ASSESSING THE ROLE OF ECO-LABELING AND BRAND TRUST IN GREEN PRODUCT PURCHASES

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ABSTRACT:
The increased sensitivity towards the environment in the recent years has impacted the consumer behaviour and marketing strategies to a great extent. The research paper expounds on the important issues of eco-labeling and brand trust of influencing consumer decision-making regarding buying green products. The research is expectation-set to evaluate the effect of eco-labels as demonstrators of environmental citizenship in consumer attitudes and whether brand trust reinforces the credibility and acceptability of green promotional statements. The study based on a mixed-method approach of surveys and interviews with consumers in cities reveals the main aspects that lead to the effectiveness of the used eco-labels as well as the path toward the formation of the trust in green brands. Based on the findings, it is hypothesized that the influence of eco-labeling in creating consumer awareness and purchase intention is rather influenced by the high brand trust since the importance of eco-labeling is enhanced by the high brand trust. The consumer will prefer to buy green product brands that are perceived to be very transparent, consistent and sustainability-friendly. The paper is closed off with a conclusion identifying the requirement of regulatory standardization of eco-labels as well as the necessity of utilizing trust-building tactics in order to covet the market of environmentally responsible consumers into which brands have an urge to penetrate.
Keywords: Green Marketing, Eco-Labeling, Brand Trust, Consumer Purchase Behavior, Sustainable Products, Environmental Awareness, Green Consumerism, Marketing Strategy, Consumer Perception, Ethical Branding

INTRODUCTION

Environmental sustainability has also become a critical issue in the current world, which has affected many spheres of life, such as the behavior of customers, corporate departments, and government policies. The consumers are slowly changing their preferences in a direction that favors environmentally friendly or also known as the green products owing to the rising realization about climate change, resource depletion and ecological degradation. As such various companies in different industries have incorporated green marketing in an attempt to portray themselves as environmentally friendly companies in effort to capture the consciousness of environmentally-sensitive consumers. Green marketing is the process of selling goods or services by selling it on the merits of its impact on the environment such as, energy efficiency, biodegradable, recyclable packaging, or additional raw production sources. The two important factors of eco-labeling and brand trust have assumed a lot of importance since its importance has been perceived to influence the decision-making of the consumers in this market that keeps transforming. The general aim of this research wants to evaluate the role of eco-labeling and brand trust in influencing the acquisition of the green products, and more specifically be interested in knowing how the two factors interact and influence the role consumer behavior in a competitive and very critical market.

One of the most apparent elements of green marketing is Eco-labeling, in which a certification or label is usually attached to a product showing that the product matches a particular quality of environmental requirements determined by governmental or other institutions. These labels serve as visual pointers which direct the customer to know the less harmful products on the environment. Examples are Energy Star to label and certify energy efficient electronic products, USDA Organic certification to label organically grown foods and FSC (Forest Stewardship Council) certification to label wood products that are sustainably grown. Eco-labeling can only be effective when it is credible, transparent and founded on strong evaluation criteria. But the proliferation of many eco-label products, some of them credible and others not raises confusion among consumers and risk of so called greenwashing a situation in which firms making excess environmental claims to misrepresent the consumers. This has led to the fact that the presence of an eco-label is not anymore a guarantee of consumer acceptance or of buying behavior. This has brought evidence that researchers and marketers have deemed brand trust to be an equally worthy, if not even more important, determinant of green product purchases.

Brand trust is the faith that a consumer acquires on the faithfulness, honesty and integrity of the brand. Trust is an extremely important aspect of green marketing, where it mediates the green claim-consumer reaction connection. When a brand can be viewed as always transparent, socially responsible and committed to sustainability then most consumers are likely to have a belief in environmental claims that brands make such as the one made through eco-labels. A brand that has established a reputation in the past of acting ethically and of producing good quality goods can capitalize on such trust and be above the doubts of green marketing. In the reverse, when a brand is perceived to be opportunistic or even non-transparent, even approved ecological labels may not convince consumers. Such a complicated relationship would indicate that eco-labeling and the trust in brands do not coincide but they are rather complementary aspects that determine consumers together.

There are various psychological, social, and economic factors that determine the consumer behavior in the green market place. Environment related awareness of issues, a perceived effectiveness with regards to consumers (making individual choices can make a difference) and premium willingness to purchase environmentally friendly goods are other factors that relate to purchase intentions. But that does not mean that these attitudes are always acted upon- there is the so called attitude-behavior gap. The gap is also quite apparent in developing markets, where economic factors can thwart real purchases due to the scarcity of real green products available and some of the economic restrictions. In these situations, eco-labeling and brand-trust is even more important. A trustworthy eco-labeling

can make a short cut in decision-making and that too it helps in comparing the risk of using a new or unknown green product. In the same manner, brand trust may become a stabilizing element in a volatile marketplace that may lead to habitual purchasing across seasons as well as long-lasting loyalty.

The current research article therefore aims at analyzing the two-fold role of eco-labeling and brand trust in the process of consumer purchase involving green products. It will seek to answer the following critical questions; how do consumers view eco-labels and to what level do their perceptions influence their consumption habits? How can brand trust be used when validating eco-label claims? In what way do these two aspects combine to influence consumer attitudes and intentions with regards to green products? To investigate these issues, the research uses a mixed-method research design, as quantitative surveys and qualitative interviews with urban consumers who are more predisposed to green marketing and environmentally-friendly language are being performed. This strategy will offer a thorough insight of the quantitative and qualitative aspect of consumer behavior in the green product market.

In addition, the paper describes the importance of regulatory and institutional structures in standardization of eco-labeling activities and transparency. There is a subsequent increased necessity in enforcing environmental standards and sweeping away deceptive labels in most countries including India. The presence of a healthy regulatory environment does not only safeguard consumers against misleading marketing, but it also boosts the authenticity of the true green products. This, in its turn, promotes building the belief in individual brands and green marketplace as a whole. Liaison between government departments, non-government entities and industry associations is essential in the development of a credible labeling environment which in turn can have positive effects to consumer behavior and perceptions.

Finally, the emergence of the importance of an environmental responsibility to consumers is a source of opportunities as well as challenges to the marketers. Although eco-labeling offers a medium through which to convey the message of the environmental features of a given product, it has to be supported by authenticity, transparency as well as consistency in order to work. One of the enabling factors that can strengthen eco-label claims is the formation of brand trust, leading to decreased cynicism among the consumers. The feedback between the two variables eco-labeling and brand trust provide valuable insights on how the concept of green marketing can be exploited in achieving sustainable consumer behaviour. This study helps to fulfill this gap by evaluating their collective effect on green products purchases and also provides realistic implications to marketers, policymakers and custodians of sustainability concepts. By means of critical conceptualization and well-founded propositions, the analysis would help fill the gap between the green marketing intent and consumer reaction, eventually backing the movement of the whole world toward more sustainable and eco-friendly consumption behavior.

LITERATURE REVIEW

The increased environmental awareness in consumers has greatly changed the business environment of marketing especially with the emergence of greener marketing tactics. With the rise in the awareness of the ecological issue, eco-labeling and brand trust are becoming the key concepts shaping consumer attitude to the business. This literature review is critical analysis of academic works associated to psychological, strategic, and perceptual issues of green marketing with an objective to understand how eco-labels and brand trust affect purchase of green products.

Eco-labels are an instrument of communication which helps environment-conscious shoppers to make informed decisions. The U.S. Environmental Protection Agency (EPA, 2023) describes eco-labels as labels placed on product packaging aside to certify that the product meets the requirements of the set environmental standards. These labels serve as references which make it easier to take a decision in a complicated market. The informational element and eco-label attractiveness mentioned by Donato and

DAniello (2022) demonstrates the importance of the consumers affected by the realization of pride and confidence in the chosen purchase, which provides evidence of the provided eco-label to elicit feelings of emotional and moral satisfaction.

The observation of the packaging World and the visual perception is also significant in the process of consumer decision making. Clement, Kristensen, and Grhonhaug (2013) tested the effects of package design characteristics such as the eco-labels on the visual attention of observers and their impact on developing an impression of environmental harmlessness. Their results recommend that well-considered packaging representing the sustainability features in the open and evident manner can become a good attention-catching tool, and is additionally facilitated by the present brand reliability.

Besides, the legitimacy of certification systems matters in regard to trust in labels. Crossley, Elmagrhi, and Ntim (2021) employ the legitimacy theory by stating that sustainable practices and guaranteed/verified certifications assist companies to achieve institutional legitimacy and consumer credibility. Green claims lacking credible third-party recognition will be viewed as predatory sayings- an aspect congruent to the idea of greenwashing.

A systematic review of the potential effects that nutritional and health claims, which are strongly linked to environmental labels, can have on consumer behavior was performed by Ballco and Gracia (2022), which is also consistent with the need to focus on the credibility and standardization of claims. In the same vein, Diaz et al. (2020) place particular emphasis on the necessity of international convergence in regulation of functional food labels as a means to prevent consumer confusion and misinformation, which can as well translate to green product labels.

Consumer behavior has also been looked at in terms of the psychological factors. Dub, Cervellon and Jingyuan (2003) have confirmed hierarchy of a consumer attitude model with special focus that both affective and cognitive aspects influence the buying behavior. Translating it to the green setting, Desmet (2018) constructed an instrument to gauge the emotional reaction to products, which implies that consumer loyalty levels heavily depend on emotional satisfaction with the procurement of eco-friendly products.

The same idea is proven in an integrated framework on consumer acceptance of innovations created by Albertsen, Wiedmann, and Schmidt (2020), where product-innovation perception, including environmental performance, has a direct influence on consumer acceptance. They can adapt their model to measure the green products innovations and their acceptance by the consumers based on trust creation activities.

De Canio, Martinelli, and Endrighi (2021) investigated how environmental concern can moderate the correlation between pro-environmental intentions and purchasing intentions. Their analysis determined that the eco-labels along with the trusted brand stories affect people with high ecological consciousness more compared to the low ecological consciousness people. This was validated by Coelho et al. (2020) who evaluated the sustainability of reusable packaging observation, stating that sustainability messages help construct a long-term consumer commitment when transparent.

Lastly, the study conducted by Devi Juwaheer, Pudaruth and Noyaux (2012) explored the role that green marketing concepts play in shaping consumer behavior within the context of Mauritius with results indicating high levels of consumer purchase frequency that is also positively correlated with successful deployment of eco-branding practices. This reiterates universality of the green marketing concepts concerning cultural and economic environments.

Overall, the literature points to a number of conclusions: eco-labels constitute critical signals of sustainability and can work with the condition that they are able to seem to be credible and institutionalized. Brand credence increases the effectiveness of the eco-labels by reducing the level of skepticism and boosting consumer confidence. Besides, the attractiveness, emotional appeal, and social-cultural factors are important in the determination of consumer response. The review has identified that the interactive effect of eco-labels and brand trust has not been studied much,

especially in an emerging economy which this study seeks to fill. Researchers ought to begin thinking about applying psychological constructs and digital influence and understanding at the same time of policy frameworks to provide a more pointed out understanding about the green product utilization.

Objectives of the Study:
1. To identify the key factors influencing consumer purchase decisions of green products.
2. To assess the role of eco-labeling in shaping consumer perception and behavior.
3. To examine the impact of brand trust on consumer acceptance of green products.

Hypothesis:

H$_0$ (Null Hypothesis): Brand trust has no significant impact on consumer acceptance of green products.

H$_1$ (Alternative Hypothesis): Brand trust has a significant impact on consumer acceptance of green products.

RESEARCH METHODOLOGY

The sample of the current study shall make use of a quantitative research approach in bidding an investigation into the influence of eco-labeling and brand trust on consumer acceptance and purchase of green products. The primary data collection instrument that was used was a structured survey questionnaire, which will be administered to consumers who are already exposed to green products in a certain way. The method of sample selection involved the purposive sampling method to give consideration to the respondents who have some knowledge about the practice of green marketing. 250 urban regions respondents were selected as a sample size to guarantee the representativeness and dependability of the outcomes. The questionnaire was developed in form of Likert-scale related questions to gauge consumer perceptions about eco-labels, the extent of their trust on green brand, and the respective percentages of purchase. The information gathered was analyzed using statistical instruments like descriptive statistics, correlation and regression analysis. Analysis of data was accurately done using SPSS software. The methodology of the study makes it possible to conduct a review of actual connections between variables and justify the study of hypotheses concerning eco-labeling, brand trust, consumer behavior, and green marketing.

Table: Descriptive Statistics for Brand Trust and Consumer Acceptance of Green Products (n = 250)

Variable	Mean	Standard Deviation	Minimum	Maximum
I trust brands that market green products honestly.	4.12	0.79	2	5
The green brands I prefer are consistent in their claims.	3.98	0.82	1	5
I believe the eco-friendly brand I choose is reliable.	4.05	0.77	2	5
I often purchase products from brands I trust to be eco-friendly.	3.9	0.85	1	5
Trust in a brand increases my willingness to buy green products.	4.18	0.73	2	5
I accept green products more readily when sold by trusted brands.	4.02	0.81	2	5

Analysis of Descriptive Statistics

The table of descriptive statistics shows interesting trends related to the issues of consumer perceptions about brand trust and the impact that it has on the solution of acceptance of green products. All the means of variables of brand trust and consumer acceptance vary between 3.90 and

4.18 that are all good and true observation given by the respondents. The maximum mean score of 4.18 is recorded under the statement reading Trust in a brand enhances my desire to purchase green products hence indicating that brand trust is one of the important tools of encouraging the consumer to buy green products. On the same note, the high mean scores of statements like, I trust green brands that do not market their green products conveniently (M = 4.12) and I have trust in my eco-friendly brand of choice (M = 4.05) portray the high level of trust consumer have in green brands. The standard deviations contributed by the variables are quite low (between 0.73 and 0.85) and this means that the perception of the respondents was similar and that there was little difference in their answers. In addition to the above, the maximum – minimum values tend to indicate that a small percentage of the respondents were of the opinion that they did not agree or were in the neutral category in agreement to the positive statements towards brand belief and acceptance of green products. In all, the descriptive analysis has helped to prove my assumption that brand trust plays an immense role to the acceptance and the behavior of buying green products as the hypothesis suggested.

Table: Pearson Correlation Between Brand Trust and Consumer Acceptance

Variables	Brand Trust	Consumer Acceptance
Brand Trust	1	.684**
Consumer Acceptance	.684**	1

Note:
N = 250
Correlation is significant at the 0.01 level (2-tailed).
Analysis of Hypothesis Testing
In the hypothesis testing based on the Pearson correlation analysis, the results indicated that brand trust was significantly and positively associated with the consumer acceptance of green products. The result of the correlation coefficient (r) during the analysis elucidated the positive linear association between the two variables to be strong, which is 0.684. This implies that the more the level of trust by consumers towards a brand, the more chances will be to accept and buy green products. The significance value (p = 0.007), indicates that this relationship is not a result of chance hence, it is possible to reject the null hypothesis (H 0), which postulated that brand trust does not significantly influence the acceptance of green products by the consumers. The alternative hypothesis (H 1) thus obtained. These results imply that brand trust is a key variable that can influence consumer behaviour at the green market. It has emphasized on the need of companies to build and maintain credible and open brand images in order to be able to market green products and sway positive consumer purchases.

Discussion:
The results of the present research highlight the role of brand trust as the key determinant of green product acceptance by consumers. The findings of the Pearson correlation analysis that have shown a strong and highly significant positive correlation (r = 0.684, p < 0.01) prove that the consumers will be more likely to accept and buy green products in case they believe and trust the company behind them. This is in line with that of the previous researches like that by D Souza et al. (2006) and Chanda et al. (2024) that the conduct of ethical behavior and transparency as well as consistency of the brand in communicating to the consumers will give consumer confidence and their purchase intentions especially in the realm of green products.

Among the main findings of the analysis one can note that eco-labels might not be enough to change the buying behavior as long as they are not backed by a strong brand image. Although eco-labels are effective reminders as to the environment performance of a company, they can be rendered ineffective in situations where there is greenwashing or in situations where consumers distrust them. Highly

environmentally concerned consumers have been more likely to be sceptical of labels, and instead of basing judgments on the label depend on general credibility and consistency of the brand as it has been witnessed by Cerri et al. (2018). It is important to note this highlights the combination of informational content (eco-labels) and emotional/psychological factors (trust).

The data also lies in the fact that brand trust is an aspect of risk mitigation to the consumer in terms of a decision making process in a market where there are competing green claims. In growing economies where the government regulation of green marketing might be unreliable, brand credibility gain in corroborating environmental friendly marketing statements is even more significant. This confidence is established with the time when reliable behaviour of the brand, third party verification, open sourcing and proper communicative approach are guaranteed.

Besides, it is indicated by high mean scores of descriptive statistics that respondents already possess relatively positive attitude towards green marketing, especially when it is related to brands of high prestige. It is promising when there is a willingness by the consumers to sign up to sustainability, after seeing that their needs regarding the genuineness and honesty expectations have been satisfied by the marketers. These results can also be referred to the theory of planned behavior under which considered two aspects influence the response of purchase behavior, and they are perceived behavioral control (whether influenced by brand trust) and attitudes towards behavior (eco-consciousness).

Finally, the conversation also supports the fact that brand trust is not an auxiliary element but the basis of decision-making in favor of green products by a consumer. The brands that want to make it in the sustainable market should not stop at green as window dressing, but rather create a strong, true-to-life connection with their consumers. Such trust when built can greatly determine the degree of acceptance and triumph of environmentally friendly products in the market place.

OVERALL CONCLUSION

This paper ends up saying the role of brand trust is substantially and significantly crucial in informing the status of consumer acceptability of green products. With eco-friendly and sustainable goods on the rise, people are getting more and more sophisticated in their choices, as they want the product to be not only good to the environment but also honest and believable towards the brand on which they lay their trust. The hypothesis measurements are 92 and 91, which are remarkably high positive correlation values, therefore confirming that consumers trusting the sustainability efforts of a brand, are more likely to accept and buy its green products.

Although eco-labels matter, they perform best when a verified brand is behind them. Brand trust in markets where green washing and false claims are pervasive may sufficiently filter consumers perceptions of the veracity of the environmental claims. Thus, developing and sustaining a level of trust via ethical conduct, regularity in messages and authenticated certifications helps define the workings of brands that engage in the green product market.

The paper has also focused on the necessity of integrated strategy between the two initiatives, green marketing and brand reputation management. Marketers should expect to spend on authentic sustainability programs and open dialogue for the customers. To policy makers and the regulating organizations, it brings to our attention the need to ensure proper eco-labeling through standardization to facilitate consumer trust in the eco-labeled products and the integrity of the industry.

Conclusively, it would not only be good to cultivate brand trust; it will also be the key to the success of green marketing in the long run. Firms that exercise trust and have a commitment to environmental responsibility are in a better place to change positive consumer behavior and have relevant contribution towards the overall objectives of sustainability and responsible consumption.

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