



Effects of green marketing on consumer purchase decisions

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Abstract

The purpose of this study is to provide data regarding how green marketing affects consumers' purchase decisions. The environment and environmental issues are first discussed, which is one of the reasons green marketing came into being. Next, the ideas of green marketing and green consumers are clarified. The literature study was then carried out in conjunction with the hypothesis that was formed, and studies that had been done on this topic up to that point were mentioned. Additionally, a statistical evaluation of the questionnaire findings from 350 Istanbul customers is presented in the final section. The analysis's findings indicate that customers' green purchasing behaviors are positively impacted by environmental knowledge, green product characteristics, green marketing initiatives, and green pricing. The model is somewhat impacted by demographic traits.

Keywords: Demographic traits, eco conscious consumers, environmental issues, environmental sustainability green product, green purchasing decisions

Introduction

The newest and most appealing marketing trends must be continuously evaluated by businesses. Researching changes in consumer behavior in the market place on a regular basis might help identify marketing trends. By determining how the customer has changed behavior, companies can change what they provide to customers. Today's consumers are more worried about the harm that their usage of goods and services does to the environment as well as environmental degradation. Increasing air and water pollution, global warming, and obvious climate changes could be the cause of this worry. Therefore, employing green marketing gives businesses a chance to not only satisfy customers and address their environmental concerns, but also to obtain a competitive edge and a solid customer base. The business world is undergoing significant awakening over its obligation to the environment and society. Techniques aimed at achieving both short-term financial success and long-term financial and environmental

Businesses have begun to prioritize environmentally friendly sustainability. 21st-century corporate ethics include being environmentally conscious. Profit-making businesses' "always me, always me" mentality is no longer relevant. Profitability is undoubtedly a company's top priority, but achieving sustainability is too difficult for businesses whose only goal is to make money. Businesses should be conscious of their obligations to society and the environment just as they are to their customers, shareholders, and staff. Future generations' leaders will face challenges in making complete and effective judgments due to societal issues, environmental concerns, and climate change. Business people should prioritize environmental protection over business profits when making these judgments.

According to existing research, environmental awareness, perceived product effectiveness, and brand trust influence green buying intentions (Jaiswal & Kant, 2018) ^[1]

Furthermore, Premi *et al.* (2021) ^[2] researched green marketing literature to find significant aspects that drive consumer purchasing behaviour and propose practical marketing solutions that match customer sustainability desires

"Green marketing" was formally coined, and it soon gained popularity as a marketing tactic. Green marketing in its early phases was concerned mainly with eco labeling and emphasizing the environmental benefits of products. Green marketing (green brand knowledge, environmental knowledge, environmental attitude) has a positive effect on purchase intention (Patwary *et al.*, 2022) ^[3].

Limited research has examined the interaction between these factors within India's emerging market, where affordability, scepticism, and socio-demographic variables often influence consumer behaviour (Lopes *et al.*, 2023) ^[4]. Green marketing's potential to promote sustainable consumption is expanding, but less is known about the factors influencing green purchasing decisions in India. While previous studies have primarily focused on developed economies, India's unique socio-economic dynamics, cultural diversity, and environmental challenges necessitate an in-depth investigation into the drivers and barriers affecting green consumer behaviour (Naini *et al.*, 2024) ^[5]. Sivarajah (2024) ^[6] undertook a detailed assessment of psychological and social aspects that influence green purchasing behaviour, focusing on green marketing methods.

Significance of the study

Due to its potential for competitive benefits, green marketing has become one of the main areas of focus for marketers. However, it necessitates investment in terms of improving technology, altering procedures, informing clients of advantages, etc. Due to changes in global consumer preferences and government laws, many Indian businesses have begun to brand themselves as environmentally friendly. However, there is a lack of study on green marketing in India, and customers' understanding of green products is questioned. Indian customers' perspectives on eco-friendly goods and the additionally, the connection between attitude and behavior is dubious. Since green marketing differs from regular marketing, marketers must understand what influences consumers to purchase green products. The purpose of this study is to find out what factors influence consumers' decisions to purchase green products.

Objectives of Research

This study aims

1. To assess Indian consumers' awareness of green products and behaviors.
2. To assess the green values of customers.
3. To identify brands, consumers associate them with green marketing strategies.
4. To examine Indian consumers' preferences for green products.
5. To identify the variables that impact customer persuasion to purchase green products.

Hypotheses

H01: Purchasing green products does not significantly and favorably correlate with environmental awareness.

H02: Green product features do not significantly and favorably correlate with green product purchasing behavior.

H03: The purchase behavior of green products is negatively correlated with green prices.

H04: Green promotion and green product purchasing behavior do not significantly and favorably correlate.

H05: The model is unaffected by age.

H06: There is no moderator effect of gender on the model.

H07: There is no moderator effect of marital status on the model.

H08: There is no moderator effect of education on the model.

H09: Income has no moderating impact on the model.

Methodology of Research

Research Design

This study evaluates how green marketing works using both qualitative and quantitative methods impact the purchasing of Indian consumers. The efficiency of ecologically conscious advertising campaigns and the factors influencing environmentally conscious purchasing behaviors are both fully examined by this method.

Sample Size and Data Collection

A convenient sampling method was adopted. In all, 350 individuals randomly selected in Nelamanga Taluk Bangalore Rural District, Out of them 240 were between the age of 18 to 37 years and rest 110 were above the age of 37 years. Primary data was collected through survey using structured questionnaire and secondary data through websites and articles.

Data analysis and Interpretation

Table 1: Demographic Profile of the Respondents

Demographic Characteristics		Frequency (N)	Percentage
Gender	Male	175	50
	Female	175	50
Marital Status	Unmarried	172	49.14
	Married	100	28.57
	Married and With Children	78	22.29
Age	18-27	105	30
	28-37	126	36
	38-47	77	22
	47-57	42	12
Qualification	PUC	70	20
	Undergraduate	140	40
	Postgraduate	105	30
	Others	35	10
Income	< Rs.25,000	84	24
	Rs.25,001-Rs.45,000	126	36
	Rs.45001-Rs.65,000	70	20
	More than Rs.65,000	70	20

Source: Author's Compilation

Table 3's socio demographic data shows a balanced gender representation. The majority of responders are between the ages of 28 and 37 (36%) and possess an undergraduate

degree (40%). The majority of responders (36%) have monthly incomes between Rs.25, 001 and Rs.45, 000

Table 2: Important Factor Descriptive Statistics

Element	Average	Standard Deviation	Minimum	Maximum
Green Awareness	2.88	0.53	1	5
Green Price	2.72	0.57	1	5
Green Product Features	2.77	0.58	1	5
Green Promotion	2.65	0.60	1	5

Source: Author's Compilation

The findings derived from the survey indicate that the participants exhibit a heightened awareness of ecological issues (Mean = 2.88) and possess confidence in environmentally sustainable products (Mean = 2.77), as evidenced by the descriptive statistics delineated in Table 2.

Additionally, there was a positive inclination towards eco-friendly products, indicated by relatively elevated scores green price (Mean = 2.72) and green promotion (Mean = 2.65).

Green Marketing's Effect on Eco-Friendly Consumption

Table 3: Consumer Purchase Behavior and Green Marketing Relationship

Variable		Green Purchase Behaviour
Green Awareness	R	0.152
	P	0.000
	N	350
Green Price	R	0.175
	P	0.000
	N	350
Green Product Features	R	0.212
	P	0.000
	N	350
Green Promotion	R	0.208
	P	0.000
	N	350

Source: Author's Compilation

A positive, significant association between green awareness and green purchase behavior was discovered as a consequence of correlation analysis. ($r=0,152$; $p=0,000<0,05$). Green pricing and green buying habits were found to be positively correlated. ($r=0,175$; $p=0,000<0,05$). There is a considerable positive correlation between green product attributes and green purchasing habits. ($r=0,212$; $p=0,000<0,05$). Green purchasing behavior and green promotion were found to be positively correlated. ($r=0,208$; $p=0,000<0,05$). This suggests that when environmental consciousness, green marketing, green pricing, and green product attributes rise, so does green buying. Additionally, there is an increase in conduct. The hypotheses H_{01} , H_{02} , and H_{04} were not acceptable in this regard. The H_{03} hypothesis was accepted

Effect of Gender on Purchasing Behavior:

A regression model was used to assess the degree of exposure to green marketing for green purchasing behavior. There was a statistically significant female customer ($F=7.920$; $p=0,000<0,05$). There was a statistically significant male customer ($F=12.778$; $p=0,000<0,05$). In this regard, only green promotion influences purchasing behavior for female consumers, but environmental awareness, green pricing, green product features, and green promotion all influence green purchasing for male consumers. The hypothesis H_{05} was disapproved. Gender influences models in a moderating way.

Marital Status's Effect on Purchase Behavior

A statistically significant regression model ($F=8.598$; $p=0,000<0,05$) was used to examine the exposure level of green purchasing behavior from green marketing for unmarried consumers. The married consumer was statistically significant ($p=0,000<0,05$; $F=5.40$). A statistically significant consumer was married and had children ($F=4.00$; $p=0,000<0,05$). In this regard, only green product features influence green purchases for married customers with children, whereas only green promotions influence green purchases for single consumers and only green prices influence green purchases for married consumers. The hypothesis H_{06} was unaccepted. Marital status influences the model in a moderating way.

Age's Effect on Purchase Behavior

The exposure level of green purchasing behavior from green marketing for consumers in the 18–37 age group was tested

using a regression model, and the results were statistically significant ($F=12.063$; $p=0,000<0,05$). Customers in the 38–47 age range were statistically significant ($F=6.655$; $p=0,000<0,05$). Customers who were 46 years of age or older did not exhibit statistical significance. ($F=1.271$; $p=0,076>0,05$).

In this regard, consumers in the 18–37 age group are influenced by environment awareness, green product features, and green promotion; consumers in the 38–47 age group are influenced by green price and green promotion; however, consumers 48 years of age or older are only influenced by green promotion. The H_{07} theory was unaccepted. A moderator influence on the model is age.

Education's Effect on Consumer Behavior

A statistically significant regression model ($F=3.432$; $p=0,001<0,05$) was used to examine the exposure level of green purchasing behavior from green marketing for elementary school graduate customers. Consumers who had completed high school were statistically significant ($F=4.781$; $p=0,000<0,05$). Consumers from undergraduate and graduate schools were statistically significant ($F=13.05$; $p=0,000<0,05$).

In this regard, environment awareness, green product features, and green promotion influence green purchasing for undergraduate and graduate school graduates, whereas only green promotion influences green purchasing for elementary school graduates, green price, and green product features influence green purchasing for high school graduates. The H_{08} hypothesis was disapproved. The model is moderated by education level.

Impact of Income Level on Purchasing Behavior

For consumers with incomes between 0 and Rs.25,000 a regression model was used to investigate the exposure level of green purchasing behavior from green marketing. The results were statistically significant ($F=2.679$; $p=0,003<0,05$). It was statistically significant for consumers with incomes between Rs.25,001 and Rs.45000 ($F=9.009$; $p=0,000<0,05$). Income Rs.45001 and higher consumers were statistically significant ($F=9.491$; $p=0,000<0,05$).

In this regard, consumers with income levels between 0 and Rs.25,000 are only affected by green promotion; consumers with income levels between Rs.25,001 and Rs.45,000 are affected by environment awareness and green price; and consumers with incomes of Rs.45,001 and higher are affected by both green promotion and environment awareness. The hypothesis H_{09} was disapproved. The model is moderated by the level of income..

Findings and Suggestions

According to the study, green purchasing behavior rises in tandem with advances in environmental knowledge, green product characteristics, green promotion, and green pricing. our study's findings indicate that consumers are increasingly prepared to pay extra for environmentally friendly products in order to combat environmental pollution, which poses a threat to our planet along with industrialization and advancing technology.

Examining customer demographics reveals that while environment knowledge, green pricing, green product characteristics, and green marketing all influence green purchasing for male consumers, only green promotion has an impact on female consumers. Additionally, this outcome

indicates that businesses should take gender into account while developing their green marketing strategy. In addition to presenting the product's pricing, features, and environmentally friendly aspects, direct promotion studies that will make the advertisement appealing may be conducted in environmentally friendly product advertisements that are broadcast during the day and targeted at women. Product features, cost, or environmentally friendly aspects can be emphasized in advertisements that are broadcast in male-oriented programs or in environmentally friendly services. In light of these findings, strategies may also be used in products targeted at men or women.

According to the study on marital status, only green product attributes influence green purchasing for married consumers with children, only green price influences green purchasing for married consumers, and only green marketing influences green purchasing for single consumers. This result indicates that unmarried consumers are only impacted by promotions; therefore, promotional efforts for environmentally friendly products targeted at single consumers should be prioritized. Additionally, advertisements should focus on making the product appealing rather than on its features, price, or environmental friendliness. On the other side, price should be emphasized in marketing for products made for married consumers (furniture, appliances, etc.). Promotional activities that highlight product qualities should be implemented since consumers who are married and have children are pickier about them. Product features should be prioritized if environmentally friendly product services are specifically targeted at children, as evidenced by the fact that customers with children only pay attention to product features when compared to single or married consumers with children. (For example, it is beneficial and does not negatively impact health.) and businesses ought to handle this matter with tact.

According to the age-related study, consumers in the 18–37 age group are influenced by environment awareness, green product features, and green promotion; consumers in the 38–47 age group are influenced by green price and green promotion; and consumers 46 years of age and older are only influenced by green promotion. The 18–37 age group considers every factor when buying a green product, with the exception of price. The product's qualities and environmental friendliness can be highlighted in ads targeted at this age group of buyers without emphasizing its cost. Conversely, price properties should be emphasized for the 38–47 age group. The deal only affects customers who are 48 years of age or older. This category is primarily made up of individuals, both male and female, who have high retirement rates. TV commercials might therefore be given priority.

According to the education study, environment awareness, green product features, and green promotion influence green purchasing for undergraduate and graduate school consumers, but only green promotion influences green purchasing for elementary school graduates. For high school graduates, green price and green product features influence green purchasing. These findings suggest that, in contrast to other groups, the highly educated group has a higher level of environmental consciousness. Businesses schedule and carry out their operations in accordance with consumer demand and needs. Because they are environmentally sensitive, consumers in this group will steadily boost

environmental gains through their requests and purchases. Furthermore, conferences and seminars on these topics may be held because of the educated group's awareness of the environment. Campus billboard advertisements may be displayed because this group is similarly impacted by marketing.

According to the income study, consumers with incomes between 0 and Rs.25,000 are only affected by green promotion; those with incomes between Rs.25,001 and Rs.45,000 are affected by environment awareness and green price; and those with incomes of Rs.25,001 and above are affected by both green promotion and environment awareness. This outcome demonstrates that low-income consumers are impacted by promotional activities rather than prices as previously believed. On the other hand, those in the middle class are more cost-conscious and environmentally sensitive. On the other hand, promotion and environmental awareness are crucial for the group with an income level of Rs.25,001 and above. As a result, greater attention should be paid to the environmental aspects of environmentally friendly items that demand a high price. Since low-income consumers are the only ones impacted by green promotion, businesses should focus on marketing campaigns for the goods they plan to manufacture specifically for this market and they plan to manufacture that are targeted at this demographic. They should also engage in certain public relations initiatives outside of television advertisement

Limitations of the study

This work has some limitations that should be taken into account despite its contributions. First, the geographic focus was mostly on urban and semi-urban areas, which limited generalizability to rural communities, where access to and awareness of green products may vary greatly. Second, longitudinal behavioral changes are not taken into account by the cross-sectional design, which suggests that long-term studies should be used in future study. Third, external validity may be impacted by differences in age, gender, and income distribution, despite efforts to include a variety of socioeconomic groups. The possibility of additional social desirability bias in self-reported data emphasizes the need for behavioral observations or experimental methods to validate findings. Additionally, the study may have overlooked additional factors including personal values, peer influence, and perceived behavioral control because it mainly concentrated on green awareness, green price, green product features and green promotion. Finally, compared to the quantitative analysis, the qualitative insights were comparatively limited, highlighting the necessity of focus groups and ethnographic techniques in subsequent research to capture deeper motivations and perspectives

Scope for Further Research

Although this study offers a basic framework for comprehending green purchasing practices, there are still a number of undiscovered topics that offer potential avenues for further investigation. Examining how social norms and cultural values affect green consumer behavior is a crucial first step. It has been demonstrated that cultural factors like individuality and collectivism have a big influence on sustainable consumption habits. Future research could examine how these cultural characteristics influence attitudes and propensity to use eco-friendly items in various

Indian regions. Green consumption and activities are also promoted by laws and government regulations. Examining how well regulatory frameworks like eco-labeling, subsidies, and green certifications perform can reveal how they affect consumer confidence and decision-making.

Conclusion

Human demands have become more diverse as a result of industrialization, technological advancement, and development. Our world has experienced the destruction and contamination of its natural resources due to a rise in the diversity of wants/resources. Pollution and environmental destruction brought on by the utilization of natural resources have a detrimental impact on human life. People have always sought to secure their futures and maintain their way of life under suitable circumstances. As a result of their growing awareness of environmental issues like pollution and global warming, consumers are beginning to think about whether the things they buy are environmentally friendly in addition to their cost and features. Businesses have begun to alter their production, goods or service generation, and marketing methods in response to the growing relevance of the environment and environmental issues. They have begun manufacturing environmentally friendly goods and have made an effort to educate customers about the idea of "green marketing."

References

1. Jaiswal D, Kant R. Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 2018;41:60–69. <https://doi.org/10.1016/j.jretconser.2017.11.008>
2. Premi H, Sharma M, Dangayach GS. Green Marketing : A Systematic Literature Review. *Indian Journal of Marketing*, 2021;51(8):39–57. <https://doi.org/10.17010/IJOM/2021/V51/I8/165761>
3. AK Patwary M, Mohamed MK, Rabiul W, Mehmood MU, Ashraf AA, *et al.* adamugreen purchasing behavior of international tourists in Malaysia using green marketing tools: Theory of planned behavior perspective *Nankai (Business Review International)*, 2022;13(2):246-265
4. Lopes JM, Gomes S, Trancoso T. The Dark Side of Green Marketing: How Greenwashing Affects Circular Consumption? *Sustainability*, 2023;15(15):11649. <https://doi.org/10.3390/SU151511649>
5. Naini SR, Mekapothula RR, Jain R, Manohar S. Redefining green consumerism: a diminutive approach to market segmentation for sustainability. *Environmental Science and Pollution Research*, 2024;31(9):12916–12932. <https://doi.org/10.1007/S11356-023-31717-9>
6. Sivarajah R. Exploring the impact of psychological and social factors on green consumer behaviour: a comprehensive review of green marketing tactics. *SN Business Economics*, 2024;4(12):1–26. <https://doi.org/10.1007/S43546-024-00756-W>