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From Awareness To Action: Evaluating The Impact Of Environmental Marketing Campaigns On Sustainable Product Adoption

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KEYWORDS

Environmental marketing, Sustainable products, Consumer awareness, Green behavior, Attitude-behavior gap.

ABSTRACT

This study examines the effectiveness of environmental marketing campaigns in shaping consumer awareness, attitudes, and adoption of sustainable products. In an era of growing ecological concerns, businesses and policymakers are increasingly turning to green marketing as a strategic tool to promote eco-conscious behavior. The study focuses on a sample of 150 urban consumers in India and employs a structured questionnaire to measure exposure to environmental campaigns, awareness levels, attitudes, and actual purchase behavior. Using descriptive statistics, correlation, regression, and mediation analysis, the study reveals that frequent exposure to environmental campaigns significantly enhances consumer awareness. Moreover, heightened awareness strongly predicts positive consumer attitudes, which in turn mediate the relationship between awareness and actual adoption of sustainable products. The findings validate all four proposed hypotheses and confirm the existence of a partial mediation effect of consumer attitudes. The study concludes that while raising awareness is a foundational step, fostering favorable attitudes through credible and emotionally engaging campaigns is critical to drive sustainable consumption. The research provides actionable insights for marketers, sustainability advocates, and policymakers seeking to bridge the gap between environmental awareness and consumer action.

1. INTRODUCTION

The urgency of environmental preservation has never been more apparent, as societies around the world grapple with escalating climate concerns, pollution, and the unsustainable exploitation of resources. Amidst this growing crisis, businesses have begun to reconfigure their marketing strategies to align with the principles of sustainability. Environmental marketing campaigns now serve as vital instruments to educate consumers about eco-friendly products and to encourage responsible purchasing behavior. These campaigns aim to raise awareness about sustainable alternatives while appealing to consumers'

environmental ethics. However, awareness alone often does not result in action, as numerous studies have pointed to a persistent gap between consumer intentions and behaviors (Vermeir & Verbeke, 2006; Sharma et al., 2023; Sridhar et al., 2025). This phenomenon, widely known as the attitude-behavior gap, presents a fundamental challenge for marketers and environmental advocates alike. In an era of rapid digitalization, understanding how marketing strategies can move consumers from awareness to tangible sustainable behavior is of paramount importance. Studies by Shankar (2024) and Sivakumar and Shankar (2019) suggest that generational segments, particularly Millennials and Gen Z, respond strongly to tailored marketing approaches, especially those that integrate environmental concerns with brand identity through social media platforms.

Digital transformation has drastically expanded the reach and impact of environmental marketing campaigns. Social media, in particular, has proven to be a potent tool in shaping public discourse around sustainability, enabling companies to create hyper-personalized, emotionally resonant campaigns that speak directly to consumer values (Shankar, 2024; Jayanthi et al., 2025). In India, campaigns that use digital storytelling, influencer advocacy, and targeted advertisements have gained traction in communicating green values and promoting eco-conscious lifestyles (Kalaivani & Shankar, 2017; R, 2021). However, the effectiveness of these campaigns depends heavily on perceived authenticity and trust. Greenwashing—false or exaggerated claims about a product's environmental benefits—has led to consumer skepticism, making transparency a critical success factor (EU Commission, 2024; Reuters, 2024). In a study of eco-friendly product decisions in Coimbatore, Babu Ramesh, Shankar, and Amirtharaj (2018) found that consumers are influenced by various factors such as price, quality, and brand reliability, in addition to environmental considerations. This highlights the complex, multi-dimensional nature of sustainable consumer behavior and emphasizes that campaigns must appeal to both rational and emotional drivers of decision-making.

Recent advances in machine learning and customer segmentation have further enhanced marketers' ability to craft messages that resonate with specific consumer groups. Research by Jayanthi et al. (2025) explored how clustering algorithms and AI-driven insights can help businesses identify green-conscious segments and personalize messages accordingly. These developments are especially relevant in emerging markets like India, where the diversity of the consumer base necessitates nuanced approaches to communication. Furthermore, sentiment analysis tools such as those examined by Sridhar et al. (2025) in the context of Amazon food reviews provide valuable insights into consumer attitudes and can be adapted to monitor responses to environmental campaigns. Yet, as emphasized in several studies, raising awareness is only a part of the journey; the real challenge lies in sustaining engagement and motivating actual behavioral change (Nguyen, 2022; Mdpi, 2023). Psychological theories such as the Theory of Planned Behavior (Ajzen, 1991) offer a useful lens to understand the cognitive and emotional mechanisms that underpin this transition. Environmental awareness must translate into intention, and intention into action—an ideal that is difficult to achieve without consistent reinforcement, value alignment, and societal support.

It is within this interdisciplinary and digitally dynamic landscape that the present study, "From Awareness to Action: Evaluating the Impact of Environmental Marketing Campaigns on Sustainable Product Adoption," is situated. Drawing upon both theoretical and empirical insights, this research seeks to critically assess how effectively environmental campaigns shape awareness and, more importantly, influence consumer behavior. While prior research has examined various aspects of green marketing—ranging from promotional tactics in retail environments (Kalaivani & Shankar, 2017) to consumer response patterns in hospitality (R, 2021) and e-commerce (Sridhar et al., 2025)—there remains a critical need to understand the full continuum from awareness creation to product adoption. This study aims to fill that gap by evaluating specific campaign elements such as messaging clarity, emotional appeal, credibility, and delivery platforms, and by analyzing their impact on consumer perception and decision-making. Through this lens, it seeks to offer actionable insights for marketers, policymakers, and sustainability advocates striving to bridge the awareness-action divide in consumer behavior and to contribute meaningfully to the broader goal of sustainable development.

2. LITERATURE REVIEW

Environmental marketing has emerged as a crucial strategy for promoting sustainable consumer behavior amidst global environmental degradation and climate challenges. Over the past decade, researchers have increasingly focused on the role of marketing in shaping eco-conscious consumer behavior. Environmental marketing campaigns, in particular, aim to educate consumers on sustainability issues and influence them to adopt green products and behaviors (Nguyen, 2022). However, existing literature underscores that while awareness is a foundational requirement for behavioral change, it does not always result in action—a discrepancy often referred to as the "attitude—behavior gap" (Vermeir & Verbeke, 2006). Studies such as those by Shankar (2024) have identified generational and technological influences on the effectiveness of such campaigns. Generation Z and Millennials, for instance, have shown higher responsiveness to sustainability messaging when delivered through digital platforms, especially social media. This finding aligns with research by Sivakumar and Shankar (2019), who observed that social media advertisements significantly influence the attitudes of women consumers in India. Similarly, R (2021) emphasized the growing role of digital marketing in hospitality and tourism, where green messaging through online platforms led to increased interest in sustainable offerings.

In the Indian context, Babu Ramesh, Shankar, and Amirtharaj (2018) explored how consumer purchase decisions for ecofriendly products are influenced by awareness, quality perceptions, and pricing. Their study concluded that while awareness is relatively high among urban consumers, actual adoption remains limited due to cost concerns and perceived performance

gaps. Meanwhile, Kalaivani and Shankar (2017) analyzed promotional activities in retail environments and found that experiential and informative promotions are more likely to foster favorable consumer attitudes toward sustainability. Technological advancements have further transformed green marketing strategies. Jayanthi et al. (2025) demonstrated how machine learning and customer segmentation can improve the targeting of environmental messages, ensuring campaigns reach those most likely to respond positively. Complementarily, Sridhar et al. (2025) utilized sentiment analysis to gauge consumer responses to product reviews, offering marketers a tool to evaluate the real-time effectiveness of their campaigns.

International literature supports similar themes. For instance, Sharma et al. (2023) identified that trust, credibility, and personal relevance of the message are key mediators between awareness and behavior. The EU Green Claims Directive (2024) and related policies highlight the importance of verifiable sustainability claims in preventing greenwashing and ensuring consumer trust (Reuters, 2024). These findings suggest that campaigns must go beyond informing—they must also build credibility and foster emotional engagement.

3. RESEARCH GAP

While prior studies have richly explored the relationship between environmental awareness and consumer behavior, gaps remain in understanding how specific elements of marketing campaigns influence this transition. Most existing research focuses either on awareness or on behavior in isolation, with limited attention to the causal pathways connecting the two. Moreover, although digital and social media have become dominant channels for green communication, empirical evidence on how campaign content, platform choice, and emotional appeal jointly affect both attitude and behavior is still emerging—especially in diverse and rapidly evolving markets like India. This study addresses this gap by assessing the effectiveness of environmental marketing campaigns not only in generating awareness but also in driving actual sustainable product adoption, thus bridging the divide between communication and behavior.

Objectives of the study

- 1. To assess the effectiveness of environmental marketing campaigns in raising consumer awareness about sustainable products and eco-friendly practices.
- 2. To examine the extent to which increased environmental awareness, driven by marketing campaigns, influences consumer attitudes and actual adoption of sustainable products.

4. PROBLEM DEFINED

Environmental sustainability has emerged as a critical global concern, prompting governments, businesses, and civil society to adopt various strategies to combat climate change, reduce carbon footprints, and promote responsible consumption. Among these strategies, environmental marketing campaigns have gained prominence as tools for influencing consumer behavior and encouraging the adoption of eco-friendly products. These campaigns aim to educate, persuade, and mobilize consumers toward sustainable choices by raising awareness about the environmental benefits of green products and services. However, despite the increasing investment in and visibility of such campaigns, a significant disconnect remains between consumer awareness and actual purchasing behavior—a phenomenon commonly referred to as the "attitude—behavior gap." Numerous studies have shown that while consumers may express concern for environmental issues and demonstrate high levels of awareness, this does not necessarily translate into sustainable purchasing decisions. Factors such as perceived product cost, lack of trust in marketing claims, limited product availability, and the absence of immediate personal benefits often deter consumers from adopting sustainable alternatives. In the Indian context, where consumer behavior is shaped by diverse cultural, economic, and social factors, this gap is even more pronounced. There is a pressing need to explore how environmental marketing campaigns are received by Indian consumers and whether these campaigns effectively move audiences beyond awareness to actual action.

The need for this study is underscored by the growing body of research that highlights the limitations of current green marketing strategies in achieving behavioral change (Shankar, 2024; Sharma et al., 2023; Babu Ramesh et al., 2018). While previous studies have addressed the influence of digital platforms, social media, and promotional tactics on consumer perceptions, few have specifically evaluated how these elements translate into measurable behavior, particularly in terms of sustainable product adoption. This gap justifies the current study's two-fold objective: first, to assess the effectiveness of environmental marketing campaigns in raising consumer awareness about sustainable products and eco-friendly practices; and second, to examine whether this awareness leads to actual changes in consumer attitudes and purchase behavior. By addressing this gap, the study aims to offer valuable insights for marketers, policymakers, and environmental advocates, enabling them to design more impactful and credible campaigns. Ultimately, it seeks to bridge the divide between environmental awareness and sustainable consumption, contributing to both academic discourse and practical solutions in the field of green marketing.

5. RESEARCH METHODOLOGY

This study adopts a quantitative research design to systematically assess how environmental marketing campaigns influence consumer awareness, attitudes, and adoption behaviors related to sustainable products. The target population for this study

consists of urban consumers aged 18–50 residing in major cities across India, who are regularly exposed to environmental marketing content via digital, print, or television media. Given the rising prominence of environmental consciousness in urban India, this demographic represents an appropriate and informed segment for evaluating marketing campaign effectiveness.

Data collection was carried out using a structured questionnaire, which was administered both online (via Google Forms and email) and offline (through in-person surveys at eco-friendly product outlets, supermarkets, and green fairs). The study used a sample size of 150 respondents, which was considered adequate for preliminary statistical analysis and reliable interpretation of trends. A purposive sampling technique was adopted to ensure the selection of respondents who are either aware of or have been exposed to environmental marketing campaigns.

6. HYPOTHESES OF THE STUDY

Based on the objectives, the study formulated the following testable hypotheses:

- **H**₁: Environmental marketing campaigns have a significant positive effect on consumer awareness of sustainable products and eco-friendly practices.
- H₂: Increased awareness through environmental marketing campaigns significantly influences consumers' positive attitudes toward sustainable products.
- H₃: Environmental awareness, fostered by marketing campaigns, significantly contributes to the actual adoption of sustainable products by consumers.
- H₄: Consumer attitude mediates the relationship between environmental awareness and sustainable product adoption.

H₁: Environmental marketing campaigns have a significant positive effect on consumer awareness of sustainable products and eco-friendly practices.

Variable	Mean	Std. Deviation	Interpretation
Frequency of Campaign Exposure	3.92	0.74	Respondents are frequently exposed to environmental campaigns (on a 5-point scale).
Awareness of Sustainable Products	4.21	0.61	A very high level of awareness among consumers, suggesting familiarity with green products and practices.

Table 1: Descriptive Statistics on Campaign Exposure and Awareness Levels (N = 150)

The descriptive statistics suggest that the majority of respondents reported regular exposure to environmental marketing campaigns, with a mean score of 3.92 (on a scale of 1 = Never to 5 = Very Frequently). Additionally, the mean awareness level stands at 4.21, indicating that most participants have a solid understanding of what sustainable or eco-friendly products entail. These results suggest that environmental campaigns are reaching their intended audience and successfully delivering core messages about sustainability. The relatively low standard deviations (0.74 and 0.61) indicate a consistent trend across the sample.

Table 2: Correlation between Campaign Exposure and Awareness

Variables	r	p-value
Campaign Exposure & Awareness	0.712**	0.000

The correlation coefficient (r = 0.712) signifies a strong positive relationship between the frequency of environmental marketing campaign exposure and the level of consumer awareness. The p-value (<0.001) confirms that the correlation is statistically significant. This finding indicates that individuals who are more frequently exposed to environmental marketing are more likely to have higher awareness of green products and eco-friendly practices. Thus, it validates the effectiveness of marketing campaigns as a tool for knowledge dissemination in the sustainability domain.

H₁ is supported.

 H_2 : Increased awareness through environmental marketing campaigns significantly influences consumers' positive attitudes toward sustainable products.



Table 3: Regression Analysis – Awareness as Predictor of Attitude

Model	R ²	β (Standardized Coefficient)	t	p-value
Awareness → Attitude	0.538	0.733	13.92	0.000

The regression results show that awareness of sustainable products accounts for 53.8% of the variance in consumer attitudes ($R^2 = 0.538$), which is substantial. The beta coefficient ($\beta = 0.733$) indicates a strong, positive effect—meaning that as awareness increases, so does the likelihood of a positive attitude toward sustainable products. The t-value of 13.92 and the p-value (<0.001) confirm that the relationship is statistically significant. This suggests that awareness built through environmental marketing not only informs but also influences how consumers emotionally and cognitively evaluate green products. The implication is clear: awareness-building campaigns are critical for shaping favorable consumer mindsets.

H₂ is supported.

H₃: Environmental awareness, fostered by marketing campaigns, significantly contributes to the actual adoption of sustainable products by consumers.

Table 4: Regression Analysis – Awareness as Predictor of Adoption Behavior

Model	R ²	β	t	p-value
Awareness → Adoption	0.421	0.649	10.34	0.000

This regression model reveals that 42.1% of the variation in actual adoption behavior is explained by the level of environmental awareness. The positive beta value ($\beta = 0.649$) indicates a strong relationship, and the significance level (p < 0.001) confirms the reliability of the result. These findings demonstrate that consumers who are more aware of environmental issues and sustainable product options are significantly more likely to adopt such products in practice. Thus, awareness generated through campaigns translates beyond thought into action. This is a vital insight for marketers and policymakers who aim to drive real behavioral change, not just cognitive shifts.

H₃ is supported.

H₄: Consumer attitude mediates the relationship between environmental awareness and sustainable product adoption.

Table 5: Mediation Analysis (Awareness → Attitude → Adoption)

Path	Coefficient (β)	p-value
Awareness → Attitude	0.733	0.000
Attitude → Adoption	0.534	0.000
Awareness → Adoption (direct)	0.372	0.003
Awareness → Adoption (indirect via Attitude)	0.391	0.000

The mediation model indicates that consumer attitude partially mediates the relationship between environmental awareness and product adoption. The path from awareness to attitude ($\beta = 0.733$) and attitude to adoption ($\beta = 0.534$) are both strong and significant, showing that awareness fosters a positive attitude, which in turn increases the likelihood of sustainable product adoption. Even though the direct path from awareness to adoption remains significant ($\beta = 0.372$), the indirect effect through attitude ($\beta = 0.391$) is also significant, suggesting that both direct and mediated pathways are at work. This highlights the pivotal role of attitude as a psychological driver that connects knowledge to behavior. Therefore, while awareness can trigger action on its own, campaigns that also work to positively shape consumer attitudes will be more effective in converting interest into behavior.

H₄ is supported.

Discussion

The results of the analyses robustly support all four hypotheses of the study. First, it is evident that environmental marketing campaigns significantly enhance consumer awareness of sustainable products. A strong positive correlation and high mean awareness scores suggest that such campaigns are effective at educating and informing consumers. Second, awareness was shown to significantly influence attitudes. Consumers who are more aware of sustainability issues tend to develop favorable attitudes toward eco-friendly products. Third, the study found that this awareness also translates into action—consumers

with higher awareness are more likely to adopt sustainable products. This bridges a crucial gap often identified in literature between environmental concern and behavioral outcomes.

Finally, the mediation analysis confirms that consumer attitude acts as a partial bridge between awareness and adoption. This implies that while awareness can directly influence behavior, strengthening consumer attitudes can significantly amplify the impact. These findings are aligned with previous studies (e.g., Shankar, 2024; Sharma et al., 2023; Babu Ramesh et al., 2018), reinforcing the critical importance of targeted, credible, and emotionally resonant environmental marketing campaigns. The study provides actionable insights for marketers and sustainability communicators: campaigns should not only inform but also foster emotional and value-based connections to green products. Future campaigns can benefit from personalized storytelling, community-driven narratives, and transparent labeling to deepen awareness and accelerate sustainable product adoption.

7. CONCLUSION

The present study set out to explore the effectiveness of environmental marketing campaigns in influencing consumer awareness, attitudes, and adoption of sustainable products. The findings clearly indicate that such campaigns play a significant role in raising consumer awareness about eco-friendly products and practices. Respondents reported frequent exposure to marketing content that highlighted sustainability themes, and this exposure was strongly correlated with higher levels of awareness. More importantly, the study found that increased awareness significantly influenced positive consumer attitudes toward sustainable products. These attitudes, in turn, served as a critical mediator between awareness and actual product adoption. The results affirm that while awareness is essential, it is not sufficient on its own—favorable consumer attitudes are necessary to bridge the gap between knowing and doing. Environmental marketing campaigns that inform, inspire, and emotionally engage consumers are more likely to succeed in encouraging sustainable consumption.

The study also confirmed that consumers with high awareness are significantly more likely to adopt sustainable products, especially when their attitudes toward such products are positive and well-formed. This reinforces the importance of building trust, credibility, and emotional relevance in green marketing efforts. In conclusion, environmental marketing campaigns are vital tools in promoting sustainable behavior, but their design must go beyond mere information dissemination. Effective campaigns must foster both awareness and positive attitudes to drive meaningful behavioral change. The insights from this research offer valuable implications for marketers, policymakers, and sustainability advocates aiming to create impactful and behaviorally effective environmental communication strategies.

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