Under-Graduated. Further, it also exhibits that 46% of publics' monthly income are below 20,000 who explore their knowledge on eco-friendly technology and sustainable practice in Chennai.

**Table: 2 Awareness of Eco-Friendly Technology of the Respondents**

Eco-Friendly Technology	Frequency	Percentage
Solar Panels	61	23%
Rainwater harvesting	65	24%
Electric Vehicles (EVs)	58	21%
Composting	32	12%
Energy-efficient appliances	27	09%
Heat pump technology	15	06%
Other	13	05%
Total	271	100%

**Source: Computed Data, N=84**

The above table exhibit that 84 people response this question. Those 84 people ticked a total of 271 boxes, which almost more than 2 boxes per respondent. On this basis, the result indicated that 24% of rainwater harvesting are highest level of technology are aware from people in Chennai City, 23% of Solar Panels, 21% of Electric Vehicles (EVs) are mostly aware about eco-friendly technology and sustainable practice among people in City.

**Table: 3 Sources of Information about Eco-Friendly Technology**

Sources	Frequency	Percentage
Television	61	25%
Newspapers	46	19%
Radio	18	07%
Social Media	70	30%
Online News Websites	36	15%
Others	11	04%
Total	242	100%

**Source: Computed Data, N=84**

The table shows that 84 people response this question. Those 84 people ticked a total of 242 boxes, which almost more than 2 boxes per respondent. On this basis, the result exhibited that 30% of people received an information about eco-friendly technology through Social Media, 25% from Television, 19% from Newspapers and 15% through Online News Websites. This shows that most of the people are nowadays gathering the information from social media pages.

**Table: 4 From whom will get Information about Environmental Issues**

Sources	Frequency	Percentage
School/University	72	30%
Community Programs/Workshop	28	12%
NGOs/Environmental Organizations	23	10%
Family Circles	40	17%
Friends	54	23%
Religious Institutions	09	04%
Other	10	04%
Total	271	100%

**Source: Computed Data, N=84**

The table shows that 84 people response for this question. Those 84 people ticked a total of 236 boxes, which almost more than 2 boxes per respondent. On this basis, the result indicate that 30% of people received an information about environmental issues through School/University, 23% from Friends, 17% from Family Circles. This emphasized that educational institutions play a vital role for promoting the various environmental issues to the people in Chennai City.

**OBJECTIVE 2: TO IDENTIFY THE VARIOUS FACTORS ON AWARENESS AND ADOPTION OF ECO-FRIENDLY TECHNOLOGY AND SUSTAINABLE PRACTICE.**

**FACTOR ANALYSIS**

Grouping the variables gives more clarity on the subject and also on the decision mechanism design. In view of this, the researcher grouped the items using Principal Component Analysis with Varimax and Kaiser Normalization. In this part of the analysis, the researcher attempts to identify the factors responsible for awareness adoption about the eco-friendly technology and sustainable practice among people in Chennai City. There are 28 variables quoted in the questionnaire. Therefore, data reduction is done through the application of factor analysis by principal component method and the following results are obtained:

**Table 5**

**KMO and Bartlett’s Test – Awareness and Adoption of Eco-Friendly Technology**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		<b>0.870</b>
Bartlett’s Test of Sphericity	Approx. Chi-Square	<b>2382.756</b>
	Degree of freedom	<b>561</b>
	Significance	<b>0.001</b>

**Source: Computed data**

From the above table, it is found that the KMO measure of the sampling adequacy is 0.870 and Bartlett’s test of Sphericity with approximate Chi-square value is 2382.756 P=0.000 are statistically significant at 5 percent level. Therefore, it can be concluded that the variable considered for factor analysis form the normal distribution less than 5% admissible error to represent the factors emerged. This implies that the sample size is adequate for data reduction process and creates a conducive situation to ascertain the latent factors responsible for awareness and adoption of eco-friendly technology and sustainable practice among respondents. Table 6 presented below deals with variance of the variables on the communality table.

**Table 6**

**Communalities – Awareness and adoption of Eco-friendly Technology**

<b>Factors influencing Eco-Friendly Technology</b>	<b>Initial</b>	<b>Extraction</b>
I know about the government initiatives that promote renewable energy sources like solar power in Chennai.	1.000	0.769
I am aware that Chennai promotes the use of energy-efficient appliances and lighting.	1.000	0.713

I know about Chennai's efforts to reduce waste through recycling programs.	1.000	0.819
I am aware of the water conservation technologies, such as rainwater harvesting, being implemented in Chennai.	1.000	0.690
I am familiar with the concept of "green buildings" and energy-efficient construction practices being adopted in Chennai.	1.000	0.830
I am aware of the city's efforts to reduce plastic waste through various eco-friendly initiatives.	1.000	0.699
I know that Chennai encourages businesses to adopt eco-friendly practices through policies or incentives.	1.000	0.766
I am familiar with the public campaigns in Chennai aimed at promoting eco-friendly behavior (e.g., waste segregation, energy conservation).	1.000	0.736
I am aware of the local efforts to reduce the carbon footprint, such as through increased use of public transport and cycling lanes.	1.000	0.802
I know about Chennai's policies for promoting sustainable agriculture and reducing environmental impacts.	1.000	0.723
I am aware that there are eco-friendly alternatives to plastic, such as biodegradable products, being promoted in Chennai.	1.000	0.740
I know that Chennai has introduced initiatives for urban green spaces to promote a cleaner and healthier environment.	1.000	0.658
I am aware of the various government and non-governmental programs that promote sustainable waste management practices in Chennai.	1.000	0.781
I am aware of the efforts in Chennai to encourage sustainable practices in the hospitality industry, such as waste reduction and energy saving.	1.000	0.830
I have installed solar panels in my home or workplace in Chennai.	1.000	0.831
I use energy-efficient appliances (e.g., LED lights, energy-efficient air conditioners) in my daily life.	1.000	0.706
I have adopted rainwater harvesting systems at my home or workplace in Chennai.	1.000	0.639
I separate my waste into recyclable and non-recyclable materials at home.	1.000	0.708
I actively participate in local recycling programs or initiatives in Chennai.	1.000	0.686
I choose eco-friendly products (e.g., biodegradable, organic) when shopping in Chennai.	1.000	0.812
I take steps to reduce water consumption (e.g., fixing leaks, using water-saving devices) at my home in Chennai.	1.000	0.852
I avoid wasting energy by turning off lights and appliances when not in use.	1.000	0.656

I prefer to support businesses and brands in Chennai that practice sustainability (e.g., reduce packaging, use renewable energy).	1.000	0.739
I compost organic waste at home to reduce landfill waste in Chennai.	1.000	0.767
I engage in community or neighborhood sustainability initiatives in Chennai (e.g., tree planting, waste clean-up drives).	1.000	0.801
I have adopted sustainable agricultural practices, such as growing my own vegetables or supporting local farmers, in Chennai.	1.000	0.731
I regularly participate in campaigns or workshops focused on environmental sustainability in Chennai.	1.000	0.816
I have made efforts to reduce my carbon footprint by minimizing air travel or choosing eco-friendly modes of transport.	1.000	0.737

Source: Computed data

**a. Extracted Factors**

The number of factors extracted is presented in the following total variance Table 7

**Table 7**  
**Total Variance Explained – Eco-Friendly Technology awareness and adoption**

Component	Initial Eigen Values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.191	3.504	71.657	6.349	18.673	18.673
2	1.063	3.126	74.782	5.338	15.701	34.374
3	0.822	2.418	77.200	4.902	14.419	48.793
4	0.764	2.246	79.446	.3.370	9.911	58.704
5	0.675	1.986	81.431	2.067	6.080	64.784
6	0.562	1.653	84.896	2.052	6.036	70.820
7	0.551	1.621	86.517	1.347	3.962	74.782
8	0.502	1.476	87.993			
9	0.482	1.418	89.411			
10	0.395	1.160	90.571			
11	0.354	1.041	91.612			
12	0.335	0.985	92.597			
13	0.315	0.926	93.523			
14	0.285	0.838	94.361			
15	0.247	0.727	95.088			
16	0.235	0.692	95.780			
17	0.216	0.634	96.414			
18	0.197	0.580	96.993			
19	0.173	0.509	97.503			

20	0.152	0.448	97.950			
21	0.138	0.405	98.356			
22	0.121	0.356	98.711			
23	0.104	0.305	99.017			
24	0.088	0.260	99.277			
25	0.072	0.213	99.489			
26	0.064	0.188	99.678			
27	0.063	0.186	99.864			
28	0.046	0.136	100.000			

Source: Computed data

**b. Rotated Component Matrix**

The factor segmentations are obtained from the operations of rotated component matrix as shown in following Table. The first factor consists of nine variables such as I am aware of the efforts in Chennai to encourage sustainable practices in the hospitality industry, such as waste reduction and energy saving, I am aware of the local efforts to reduce the carbon footprint, such as through increased use of public transport and cycling lanes, I am familiar with the public campaigns in Chennai aimed at promoting eco-friendly behavior (e.g., waste segregation, energy conservation), I know that Chennai has introduced initiatives for urban green spaces to promote a cleaner and healthier environment, I am aware of the various Government and Non-Governmental programs that promote sustainable waste management practices, I know that Chennai encourages businesses to adopt eco-friendly practices through policies or incentives, I know about Chennai’s policies for promoting sustainable agriculture and reducing environmental impacts, I have adopted rainwater harvesting systems at my home or workplace, I am aware that there are eco-friendly alternatives to plastic, such as biodegradable products, being promoted in Chennai are suitably named as **Proclamation**. The factor loadings for proclamation are derived from rotated component matrix by using Varimax with Kaiser Normalization which are shown in Table 4

**Table 8**

**Factor 1 – Eco-friendly technology and sustainable practice awareness among people**

Variables	Explanatory Notes	Factor Loading
AFP17	I am aware of the efforts in Chennai to encourage sustainable practices in the hospitality industry, such as waste reduction and energy saving	0.849
AFP11	I am aware of the local efforts to reduce the carbon footprint, such as through increased use of public transport and cycling lanes.	0.807
AFP10	I am familiar with the public campaigns in Chennai aimed at promoting eco-friendly behavior (e.g., waste segregation, energy conservation)	0.750
AFP14	I know that Chennai has introduced initiatives for urban green spaces to promote a cleaner and healthier	0.693

	environment	
AFP15	I am aware of the various Government and Non-Governmental programs that promote sustainable waste management practices	0.688
AFP9	I know that Chennai encourages businesses to adopt eco-friendly practices through policies or incentives	0.663
AFP12	I know about Chennai’s policies for promoting sustainable agriculture and reducing environmental impacts	0.629
ADP04	I have adopted rainwater harvesting systems at my home or workplace	0.571
AFP13	I am aware that there are eco-friendly alternatives to plastic, such as biodegradable products, being promoted in Chennai	0.505

Source: Computed data

The second factor comprises of eight variables such as I regularly participate in campaigns or workshops focused on environmental sustainability in Chennai, I have adopted sustainable agricultural practices, such as growing my own vegetables or supporting local farmers, I engage in community or neighbourhood sustainability initiatives in Chennai (e.g., tree planting, waste clean-up drives), I compost organic waste at home to reduce landfill waste in Chennai, I actively participate in local recycling programs or initiatives in Chennai, I have made efforts to reduce my carbon footprint by minimizing air travel or choosing eco-friendly modes of transport, I have installed solar panels in my home or workplace in Chennai, I know about the government initiatives that promote renewable energy sources like solar power are suitably named as **Persuasiveness**. The factor loadings for surplus usage are derived from rotated component matrix by using Varimax with Kaiser Normalization which are shown in Table 9.

Table 9

Factor 2 – Eco-friendly technology and sustainable practice awareness among people

Variables	Explanatory Notes	Factor Loading
ADP16	I regularly participate in campaigns or workshops focused on environmental sustainability in Chennai	0.802
ADP15	I have adopted sustainable agricultural practices, such as growing my own vegetables or supporting local farmers.	0.762
ADP14	I engage in community or neighborhood sustainability initiatives in Chennai (e.g., tree planting, waste clean-up drives)	0.749
ADP13	I compost organic waste at home to reduce landfill waste in Chennai	0.728
ADP08	I actively participate in local recycling programs or	0.684

	initiatives in Chennai.	
ADP17	I have made efforts to reduce my carbon footprint by minimizing air travel or choosing eco-friendly modes of transport.	0.627
ADP01	I have installed solar panels in my home or workplace in Chennai	0.516
AFP02	I know about the government initiatives that promote renewable energy sources like solar power	0.510

**Source: Computed data**

The third factor comprises of six variables such as I take steps to reduce water consumption (e.g., fixing leaks, using water-saving devices) at my home in Chennai, I choose eco-friendly products (e.g., biodegradable, organic) when shopping in Chennai, I avoid wasting energy by turning off lights and appliances when not in use, I separate my waste into recyclable and non-recyclable materials at home, I prefer to support businesses and brands in Chennai that practice sustainability (e.g., reduce packaging, use renewable energy), I use energy-efficient appliances (e.g., LED lights, energy-efficient air conditioners) in my daily life are suitably named as **forefend**. The factor loadings for surplus usage are derived from rotated component matrix by using Varimax with Kaiser Normalization which are shown in Table 10.

**Table 10**

**Factor 3 – Eco-friendly technology and sustainable practice awareness among people**

Variables	Explanatory Notes	Factor Loading
ADP10	I take steps to reduce water consumption (e.g., fixing leaks, using water-saving devices) at my home in Chennai	0.854
ADP09	I choose eco-friendly products (e.g., biodegradable, organic) when shopping in Chennai.	0.782
ADP11	I avoid wasting energy by turning off lights and appliances when not in use	0.731
ADP07	I separate my waste into recyclable and non-recyclable materials at home.	0.702
ADP12	I prefer to support businesses and brands in Chennai that practice sustainability (e.g., reduce packaging, use renewable energy).	0.683
ADP02	I use energy-efficient appliances (e.g., LED lights, energy-efficient air conditioners) in my daily life.	0.516

**Source: Computed data**

The fourth factor comprises of five variables such as I am familiar with the concept of "green buildings" and energy-efficient construction practices being adopted in Chennai, I know about Chennai's efforts to reduce waste through recycling programs, I am aware of the water conservation technologies, such as rainwater harvesting, being implemented in Chennai, I am aware of the city's efforts to reduce plastic waste through various eco-friendly initiatives, I am aware that Chennai promotes the use of energy-efficient appliances and lighting are suitably named as **effectuated**. The factor loadings for surplus usage

are derived from rotated component matrix by using Varimax with Kaiser Normalization which are shown in Table 11.

**Table 11**

**Factor 4 – Eco-friendly technology and sustainable practice awareness among people**

Variables	Explanatory Notes	Factor Loading
AFP07	I am familiar with the concept of "green buildings" and energy-efficient construction practices being adopted in Chennai	0.716
AFP05	I know about Chennai's efforts to reduce waste through recycling programs.	0.706
AFP06	I am aware of the water conservation technologies, such as rainwater harvesting, being implemented in Chennai	0.672
AFP08	I am aware of the city's efforts to reduce plastic waste through various eco-friendly initiatives.	0.579
AFP04	I am aware that Chennai promotes the use of energy-efficient appliances and lighting	0.523

Source: Computed data

**OBJECTIVE 3: TO EXAMINE THE BARRIERS IN ADOPTION OF ECO-FRIENDLY TECHNOLOGY AND SUSTAINABLE PRACTICES IN CHENNAI CITY**

**Table 10 Descriptive Statistics**

Particulars	N	Min.	Max.	Mean	St. Devi.
The high upfront cost of eco-friendly technologies (e.g., solar panels, electric vehicles) is a barrier to their adoption in Chennai.	84	1	5	4.12	0.733
I find that eco-friendly products and technologies are not easily available in Chennai	84	2	5	3.90	0.762
The lack of awareness about eco-friendly technologies and sustainable practices is a major barrier to their adoption in Chennai	84	1	5	3.86	0.823
I believe that the long payback period for investments in eco-friendly technologies discourages their adoption in Chennai	84	2	5	3.85	0.783
The inconvenience of using eco-friendly alternatives (e.g., electric vehicles, recycling systems) compared to conventional options is a barrier	84	1	5	3.70	1.103
There is insufficient government support or incentives for adopting eco-friendly technologies in Chennai	84	1	5	3.76	1.003
The lack of infrastructure, such as charging stations for electric vehicles, is a barrier to adopting eco-friendly technologies in Chennai	84	2	5	3.94	0.635
I believe eco-friendly technologies do not perform as well	84	2	5	3.75	0.744

as traditional technologies, which discourages their adoption					
I find it difficult to identify trustworthy companies or services that offer eco-friendly products and technologies in Chennai	84	1	5	3.89	0.820
There is a lack of government policies or regulations that encourage sustainable practices in Chennai	84	1	5	3.80	0.747
Valid N (list wise)	84				

**Source: Computed Data**

The above table shows that each variable seems to represent a different aspect or dimension related to the barriers on adoption of eco-friendly technology and sustainable practice. Mean values indicate the average level of barriers on adoption for each variable, ranging from 4.12 to 3.80, the high upfront cost of eco-friendly technologies (e.g., solar panels, electric vehicles) is a barrier to their adoption in Chennai has the highest mean of 4.12. Standard deviations indicate the variability or dispersion in responses for each variable.

**CONCLUSION**

This research study shows that the general people in Chennai City is somewhat environmentally conscious and receptive. There is a big disconnect between awareness and actual use. According to research, proclamation, persuasiveness, forefend, and effectuation are important factors that hinder the adoption of eco-friendly technologies and activities. Along with self-efficacy, the findings also emphasize the significance of social norms, which should be taken into account in interventions aimed at boosting use of sustainable practices and eco-friendly technologies. The general population in Chennai recommended that the Government launch a campaign to enhance the number of environmentally friendly items in the future. In order to make the people more environmentally conscious, which is urgently needed, they should also be required to adhere to such sustainable practices.

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