

## EXPLORING THE RELATIONSHIP BETWEEN GREEN MARKETING STRATEGIES AND CONSUMER PURCHASE BEHAVIOR

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Received	Revised	Accepted	Published
15 September, 2024	15 October, 2024	26 October, 2024	19 November, 2024

### ABSTRACT

*This study investigates the factors affecting consumer purchase behavior in Pakistan. Green marketing strategy plays an important role in his current era. Its particular aim is to check the impact of the green marketing strategy on consumer purchase behavior. The unit of analysis was in this study the user of green products who used green products in Pakistan. A survey was conducted using a non-probability sampling method for data collection. In this current research, the total number of respondents was 368. Furthermore, two software were used for data analysis SPSS and Smart-Pls. SEM technique was used for the measurement model and structural model. The study's result found that all variables like Eco-labeling, Green Packaging and Branding, and Environmental concerns and beliefs are major contributing factors to consumer purchase behavior. This study is conducted on the comprehension of green marketing strategy in consumer purchase behavior.*

**Keywords:** Green Marketing, Eco-labeling, Green Packaging and Branding, Environmental concerns and beliefs

### INTRODUCTION

In this era, green marketing plays an important role for businesses all over the world. Green advertisement is closely linked to environmental conversation to enhance the business strategy (Roh et al., 2022). Companies are highly concerned about the customers driving purchase patterns in this population in the present economic environment. Environmental marketing and green marketing strategies emerged as a new global prospects in the 1980s and 1990s (Cha, 2020, Ozturk, 2021). Since

2010, green marketing has grown significantly, gaining customer trust and participating in considerable market value as shown by the USD value 250 billion yearly market in only Pakistan (Qian et al., 2021).

The primary objective of marketing management focuses on increasing marketing performance to retain customer intention. However, the current database in business literature under the preface of green marketing highlights the sustainability issues

(Shaukat et al., 2023). The first concept of green marketing emphasizes the cultivation of three basic competencies; eco-friendly product development, pollution prevention, and product stewardship (Shaukat et al., 2023).

Research in Pakistan investigates the impact of several green marketing strategies on customer behavior aimed at increasing environmental concerns. A previous study (Sedky and abdelRaheem, 2022) shows that in both industrialized and emerging economies, Pakistan has taken minimal intention in consumer behavior concerning the environment and green marketing. Acknowledging Pakistan's desire to transform its economy via climate-friendly and promoting a green economy these types of improvement require crucial data. Moreover, a thorough analysis of green marketing and Pakistani consumer behavior is lacking in the current body of research.

Therefore, this current research fills that gap by investigating green marketing strategies and their impact on environmental consumer behavior, addressing key questions such as the effect of green packaging branding, green product premiums & pricing environmental concerns & beliefs, eco-labeling on consumer behavior (Majeed et al., 2022). The research intends to provide more insights into incorporating environmental factors into the economy by illuminating these features. By the meaning of rigorous analysis try to provide a significant response to the research question, so contributing to a conversation on green marketing and consumer behavior in respect to the environment.

## 2. Literature Review

Several study shows that green marketing plays an important role, which is well established in this current research. Green marketing is a multi-dimensional strategy for sustainable manufacturing practices, eco-friendly packing and labeling, target advertising tactics, and product innovation. According to Gelderman, (2021), green marketing is a management process that focuses on identifying and fulfilling the consumers' needs and wants, while balancing the environmental and economic concerns. Moreover, businesses have to change quickly to deal with growing environmental issues, putting safety and sustainability at the top of their list of priorities

(Yousaf et al., 2021). Green marketing tactics like environmentally conscious operations have become necessary for improving and success insuring its the long term (Fuchs et al., 2020). Nevertheless, the growth of green marketing is parallel to the progress of environmental sustainability and consumer segmentation (Khan et al., 2020). Green marketing tries to seek customers with environmental concerns to buy things to buy things that are good for the ecosystem and living things (Yousaf et al., 2021). Concern about the environment has caused a noticeable change in consumer behavior during the 1990s (Dang et al., 2023).

Green marketing is the outcome of a change in customer behavior that has promoted the development of sustainable products (Kautish & Sharma, 2020). However, a discrepancy between environmental sentiments and purchase behavior revealed an intricate consumer decision-making process (Salwa, 2023). Given the critical role, eco-labeling has an effect on the perception of consumer purchase, industry stakeholders must recognize and respond to consumer worries about environmental deterioration (Ejibe et al., 2024). Although, enhanced knowledge, distrust among consumers over the veracity of the labeling process endures (Zaubrecher & Henschel., 2021).

Furthermore, previous research identifies the substantial influence of sustainable packaging and branding on customer behavior (Herbes Beuthner, & Ramme, 2020). Green product price also affects the consumer behavior of what people buy, the most important thing to build a strong communication method among customers (Akter et al., 2023). Despite these factors, it is a very critical way to convey an information-friendly product that is easily accessible to various customer segments (Yadegaridehkordi., 2021).

### 2.1 Eco-Labeling

Eco-labeling plays an important role in delivering information on both product attributes and environmental concerns positive impact on consumer behavior toward products (Calderon-Monge et al., 2021). The environmental implication and encouragement of eco-friendly tactics convert into eco-labeling, the operating function within the parameter of stakeholder strategies (Taghikhah., 2020). Despite its many benefits, eco-labeling has

confused customers about environmental claims through the products (Taghikhah., 2020). Environmental effect is an important factor in life to classify products, consumers depend on eco-labeling to identify products that have a very low environmental effect from production to waste (Saleem et al., 2023). The previous study delves into the business tactics to associate eco-labeling, interrogating competing among green product investment, labeled products, and unlabeled products (Choi & Park., 2022). According to Yu and Zhu 2024, (2024) eco-labeling as a tactic can increase both low-quality enterprises and the overall market competition.

**H1:** Eco-labeling has a positive significant effect on consumer behavior

## 2.2 Green Packaging and Branding

In the last decades' study shows that environmentally friendly packaging, and branding are not sustainable at this time. Due to the present economic situation green marketing has not yet focused on green branding. However, consumers have knowledge about green packaging and logo branding has a positive effect on eco-friendliness (Shimul & Cheah., 2023). However, that product does have not a green feature or is less likely to do well in the existing market (Vyas et al., 2023). Additionally, many researchers have been the suggestion that advertising

green products is an essential component of green branding enterprises (Rajput et al., 2024). Previous research shows that environmental product features and characteristics are related to their behavior (Bhukya & Pau, 2023).

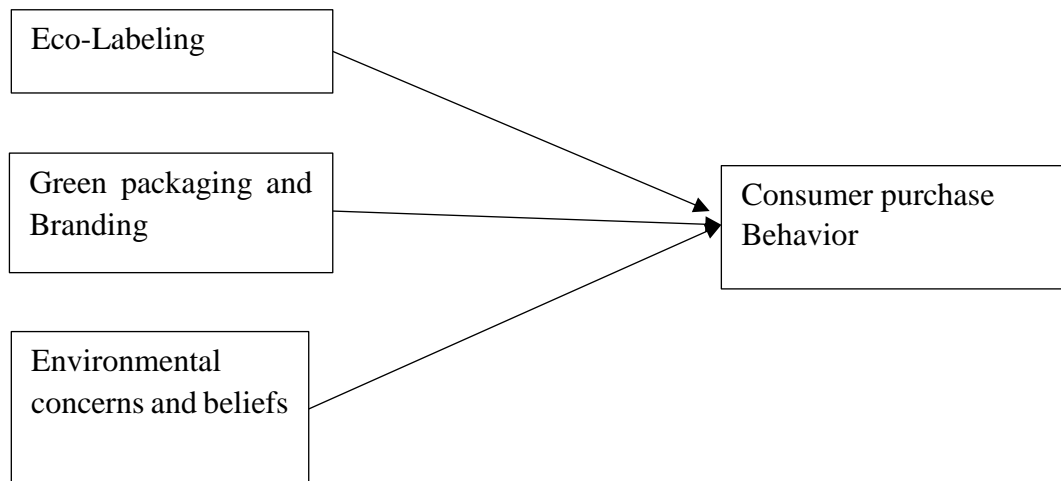
**H2:** Green packaging and branding have a positive and significant effect on consumer behavior

## 2.3 Environmental concerns and beliefs

Environmental concerns and beliefs are deeply connected with businesses and all over the world. Previous research shows that people are more willing to be concerned about protecting the environment, which leads to big changes in how they act (Lavuri et al., 2023). This increasing concern has led to the development of a market for eco-friendly goods, with active customers playing a critical role in its growth (Reddy et al., 2023). Despite the crucial behavior noted that the environment is most important. Nevertheless, Consumer awareness of environmental issues does not necessarily result in eco-friendly behavior (Zhang et al., 2023). Empirical study shows that a minority of a customer exhibit continuous habit, including recycling concern for the pollution of the environment, and financial help for environment-friendly products (Xu et al., 2024).

**H3:** Environmental concerns and belief has a positive and significant effect on consumer behavior

**Figure 1. Conceptual Framework**



## 3. Research Method

In the research method section, the researcher used non- probability convenience sampling method for

data collection. The survey method was used for data collection through an online Google form. Data was collected from Pakistan's twin cities Rawalpindi and Islamabad. In this current research, the total respondents were 368 and also used a five-point Likert scale for data collection. For data analysis, two

software was used for data analysis first one is SPSS and the second one is smart-pls SEM. SPSS used for demographic variables and Smart-pls is used for measurement and structural model. All of the demographic variables shown in Table 3.1.

### 3.1 Demographic Profile

Profile	Distribution	Frequency	Percentage
Age	18-25	107	29.07%
	26-35	136	36.95%
	36-45	68	18.47%
	46-55	45	12.22%
	Above 55	12	3.26%
Gender	Female	143	38.85%
	Male	225	61.14%
Marital Status	Married	168	45.65%
	Single	200	54.34%
Education	Matriculation	31	8.42%
	Intermediate	104	28.26%
	Under Graduate	172	46.73%
	Post Graduate	61	16.57%
Income level	50,000 and below	124	33.69%
	51,000-100,000	173	47.01%
	101,000-150,000	45	12.22%
	151,000 and above	26	7.06%

## 4. Results

### 4.1 Measurement Model

In the assessment of the measurement model the researcher tests validity and reliability, there are two types of validity; convergent validity and discriminant validity. In convergent validity check through factors loading and average variance extract,

and reliability check through Cronbach alpha. According to Hair et al., (2014) all of the values of Cronbach alpha are greater than 0.7 and the value of average variance extract from all of the variables is greater than 0.5. The result of the measurement model is shown in Table 4.1.

Table 4.1 measurement model

Variables	Factor Loading	Cronbach alpha	Average variance extract
Eco-Labeling	0.814	0.86	0.697
	0.901		
	0.855		
	0.763		
Green packaging and Branding	0.718	0.85	0.687
	0.794		
	0.905		
	0.884		
Environmental concerns and beliefs	0.873	0.90	0.785
	0.906		
	0.917		
	0.846		

## 4.2 Structural model

After the measurement model, the next thing to do was the structural model. In the structural model, the

researcher tests the hypothesis. It includes beta, standard deviation, T-value, and P-value. All of the values are shown in Table 4.2.

**Table 4.2 Path Coefficient**

Path	Path Coefficient	Standard Deviation	T- statistics	P-Values	Remarks
EL->CPB	0.45	0.15	3.10	0.00	Accepted
GPB->CPB	0.48	0.18	20.67	0.01	Accepted
ECB->CPB	0.41	0.17	2.50	0.01	Accepted

Table 4.2 shows that EL has a positive significant effect on CB ( $H_1$  EL→CPB  $\beta = 0.45$ ,  $t = 3.10$ , and P-value is 0.00). So, that the  $H_1$  was accepted. GPB has a positive significant effect on CPB ( $H_2$  GPB→CPB  $\beta = 0.45$ ,  $t = 20.67$ , and P-value is 0.01). Hence,  $H_2$  was accepted. ECB has a positive significant effect on CPB ( $H_3$  ECB→CPB  $\beta = 0.41$ ,  $t = 2.50$ , and P-value is 0.01). So  $H_3$ : was accepted.

## 5. Discussion

The findings of the existing research on Eco-Labeling, green packaging and branding, and Environmental concerns and beliefs have positive and significant effects on consumer purchase behavior. Eco-labeling provides transparent information to customers about products like environmental impact and encourages eco-friendly purchases. Green packaging and branding show that a company cares about the environment and makes goods more appealing to people who care about the environment. Also, people who care a lot about the environment are more likely to choose goods that are sustainable and in line with their values. All of these things make people more likely to trust eco-friendly goods and make them more likely to buy them, which is in line with how much more people around the world are becoming aware of environmental problems.

## 6. Implication

The findings of this study have significant implications for marketers, policymakers, and companies aiming to promote sustainable products in Pakistan. Given the positive impact of green marketing strategies on consumer purchase behavior, brands can effectively leverage eco-labeling, green packaging, and branding to enhance the appeal of green products. Eco-labels provide consumers with

assurance about product sustainability, allowing companies to build trust and drive purchase intent. Marketers can thus emphasize eco-labels to inform consumers about the environmental benefits and quality of their products.

Green packaging and branding have emerged as crucial elements influencing purchase decisions. Companies should invest in sustainable, visually appealing, and eco-friendly packaging that reinforces their commitment to environmental sustainability. A strong green brand image can differentiate products in a competitive market, helping companies attract environmentally conscious consumers and foster brand loyalty. Additionally, companies can engage in educational campaigns to raise awareness about the importance of green packaging and the environmental impact of their products.

For policymakers, this study underlines the importance of supporting green marketing initiatives to promote sustainable consumer behavior. Policies that encourage or mandate eco-labeling and sustainable packaging can enhance consumer trust in green products. Incentives for companies adopting environmentally friendly practices could further reinforce green consumerism in Pakistan.

Furthermore, the study highlights the role of consumers' environmental concerns and beliefs in shaping their purchasing behavior. Organizations can capitalize on this by aligning their marketing messages with consumers' environmental values, thus fostering an emotional connection with the audience. Overall, this study encourages companies to adopt comprehensive green marketing strategies that not only promote their products but also contribute to a sustainable future by addressing consumers' environmental concerns.



## 7. Limitations and Future Research

Every research has some limitation, furthermore the current research has some limitation. The current research Eco-Labeling, green packaging and branding, and Environmental concerns and beliefs effect on consumer purchase behavior. Our sample size was limited to a specific demographic. And the other limitation is data collected from Pakistan twin cities Islamabad and Rawalpindi. The suggestion for future research the same model was used in other developing countries. And the other future research suggestion the researcher can add as an independent variable Green Products, Premium & Pricing.

## 8. Conclusion

- The development of green policies and global green growth has shown clear signs of success across many industries. Current research suggests that green marketing has notable effects on customer behavior, especially in relation to increased environmental awareness, as demonstrated by numerous scientific studies. Furthermore, we are beginning to better understand the role of green marketing for enterprises, as it provides valuable insights into how eco-consciousness can foster innovation. As a result, businesses are increasingly able to create added value by integrating environmentally-friendly practices, which is becoming essential in today's market-driven world. This shift not only aligns with sustainable development goals but also enhances brand reputation and customer loyalty, ultimately contributing to long-term profitability and industry resilience.

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