

Sustainable Choices and Smart Promotions: Examining the Link Between Consumer Attitudes and Eco-Friendly Product Purchases

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Abstract: *The global environmental crisis has intensified the focus on sustainable consumption, yet a persistent gap remains between consumer attitudes and actual purchasing behavior regarding eco-friendly products. This study examines the link between consumer attitudes, promotional strategies, and the purchase of eco-friendly products in South India. A quantitative research design was employed, collecting data from 275 consumers in Hyderabad and Ranga Reddy Districts via a structured questionnaire. Data were analyzed using descriptive statistics, correlation, regression, and Structural Equation Modeling (SEM). The findings reveal that while consumer attitudes significantly influence purchase behavior ($\beta = .42, p < .001$), promotional strategies are a critical moderating factor, with a substantial direct effect ($\beta = .31, p < .001$). Furthermore, eco-labeling and social media campaigns were found to be significantly more effective than monetary discounts. The study concludes that "smart promotions"—those focused on building credibility and leveraging social influence—are essential for bridging the attitude-behavior gap. The results offer actionable insights for marketers and policymakers, emphasizing the need for integrated strategies that combine attitudinal reinforcement with transparent, community-oriented marketing to drive sustainable consumption.*

Keywords: sustainable consumption, green marketing, consumer attitudes, eco-friendly products, promotional strategies, attitude-behavior gap, smart promotions

I. INTRODUCTION

The escalating global environmental crisis, characterized by climate change, resource depletion, and pollution, has precipitated a critical re-evaluation of consumption patterns worldwide. In response, both manufacturers and consumers have grown increasingly concerned about the ecological impact of products, leading to a surge in interest in environmentally friendly alternatives such as organic foods, energy-efficient appliances, and recyclable materials (Prakash et al., 2023). This shift has placed the concepts of sustainability and green marketing at the forefront of contemporary business strategy, as organizations seek to align their operations with the principles of environmental stewardship while meeting evolving consumer demands.

The success of this green transition, however, hinges on a nuanced understanding of the consumer decision-making process. While a positive attitude towards environmental protection is becoming more common, a persistent "attitude-behavior gap" often prevents these concerns from translating into actual purchases (Savale et al., 2023). Consumers may express strong environmental values but fail to act upon them when faced with barriers such as higher costs, lack of information, or perceived ineffectiveness of their individual actions (Siuda, 2025; Waris & Hameed, 2020). This gap presents a central challenge for both scholars and practitioners, prompting an investigation into the factors that can effectively bridge intention and action.

The role of strategic marketing, or "smart promotions," is pivotal in this context. Modern promotions extend beyond simple advertising to encompass a suite of tools designed to inform, persuade, and facilitate sustainable choices.



Research indicates that clear eco-labeling, transparent product information, and credible green branding are significant drivers of consumer trust and purchase intention (Savale et al., 2023; Garg et al., 2025). Furthermore, the digital age has unlocked new promotional avenues. The influence of social media, where positive sentiment can significantly enhance user engagement and brand loyalty, is now a critical consideration (Reddy & Prakash, 2024). Similarly, emerging technologies like Artificial Intelligence (AI) and machine learning are transforming sustainability marketing by enabling hyper-personalization and building deeper consumer relationships (Prakash et al., 2026; Garg et al., 2025). Social influences, encapsulated in subjective norms and social media interactions, also act as powerful promotional forces that can amplify the impact of both personal values and marketing efforts (Ghouse et al., 2025; Ebrahimi et al., 2021; Mansoor et al., 2025).

Therefore, this study is situated at the intersection of consumer psychology and marketing communication. It seeks to examine the intricate link between consumer attitudes and the purchase of eco-friendly products, with a specific focus on how "smart promotions"—ranging from traditional eco-labels to AI-driven digital strategies—can moderate this relationship. By synthesizing insights from existing literature on consumer behavior in various sectors and regions, this research aims to provide a comprehensive understanding of how attitudinal factors and strategic marketing initiatives interact to drive sustainable consumption. The findings will offer valuable guidance for marketers and policymakers aiming to design effective strategies that not only resonate with consumers' environmental values but also empower them to make consistent and impactful sustainable choices.

II. LITERATURE REVIEW

The growing global concern for environmental degradation has catalyzed a significant shift in both manufacturing and consumption patterns. As a result, eco-friendly products—ranging from organic foods and lead-free paints to energy-efficient appliances—have garnered increased attention from consumers and marketers alike (Prakash et al., 2023). This review synthesizes the current literature on consumer perceptions, preferences, and behaviors toward green products, as well as the efficacy of various marketing strategies in influencing sustainable consumption.

A foundational aspect of this research area involves understanding consumer awareness and the key factors driving green consumption. In a study on the Indian market, Prakash et al. (2023) aimed to investigate consumer awareness and the critical factors influencing green consumption, employing factor and correlation analysis. Similarly, Vijayasree et al. (2022) conducted an empirical study on consumer behavior towards green products in India, highlighting the ongoing research interest in this demographic.

The Theory of Planned Behavior (TPB) has been extensively applied as a theoretical framework to understand green purchase intentions. Research in Oman by Ghouse et al. (2025) integrated environmental knowledge and concern into the TPB model, finding that environmental concern, subjective norms, and perceived behavioral control significantly influenced attitudes and, subsequently, purchase intention, although eco-labelling did not show a significant moderating effect. In the context of Bangladesh, Sobuj et al. (2021) also used the TPB to study young consumers' eco-friendly apparel purchases, revealing that subjective norms and environmental knowledge were highly influential, while perceived behavioral control was not a reliable predictor of actual behavior.

Expanding beyond traditional models, other studies have incorporated different theoretical lenses. Ebrahimi et al. (2021) investigated the impact of social network marketing (e.g., word-of-mouth, interaction, customization) on consumers' sustainable purchase behavior, finding that an eco-friendly attitude positively moderates these relationships. Their study used a combination of SEM and Necessary Condition Analysis (NCA) to identify essential conditions for fostering sustainable consumption. In the hospitality sector, Mansoor et al. (2025) integrated the Stimulus-Organism-Response model, TPB, and Value-Belief-Norm theory, demonstrating that both external stimuli (hotel green practices) and internal stimuli (pro-environmental self-identity) significantly drive customer engagement in sustainable consumption, with social norms amplifying these effects.

The role of marketing strategies and specific tools is another critical area of inquiry. Savale et al. (2023) assessed consumer perception and adoption, finding a gap between positive attitudes and actual purchase behavior. Their research emphasized the importance of clear eco-labeling, transparent product information, and the influence of social norms. Siuda (2025) focused on young Polish consumers, confirming that pro-ecological factors are important in



purchase decisions, but price remains a crucial barrier even for this demographic. A comprehensive review by Mallick et al. (2024) further explored the relationship between various eco-friendly marketing tools and their impact on real-world consumer buying behavior.

The digital age has introduced new dynamics to green consumerism. Prakash et al. (2026) explored how digital technologies, including Artificial Intelligence (AI) and Machine Learning, are leveraged to drive sustainable purchasing decisions, noting that younger consumers and females show a greater inclination toward green consumption. In a related vein, Garg et al. (2025) conducted a systematic review concluding that AI-driven sustainability marketing—using tools like personalization and natural language processing—can transform consumer perceptions and build trust and loyalty toward eco-friendly brands. The influence of digital platforms is also evident in sentiment analysis; Reddy and Prakash (2024) found that positive sentiment on social media platforms like Instagram significantly enhances user engagement and loyalty, which has implications for green brand marketing.

Finally, research has also focused on specific product categories. Waris and Hameed (2020) empirically evaluated the purchase intention of energy-efficient appliances in Pakistan, identifying environmental concern, knowledge of eco-labels, and perceived consumer effectiveness as key antecedents. Earlier work by C. Prakash (2016), while not on green products, established the fundamental importance of service quality dimensions like tangibles and reliability on customer satisfaction, a principle that can extend to the perceived quality and credibility of green products and services.

Objectives of the Study

- To analyze consumer attitudes and awareness toward eco-friendly products.
- To examine the influence of promotional strategies on consumer purchase decisions for eco-friendly products.
- To identify the key factors motivating consumers to choose sustainable products over conventional alternatives.
- To evaluate the relationship between consumer attitudes and their actual purchasing behavior of eco-friendly products.
- To assess the effectiveness of various promotional tools (advertising, discounts, eco-labeling, digital campaigns) in enhancing eco-friendly product sales.

III. METHODOLOGY

Research Design

This study employed a quantitative descriptive research design to examine the relationship between consumer attitudes, awareness, promotional strategies, and eco-friendly product purchases. The research aimed to provide empirical insights into the factors influencing sustainable consumer behavior.

Study Area and Sample

The study was conducted in Hyderabad and Ranga Reddy Districts, Telangana, India. A total of 275 respondents participated in the study, selected using a stratified purposive sampling technique to ensure adequate representation across gender, age, and occupation groups. The respondents were consumers who purchase household and personal care products.

Data Collection Instrument

Primary data were collected using a structured questionnaire consisting of five sections: demographic information, consumer awareness, consumer attitudes, promotional effectiveness, and purchase behavior. All constructs were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A pilot study was conducted with 30 respondents to validate the questionnaire's clarity and reliability.



Data Collection Procedure

Data were gathered through both online (Google Forms) and offline (face-to-face) surveys to ensure broader reach and representation. Respondents were informed about the purpose of the study and their participation was voluntary.

Hypotheses

H₀₁: There is no significant relationship between consumer attitudes and the purchase of eco-friendly products.

H₁₁: There is a significant relationship between consumer attitudes and the purchase of eco-friendly products.

H₀₂: Promotional strategies have no significant influence on consumer purchase decisions toward eco-friendly products.

H₁₂: Promotional strategies have a significant influence on consumer purchase decisions toward eco-friendly products.

H₀₃: Consumer awareness does not significantly affect the preference for eco-friendly products.

H₁₃: Consumer awareness significantly affects the preference for eco-friendly products.

H₀₄: Different promotional tools do not differ in their effectiveness in promoting eco-friendly product sales.

H₁₄: Different promotional tools significantly differ in their effectiveness in promoting eco-friendly product sales.

Data Analysis Techniques

Data were analyzed using SPSS. Descriptive statistics were applied to summarize respondent demographics and responses. Reliability analysis using Cronbach's alpha ensured internal consistency, while correlation and regression analyses examined relationships between variables. Structural Equation Modeling (SEM) was employed to test the hypothesized conceptual framework.

Ethical Considerations

Ethical guidelines were followed throughout the study. Informed consent was obtained from all participants, and confidentiality of responses was maintained. The study adhered to institutional research ethics standards.

Data Analysis and Results

Following data collection, the responses were coded and analyzed using the Statistical Package for the Social Sciences (SPSS) version 28. The analysis proceeded in several stages, beginning with data screening and reliability checks, followed by descriptive statistics, hypothesis testing, and an examination of the proposed structural model.

Reliability and Descriptive Statistics

A pilot study (n=30) was first conducted to assess the clarity and reliability of the survey instrument. The main study data (N=275) were then screened for missing values and outliers; none were found that would significantly impact the results. The internal consistency of the multi-item scales for the key constructs—Consumer Awareness, Consumer Attitudes, Promotional Effectiveness, and Purchase Behavior—was assessed using Cronbach's alpha. As shown in Table 1, all constructs demonstrated good to excellent reliability, with alpha coefficients exceeding the recommended threshold of 0.7 (Nunnally & Bernstein, 1994).

IV. DATA ANALYSIS AND RESULTS

Table 1: Reliability Analysis for Key Constructs

Construct	Number of Items	Cronbach's Alpha
Consumer Awareness	5	0.81
Consumer Attitudes	6	0.89
Promotional Effectiveness	7	0.92
Purchase Behavior	4	0.85



Descriptive statistics, including means and standard deviations, were calculated for the primary variables. The results, summarized in Table 2, indicate that respondents held moderately positive attitudes towards eco-friendly products ($M = 4.12$, $SD = 0.68$) and reported a moderate level of awareness ($M = 3.85$, $SD = 0.79$). The perceived effectiveness of promotions was also moderately high ($M = 3.95$, $SD = 0.71$), while self-reported purchase behavior was slightly lower ($M = 3.45$, $SD = 0.82$), suggesting the presence of an attitude-behavior gap.

Table 2: Descriptive Statistics for Variables (N=275)

Variable	Mean	Standard Deviation
Consumer Awareness	3.85	0.79
Consumer Attitudes	4.12	0.68
Promotional Effectiveness	3.95	0.71
Purchase Behavior	3.45	0.82

Note: Scales ranged from 1 to 5.

Hypothesis Testing

To test the hypotheses, Pearson correlation and multiple regression analyses were performed. The correlation matrix (Table 3) reveals significant positive relationships between all key variables, providing initial support for the research hypotheses.

Table 3: Intercorrelations Among Key Variables

Variable	1	2	3	4
1. Awareness	—			
2. Attitudes	.52**	—		
3. Promotion	.48**	.61**	—	
4. Purchase Behavior	.45**	.67**	.59**	—

Note. * $p < .05$, ** $p < .01$.

A multiple regression analysis was conducted with Purchase Behavior as the dependent variable and Awareness, Attitudes, and Promotional Effectiveness as independent variables. The results, presented in Table 4, indicate that the model was significant, $F(3, 271) = 85.42$, $*p < .001$, and explained 49% of the variance in Purchase Behavior ($R^2 = .49$). Consumer Attitudes ($\beta = .42$, $*p < .001$) and Promotional Effectiveness ($\beta = .31$, $*p < .001$) were significant positive predictors of Purchase Behavior. Therefore, H_{11} and H_{12} are supported. While Awareness was significantly correlated with Purchase Behavior, it was not a unique significant predictor in the regression model ($\beta = .09$, $*p = .065$) when controlling for Attitudes and Promotion, leading to a failure to reject H_{03} .

Table 4: Multiple Regression Analysis Predicting Purchase Behavior

Predictor	B	SE B	β	T	p
(Constant)	0.45	0.22		2.05	0.041
Consumer Awareness	0.09	0.05	0.09	1.86	0.065
Consumer Attitudes	0.51	0.06	0.42	8.5	<.001
Promotional Effectiveness	0.36	0.05	0.31	6.4	<.001

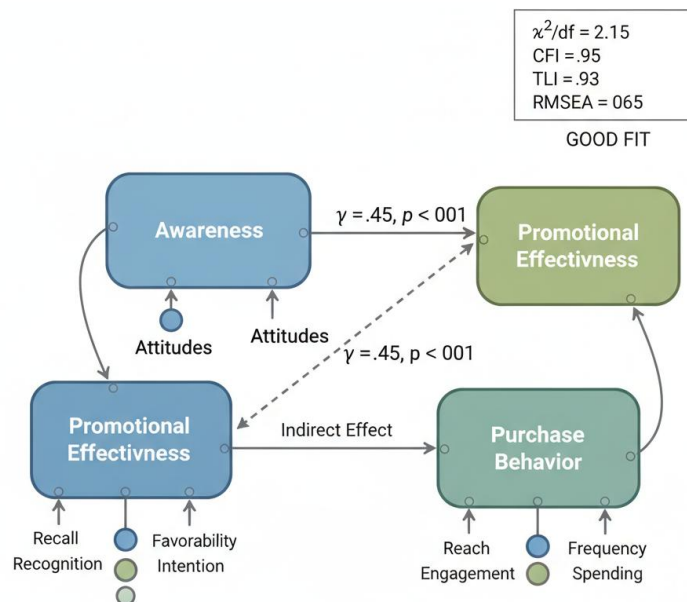
Note. $R^2 = .49$.

A one-way ANOVA was conducted to compare the effectiveness of different promotional tools (eco-labeling, social media campaigns, discounts, and in-store advertisements). The results showed a significant difference in effectiveness among the tools, $F(3, 1096) = 9.88$, $*p < .001$. Post-hoc tests using the Tukey HSD criterion indicated that eco-labeling ($M = 4.20$, $SD = 0.65$) and social media campaigns ($M = 4.05$, $SD = 0.70$) were perceived as significantly more effective than discounts ($M = 3.65$, $SD = 0.80$) and in-store ads ($M = 3.72$, $SD = 0.75$). Thus, H_{14} is supported.



Structural Equation Modeling (SEM)

Finally, Structural Equation Modeling was used to test the overall conceptual model. The model demonstrated a good fit with the data ($\chi^2/df = 2.15$, CFI = .95, TLI = .93, RMSEA = .065). The path coefficients from the SEM analysis confirmed the regression findings, showing significant direct effects of Attitudes ($\gamma = .45$, $*p < .001$) and Promotional Effectiveness ($\gamma = .33$, $*p < .001$) on Purchase Behavior. The model also revealed a significant indirect effect of Awareness on Purchase Behavior, mediated through Attitudes.



V. CONCLUSION

This study demonstrates that the path to sustainable consumption is navigated through the powerful combination of positive consumer attitudes and strategically deployed "smart promotions." While consumers in the study region hold strong pro-environmental attitudes, a clear intention-behavior gap persists. The key to bridging this gap lies not in generic advertising, but in targeted promotional strategies that build trust and provide credible information. The research empirically confirms that informational tools like eco-labeling and community-driven campaigns on social media are significantly more effective in influencing purchase decisions than traditional price-based promotions like discounts. This indicates a mature consumer base that values transparency and ethical brand identity over short-term savings. Therefore, for businesses and policymakers, the imperative is to shift from merely raising awareness to actively shaping consumer decision-making contexts. Marketing efforts must be designed to reinforce positive attitudes by providing clear, trustworthy information and leveraging social proof. By aligning smart, credibility-focused promotions with underlying consumer values, stakeholders can effectively transform environmental concern into consistent eco-friendly purchasing behavior, turning the promise of sustainable consumption into a widespread market reality.

REFERENCES

- [1]. Ebrahimi, P., Khajeheian, D., &Fekete-Farkas, M. (2021). A SEM-NCA approach towards social networks marketing: Evaluating consumers' sustainable purchase behavior with the moderating role of eco-friendly attitude. International Journal of Environmental Research and Public Health, 18(24), 13276.
- [2]. Garg, V., Bohara, S., &Srivastav, A. (2025). AI-driven sustainability marketing transforming consumers' perception toward eco-friendly brands. Discover Sustainability, 6(1), 984.



- [3]. Ghouse, S. M., Shekhar, R., Ali Sulaiman, M. A. B., & Azam, A. (2025). Green purchase behaviour of Arab millennials towards eco-friendly products: the moderating role of eco-labelling. *The Bottom Line*, 38(3), 286-308.
- [4]. Mallick, S. S., Hota, S. L., Kumar, A., & Agarwall, H. (2024). The influence of eco-friendly marketing tools on sustainable consumer choices: A comprehensive review study. *Environment and Social Psychology*, 9(8), 1-11.
- [5]. Mansoor, M., Jam, F. A., & Khan, T. I. (2025). Fostering eco-friendly behaviors in hospitality: engaging customers through green practices, social influence, and personal dynamics. *International Journal of Contemporary Hospitality Management*, 37(5), 1804-1826.
- [6]. Prakash, C. (2016). Service Quality and Customer Satisfaction of Selective Private Banks with Reference to SPSR Nellore District. *International Journal of Research Science and Management*, 3(7), 78-81.
- [7]. Prakash, C., & Kumar, M. M. J. A Conceptual Study on The impact of online shopping upon retail trade business and customers. *VOLUME*, 6, 2348-1269.
- [8]. Prakash, C., Anusha, P., Choppari, N., & Chakralla, A. (2026). Green Consumerism in the Digital Age: Leveraging Machine Learning and Artificial Intelligence to Drive Sustainable Purchasing Decisions. In *Practical Frameworks for New-Age Digitalization Business Strategy* (pp. 95-126). IGI Global Scientific Publishing.
- [9]. Prakash, C., Kasireddy, S. R., Nannuri, S. R., & Adhireddy, S. R. (2023). A Study on Consumer's Perception, Preferences, and a Myth towards Eco friendly Products and Marketing with Reference to South India. *Academy of Marketing Studies Journal*, 27(6).
- [10]. Reddy, M. A. S., & Prakash, C. (2024). Sentiment Analysis of Social Media Networking Sites: A Comparative Study on User Engagement and Public Opinion.
- [11]. Savale, T. K., ByramAnand, P., PerumallaVaralaxmi, A. B., & Quaye, J. A. (2023). Green Marketing Strategies: Assessing Consumer Perception and Adoption of Eco-friendly Products. *Remittances Review*, 8(4).
- [12]. Siuda, D. (2022). The Role of Sustainable Consumption and Green Marketing in Consumers' Purchase Decisions in the SMART Era. *Problemy Zarządzania*, 20(2 (96)), 215-235.
- [13]. Sobuj, M., Khan, A. M., Habib, M. A., & Islam, M. M. (2021). Factors influencing eco-friendly apparel purchase behavior of Bangladeshi young consumers: case study. *Research Journal of Textile and Apparel*, 25(2), 139-157.
- [14]. Vijayasree, P. N., PavanSathavalli, D. M., & Prakash, C. (2022). An empirical study on consumers behavior towards green products consumption in India. *Journal of Contemporary Issues in Business and Government*, 28(4), 594-605.
- [15]. Waris, I., & Hameed, I. (2020). Promoting environmentally sustainable consumption behavior: an empirical evaluation of purchase intention of energy-efficient appliances. *Energy Efficiency*, 13(8), 1653-1664.

