# **Major Research Report**

# A Study On Consumer Buying Behavior Towards Green Products

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Under the Guidance of Dr. Rajan Yadav Professor



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# DECLARATION

I, Tushar Barthwal student of Delhi School of Management, Delhi Technological University hereby declare that the Major Research Project on "A Study On Consumer Buying Behavior towards Green Products" as a part of Master of Business Administration (MBA) curriculum Delhi School of Management, New Delhi, is an original piece of work. I also confirm that this project has not been submitted to any other institution or university for my other degree or diploma. I further declare that the information collected from various sources has been duly acknowledged in this project.

Tushar Barthwal.

2K22/ DMBA/139

# CERTIFICATE

This is to certify that Tushar Barthwal, enrolled as 2K22/DMBA/139, has submitted the major research project titled 'A Study On Consumer Buying Behavior towards Green Products' as part of the prerequisites for obtaining the Master of Business Administration (MBA) degree from Delhi School of Management, Delhi Technological University.

Dr. Rajan Yadav

Professor

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Tushar Barthwal

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# **EXECUTIVE SUMMARY**

Global consumption has increased, which has accelerated economic growth. This overindulgent consumption has made the planet's condition worse. Environmental damage, global warning, and the other consequences of this damage to the environment have alarmed the public and sparked the green movement for the protecting the environment. The purpose of this study was to determine what factors consumers used to decide which green products to buy. The study discovered that consumer decisions to purchase green products are unaffected by social variables. How pleased a customer is with the product affects the likelihood that they will buy it. The attributes of green products have the greatest influence on consumer satisfaction and behaviour. A study was conducted within 74 participants. Customers demonstrated a high level of knowledge about green marketing tactics and products. The respondents' high values for the environment were also found to exist. Research has offered helpful insights for green product marketers due to the high perceived green value among consumers, and it suggests the need for creating marketing communication campaigns promoting green products. Analysis of the rationale behind choosing non-green products is also included. The findings of the regression analysis are consistent with the notion that consumer decision-making to buy and prefer green goods over conventional ones was significantly and positively affected by in general green values, knowledge of green practices and products, and benefits derived from the fact that they are produced in accordance with hygienic standards, without the use of dangerous substances, reusable, recyclable by nature, and with packaging that is sustainable.

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# **CHAPTER 1: INTRODUCTION**

#### 1.1 Background

Technology has advanced quickly, boosting industrial activity, which has had a negative effect on the environment. Overuse of the environment has resulted in problems like ozone layer depletion, pollution, climate change, and global warming. Going green is a concept that was inspired by the need to protect the environment in light of these issues. Governments and businesses have implemented laws and procedures designed to protect the environment and advance sustainability.

The introduction of products that were both environmentally friendly and had practical value for consumers was one of the initial actions taken towards tackling this issue of sustainability. These products are commonly referred to as "Green Products" because they are less toxic, biodegradable, recyclable, efficient in terms of energy use, and renewable. Green Promotional efforts have been a significant tool used by many organizations due to the adverse effects on the ecosystem, which has changed how consumers approach buying green products.

The decision of if they want to purchase a product that is sustainable falls under the category of green actions. The choice to buy a product that is sustainable is considered to be a form of green actions. Customers are becoming increasingly more concerned about safety. There are many different green goods on the market today. Consumer spending is influenced by their attitudes and level of awareness towards environmental issues. Choosing an item that sustainable has many for a long-time environmental advantage in addition to personal ones for the buyer. The consumer's potential behavior towards these products influences whether they choose to buy them.

Due to what has been designated the "value-action gap" (Blake, 1999), it is likely that a lot of customers who are concerned with the environment do not regularly make these environmentally conscious choices. The worth action gap is the discrepancy between a consumer's environmental knowledge and the behavior he exhibits when interacting with such goods. According to a study done in Canada in 2004 (KeMedy, Beckley, Mcfarlane, & Nadeau, 2009), there is a gap among the acceptance and adoption of green products. The method that markets items and services based on their positive impact on the natural world is known as " Green marketing"

Many businesses use raising consumer awareness of environmental issues as a means of product promotion, which encourages customers to switch from conventional to green products (Golkanda, 2013).

Nowadays, more individuals in developed countries than in countries that are developing live environmentally conscious lives. Many companies are beginning to use environmentally friendly advertising and research methods in order to preserve the environment and generate long-term profits. The marketplace of today offers a wide range of green products, such as solar panel batteries and chargers, jute bags, battery packs, CFL light bulbs, and powered domestic appliances. The widespread acceptance of eco-friendly initiatives demonstrates that they are crucial to people in many ways. They have a positive effect on the lives of all species. The biggest result of the trend towards selling eco-friendly goods is that they help consumers save a lot of energy, which significantly reduces the amount of carbon emissions that they produce.

#### 1.1.1 Meaning of green products

Sustainable goods are those which employ green technology and do not in any way damage the environment. The promotion of environmentally friendly methods and goods is essential for equitable growth and preservation of resources. The terms "environmentally friendly," "environmentally conscious," or "eco-friendly" (also known as "nature-friendly and green") are marketing and sustainability concepts that apply to products and services, rules, laws, and regulations that claim to have reduced, minimal, or no negative effects on the environment or ecosystems.

Environmentally friendly activities are described using e term "eco-friendly" terminology. It is a condensed form of the words "ecologically," "environmentally," or "green" that is used to describe similar practices. Activities can be eco-friendly in a variety of ways, from making changes to one's lifestyle that are intended to benefit the environment to producing goods that are built with the environment in mind. A few instances of environmentally friendly goods include: For a while now, TV makers have been actively working to create products that are energy efficient. A retailer's devotion to saving energy and sustainability is demonstrated by the fact that nearly every piece of

the news inventory is typically ENERGY STAR certified. New models go on working properly while using less and less authority, benefiting both the planet and your wallet. This is crucial because watching television is one of the most frequently utilized gadgets in a typical home, and finding ways to reduce its energy consumption is priceless.

Simply cutting down on the total amount of energy consumption can help you minimize your negative environmental impact. Replace your conventional bulbs with LED ones as a great place to start. LED illumination will increase your bulb's efficiency along with life span whereas still providing excellent illumination. Almost no harmful UV emissions are produced by LED bulbs, and they are free of toxic chemicals. Every day, more homes adopt the gadgetry, which is undergoing widespread propagation. The biggest surprise about fluorescent light bulbs is how much better they are and their conventional equivalents.

Solar thermal water heaters are a prime example of how the solar panel business's widespread development. They outperform traditional models in almost every respect. Their total effectiveness rates, unit longevity, and particle emissions are increased by their reliance on solar energy. Additionally, a solar water heater may reduce energy use by up to 70%, which will help make each month's power bill a little more bearable.

Cases for solar-powered charging. Solar rooftop panels typically produce electricity for homes by taking in light and converting it to energy. It wasn't long before this idea was successfully used on a smaller scale to power electrical appliances. The premium solar cells on the impermeable case of the Voltaic Creator Solar Laptop Charger are used with batteries that have been checked to effectively absorb solar power. Almost all popular electronics can be powered by this handy solar charging case. Another nice perk is that the case still looks stylish spite of the panels for electricity attached.

Mobile Apps for Environmental Verification Organizations are frantically trying to come up with ways to position one another as environmentally friendly in an audience that's obsessed with green goods. While a lot of organizations have a formal endorsement from a third party confirming their green efforts, many other companies are disguising themselves as eco-friendly in order to boost sales and improve their reputation. Download the official Consumer Reports mobile app for

nothing. Shoppers may be able to avoid being deceived by fraudulent marketing by using the lists of products with the Eco Label certification. You can find genuine eco-friendly products while browsing the aisles with the help of Eco Label, which boasts a seamless and simplified interface for users.

Environmentally friendly The paper The shredders - It goes without saying that papers containing sensitive data and personal financial records should not be disposed of. This need is what gave rise to the gadget paper shredder market. Now that they are widely available, different hand powered shredders offer a practical eco-friendly solution. Users only need to twist their hands to start the shredding system. These eco-friendly shredders are transportable, incredibly simple to use, and they offer a simple way to support energy conservation.

The dryer balls are just big rubber objects with rises on the floor, they're a simple but effective idea that has finally started to gain mainstream recognition. They serve to separate the clothing in order to hasten drying and preserve softness. Dryer balls can be reused, which makes traditional dryer sheets unnecessary and lets you save money. They occasionally can be quite noisy, which is the only drawback.

#### 1.1.2 Characteristics of green products

Typically, sustainable goods can be distinguished by their focus on minimizing garbage and maximizing the efficiency of resources. Them are produced using non-toxic materials and ·eco-friendly processes, and they have received certification from reputable agencies like Energy Star, Forest Stewardship Council, etc.

- Goods grown in their natural environment
- Products that are biodegradable, recyclable, and reusable.
- Natural components, recycled materials, non-toxic chemicals, and contents of products with chemical approval are all examples of products.
- Items that are free of animal testing and environmentally friendly products.
- Products packaged in reusable, refillable containers or other environmentally friendly materials.

• Products with lower energy consumption (both during production and use)

Advantages: The use of environmentally friendly products can help reduce toxic waste and •prevent environmental pollution. Utilizing eco-friendly products has numerous advantages, including reducing harmful substances, saving money, and energy.
Pollution reduction - Reducing pollution is the primary advantage of using sustainable products. As a result, there is less pollution because there is a reduction in the amount of toxic waste and non-biodegradable materials on the planet.

• Personal health - By using environmentally friendly products, you can avoid consuming many dangerous chemicals and other substances. These products make the lives of the consumers more wholesome and environmentally friendly.

• Long-Term Investments - The majority of environmentally friendly goods are also energyefficient, which helps consumers save money.

#### 1.1.3 Major initiatives

In India, there are numerous environmental organizations working to safeguard and preserve the environment. Eco-friendly advertising has become more prevalent as more companies integrate; the concept of the environment into their organizational cultures.

On this innovative, socially responsible concept, advertisers are concentrating their ads across a range of media. In addition to building a positive public image, advertisements for environmentally friendly goods can increase awareness of what people should do to conserve energy and environmental resources. Thus, promoting environmentally friendly products ultimately benefits both businesses and the environment. Environmentally friendly products are promoted in India through various programmes.

#### **1.1.4 Certifications**

- Energy Star (EPA): It is a certification which seeks to cut down on energy consumption and releases of greenhouse gasses while protecting the environment by avoiding excessive consumption of non-renewable\_ resources. It defines and labels items, buildings, and technological devices that consume a great deal less energy. It was first made available on March 15, which means it can be applied to a wide range of electronic equipment, structures, etc.
- Managing the world's forests is a goal of the Forest Stewardship Council, or FSCl31, which labels and accredits products as being environmentally friendly. The administration strives to maintain clean air and water while preventing the environment from changing dramatically due to pollution. Their logo claims that the forest product was derived from ethical, sustainable, and commercially viable sources. Introduced in 1993, it covers both forests and whatever is made from them.
- Green Seal: The initiative's creator is dedicated to lowering the adverse effects of the raw substance's extraction process, manufacturing, consumption, and recycling. Prior to issuing the certificate, the business goes through a particular assessment process that includes examining data, labeling, marketing materials, and on-site inspection. It first appeared in 1989 and can be used with a variety of goods, which includes paints, lodging, home goods, and cleaning items.
- USDA Certified USDA: It works to prevent fraud and generate crops that are entirely organic. Genetically altered seeds and chemical-based products are prohibited. They strictly keep non-organic and organic products apart, and they frequently conduct onsite inspections to ensure pure products.
- Customers can evaluate the harmful effects of a gadget thanks to the Electronic Product . Environment Assessment Tool (EPEAn certification In accordance with the way the items perform in terms of sustainability, they are rated as gold, silver, or bronze.

#### **1.2 Problem Statement**

The global increase in usage has caused the economy to grow quickly. This overindulgent consumption has made the environment worse. Environmental damage, global warming, and other effects of this environmental degradation have alarmed the public and sparked the green movement for environmental preservation. The purpose of this study was to determine what factors customers used to decide which green products to buy. According to the study, demographic factors have no bearing on consumers' choices to purchase green products. The likelihood that a consumer will make a purchase is influenced by how satisfied they are with the product, the benefits derived, and how much green value one possesses. The adoption of such policies by consumers ultimately determines the success of governmental initiatives and corporate sustainability strategies. Consumers are the main player in the marketing of any product and they are very important in the marketing process. Consumer purchasing behavior is a key factor in determining whether a business succeeds fails. understanding or and gaining an of these preferences and behaviors will help marketing strategies work as efficiently as possible. Purchase decisions and satisfaction are most significantly influenced by green product features. Environmental concerns have been extremely escalating recently. Green-tagged goods are growing more and more well-liked as a result of their potential to reduce environmental issues and health risks. There are only a few people who use environmentally friendly goods because of factors like lack of awareness, scarcity, high cost, and others. The focus of the current study is how customers choose ecologically conscious goods.

#### 1.3 Objectives of the study

1. To study the respondents' buying behavior regarding eco-friendly products.

2. To assess consumer purchasing intentions and their level of awareness regarding environmentally friendly products.

3. To study the internal and external factors that affect consumers' purchasing decisions regarding green products.

#### 1.4 Scope of the study

The analysis of buyer attitudes towards green products is a significant field of study that aims to comprehend how people decide to purchase environmentally friendly goods. This area of research covers a wide range of topics, such as consumer attitudes towards green products, reasons people buy them, perceived risks and benefits, and adoption barriers. This area of study covers a wide range of green products, including hybrid cars, energy-efficient appliances, organic food, and home goods that are environmentally friendly. The analysis of consumer behavior in relation to green products may also cover various stages of the decision-making process, such as awareness, consideration, evaluation, and post-purchase analysis. Understanding the variables that affect consumers' decision-making processes when it comes to purchasing environmentally friendly products is the main goal of research on consumer behavior towards green products. Marketers and policymakers who want to encourage the adoption of green products and more sustainable consumer behavior may find this research to be helpful. The socioeconomic makeup of those who buy sustainable products can be used to learn about the socioeconomic factors that have a big impact on their buying decisions. The attitude, perception, and purchasing behavior of consumers towards environmentally friendly products are important for gaining a comprehensive understanding of those consumers' perceptions, emotions, and acts of compassion.

### **CHAPTER 2: LITERATURE REVIEW**

(NE Furlow, 2009) describes the state of the market which is currently flooded with "green products" that are blatantly dishonorable in the name of protecting the environment. In an effort to appeal to an uninformed audience, businesses frequently make claims that appear environmentally friendly but are occasionally also untrue and figuratively imprecise. As a result, "Green washing" has spread throughout the industry. The problem with green laundry is not just that it deceives customers, but also that companies that adhere to their environmental commitments become less competitive if dishonest marketers continue to make environmental claims. Furthermore, the market will become so saturated with "green" claims due to their overuse and misuse that the consumer may stop understanding how green the product actually is. In the end, misleading environmental advertising will be bad for our environment as well as for people, companies, and the economy. As a result, environmental claims must be sincere, accurate, and consistent with the purpose of the organization.

In their analysis article, (Afzaal Ali, 2011) looked at Pakistani consumers' intentions to buy environmentally friendly goods. The main goal of this analysis material was to look into and investigate the suggested relationship between the criterion and predictor variables, specifically the unproven purchase angle (GPA) and unqualified intent to buy (GPD). The second involved looking at how the criterion variable (GPI intention) and the outcome variable (GPB), or beginner purchase behavior, related to one another. Determine how perceived product value and quality (PPP&Q) impacted the alleviative effect was the third objective. The tests revealed that a person's criterion had a significant impact on his GPI in addition to the correlational statistic between criterion and GPI. Similar to how GPI and GPB are inextricably linked. According to the findings, consumers who indicate a desire to purchase an unfamiliar product are more likely to do so than consumers who express no desire to purchase.

The Weiling and Anupamaa S. Chavan study examined Green marketing, which is not going to be a simple concept in order to determine whether the plan is feasible, the company must first plan and then conduct research (Chavan, 2010). Environmental marketing needs to mature as it is still in its infancy. Although implementing green marketing might not be straightforward at first, it will unquestionably be advantageous for the business in the future.

# **CHAPTER 3: RESEARCH METHODOLOGY**

In order to achieve the intended goals, the research is a thorough exploratory study that tries to use computational models and carry out statistical modeling. The tools and techniques used for the study are briefly covered in this chapter's discussion of the research approach.

#### **1.1 Population and Sample Size Determination**

Google forms were used to collect data from a sample of 74 respondents, including both men and women. In order to complete the research, the sample size was chosen based on the degree of green value. consumer awareness. and benefit from using products. green Customers who fall within the study's target demographic are primarily older than 20. According to observations made while gathering consumer data, consumers over this age are believed to be engaged shoppers who independently select their products. The target population consists of working adults, students pursuing higher education, entrepreneurs, and stay-at-home mothers, who make up the majority of India's population. Non- probability sampling was used in this study. To reduce complexity, this method employs convenience sampling.

#### **1.2 Data Collection Procedure**

Through convenience sampling, a pre-designed structured questionnaire was created and given to the participants. The questionnaire includes demographic, single-choice, and the majority of closed-ended questions with a Likert scale with five scales (1=strongly disagree, 5=strongly agree). The questionnaire assessed the perceived influence of consumers' purchase intentions on environmental beliefs, eco-friendly packaging, green branding, awareness, and benefits. Google forms were used for the online data collection.

#### 1.3 Data Tools Used

The information gathered from the primary source was put through a number of statistical tools for interpretation and verification. Data analysis was the main use for SPSS. There are two types of data analysis: descriptive and inferential. The results from the SPSS were copied to an Excel Worksheet, where they were improved upon and interpreted, in order to present the

understanding of data analysis. Using Microsoft Excel, the necessary graphs, tables, and charts were also generated. Cross tabulation and mean analysis were carried out for the descriptive analysis. In the case of inferential analysis, Chi Square, t-test were used to infer conclusions from the data collected.

Understanding the relationship between variables representing consumer behavior towards green products was done using correlation and regression analysis. For a more thorough analysis of the hypothesis, correlation between the variables that represent these elements can be used to assess the degree of synchronicity these variables have with one another.

# **CHAPTER 4: DATA ANALYSIS**

In order to gain an understanding of the variables that affect consumer behavior towards purchasing green products, the analysis of information for this study combines descriptive, inferential, and exploratory techniques. This chapter primarily focuses on an exhaustive examination of the data that is currently available to learn more about the facts relating to consumer behavior with regard to green products. 74 respondents provided the information that was gathered.

### 4.1 Demographics analysis

		Count	Column N%
	Female	30	40.5
Gender	Male	44	59.5
	26-35	27	27.3
	36-45	1	1.3
Age	Below 25	46	62.16
	Rural	1	1.3
	Semi-Urban	11	14.86
Where do you live	Urban	62	83.78
	Postgraduate	64	86.48
Qualification	Under graduate	10	13.5
	Businessman	2	2.7
	Employee	16	21.6
	Freelancing	1	1.3
	Professional	3	5.4
	Recently not working	1	1.3
Occupation	Student	51	68.9
	Married	9	12.16
Marital Status	Not Married	65	87.83

Table 1: Demographics Table

Here are some conclusions drawn from the information provided:

Male participants make up more than female participants (59.5% vs. 40.5%).

Most of the participants (62.16%) are under the age of25, followed by those between the ages of26 and 35 (27.3%). Only 1.3% of participants (who range in age from 36 to 45) fall within this age bracket. Only a small percentage of participants (14.9%) and the majority (83.78%) of participants (83.78%) live in semi-urban or rural areas. Only a few participants (13.5%) have undergraduate degrees, "•the majority (16.48%) have postgraduate degrees.

Students make up the majority of participants' occupational categories (61.9%), followed by employees (21.6%). Only a small portion of participants identify as busy people, independent contractors, professionals, or recently unemployed. 87.83% of participants arc single (the majority), while only a few are married (12.16%)

# 4.2 Inferential Statistical Analysis

Inferential statistics describe the many ways in which statistics derived from observations on samples from study populations can be used to deduce whether or not those populations are truly different.

Reliability Statistics				
Cronbach's Alpha No of items				
0.867 5				

		Scale variance if item deleted		Cronbach's Alpha if item deleted
I am aware of the benefits of green products for environment	14.79	10.416	0.745	0.825
I am aware of the point of purchase for green products	15.02	11.097	0.706	0.836
I am aware of the various brands offering green products	15.26	11.418	0.668	0.845
I am aware of various symbols which declare a product green	15.38	11.022	0.685	0.84
How would you describe your level of awareness of green products		10.17	0.663	0.85

Table 2: Reliability Test

The above table shows Cronbach's Alpha coefficient is 0.867, which indicates a relatively high level of internal consistency among the items in the test. This suggests that the items are measuring the same construct, and that they are reliable and consistent in their measurement. It is generally accepted that a value between 0.6 and 0.7 denotes an acceptable level of reliability and a value between 0.8 and greater, a very good level. Overall, the table suggests that all five items are strongly correlated with the overall score of the scale and contribute positively to the reliability of the scale. The highest corrected item-total correlation is for the first item, indicating that it is the most strongly related to the overall score. However, all items have relatively high corrected item-total correlations, indicating that they all measure a similar construct of awareness of green products.

Reliability Statistics				
Cronbach's Alpha No of items				
0.815	5			

		Scale variance if item deleted		Cronbach's Alpha if item deleted
Kindly provide your response on the following statements				
It is important to me that the products I use do not harm the environment	14.46	9.502	0.65	0.768
I am concerned about wasting the resources of our planet	14.35	10.232	0.662	0.761
My purchased habits are affected by the concerns of the environment	14.57	10.218	0.719	0.745
I consider the potential environment impact while making a purchase decision		11.353	0.502	0.809
I would describe myself as environmentally responsible citizen		12.29	0.52	0.804

Tahle	3.	Reliability	Test ii
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The above table shows Cronbach's Alpha coefficient is 0.815, which indicates a relatively high level of internal consistency among the items in the test. This suggests that the items are measuring the same construct, and that they are reliable and consistent in their measurement. Overall, the item-total statistics suggest that the first three items are important for the overall reliability of the scale, while the fourth and fifth items have less influence. However, all five items contribute to measuring attitudes towards the environment and should be retained in the scale unless there are specific reasons for removing any of them.

Table 4: The factor which affects the most buyers before purchasing a green product.

		Frequency	Percent	Valid Percent
	Environment Protection	24	32.4	32.4
Valid	increase in quality of life	9	12.2	12.2
	Potential Increase in product value	4	5.4	5.4
	Self-satisfaction	5	6.8	6.8
	Total	74	100	100

Based on the data provided, it appears that the factor which affects the buyer most before purchasing green products is environment protection, with 32.4% of respondents selecting this option. The second most selected factor is increase in quality life, with 12.2% of respondents selecting this option. The remaining factors, including frequency, self satisfaction, and potential increase in product value, were selected by smaller proportions of respondents.

#### **Internal Factors**

Internal Factors which affect the most before purchasing a green product:

Among the 74 respondents, 47 responded positively towards buying a green product. The internal factors that are responsible for consumer buying behavior towards green product are motivation and personal value. It appears that personal value has a great influence on the consumer behavior with 66% and motivation with 34%.

#### **External Factors**

Factors which affect the most before purchasing a green product:

Among the 74 respondents, 47 responded positively towards buying a green product. The external factors that are responsible for consumer buying behavior towards green product are green packaging, label, community, information. It appears that information possessed by consumers has a great influence on the consumer behavior with 53.2%, then community with 14.9% and green packaging with 23.4%.

#### Willingness to pay

Factors which affect the most before purchasing a green product Among the 74 respondents, 47 responded positively towards buying a green product. 83% of the respondents are ready to pay a little more for green product vs. normal product as it is grown without the use of harmful chemicals and under sanitary conditions and is recyclable, **reusable**, and naturally biodegradable. It was found through analysis that there exists a significant relationship between Environmental Concern and Willingness to Pay, which means that people

who have higher concern for the environment are expected to be willing to purchase green products and this finding agrees to the previous studies. This study states that as consumers are becoming sensitive towards environmental issues, they are becoming more inclined towards green products.

#### **Descriptive Statistics**

Descriptive statistics describe, show, and summarize the basic features of a dataset found in a given study, presented in a summary that describes the data sample and its measurements. It helps analysts to understand the data better. Based on the given descriptive statistics, we can make the following observations:

	N	Range	Minimum	Maximum	Mean	Std. Deviation
How would you describe your level of awareness about following dimensions of green products?						
I am aware of the benefits of green products for health	42	4	1	5	3.88	1.152
I am aware of the benefits of green products for the environment	42	4	1	5	4.07	1.022
I am aware of various brands offering green products	42	3	2	5	3.6	0.912
I am aware of various symbols which declare the products as green products	42	3	2	5	3.48	0.969
I am aware of the point of purchase for green products	42	4	1	5	3.83	0.935
Valid N (Listwise)	42					

Table 5: Descriptive statistics of the level of awareness towards a green product

According to the table above, respondents' awareness of the advantages of green products for the environment was on average the highest (mean=4.07), followed by their awareness of the advantages of green products for health (mean=3.88) and the place where they should buy green products (mean=3.83). The lowest level of awareness for different symbols, certifications, and other identifiers that indicate a product is a green product was reported by respondents (mean: 3.48), followed by various brands that offer green products (mean: 3.60).

The standard deviation for each dimension of awareness ranges from 0.912 to 1.152, indicating that there is some variability in the responses. Overall, the results suggest that respondents have a

moderate level of awareness about the dimensions of green products, with the highest awareness for the environmental benefits of green products.

However, awareness of green products could be created through labeling, packaging and advertising. People who are aware and have used Green Product's agree to the fact that Green Products' help improve. the environment. Nguyen et al. stated that if consumers are conscious of the performance of green products, then it will assist them in achieving individual environmental impact objectives. This indicates that awareness of green products can impact consumers' decision-making which in turn can aid in restoring a more positive outlook in the market. Again, the education on Green Product's would increase people's behavioural intention to use Green Product's and consequently become green consumers. Green Products have good effects on the environment and human actions have effects on the environment. Green products consciously reduce waste and financial burdens.

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Green Products are very expensive	26	4	1	5	3.85	1.008
Green Products are not promoted properly	26	4	1	5	3.69	1.087
Lack of awareness about green products	26	4	1	5	3.35	1.263
Lack of confidence in the performance of green products	20	-	1	5	3.04	1.248
Green products are not available in full range of variety			2	5	3.88	0.864
Green products are not easily available in shopping outlets	26	2	3	5	3.96	0.871
Labels of green products are not informative, they don't fully inform about their greenness	26	4	1	5	3.27	1.116
Valid N (Listwise)	26					

Table 6: Descriptive statistics of the level of awareness towards a green product

These are the descriptive statistics for a survey where respondents were asked to rate their agreement with various statements related to green products on a scale of I to 5, with I being strongly disagree and 5 being strongly agree. The statistics are as follows:

N (sample size) = 26, which means there were 26 respondents.

Mean= the average score for each statement, which ranged from 3.04 for "Lack of confidence in the performance of green products" to 3.96 for "Green products are not easily available in shopping outlets".

Std. Deviation = a measure of the variability of scores around the mean for each statement, which ranged from .864 for "Green products are not available in full range of variety" to 1.263 for "Lack of awareness about green products".

# 4.3 Hypothesis Testing

Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.

**Hypothesis 1** - Null hypothesis (Ho): There is no significant association (relationship or dependency) -between Gender and consumer buying behavior towards Green Products. Alternate hypothesis (HI): There is a significant association (relationship or dependency) between Gender and consumer buying behavior towards Green Products.

Table 7: Chi square test of association-between gender and consumer behavior towards green products.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	76.994	4	<.001
Likelihood Ratio	44.49	4	<.001
No of Valid Cases	74		

The results of two different chi-square tests-the Pearson Chi-Square and the Likelihood Ratio-are displayed in the output you provided. To investigate the relationship between categorical variables, both tests are used. The chi-square statistic's value for each test is shown in the first column, "Value," of the table. The degrees of freedom for each test are shown in the second column, "df," and they are equal to the number of categories minus one. Since there are four categories in this

situation, df=4-1 = 3. The p-value for each test is displayed in the third column, "Asymptotic Significance (2-sided)". In the event that the null hypothesis is correct, the p-value represents the likelihood of observing a result that is equally extreme to or more extreme than the observed result. The p-value is less than 0.001 in both instances, indicating strong evidence against the null hypothesis of no association between the variables.

**Hypothesis 2-** Null hypothesis (Ho). There is no significant association (relationship or dependency between Age and consumer buying behavior towards Green Products.

Alternate hypothesis (HI): There is a significant association (relationship or dependency) between Age and consumer buying behavior towards Green Products.

Table 8: Chi square test of association between Age and consumer behavior towards green products.

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	75.346	6	<.001
Likelihood Ratio	43.224	6	<.001
No of Valid Cases	74		

The results suggest that there is a relationship between age and green product purchasing behavior. The majority of individuals who have purchased a green product are in the below 25 age group (65%), followed by the 26-35 age group (55.6%). No individuals in the 26-35 age group reported not purchasing a green product, indicating a strong association between this age group and green product purchasing behavior.

Both tests have 6 degrees of freedom and the p-values for both tests are less than .00 I, which indicates a significant association between the variables being tested. The minimum expected count is .08, which is higher than the commonly used threshold of 5. It suggests a significant association between the variables being tested, but the low expected counts in some cells may limit the confidence in the results. However, the minimum expected count being higher than reduces this limitation. Hence, rejection of null hypothesis.

**Hypothesis 3-** Null hypothesis (Ho): There is no significant association (relationship or dependency) between Income and consumer Buying behavior towards Green Products.

Alternate hypothesis (HI): There is a significant association (relationship or dependency) between Income and consumer buying behavior towards Green Products.

Table 9: Chi square test of association between Income and consumer behavior towards green products.

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	75.93	6	<.001
Likelihood Ratio	43.224	6	<.001
No of Valid Cases	74		

The Pearson Chi-Square test and the Likelihood Ratio test are two chi-square tests whose results are displayed in the table. The observed data differs significantly from what would be predicted under the null hypothesis of independence, according to both tests, which each have six degrees of freedom (df) and produce a very low p-value (.001). With a p-value of.001 and a Pearson Chi-Square value of 75.930, it can be concluded that the variables under study are statistically related. As a result, the null hypothesis can be rejected because there is a significant discrepancy between the income and the expected values. Similar to how the Likelihood Ratio Test value is 43.401 with a p-value of.001, rejecting the null hypothesis is supported by this data.

#### 4.4 Finding and Recommendations

According to the study's findings, consumer environmental awareness, awareness and benefits derived are the key determinants of whether they choose to buy green products. This emphasizes how crucial it is for companies to educate customers about the environmental advantages of their products. Businesses should also make sure that their eco-friendly goods are well-made and cost-effective. However, consumers seem willing to seek out green products even if they are not widely available, so their availability may not be as important as previously believed.

The study sought to understand how consumers felt about green products. The study's key findings are listed below.

1- Of The respondents, 59.50% were men and 40.50% were women.

2- The age group of respondents with the highest percentage (62.10%) is under 25 years old.

3- The majority of respondents (86.48%) have completed post-graduate coursework.

4- The income of the respondents is below \$20,000 in 68.3% of cases.

5-87.7% of respondents were aware of the advantages and benefits of green products.

6-63% of respondents reported having purchased a green product.

7- 87% of respondents think environment protection as the major factor while buying a green product.

8- According to 67% of participants, the main internal consideration when purchasing a green product is personal value.

9- In comparison to standard products, 83% of respondents are willing to pay more for green products.

The majority of those polled are aware of the advantages for both personal health and the surroundings. You can cut down on your consumption of energy and emissions of carbon by purchasing sustainable products and services, such as those that use renewable energy. By selecting goods and services that use waste or recycled materials as a raw material or resource, you can conserve natural resources.

•Reason for not purchasing a green product can be attributed to lack of awareness and confidence in performance of green product. Few find it expensive and it seems they are not available in wide variety.

•The government needs to take corrective action and raise awareness for people to be persuaded to purchase environmentally friendly products from the nearby market. • To eventually transition to a green economy, the government should promote green product and service concepts.

•According to the findings, consumers should use products that can be recycled or reused, efficient products that reduce environmental impact by saving water, energy, or petrol, organic products that guarantee quality, and certified products that meet or exceed environmental responsibility standards. Global consumer consumption has increased in recent decades, which is proof of the rapid economic expansion. As a result, natural resources are used excessively, which worsens the environment. Environmental degradation has a number of effects, including desertification, acid rain, water pollution, noise pollution, and loss of the ozone layer. reported that about 40% of environmental degradation is caused by private households' consumption patterns

•If a product is more valuable, most consumers are willing to pay a higher price. This kind of value enhancement can be produced using green value. Marketers should launch a coordinated and united campaign to increase customer awareness of green marketing because not all customers are familiar with the concept. Even though it will take time and effort, the public must become aware of the new green movements.

•Green marketing involves promoting environmentally friendly goods and services, environmentally friendly technology, and environmentally friendly power and energy sources. All of these require a sizable investment in R&D and subsequent marketing campaigns because they will introduce some new, improved methods for producing, communicating, and delivering environmentally friendly goods and services.

•Providing green products and services alone is insufficient; they must also be well- suited to the realities of customers' needs. Marketers should design their products and services in response to true customer needs.

Marketers should implement green policies as a long-term strategy because most green initiatives have a high initial cost but are beneficial and cost-effective in the long run. The government should finance green initiatives so that marketers may get green products and services at affordable pricing.

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Authorities should hold seminars and awareness campaigns to increase consumer knowledge of green products.

The importance and benefits of sustainable products for achieving environmental sustainability will be covered in the students' course materials. Future studies should take into account some research limitations despite the fact that this study has illuminated the marketing of green products. The first flaw is that the research goals of this study constrained the utilization of green products. Second, this study used convenience sampling. The sample size was restricted to 74 due to time constraints. The results could be biased and the representativeness of this sample size could be constrained.

#### 4.5 Limitations of study

Although this study has shed light on the marketing of green products, there are still some research limitations that should be considered in future investigations.

• Sample Size: The sample size is a bit small with only 74 respondents and might not be representative of the entire population. A greater number of respondents might provide a more accurate representation of the level of consumer knowledge regarding green products.

• Sampling Bias: Because the poll was completed online, sampling bias may have occurred. those who are more inclined to take part in online surveys could behave and hold different attitudes towards green product than those who do not.

•Self-Reporting Bias: Since the results in the survey were self-reported, biases such social desirability bias and recall bias may have been present. It's possible that respondents gave responses they believed to be socially acceptable.

•Time Restrictions: Because the study was carried out at a given time, attitudes and behaviors of consumers towards buying a green product may have altered since then.

# **CHAPTER 5: CONCLUSION**

The primary goal of the essay was to examine how consumers approach buying green products. factors like a consumer's age, gender, income, or educational background have some impact on their purchasing decisions and satisfaction with green products. Consumer purchasing decisions are influenced by their level of motivation and personal value for the products. Younger consumers have been found to be kinder to the environment. Consumers give the features of green products the most weight when making purchases. They are even willing to pay more for eco-friendly products in order to protect their environment. Clients are urged to buy eco-friendly goods because they care about the environment and because they believe they might be better for their health.

Gender has bearing on how consumers choose to purchase green goods. However, it has been observed that those under the age of 20, or the younger generation, are more likely to purchase green products because they are produced in clean environments without the use of harmful chemicals, are recyclable, reusable, naturally biodegradable, and come in packaging that is green. The purchasing habits of consumers with regard to green products are greatly influenced by income.

Consumers who buy green products are undergraduates and postgraduate educated, and have a pro-environment outlook. The findings also indicated that customers are more likely to buy sustainable goods if they are not married. It's possible that this group of consumers buys eco-friendly goods out of concern for the health of their family and themselves.

Global consumer spending has increased in recent years, which is proof of the rapid economic expansion. As a result, resources from nature are used excessively, which exacerbates the environment. Environmental degradation has a number of effects, including desertification, acid rain, water pollution, noise pollution, and Joss of the ozone layer. It was estimated that about 40% of environmental degradation is caused by private family consumption patterns. Therefore, businesses must put more effort into enhancing the quality of green products and offering them at competitive prices. It turns out that although consumers are aware of the problem, they only have a vague understanding of the facts regarding the components of green products. People are

purchasing eco-friendly products like those made with organic materials, herbs, or ayurveda. Infomercials (instead of just commercials) should be used by advertisers to increase consumers' understanding of the environmental advantages of green products. Businesses may use infomercials to promote their eco-friendly products and educate consumers at the same time because they frequently contain a wealth of information about the subject at hand. The rising cost and subpar quality of sustainable products rank as the two main barriers and disincentives for consumers to consider buying such goods. Realize the advantages of popularizing green marketing or green product promotion. Individuals' small contributions will add up to make a big difference in the future.

However, in order to manufacture green products, more money needs to be invested right away in technology and equipment. Items with minimal environmental effects are perceived as being of higher quality by consumers, who are more likely to make a purchase. Many of the people who responded to the survey believe they are knowledgeable about the benefits and drawbacks of the environmental products they buy. Future consumer habits, such as growing environmental awareness and interest in green products could have a significant impact on the market penetration of green goods.

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