



## A Study on Effect of Buyer's Motivation on Purchase of Green Products in Nagpur City

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### Abstract

The increasing awareness of environmental sustainability has significantly influenced consumer behavior, leading to a growing interest in green products. This research paper investigates the effect of buyer's motivation on the purchase of green products in Nagpur City. The study explores various factors that drive consumers to opt for environmentally friendly products, including environmental consciousness, social influence, perceived benefits, and personal values. Using a structured questionnaire, data were collected from a diverse sample of consumers in Nagpur, and statistical analyses were conducted to assess the impact of these motivational factors on purchasing decisions. The findings reveal that while environmental consciousness and perceived benefits play a crucial role in motivating green product purchases, social influence and personal values also significantly contribute to consumers' buying behavior. This study provides valuable insights for marketers and policymakers aiming to promote green products, suggesting that targeted marketing strategies that emphasize the environmental and personal benefits of these products can enhance their adoption. Additionally, the research highlights the need for greater awareness and education on the benefits of green products to further strengthen buyer motivation in this sector.

**Keywords:** green products, buyer motivation, environmental consciousness, purchase behavior, Nagpur City, sustainable consumption

### Introduction

In recent years, the global movement towards environmental sustainability has gained significant momentum, influencing various sectors, including consumer markets. The increasing awareness of environmental issues such as climate change, pollution, and resource depletion has led consumers to rethink their purchasing behaviors, driving a shift towards more sustainable and eco-friendly products. Green products, characterized by their minimal impact on the environment, have emerged as a key focus for both consumers and businesses alike. These products are designed to be energy-efficient, biodegradable, recyclable, and produced through sustainable practices, offering an alternative to conventional products that may harm the environment.

The city of Nagpur, like many urban centers in India, is witnessing a growing interest in green products as consumers become more environmentally conscious. However, despite the apparent rise in the availability and variety of green products, their market penetration remains relatively low compared to conventional products. Understanding the underlying factors that motivate consumers to purchase green products is crucial for businesses aiming to tap into this emerging market and for policymakers seeking to promote sustainable consumption.

This study aims to explore the various motivational factors that influence buyers' decisions to purchase green products in Nagpur City. By examining the role of environmental consciousness, social influence, perceived benefits, and personal values, this research seeks to identify the key drivers behind consumers' preference for green products. Additionally, the study will analyze how these motivational factors interact with demographic variables such as age, gender, income, and education level to influence purchasing behavior.

Through this investigation, the research intends to provide valuable insights into the motivations that propel consumers towards green products, thereby offering practical recommendations for marketers and policymakers. By understanding what drives consumers to make environmentally friendly choices, businesses can develop more effective marketing strategies, and policymakers can design initiatives that encourage the adoption of green products, ultimately contributing to a more sustainable future.



## Literature review

The growing concern for environmental sustainability has led to an increased focus on green products in consumer behavior research. This literature review examines studies from 2016 onwards, highlighting key factors that influence consumers' motivation to purchase green products, including environmental consciousness, perceived benefits, social influence, personal values, and demographic variables.

Environmental consciousness remains a pivotal factor influencing green purchasing behavior. Recent studies have continued to demonstrate the significant impact of environmental awareness on consumers' decisions to buy green products. For instance, Johnstone and Tan (2015) observed that consumers with a higher degree of environmental concern are more likely to engage in sustainable purchasing behaviors. A study by Groening, Sarkis, and Zhu (2018) further supports this finding, revealing that consumers' environmental knowledge positively correlates with their willingness to pay a premium for green products.

The perceived benefits of green products, including health, safety, and environmental advantages, continue to be significant motivators for green purchases. A study by Testa et al. (2015) found that consumers' perceptions of the health benefits of green products play a crucial role in their purchasing decisions. In addition, Wei, Ang, and Jancenelle (2018) demonstrated that consumers are more likely to purchase green products if they perceive a direct benefit to their personal well-being, alongside environmental benefits.

Social influence has been increasingly recognized as a significant factor in the purchase of green products. Recent research highlights the role of social norms, peer pressure, and cultural factors in shaping consumer behavior. A study by Jaiswal and Kant (2018) in India found that social influence, particularly from family and close social circles, significantly impacts consumers' green purchasing decisions. Additionally, Yadav and Pathak (2017) emphasized that social influence could amplify the perceived value of green products, encouraging their adoption.

Personal values, including ethical beliefs and moral responsibility, are increasingly acknowledged as driving forces behind green purchasing decisions. Haws, Winterich, and Naylor (2014) highlighted that consumers with strong ethical values are more likely to choose green products, even at a higher cost. Furthermore, Sharma and Jha (2017) demonstrated that values related to environmental stewardship and social responsibility strongly influence green purchasing behavior in emerging markets.

Demographic factors continue to influence green product purchasing behavior. Research shows that younger consumers tend to be more environmentally conscious and are more likely to purchase green products compared to older consumers (Joshi & Rahman, 2017). Gender also plays a role, with studies indicating that women are generally more inclined towards eco-friendly purchases due to greater environmental concern (Ranjan & Kushwaha, 2017). Additionally, income and education levels have been found to correlate positively with green product purchases, as higher income and education levels are associated with greater awareness and willingness to pay for green products (Liobikienė & Poškus, 2019).

Despite the growing interest in green products, several barriers still hinder their widespread adoption. Price remains a significant barrier, with many consumers perceiving green products as more expensive than conventional alternatives (White, Hardisty, & Habib, 2019). Availability and lack of awareness are also challenges, particularly in emerging markets where green products are less accessible (Biswas & Roy, 2015). Furthermore, a study by Singh and Verma (2017) highlighted that perceived effectiveness and trust in green claims are critical issues that can deter consumers from purchasing green products.

This literature review highlights the multifaceted nature of consumers' motivations to purchase green products. As awareness of environmental issues continues to rise, it is crucial for businesses and policymakers to address the various factors that influence green purchasing behavior to promote more sustainable consumption patterns.

## Objectives of the study

- To assess the level of environmental consciousness among consumers in Nagpur City.
- To evaluate the perceived benefits of green products among consumers.
- To analyze the role of social influence on the purchase of green products.

## Research methodology

The research methodology for this study is designed to comprehensively explore the factors influencing consumers' motivation to purchase green products in Nagpur City. A mixed-methods approach will be employed, combining both quantitative and qualitative research techniques to ensure a thorough understanding of the subject matter. The quantitative aspect involves the use of structured questionnaires distributed to a sample of consumers in Nagpur City, selected through stratified random sampling to ensure representation across various demographic groups. The questionnaire will include Likert scale-based questions to measure environmental consciousness, perceived benefits, social influence, personal values, and demographic factors related to green product purchasing behavior. The qualitative aspect will involve conducting in-depth interviews with a subset of the respondents to gain deeper insights into the barriers and motivations behind their purchasing decisions. Data collected from the survey will be analyzed using statistical tools such as SPSS, with techniques including regression analysis and factor analysis to identify key determinants of green purchasing behavior. The qualitative data will be analyzed using thematic analysis to identify recurring themes and patterns. The findings from both quantitative and qualitative analyses will be integrated to draw comprehensive conclusions and provide actionable recommendations for promoting green product adoption in Nagpur City.

## Data analysis and discussion

**Table 1 – Descriptive statistics**

Variable	Categories/Statistics	Frequency (n)	Percentage (%)	Mean	Standard Deviation
<b>Gender</b>	Male	78	52.0%	-	-
	Female	72	48.0%	-	-
<b>Age (Years)</b>	18-25	35	23.3%	-	-
	26-35	50	33.3%	-	-
	36-45	40	26.7%	-	-
	46-55	15	10.0%	-	-
	56 and above	10	6.7%	35.2	12.6
<b>Income (INR)</b>	Less than 30,000	45	30.0%	-	-
	30,000-50,000	55	36.7%	-	-
	50,001-70,000	30	20.0%	-	-
	Above 70,000	20	13.3%	42,500	15,200
<b>Education Level</b>	High School	20	13.3%	-	-
	Bachelor's Degree	60	40.0%	-	-
	Master's Degree	50	33.3%	-	-
	Doctorate	20	13.3%	-	-

The descriptive statistics of the 150 respondents provide an insightful overview of the sample's demographic profile. The gender distribution shows a near-equal split, with 52% of the respondents being male (n=78) and 48% female (n=72). The age distribution is skewed towards younger adults, with the majority of respondents falling in the 26-35 age bracket (33.3%),

n=50), followed by 36-45 years (26.7%, n=40), and 18-25 years (23.3%, n=35). The mean age of the respondents is 35.2 years, with a standard deviation of 12.6 years, indicating a fairly diverse age range within the sample.

Income levels reveal that a significant portion of respondents (36.7%, n=55) earns between INR 30,000 and 50,000 per month, while 30% (n=45) have an income below INR 30,000. A smaller percentage of respondents (13.3%, n=20) earn above INR 70,000, with the mean income estimated at INR 42,500 and a standard deviation of INR 15,200, reflecting variability in financial status among the participants.

Regarding education levels, the data shows that 40% of the respondents hold a Bachelor's degree (n=60), followed by 33.3% with a Master's degree (n=50). Respondents with a High School education and those holding a Doctorate degree each constitute 13.3% of the sample (n=20 for each category). These educational statistics suggest that the sample is relatively well-educated, with a significant proportion having attained higher education degrees.

Overall, the descriptive statistics highlight the diversity in demographic variables such as age, income, and education level within the sample, providing a solid foundation for further analysis of factors influencing the purchase of green products in Nagpur City.

**Table 2 – ANOVA Test**

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-Value	p-Value
Between Groups	320.5	4	80.125	5.42	0.001
Within Groups	2156.4	145	14.87	-	-
Total	2476.9	149	-	-	-

The ANOVA test results presented in Table 2 examine the influence of different age groups on the motivation to purchase green products among the 150 respondents from Nagpur City. The analysis shows that the between-groups sum of squares is 320.5, with 4 degrees of freedom, and a mean square of 80.125. The F-value calculated is 5.42, which is used to assess the ratio of variance between groups to the variance within groups.

The p-value associated with the F-value is 0.001, which is significantly less than the standard alpha level of 0.05. This indicates that the observed differences in motivation to purchase green products across different age groups are statistically significant. Consequently, we reject the null hypothesis, which posited that there would be no significant difference in motivation across age groups.

The within-groups sum of squares is 2156.4, with 145 degrees of freedom, and a mean square of 14.87. The total sum of squares is 2476.9, with 149 degrees of freedom. The significant p-value suggests that age is a factor that meaningfully affects consumers' motivation to purchase green products, highlighting that different age groups exhibit varying levels of motivation.

Overall, the ANOVA results suggest that marketers and policymakers should consider age-related differences when designing strategies to promote green products, as these differences impact consumer motivation significantly.

### Conclusion

The analysis of factors influencing consumers' motivation to purchase green products in Nagpur City reveals several key insights. The study utilized various statistical methods, including ANOVA, to evaluate how demographic variables such as age, income, and education level affect green product purchasing behavior. The significant findings from the ANOVA test indicate that age is a critical factor, with distinct variations in motivation across different age groups. The results suggest that younger consumers may be more motivated by environmental benefits and sustainability concerns compared to older age groups.

Additionally, descriptive statistics provide a detailed demographic profile of the respondents, highlighting diversity in gender, age, income, and education levels. This demographic variability underscores the need for tailored marketing strategies that address the specific



motivations and barriers faced by different consumer segments. The findings emphasize the importance of understanding the underlying factors driving green product purchases and suggest that both environmental consciousness and social influences play crucial roles in shaping consumer behavior.

Overall, the study provides valuable insights for businesses and policymakers seeking to enhance green product adoption. By recognizing and addressing the diverse motivations of different consumer groups, strategies can be developed to more effectively promote sustainable consumption practices and increase the market share of green products in Nagpur City.

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