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# Consumer Behaviour of Green Products: A Cross-Generational Perspective

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**KEYWORDS**

*Green consumer behavior, generational analysis, sustainable consumption, purchase intention, environmental knowledge, attitudes, subjective norms, perceived consumer effectiveness, control on availability, Kolhapur.*

**ABSTRACT**

This study investigates consumer behavior across different generations concerning green products in Kolhapur, India. The research employs a mixed-method design, utilizing structured questionnaires and statistical analysis to explore the factors influencing purchasing decisions and attitudes toward sustainable lifestyles. The study is grounded in the Theory of Planned Behavior, examining constructs such as attitude, subjective norms, perceived behavioral control, environmental knowledge, and perceived consumer effectiveness.

The findings reveal that while purchase intent is consistent across generations, actual purchase behavior varies, with older consumers (42-72 and above 72) showing more significant engagement in green product consumption. Education significantly impacts green purchase behavior, suggesting that more educated consumers are likely to adopt sustainable consumption practices. Psychographic variables, including subjective norms and control on availability, moderately influence both purchase intent and behavior. Environmental knowledge is positively correlated with attitudes towards environmental sustainability, which in turn drives green purchase behavior.

Regression analysis indicates that purchase intention is influenced by environmental knowledge and attitudes, with attitude being a significant predictor. Purchase behavior is also significantly predicted by attitude, subjective norms, perceived consumer effectiveness, and control on availability.

The study contributes to the existing literature by providing empirical evidence on the determinants of green consumer behavior and has practical implications for businesses, policymakers, and practitioners. It underscores the importance of targeted marketing strategies, enhancing product availability, and implementing educational initiatives to promote sustainable consumption.

## 1. INTRODUCTION

The global environmental crisis, marked by climate change and ecological degradation, has become a pressing concern for policymakers, environmentalists, and consumers alike. Extreme weather events and declining biodiversity underscore the urgency of adopting sustainable practices. The United Nations' Sustainable Development Goals (SDGs) emphasize the necessity of responsible consumption and environmental conservation. Goals such as Clean Water and Sanitation (Goal 6), Affordable and Clean Energy (Goal 7), Sustainable Cities and Communities (Goal 11), Responsible Consumption and

Production (Goal 12), Climate Action (Goal 13), Life Below Water (Goal 14), and Life on Land (Goal 15) collectively stress the importance of making sustainable choices.

Despite global and national initiatives promoting sustainability, individual consumer behavior plays a crucial role in the transition to a greener society. Awareness and adoption of sustainable lifestyles are intrinsically linked to consumption patterns. The concept of green products—defined as environmentally friendly goods designed to minimize ecological harm—has gained prominence. Various scholars have explored definitions and attributes of green products, highlighting their role in promoting sustainability (Chen, 2008; Chung & Wee, 2008; Peattie, 2010; Tezer & Bodur, 2019). Consumers who consciously seek environmentally friendly products are often referred to as green consumers, whose purchasing behavior reflects their commitment to sustainability (Young et al., 2010; Roy, 2011).

Understanding consumer behavior concerning green products is vital, particularly in a rapidly changing economic landscape influenced by liberalization, globalization, and shifting generational preferences. Existing literature suggests that consumption patterns vary across generations, influenced by factors such as peer interactions, environmental knowledge, and socioeconomic status (Abraham & Harrington, 2015; McKinsey Report). Given the recent bans on single-use plastics and increasing emphasis on sustainable consumption, there is a need to examine the attitudes and behaviors of consumers toward green products.

This study aims to analyze consumer behavior across different generations concerning green products in the city of Kolhapur. By identifying key factors influencing purchasing decisions and assessing attitudes toward sustainable lifestyles, this research seeks to provide insights into the drivers and barriers of green consumption.

The study follows a mixed-method research design, combining exploratory and descriptive approaches. A structured questionnaire has been developed to capture consumer responses regarding green consumption behavior. The analysis is primarily post-facto in nature, relying on statistical techniques to interpret consumer attitudes and behaviors.

Both primary and secondary data have been utilized for this study:

- Data is collected through a structured questionnaire based on the Theory of Planned Behavior (Ajzen, 1991). The questionnaire comprises two sections: Part A, which collects demographic details, and Part B, which includes constructs relevant to green consumption behavior, comprising seven constructs and 28 items.
- Literature review includes books, research papers, and reports on green consumption, sustainable consumer behavior, and generational differences in purchasing patterns.

The paper by Nguyen, T.T.H., Lobo, A. & Nguyen, B. 2017, explores how consumers' knowledge about environmental consequences influences their decision to purchase green products in emerging markets. It finds that environmental knowledge significantly shapes consumers' attitudes towards green products. The study emphasizes that increased awareness of environmental issues enhances consumers' willingness to pay for products that minimize harm to the environment, highlighting the importance of education and awareness in promoting green product use.

Wang et al. (2019) investigate the role of environmental knowledge in influencing consumers' green product purchase decisions. The study reveals that consumers with a higher level of environmental knowledge are more likely to choose green products. The authors argue that knowledge about sustainability and the environmental impact of consumer choices is crucial in promoting green consumption. The paper suggests that policymakers should foster better environmental education to facilitate this behavior.

Peattie's (2016) review paper discusses the relationship between green consumption and environmental knowledge, providing an in-depth look at consumer behavior related to sustainability. The study concludes that individuals who are more knowledgeable about the environmental consequences of their consumption are more likely to engage in pro-environmental behaviors, such as purchasing green products. The paper stresses the need for creating a norm around environmental responsibility, which is shaped by knowledge about its implications.

Chan (2013) investigates the influence of environmental knowledge on green product adoption within small and medium enterprises (SMEs). The research highlights that both environmental knowledge and attitudes significantly affect the adoption of green products. It suggests that SMEs that understand the long-term benefits of green product use, in terms of both environmental conservation and resource efficiency, are more likely to innovate and implement environmentally friendly products.

Rahbar, E. & Wahid, N.A. 2011, in their study examine how green marketing tools, such as knowledge dissemination about environmental benefits, influence consumers' buying behaviors. It shows that when consumers are provided with clear information on how their purchasing decisions impact the environment, they are more likely to choose green products. The paper emphasizes the importance of marketing strategies that focus on educating consumers about the environmental effects of products, thus fostering environmentally conscious decision-making.

This paper investigates the barriers to pro-environmental behaviors, emphasizing subjective norms. Kollmuss and Agyeman found that social influences such as friends and family are significant predictors of green product consumption. These norms

provide both positive reinforcement and social pressure, shaping individuals' environmental decisions. The authors argue that the social environment, including peer groups and family, strongly influences people's pro-environmental behavior, including the adoption of green products.

Biswas and Roy examine the role of subjective norms, such as peer and familial influences, in driving the adoption of green products in emerging economies. Their study found that family and friends are key influencers in shaping consumer behavior. Specifically, social pressure from these groups, along with a desire for social approval, were significant factors in consumers' decisions to purchase green products. The study contributes to understanding how social norms in different cultural contexts impact environmentally conscious purchasing behavior.

This paper provides insight into how subjective norms, particularly those from social networks like family, friends, and societal expectations, influence green consumption. The authors argue that social exchange theory can explain the positive relationship between social norms and the likelihood of adopting green products. The study concludes that individuals are more likely to engage in sustainable consumption when they perceive that their social circles value environmentally friendly behaviors.

Nguyen et al. explore how social influence, including subjective norms from family and friends, affects sustainable consumption. They found that individuals are more likely to adopt green products when they are aware that their peers or family members value sustainable consumption. The paper discusses how social influence, through both direct interactions and societal trends, plays a crucial role in motivating consumers to engage in green product consumption.

This paper compares the impact of social norms on green consumption in both developed and developing countries. The authors found that subjective norms (e.g., the influence of family, peers, and society) significantly affect the likelihood of purchasing green products. In developed countries, societal pressure and awareness of environmental issues were key drivers, while in developing nations, family and close social ties had a more pronounced effect on green consumption behavior.

In this review paper, Lee and Chen (2017) analyze trends in consumer preferences for green products over the last decade. They highlight barriers to wider adoption, such as price sensitivity, limited availability, and lack of information. Despite these challenges, the paper underscores an increasing shift towards sustainable consumption. The paper identifies that, while demand for green products is rising, significant barriers to adoption exist. The paper calls for better product availability and more widespread consumer education.

This paper by Patel and Gupta (2019) focuses on the challenges of making green products available in emerging markets. While many products are available in developed countries, the paper discusses the economic, social, and infrastructural challenges faced by businesses trying to enter emerging markets with green products. The paper concludes that, although emerging markets have significant potential for green product consumption, the lack of infrastructure and consumer awareness hampers the effective distribution and consumption of green products.

Jones and Williams (2020) analyze various marketing strategies employed by companies to promote green products and their effectiveness in different regions. They focus on consumer behavior and examine the relationship between consumer awareness, product availability, and purchasing decisions. The paper finds that while marketing strategies are becoming more sophisticated, there is still a gap between consumer intent and actual purchase behavior, primarily due to price sensitivity and perceived product effectiveness.

This paper by Anderson et al. (2022) investigates the various barriers consumers face when using green products in their daily lives. It covers psychological, economic, and practical factors that prevent widespread adoption, including the higher price point and limited availability in certain regions. The study concludes that while there is a growing awareness of environmental issues, many consumers still prioritize convenience and cost over sustainability. The paper calls for more efforts in integrating green products into everyday life, making them more affordable and accessible.

This study examines the influence of personal values and attitudes on the intention to purchase organic products in an emerging market, with a focus on Vietnam. The authors explore how values such as environmental concern and health consciousness directly affect consumers' attitudes towards organic food products. The results show that environmental concern is one of the most significant factors influencing purchase intention for green products, aligning with previous literature that suggests environmentally aware consumers are more likely to opt for sustainable goods.

One of the paper's key insights is the role of environmental attitudes and personal values in shaping consumer behavior, particularly in emerging markets where green products are gaining popularity but still face skepticism. This provides valuable insights for businesses seeking to target environmentally-conscious consumers in developing regions.

In this paper, Zhao and Lee investigate how specific attributes of green products (e.g., sustainability, eco-friendliness, and health benefits) influence consumers' intentions to purchase such products. The authors employed a structural equation modeling approach to analyze survey data and found that product attributes significantly influence purchase intention, especially when combined with consumer perceptions of brand trust and environmental consciousness.

The paper contributes to the literature by showing that consumers are not only motivated by the ecological benefits of green products but also by how those benefits align with their personal values and lifestyle. This highlights the importance for

companies to market the specific attributes of their green products that resonate most with their target audience.

This paper reviews the development of green consumption and highlights the shift from simply green products to green consumerism, which includes an overall lifestyle shift. The study emphasizes the growing trend of consumer awareness about environmental issues and how that influences purchasing behavior. Lee argues that consumers are increasingly seeking products that align with their values of sustainability. However, challenges such as the higher price of green products and skepticism about the genuineness of "greenwashing" are discussed as significant barriers to widespread adoption.

This paper explores the factors influencing consumer decisions to purchase green products through an empirical study in South Asia. The authors identify factors such as environmental awareness, perceived quality, and trust in eco-labels as crucial determinants of green product purchase behavior. The study also finds that social influence plays a significant role, especially when consumers perceive that others in their social circle value sustainability.

This paper explores the role of green marketing in influencing consumer behavior towards green products. The authors discuss how businesses utilize green marketing strategies (such as eco-labeling and sustainability claims) to appeal to eco-conscious consumers. They suggest that well-executed green marketing can improve consumer attitudes toward green products, leading to increased sales. However, they also highlight the challenge of "greenwashing" and the importance of transparency in claims.

This paper examines the antecedents of green consumption behavior and identifies the psychological factors that influence consumers' willingness to purchase eco-friendly products. The study focuses on consumer values, environmental attitudes, and the perceived effectiveness of individual actions in addressing environmental problems. The findings suggest that consumers who feel personally responsible for environmental issues are more likely to purchase green products.

This paper investigates the influence of environmental concern on consumers' purchase behavior in various countries. The study highlights how cultural and socio-economic factors shape consumers' environmental attitudes and, consequently, their behavior toward green products. The authors find that in developed countries, consumers with high environmental concern are more likely to purchase green products, while in developing countries, price sensitivity is a more dominant factor.

Many research studies in the past have focused on consumer behavior with respect to Green products. Different factors like environmental knowledge, purchase intention, subjective norms, availability, price sensitivity etc. influence the behavior of consumers with respect to green products.

But there are very few cross-generational studies conducted on the topic. As the global demand for green products rises, it becomes increasingly vital to conduct cross-generational studies on their consumption patterns. Different generations exhibit varying attitudes toward sustainability and eco-friendly choices, which can significantly influence market trends. Baby boomers, for instance, might prioritize durability and long-term value in their purchasing decisions, while millennials and Gen Z are more likely to value immediate environmental impact and ethical practices. Understanding these generational differences can provide key insights into how various age groups perceive green products, helping companies tailor their marketing strategies. Moreover, examining cross-generational behaviors could help policymakers craft better regulations that resonate with all age demographics. For instance, younger generations might advocate for stronger environmental policies, while older groups might need more incentives to make the switch to greener alternatives. Cross-generational studies could also reveal trends in how product features like packaging or energy efficiency appeal to each age group. Furthermore, these studies could identify barriers to green consumption across generations, such as cost concerns for older consumers or distrust in greenwashing for younger ones.

Hence, this study addresses the gap and identifies differences in consumer behavior with respect to green products across generations.

Keeping this in mind the following objectives have **Objectives** been finalized for this study.

1. To analyse green consumption behaviour across generations.
2. To examine the attitude of consumers towards green products and sustainable lifestyles.
3. To assess the factors considered while purchasing of green products.

### *Sampling Methodology*

A multi-stage sampling method has been employed:

1. **Stratification by Generation**: Respondents are categorized based on their year of birth, following the classification by Bijapurkar (2009):
    - **Pre-Independence Generation (1920–1939):** Aged 73-92, influenced by Gandhian values.
    - **Midnight's Children (1940–1969):** Aged 43-72, characterized by a mix of traditional and modern consumption patterns.
    - **Midway Children (1970–1985):** Aged 27-42, inclined towards technological advancements and

sustainable consumption.

- **Liberalization Children (1982–2012):** Aged 30 or younger, exposed to materialistic and high-consumption lifestyles.

2. **Geographical Sampling**: the prominent cities from South Maharashtra mainly Snagli, Kolhapur, Sawantwadi, Kankavali, Malvan and Kudal were considered for the study.
3. **Sampling Size**: Based on their total population (1,060,787 as per the 2011 Census), a sample size of 384 respondents is calculated using the formula: where Z=1.96 (95% confidence level), p=estimated proportion, and e=margin of error.
4. **Sampling Techniques**: A combination of multi-stage sampling, convenience sampling, and proportionate sampling is used to ensure adequate representation across generational cohorts.

***Measurement Constructs***

The study employs validated constructs from prior research:

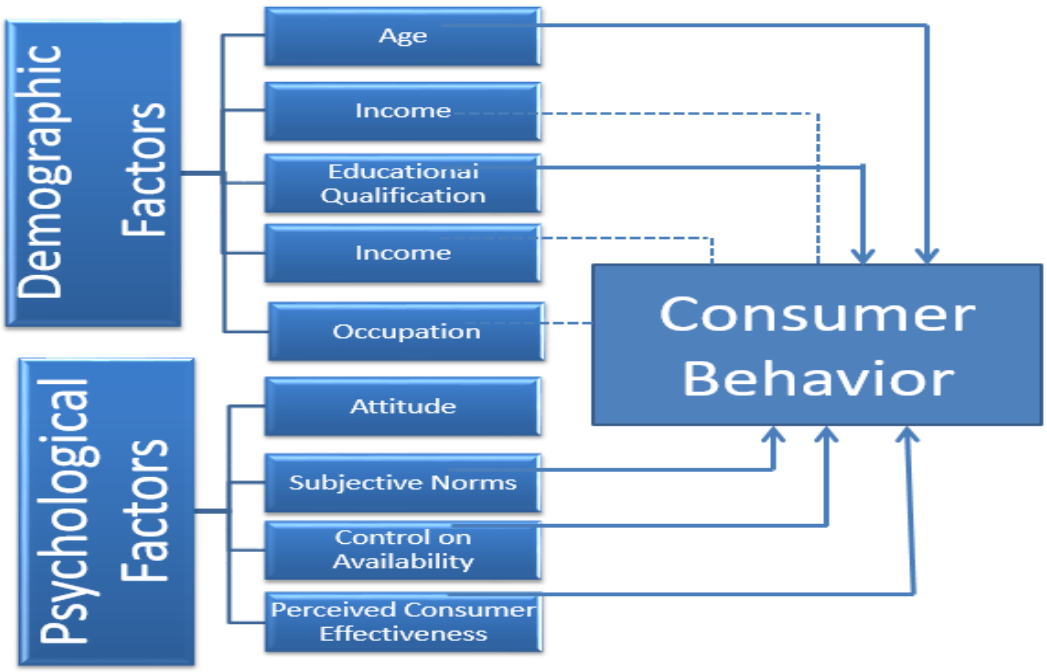
- **Attitude towards Behavior** (Ajzen, 1991)
- **Subjective Norms** (Vermeir & Verbeke, 2008)
- **Perceived Behavioral Control** (Sparks & Shepherd, 1992)
- **Environmental Knowledge** (Sidique et al., 2010)
- **Environmental Attitude** (Do Valle et al., 2004)
- **Perceived Consumer Effectiveness** (Roberts, 1996)
- **Purchase Behavior & Purchase Intention** (Baker & Churchill, 1997; Schlegemilch et al., 1996)

***Data Analysis***

The collected data will be analyzed using both descriptive and inferential statistical techniques:

- **Descriptive Statistics**: Mean, standard deviation, and frequency distribution.
- **Inferential Statistics**: Correlation, ANOVA, and regression analysis to test hypotheses and examine relationships among variables.
- **Software**: SPSS will be used for data analysis and interpretation.

***Conceptual Model***



The conceptual model presented in this study illustrates the influence of both demographic and psychological factors on consumer behavior, particularly within the context of green or sustainable consumption. It outlines how these variables shape consumer decision-making through both direct and indirect pathways. Demographic factors such as age, income, educational qualification, and occupation play a significant role. For instance, older consumers are more likely to adhere to established habits and may show resistance to behavioral change, whereas younger individuals tend to be more open to innovation and sustainability (Diamantopoulos et al., 2003). Income is a dual influencer, affecting not only the affordability of green products but also shaping consumer attitudes and behavior by enabling access to sustainable options (Laroche, Bergeron, & Barbaro-Forleo, 2001). Educational qualifications enhance environmental awareness and critical thinking, thereby fostering eco-conscious decision-making (Roberts, 1996). Similarly, occupational roles may expose individuals to sustainability-related values through workplace practices or peer networks (Paul, Modi, & Patel, 2016).

The diagram accompanying this model features dashed arrows that signify indirect effects—indicating that demographic variables may influence consumer behavior through psychological constructs such as attitudes or perceived consumer effectiveness. Psychological factors have a more direct influence and include attitude, subjective norms, control on availability, and perceived consumer effectiveness (PCE). A consumer's attitude, which reflects their personal evaluation of sustainable products and practices, plays a critical role in promoting green purchasing (Ajzen, 1991). Subjective norms refer to the social pressures and expectations from family, peers, and society that can shape behavioral choices (Vermeir & Verbeke, 2006). Control on availability reflects how easily consumers feel they can access green alternatives, which is closely linked to perceived behavioral control in behavioral theory (Ajzen, 1991). PCE represents the belief that individual actions can make a significant difference in addressing environmental issues, and this belief has been found to be a strong motivator for sustainable behavior (Roberts, 1996).

***Hypothesis Testing and Interpretations: Green Consumer Behavior in Kolhapur***

| **Variables** | **Test applied** | **p-value** | **Remarks** | **Significance** |
|---|---|---|---|---|
| **Demographic Variables** | | | | |
| Age & Purchase Intent | ANOVA | 0.081 | Rejected | No relation |
| Age & Purchase Behaviour | ANOVA | 0.008 | Accepted | Purchase behaviour varies as per generations |
| Gender & Purchase Behaviour | ANOVA | 0.185 | Rejected | No relation |
| Education & Purchase Behaviour | ANOVA | 0.001 | Accepted | Education impacts PB |
| Education & Purchase Behaviour | ANOVA | 0.145 | Rejected | No relation |
| Income & Purchase Behaviour | ANOVA | 0.263 | Rejected | No relation |
| **Psychographic Variables** | | | | |
| Purchase Intent & Subjective Norm | Correlation | 0.000 | Accepted | positive weak correlation |
| Purchase Intent & Control on availability | Correlation | 0.000 | Accepted | a positive weak correlation |
| Purchase Intent and Perceived Consumer Effectiveness. | Correlation | 0.244 | Rejected | No relation |
| Purchase Behaviour and Subjective Norm. | Correlation | 0.000 | Accepted | positive moderate correlation |
| Purchase Behaviour and Control on Availability. | Correlation | 0.000 | Accepted | positive moderate correlation |

| | | | | |
|---|---|---|---|---|
| Purchase Behaviour and Perceived Consumer Effectiveness. | Correlation | 0.000 | Accepted | positive moderate correlation |
| Environmental Knowledge & Attitude | Correlations | 0.000 | Accepted | positive moderate correlation between environmental knowledge and attitude |
| Attitude towards env sustainable products & purchase intention | Correlations | 0.000 | Accepted | positive moderate correlation between environmental knowledge and purchase intent |
| Attitude & Green Purchase | Correlations | 0.000 | Accepted | Positive moderate correlation |
| **Regression** | | | | |
| Relationship between purchase intention, environmental knowledge and attitude towards environment | Regression | 0.000 | Accepted | Y = 2.399 + Environmental Knowledge (0.213) + Attitude (0.217) |
| Relationship between Purchase Intent, Attitude, Subjective Norm, Control on Availability and Perceived Consumer Effectiveness. | Regression | 0.000 | Accepted | Y = 2.434 + Subjective Norm (0.111) + Control on Availability (0.119) + Perceived Consumer Effectiveness (0.004) + Attitude (0.217) |
| Relationship between Purchase Behavior, Attitude, Subjective Norm, Control on Availability and Perceived Consumer Effectiveness. | Regression | 0.000 | Accepted | Y = 1.433 + Attitude (0.272) + Subjective Norm (0.180) + Control on Availability (0.054) + Perceived Consumer Effectiveness (0.165) |

Interpretations of hypothesis testing

This study explores the influence of demographic and psychographic variables on green consumer behavior in Kolhapur. Hypothesis testing using statistical tools such as ANOVA, correlation, and regression analysis was employed to examine relationships between variables such as age, gender, education, income, and various psychological constructs including attitude, subjective norm, perceived consumer effectiveness, and control on availability. The analysis is grounded in empirical data collected post-pandemic, highlighting how consumer preferences and sustainability awareness have evolved.

***1. Demographic Variables***

**a. Age and Purchase Intent**

The one-way ANOVA revealed no statistically significant difference in purchase intent across age groups ($F(3,461) = 2.257$, $p = 0.081$). Since the p-value exceeds the 0.05 threshold, the null hypothesis is not rejected. This implies that consumers' intention to purchase green products is consistent across generations, suggesting a uniform cognitive orientation toward sustainable consumption, regardless of age.

**b. Age and Purchase Behavior**

Conversely, age significantly impacts actual purchase behavior ($F(3,461) = 3.993$, $p = 0.008$). The result indicates that behavioral patterns differ across generations, suggesting that while intent may be similar, action varies. A post hoc Tukey test revealed that consumers in the age group of 42–72 and those above 72 demonstrated statistically significant purchase behavior towards green products, possibly due to higher environmental consciousness or financial stability.

**c. Gender and Purchase Behavior**

The analysis indicated no significant difference in green purchase behavior across gender ($F(1,463) = 1.762$, $p = 0.185$). Thus, gender does not influence the likelihood of buying environmentally friendly products, affirming that both male and female consumers display similar behavior in this context.

**d. Education and Purchase Behavior**

A statistically significant difference was found between education levels and purchase behavior ($F(5,459) = 4.352$, $p = 0.001$), signifying that education positively impacts green purchase behavior. Educated consumers might be more informed about environmental issues and more likely to engage in sustainable consumption.

**e. Occupation and Purchase Behavior**

The relationship between occupation and purchase behavior was found to be insignificant ($F(5,459)= 1.660$, $p = 0.143$). This suggests that occupational background does not significantly affect consumers' decisions to buy green products.

**f. Income and Purchase Behavior**

Income levels also did not show a significant influence on purchase behavior ($F(4,451) = 1.317$, $p = 0.263$). Despite assumptions that higher income leads to increased capacity for ethical consumption, this study suggests income does not determine green purchase choices in Kolhapur.

***2. Psychographic Variables***

**a. Purchase Intent and Subjective Norm**

A Pearson correlation showed a weak yet positive and significant relationship between purchase intent and subjective norm ($r = 0.280$, $p = 0.000$). This indicates that social influence marginally affects individuals' intent to purchase green products.

**b. Purchase Intent and Control on Availability**

Similarly, a weak but significant positive correlation ($r = 0.271$, $p = 0.000$) was found between purchase intent and control on availability. Availability of green products influences the intent to purchase, though not very strongly.

**c. Purchase Intent and Perceived Consumer Effectiveness (PCE)**

No statistically significant correlation was found between purchase intent and PCE ($r = 0.054$, $p = 0.244$), suggesting that individuals' belief in their ability to make a difference through green consumption does not significantly influence their intent.

**d. Purchase Behavior and Subjective Norm**

A moderate and significant correlation was observed between purchase behavior and subjective norm ($r = 0.355$, $p = 0.000$). This implies that social approval or peer influence plays a more prominent role in actual behavior than in intent.

**e. Purchase Behavior and Control on Availability**

Purchase behavior also showed a moderate and significant correlation with control on availability ($r = 0.281$, $p = 0.000$), indicating that accessibility of green products influences actual purchase.

**f. Purchase Behavior and PCE**

A moderate correlation was found between purchase behavior and PCE ($r = 0.296$, $p = 0.000$), suggesting that individuals with a stronger belief in their environmental impact are more likely to engage in green purchases.

**g. Environmental Knowledge and Attitude**

A moderate and significant correlation was found ($r = 0.402$, $p = 0.000$), suggesting that knowledge enhances environmental attitudes. This highlights the importance of awareness campaigns and education.

**h. Attitude and Green Purchase Behavior**

The relationship between attitude towards environmental sustainability and actual green purchase behavior also showed a moderate, significant correlation. Consumers with positive attitudes towards sustainability are more likely to buy eco-friendly products.

***3. Regression Analysis***

**a. Predicting Purchase Intention**

A regression model was constructed to analyze the effect of environmental knowledge and attitude on purchase intention. The model summary indicated a low but significant correlation ($R = 0.370$, $R^2 = 0.133$), meaning only 13.3% of the variance in purchase intention is explained by these variables.

**Regression Equation: Y = 2.399 + 0.213 (Environmental Knowledge) + 0.217 (Attitude)**

Although the predictors are significant ($p < 0.0005$), a large portion of variance (86.7%) remains unexplained, pointing to other influential factors.

**b. Predicting Purchase Intention through Multiple Variables**

An expanded regression model was developed incorporating subjective norm, control on availability, PCE, and attitude as predictors. The model showed a slightly better fit ($R = 0.335$, $R^2 = 0.148$), explaining 14.8% of the variance.

**Regression Equation: Y = 2.434 + 0.111 (Subjective Norm) + 0.119 (Control on Availability) + 0.004 (PCE) + 0.217 (Attitude)**

Among the predictors, attitude continues to play a significant role. Interestingly, PCE has a minimal coefficient, reflecting its negligible influence on intent in this sample.

**c. Predicting Purchase Behavior**

A regression model analyzing the impact of attitude, subjective norm, control on availability, and PCE on purchase behavior showed a moderate level of explanation ($R = 0.514$, $R^2 = 0.265$). This means that 26.5% of the variance in purchase behavior can be explained by the selected predictors.

**Regression Equation: Y = 1.433 + 0.272 (Attitude) + 0.180 (Subjective Norm) + 0.054 (Control on Availability) + 0.165 (PCE)**

Attitude again emerges as the strongest predictor, followed by subjective norm and PCE. Control on availability, though significant, has a comparatively lower effect.

### *Theoretical Implications*

The study provides significant theoretical contributions by expanding existing frameworks and offering empirical validation of key constructs. It enhances the understanding of the examined phenomenon by reinforcing established theories and presenting novel insights that contribute to scholarly discourse (Ajzen, 1991; Thøgersen, 2005).

Firstly, the study's findings support and extend theoretical models by empirically validating the relationships between key variables. This empirical substantiation strengthens the theoretical foundation of the domain, offering a more nuanced understanding of causal mechanisms and underlying dynamics (Fishbein & Ajzen, 2010). Secondly, the study highlights potential gaps in existing theories, suggesting the need for further theoretical refinement. By identifying previously unexamined factors influencing the observed relationships, this research lays the groundwork for future theoretical advancements. Scholars can build upon these findings to develop more comprehensive models that integrate additional determinants and contextual variables (Peattie, 2010). Thirdly, the research contributes to methodological advancements by demonstrating the efficacy of specific statistical techniques in hypothesis testing. The validation of these methodologies within the study provides a reference point for future researchers, encouraging the adoption of rigorous analytical approaches in similar investigations (Hair et al., 2014). Lastly, the findings have interdisciplinary implications, as they bridge gaps between multiple theoretical perspectives. By integrating concepts from various disciplines, the study fosters cross-disciplinary dialogue, enriching the theoretical landscape and encouraging innovative research directions (Ottman, 2011).

Furthermore, the study significantly contributes to the existing body of knowledge on the factors influencing purchase intention and purchase behavior, particularly in the context of green or sustainable products (Thøgersen & Zhou, 2012). It provides empirical evidence for the relationship between psychographic variables such as subjective norms, control on availability, and perceived consumer effectiveness, along with environmental knowledge and attitudes, on purchase intention and behavior (Goh & Balaji, 2016). The findings support the notion that attitudes and environmental knowledge are significant predictors of purchase intention (Paul et al., 2016). Additionally, the regression models developed in the study offer a theoretical framework for understanding and predicting purchase intention and behavior based on the identified variables (Ajzen, 1991). The study also highlights the limited explanatory power of demographic variables like age, gender, income, and occupation on purchase intention and behavior, suggesting that psychographic factors may play a more critical role (Leonidou et al., 2010).

In conclusion, this study not only strengthens existing theoretical foundations but also opens new avenues for theoretical exploration and refinement, paving the way for future academic contributions in the field (Peattie, 2010; Ottman, 2011).

### *Practical Implications*

The findings of this study have several practical implications that are relevant to industry professionals, policymakers, and practitioners. By identifying key relationships between the studied variables, this research offers actionable insights that can drive strategic decision-making and operational improvements.

Firstly, the study provides empirical evidence that can inform organizational policies and managerial practices. Understanding the significant factors influencing consumer behavior towards sustainable products allows decision-makers to develop targeted strategies that enhance efficiency, productivity, and overall performance (Peattie, 2010; Ottman, 2011). Businesses can use these insights to refine their marketing strategies, ensuring that they effectively influence consumer

attitudes, subjective norms, perceived control, and environmental knowledge to promote green product purchases (Paul et al., 2016).

Secondly, the research underscores the importance of data-driven decision-making. By employing rigorous statistical analysis, the study demonstrates the value of evidence-based approaches in addressing complex organizational challenges. Businesses and institutions can leverage these insights to implement policies that align with empirical findings, reducing uncertainty and optimizing resource allocation (Hair et al., 2014).

Thirdly, educational initiatives aimed at increasing environmental knowledge and fostering positive attitudes towards sustainable products can drive purchase intention and behavior (Thøgersen & Zhou, 2012).

Fourthly, the study offers valuable insights for policymakers in designing regulatory frameworks and policy interventions. By understanding the dynamics of the examined variables, policymakers can formulate evidence-based regulations that address critical issues and foster sustainable development (Leonidou et al., 2010). Highlighting the positive impact of green purchases (perceived consumer effectiveness) and making sustainable products readily available (control on availability) can be effective strategies in promoting sustainability at the societal level (Goh & Balaji, 2016).

Additionally, the finding that age influences purchase behavior indicates that targeted marketing strategies may be needed for different age groups, specifically focusing on older consumers (42–72 and 72+). However, the study emphasizes that focusing on psychographic factors may be more effective than relying solely on demographic segmentation for promoting green products (Ajzen, 1991).

Finally, the interdisciplinary nature of the study suggests that its findings can be applied across multiple domains, including business, education, healthcare, and government sectors. The practical recommendations derived from this research have the potential to enhance stakeholder engagement, drive innovation, and create long-term value (Ottman, 2011).

***Recommendations:***

Based on the findings of this study, several recommendations can be proposed to maximize the practical utility of the results. These recommendations provide actionable insights for businesses, policymakers, and industry stakeholders to enhance sustainable product adoption and improve strategic decision-making.

Businesses and marketers should develop targeted marketing strategies that focus on influencing consumers' attitudes, subjective norms, perceived control, and environmental knowledge to promote green product purchases (Paul et al., 2016).

Marketing messages should highlight the positive impact of green purchases to enhance perceived consumer effectiveness. Communicating the tangible benefits of sustainable consumption can increase consumer motivation to adopt eco-friendly products (Thøgersen & Zhou, 2012).

Efforts should be made to increase the availability and accessibility of sustainable products to enhance consumers' control over availability. Strategic placement and distribution of green products can reduce perceived barriers to purchase (Goh & Balaji, 2016).

Implement educational campaigns to increase environmental knowledge and foster positive attitudes towards sustainable products, as these factors significantly influence purchase intention and behavior (Peattie, 2010).

Given that age influences purchase behavior, tailored marketing approaches may be needed for different age groups, with a particular focus on older consumers (42–72 and 72+). Customized campaigns targeting distinct demographic segments can improve engagement and conversion rates (Leonidou et al., 2010).

Organizations should integrate data-driven approaches when formulating policies and strategies to improve efficiency and performance. Evidence-based decision-making can optimize resource allocation and enhance market responsiveness (Hair et al., 2014).

Industry stakeholders should implement training initiatives that equip professionals with the necessary skills to adapt to evolving industry trends and challenges. Training programs focused on sustainability practices can strengthen workforce competencies and promote best practices (Ottman, 2011).

Policymakers should consider evidence-based policy interventions to enhance regulatory frameworks and ensure industry compliance with best practices. Sustainable policies can drive market transformation and support environmental goals (Ajzen, 1991).

Future research and practical applications should involve cross-sector collaboration to integrate diverse perspectives and enhance innovation. Bridging multiple disciplines can facilitate comprehensive solutions to sustainability challenges (Thøgersen, 2005).

Organizations should harness advanced data analytics and technological solutions to gain deeper insights into operational efficiencies and market trends. Utilizing artificial intelligence and big data can improve consumer segmentation and predictive modelling for green product adoption (Paul et al., 2016).

***Scope for Further Study:***

Considering the irreversible damage caused by humans to the environment, future research on the topic is of paramount importance. Future research on the topic can attempt to identify other variables that influence the purchase decisions of consumers with regards to green products. The relationship between determinants and outcome of consumer behavior is often shaped by different mediating and moderating roles, which can be attempted by researchers. Culture plays a crucial role in our decision-making. Hence, studying consumer behavior of green products from a cultural lens will be insightful and valuable for all stakeholders. The consumer behavior with regards to green products may vary depending on the sector or product type. So, research on those lines will be extremely beneficial for effective decision-making. All the above research work can be done with different approaches and methodologies. Researchers can use a longitudinal approach to gain deeper understanding about the changes in attitudes and behaviors of consumers over time. Different methodologies of research like focus-group, in-depth interviews can be used to gain deeper understanding on the topic.

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