# IMPACT OF GREEN BRANDING, GREEN PACKAGING AND GREEN ADVERTISING ON CONSUMER BEHAVIOUR WITH MEDIATING ROLE OF ENVIRONMENTAL AWARENESS IN THE RESTAURANT INDUSTRY IN PAKISTAN



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# **Abstract**

This study investigates the impact of green marketing elements including green branding, green packaging, and green advertising on consumer behavior within the restaurant industry in Pakistan, with a particular focus on the mediating role of environmental awareness. Data was collected from middle managers in Pakistani restaurants using a structured questionnaire. The findings reveal significant positive correlations between green branding, packaging, advertising, and consumer behavior, highlighting the critical role of environmental awareness as a mediator. Despite the overall positive influence, the analysis uncovered statistically significant negative parameter estimates for certain variables, indicating areas where green marketing efforts may not align with consumer expectations, particularly in the domain of green packaging. Descriptive statistics showed a positive general perception of green marketing practices, though variability in responses pointed to the need for improvements in green packaging and advertising strategies. The study emphasizes the importance of a holistic and well-aligned approach to green marketing, suggesting that businesses should focus on educational campaigns communication to enhance environmental awareness and foster sustainable consumer behavior. These insights offer valuable implications for businesses and policymakers aiming to promote environmentally responsible consumption patterns in the restaurant sector. Additionally, the study underscores the generational shift towards environmental consciousness among younger consumers, making them a key target demographic for green marketing initiatives. This research provides a framework for developing effective green marketing strategies that not only drive consumer behavior but also contribute to broader environmental sustainability goals.

# Chapter 1

# Introduction

# 1.1 Background of Study

Sustainability has been recognized as a key driver over the past decades. Due to which numerous companies are manufacturing green products and consumers have shown an increase in trust in these products. It is important to identify the factors which affect willingness to pay and prices for these products, promotional tools that will help companies seek designing, developing, and market green products. This is the reason that deep insight green marketing would help sustainable consumption. Development of environmentally sustainable products and services are essential to reduce the environmental impact. (Dangelico & Vocalelli, 2017)

Consumers are becoming more thoughtful about the environment. Consumers are now more concerned about their attitude and purchases. Consumers propose environmental advertisement as being more effective to create awareness about the green products and to help them make buying decisions. Green advertisement can give motivation to buy ecofriendly products. Environmentally conscious consumers are willing to pay soaring prices. (Ansar, 2013) Companies that are executing environmental strategies give a strong message. Business leaders and researchers encourage companies to meet social responsibilities that can only be achieved through consumption of green business practices. (Papadas et al., 2017)

Consumers are becoming more socially accountable for the environment which has led to consumption eco-friendly of products and recycling. More companies have initiated this standardization and to be socially responsible and to move towards ecofriendly consumption. Consumers perception of green marketing has become critical for corporate image than that of conventional marketing. (Ko et al., 2013) Green marketing messages influence behavior towards business. Consumers with different regulatory focus have different intentions related to the marketing message. Consumers observe the motives of green initiative as a means for consumers to assist the renovations of that industry. (Chang et al., 2019) Consumer behavior has played a critical role in the rise of environmental problems so there has been an increase in organizations moving towards greenness. Social media marketing has an impact on consumers' purchase intention and behavior in relation to green products. (Sun et al., 2022)

The restaurant industry is currently navigating intense competition in the global market, posing challenges for operators to distinguish themselves amidst similar options. Adopting environmentally friendly practices, commonly known as being green, has proven essential for the survival of many firms from a marketing standpoint. Beyond marketing benefits, green restaurants are gaining recognition for their contributions to environmental sustainability, such as reducing waste, conserving energy, and water, and utilizing organic and recyclable products. These eco-friendly establishments are not only committed to social welfare and fair business principles but are also designed to maximize energy efficiency and minimize environmental impact during demolition. The growth of green restaurants aligns with an increased societal awareness of social and environmental concerns. (Kumar et al., 2023)

It is important that brands see how customers perceive them and what image of their brand it is. As green marketing is growing consumers are more willing to become environmentally conscious. Green marketing is not just a catch phrase, but it is a marketing strategy (Tara Schofield, 2018) Green marketing aims to reduce effects of environment by packaging, labeling, designing, producing and consumption. Companies are now using a strategic approach for investment and entrepreneurship parts in the industry by modifying consumer satisfaction. This can give a competitive advantage and reduce competition. The purchasing behavior of customers depends upon the need for solutions and decision to purchase. (Delafrooz et al., 2014)

# 1.2 Problem Statement

Maintaining the earth's ecosystems is a major issue today. The focus is to recognize green marketing and its effects on the consumers' behavior. (Heck & Yidan, 2013) Concern about environmental issues in the world has increased. Today consumers are concerned about how their purchasing habits can help to minimize negative impact on the environment. The impact of these initiatives is not fully examined in the restaurant industry. (Muchenje et al., 2023) It is, therefore, appropriate to undertake the analysis of the impact of green marketing tools on the consumer buying decision in a developing nation where green consumers are emerging. The problem is to investigate the direct impact of green branding, green packaging, and green advertising on consumer behavior and the indirect impact of green branding, green packaging, and green advertising on consumer behavior with mediating role of environmental awareness in the restaurant industry in Pakistan. (Panthi, 2021)

# 1.3 Research Objectives

- 1. To examine the impact of green branding on consumer behavior.
- 2. To examine the impact of green packaging on consumer behavior.
- 3. To examine the impact of green advertising on consumer behavior.
- 4. To investigate the mediating role of environmental awareness between green branding and consumer behavior.
- 5. To investigate the mediating effect of environmental awareness between green packaging on consumer behavior.
- 6. To investigate the mediating role of environmental awareness between green advertising and consumer behavior.

# 1.4 Research Questions

- 1. What is the impact of green branding on consumer behavior?
- 2. What is the impact of green packaging on consumer behavior?
- 3. What is the impact of green advertising on consumer behavior?
- 4. Does environmental awareness mediate the relationship between green branding and consumer behavior?
- 5. Does environmental awareness mediate the relationship between green packaging on consumer behavior?
- 6. Does environmental awareness mediate the relationship between green advertising and consumer behavior?

#### 1.5 Research Contribution

This research contributes to the theory of planned behavior in the setting of the impact of green marketing on consumer behavior within the restaurant industry in Pakistan. The study extends the theoretical framework by introducing novel constructs, including green branding, green packaging, and green advertising, into the model. These additions enhance the understanding of the belief system underlying consumer attitudes towards green products in the restaurant sector. Specifically, environmental awareness emerges as crucial factors shaping consumer attitudes. (Iqbal et al., 2023) Practical implications include the adoption of sustainable sourcing, eco-

friendly packaging, and energy-efficient practices, all of which can contribute to a positive environmental image and with the values of increasingly environmentally-conscious consumers. Managerial implications include organizations can achieve successful competitive advantage while contributing to environment. It can help managers use green branding, green packaging, and green advertising to create brand awareness. Furthermore, policymakers can use the findings to formulate and implement regulations that incentivize or mandate green marketing practices within the restaurant sector. By encouraging or requiring restaurants to adopt eco-friendly measures to reduce industry's environmental footprint. (Karjaluoto & Vaccaro, 2009)

# 1.6 Research Gap

The existing literature in Pakistan's restaurant industry lacks comprehensive exploration into the dynamics of the impact of green marketing on consumer behavior in the restaurant industry. While previous studies have touched upon general sustainability practices, a research gap persists in understanding the specific influence of green branding, packaging, and advertising on consumer choices within this context. Moreover, limited attention has been given to the mediating role of environmental awareness in the relationship between green marketing strategies and consumer behavior in the Pakistani restaurant sector. (Hameed et al., 2019) Despite the increasing importance of sustainable practices in global business, there is a need of comprehensive research focusing on the Pakistani population and their responses to green marketing initiatives in the restaurant sector. By narrowing its focus to the Pakistani context, this study seeks to provide understanding of consumers perceptions and behaviors towards environmentally conscious practices in restaurants. (Iqbal et al., 2023)

# 1.7 Scope of the Study

This research explores the impact of green marketing on consumer behavior within the restaurant industry in Pakistan, adopting an individual unit analysis approach. The study investigates various green marketing strategies employed by diverse categories of restaurants, including fast-food, casual dining, and fine dining establishments, operating in different regions of the country. This study, employing a unit analysis approach, specifically focuses on the middle management tier within the hierarchy of organizations. The unit of analysis is of middle managers It will investigate how middle managers navigate their dual responsibilities of executing strategic initiatives while managing the expectations and concerns of both higher and lower organizational

levels. The unit analysis will focus on understanding how specific green initiatives, such as green branding, green packaging, and green advertising, influence consumer perceptions and behavior. The research will consider the unique challenges faced by restaurants in implementing green practices and assess the regional variations and market trends within the Pakistani restaurant industry. The timeframe for the study will extend over a defined period to capture any potential variations in consumer behavior. Additionally, the research will explore the mediating role of environmental awareness in shaping the relationship between green marketing strategies and consumer behavior. The findings are expected to contribute to both academic knowledge and practical implications for restaurant owners and marketers.

# 1.8 Limitation of the Study

The study contributes insights to the understanding of the impact of green marketing on consumer behavior in the restaurant industry in Pakistan, certain limitations should be acknowledged. The diversity within the restaurant industry may pose challenges in concluding results to the entire sector. Variations in restaurant types, sizes, and geographic locations may lead to different consumer responses to green marketing initiatives, limiting the broad applicability of the study. The research has constraints in survey methodologies, including the potential for response bias. Additionally, the dynamic nature of consumer preferences and the evolving landscape of the restaurant industry may introduce temporal limitations, making it crucial for the findings to be interpreted within the context of the study period. Furthermore, the study's scope may not encompass all cultures and regions within Pakistan, potentially limiting the applicability of findings to specific subpopulations.

# Chapter 2

# **Literature Review**

# 2.1 Green Branding

Green branding refers to the practice of marketing and promoting products or companies as environmentally friendly or sustainable. It involves creating and maintaining a brand image that aligns with consumer values of protecting the environment and promoting sustainability. By positioning a product as eco-friendly and highlighting its environmental benefits, companies can appeal to consumers who have pro-environmental preferences. Successful green branding strategies should be genuine, educate consumers about green products, and give consumers the opportunity to participate in social responsibility towards the environment. The study suggests that green marketing and branding efforts should be intensified to promote the use of environmentally favorable and effective products. To effectively implement green branding, companies can use various tools such as eco-labeling and eco-friendly packaging to highlight the environmental features of their products. Additionally, implementing an international standard can help remove consumer doubts and contribute to a more effective green branding strategy. (Rahman et al., 2017)

Green brand image is created by companies that offer environmentally friendly products, and it is awarded to companies that acknowledge the impact of their products on the environment. A green brand image is important for companies as it controls consumers' perception of the company and can influence their purchase intent. Green brand image does not always result in consumer awareness of the product, as consumers tend to select environmentally friendly products based on content information rather than brand image. It aims to improve consumer knowledge and decision-making by providing information about the environmental benefits of the product.(Alamsyah, Othman, & Mohammed, 2020)

#### 2.2 Green Packaging

Green packaging is using sustainable materials for packaging purposes in order to reduce waste and promote sustainable development. It has gained increasing interest from both researchers and practitioners. Research on green packaging has significantly increased in recent years, indicating the growing importance of addressing climate change, environmental protection, and resource conservation. Decisions to purchase green-packaged products are influenced by multiple factors,

Companies are encouraged to incorporate sustainable packaging to comply with government regulations.(Rashid, 2009)

Consumers are increasingly concerned about environmental issues. Research on green packaging has seen significant growth, indicating the increasing interest and importance of the topic. Green supplier selection is another area of focus for companies looking to gain a competitive edge and reduce food waste. Companies consider the costs and consumer preferences when choosing green packaging. Packaging redesign and innovations in packaging machines aim to reduce costs and increase flexibility. (Wandosell et al., 2021)

# 2.3 Green Advertising

The aim of green advertising is to educate consumers about nature, enhance their understanding of the environment, increase the sales of green products, and improve the firm's green image. Consumer attitudes toward green advertising significantly influence their purchase intention for environmentally friendly products. Green advertising plays a crucial role in informing and educating consumers about product attributes and specifications related to environmental concerns and health issues. However, it is important for green marketers to validate the environmental claims made in advertisements to build consumer trust. Overall, green advertising has a role in consumer purchase intention and influences consumer buying behavior in relation to environment-friendly products.(Ankit & Mayur, 2013)

Green advertising plays a crucial role in improving environmental awareness. Green advertising campaigns are designed to promote the concept of environmental sustainability and highlight the positive impact of using eco-friendly products. Green advertising is also aimed at building consumer trust in environmentally friendly products. It improves consumer perception and increases their willingness to purchase environmentally friendly products. Furthermore, green advertising contributes to the development of green awareness among consumers. Green awareness refers to the change in consumer behavior from consuming conventional products to recommending and choosing environmentally friendly products. It is influenced by consumer knowledge of the characteristics of eco-friendly products. (Alamsyah, Othman, Bakri, et al., 2020)

#### 2.4 Consumer Behavior

Consumer behavior plays a crucial role in understanding how consumers make decisions and what influences their purchasing behavior. The research explores the relationship between consumer attitudes and perceptions towards green marketing, as well as their willingness to pay more for green products. A significant percentage of respondents are aware of green products, and a portion of them are willing to pay extra for eco-friendly products. Green marketing offers several advantages for companies. It saves money in the long run despite initial cost increases and allows companies to access new markets and gain a competitive advantage. Moreover, employees often feel proud to work for environmentally responsible companies. (Rhea et al., 2018)

Consumer behavior encompasses various factors, including individual needs, wants, attitudes, preferences, and values, as well as external influences such as cultural, social, and economic factors. Consumers' behavior towards products or services can be influenced by several factors. Studies show that consumers' interest in buying eco-friendly products arises from their need and want satisfaction related to the product or service. Green marketing strategies, such as eco-labels and green brands, can play a role in influencing consumer behavior. Research suggests that consumers who care about the environment often inspect and analyze products to ensure that they are environmentally friendly. In the context of the Indian market, where this study focuses, there is a growing concern for environmental well-being. (Ansar, 2013)

#### 2.5 Environmental Awareness

The concept of environmental awareness refers to the understanding and concern about environmental issues among individuals, which includes emotional, attitude, and practice of sustainability awareness. Environmental awareness can be measured by evaluating the knowledge and understanding of environmental issues, their causes, and their impacts. However, it is important to note that having a high level of environmental awareness does not necessarily lead to greater environmental behavior. Environmental behavior is the observable actions taken by individuals in response to their comprehension of environmental issues. In the context of Malaysians, the study shows that they have a high level of awareness regarding water pollution, followed by air pollution and solid waste management. Malaysians are less aware of climate change, potentially due to the indirect and less visible effects in a country with a tropical

rainforest climate. Environmental awareness is crucial for policy-making decisions as it helps policymakers understand what the public is doing to improve environmental behavior. In Malaysia, there are numerous national environmental awareness programs initiated by the government and relevant ministries. (Mei et al., 2016)

Previous research has found that individuals with stronger environmental awareness are expected to engage in environmentally friendly actions. Environmental awareness plays a role in individuals' green purchase behavior, and eco-labels can serve as a tool to enhance consumers' environmental awareness by providing information about the environmental attributes of products. Research suggests that environmental awareness acts as an important factor between eco-labels and green purchase behavior. It is theorized that eco-labels inform environmental awareness and encourage sustainable consumption. The research argues that eco-labeling can boost consumers' perceptions of environmental attributes of products, ultimately influencing their environmental attitude and concern. (Song et al., 2019)

Environmental awareness refers to the consciousness of individuals regarding environmental issues, as well as their responsibility to protect the environment. Environmental awareness has a significant and positive impact on consumers' green purchasing behavior. Several factors contribute to environmental awareness and its influence on green purchasing behavior. The features of green products, such as recyclability, plays a role in shaping consumer behavior. Additionally, green promotion activities, such as advertising campaigns highlighting the environmental benefits of products, can also increase consumer awareness. Furthermore, the price of green products is another factor that can affect green purchasing behavior. Demographics can also impact the connection between environmental awareness and green purchasing behavior. For example, research has shown that gender can influence the effectiveness of green promotion strategies, with different effects observed for males and females. Additionally, educational level has been found to influence the level of environmental consciousness and the factors that influence green purchasing behavior. (Saini, 2013)

# 2.6 Green Branding and Environmental Awareness

Environmental awareness positively influences green purchase intentions, and this, in turn, has an impact on brand. Marketers can influence this by representing their products as green and organizing marketing campaigns to create awareness and motivate consumers. The relationship between green branding and environmental awareness is beneficial and supports sustainable practices.. Consumers with higher environmental awareness are more conscious about their environment and prefer to buy eco-friendly products. Marketers can leverage this by portraying their products as green and organizing marketing campaigns to create awareness and motivate consumers to purchase green products. Therefore, the relationship between green branding and environmental awareness is beneficial and supports sustainable practices. (Alamsyah, Othman, & Mohammed, 2020)Thus, the following hypothesis can be proposed.

H1: There is a positive relationship between green branding and environmental awareness.

# 2.7 Green Packaging and Environmental Awareness

Green packaging and environmental awareness are interconnected concepts that play a significant role in promoting sustainable consumption behavior. It includes the use of renewable and recyclable materials, as well as the incorporation of energy-saving and waste-reducing measures. Environmental awareness, on the other hand, refers to individuals' knowledge, understanding, and concern for environmental issues and their impact on the planet. It reflects consumers' level of awareness about the importance of environmental conservation and their willingness to engage in behaviors that promote sustainability. Corresponding to research green packaging is considered an important aspect of green marketing and can have a substantial impact on consumers' purchasing behavior. The research emphasizes that the use of ecopackaging contributes to safety for individuals and the environment and addresses consumer concerns about the well-packed packaging of products. (Ahmad et al., 2020) Hence suggest the following.

H2: There is a positive relationship between green packaging and environmental awareness.

# 2.8 Green Advertising and Environmental Awareness

Green marketing and environmental awareness are closely linked. It involves creating products that are priced and minimize damage to the environment. Environmental awareness, on the other hand, refers to the level of knowledge and concern that individuals have about environmental issues. The higher the level of environmental awareness, the more likely individuals are to engage ingreen purchasing behavior. (Saini, 2013) People perceive green advertising campaigns as an effective tool for educating and encouraging positive behavioral change. Additionally, a study found a significant difference in attitudes towards green advertising between

environmentally

responsible and environmentally apathetic individuals. Therefore, according to the research the relationship between green advertising and environmental awareness is positive. (Rahim et al., 2012) Thus propose the following hypothesis.

H3: There is a positive relationship between green advertising and environmental awareness.

# 2.9 Green Branding and Consumer Behavior

Customers who are environmentally responsible are likely to favor eco-friendly products. Price, quality, and green marketing are key factors that influence consumer behavior and decision-making. Branding alone may not significantly affect consumer green behavior. Companies should focus on factors such as price, quality, and the environmental benefits of their products to attract and retain customers.(Sheikh et al., 2014). Consumers are increasingly supporting green brands and there has been considerable growth in the sales of these brands. Green brands are those that actively communicate their environmentally sound attributes and differentiate themselves from competitors. Consumers' support for these brands indicates a positive association between green branding and consumer behavior. (Papista et al., 2018) Thus hypothesis is the following.

H4: There is a positive relationship between green branding and consumer behavior.

# 2.10 Green Packaging and Consumer Behavior

Green packaging and consumer behavior are closely related areas of research. The document highlights the importance of analyzing green packaging from both business and consumer perspectives. The inclination to buy green-packaged products is also influenced by price. On the other hand, from a business perspective, companies are being forced to adapt green packaging initiatives due to societal pressure, customer attitudes, and willingness to pay, as well as laws and regulations. The study suggests that companies should establish procedures to understand customers' perceptions of green packaging and carry out successful CSR communication plans. (Wandosell et al., 2021) Researchers have argued that green packaging plays an important role in influencing consumer attitudes towards green products. Factors such as the importance of information on packaging, recycling, and the trust in well-known green branded products indicate a positive association between green packaging and consumer behavior. (Shabbir et al., 2020) Consequently hypothesis the following.

H5: There is a positive relationship between green packaging and consumer behavior.

# 2.11 Green Advertising and Consumer Behavior

Green advertising aims to promote a green lifestyle and enhance a company's image of social responsibility. Research has shown that green advertising can have an impact on consumer behavior and attitudes towards environmental issues. In the case of Malaysian youth, a study found that while they have some awareness of green living, the number of those who actually practice it is lower. It is an effective tool to educate and encourage positive behavioral change among them. Overall, green advertising has the potential to empower. (Rahim et al., 2012) Research has suggested that consumers who are more concerned about the environment are more likely to positively respond to green advertising and are willing to pay more. (Batool & Iqbal, 2016) Therefore hypothesis the following.

H6: There is a positive relationship between green advertising and consumer behavior.

#### 2.12 Environmental Awareness and Consumer Behavior

Research has found that environmental awareness mediates the relationship between environmental disclosure by firms and consumer willingness to engage in eco-responsible consumption activities. The study emphasizes the importance of transparent environmental reporting in promoting eco-friendly consumer choices and protecting the environment from human activities. Environmental awareness is a significant factor in influencing consumer behavior towards eco-friendly consumption. (Rustam et al., 2020) It is evident that consumer environmental awareness affects their purchasing decisions.. This finding suggests that companies can benefit from offering environmentally friendly products to meet the demand of environmentally conscious consumers. For instance, consumers become more aware of the environmental impact of their purchasing decisions, they are more likely to choose eco-friendly products, even if they are priced higher. (Zhang et al., 2015) Accordingly hypothesis the following.

H7: There is a positive relationship between environmental awareness and consumer behavior.

# 2.13 Mediating Role of Environmental Awareness

The role of environmental awareness is important in promoting eco-friendly behaviors and protecting the environment. Studies have shown that environmental awareness positively influences pro-environmental behaviors. The positive impact of environmental awareness on environmental quality has been supported by empirical research. (Ahmad et al., 2020) Green product awareness acts as a mediating variable between green marketing and consumers' attitudes. The findings highlight the significance of green perceived value, environmental concerns, and green product awareness in shaping consumers' attitudes towards buying green buildings. The study found that green product awareness acts as a mediating variable between green marketing and consumers' attitudes. (Sahioun et al., 2023). Hence the following hypothesis can be proposed.

H8: Environmental awareness mediates the relationship between green branding and consumer behavior.

H9: Environmental awareness mediates the relationship between green packaging and consumer behavior.

H10: Environmental awareness mediates the relationship between green advertising and consumer behavior.

# 2.14 Theory

The research used the Theory of Planned Behavior as the base for the research model. This theory suggests that behavior is influenced by attitudes, subjective norms, and perceived behavioral control. The research references other theories and models that support their research. For example, the research cites the Theory of Reasoned Action and the Extended Theory of Planned Behavior to predict consumers' intention. These theories focus on the cognitive and affective factors that influence consumers' attitudes and intentions.(Li et al., 2020) In the context of the study, the theory is applied to understand consumer behavior and decision-making. The researchers examine factors such as price, quality, brand, green marketing, and gender differences, and how these variables influence consumers' intention to buy green products. (Sheikh et al., 2014)

Environmental awareness is a significant factor in influencing consumer behavior towards ecofriendly consumption. The theories employed include the theory of planned behavior, stakeholder theory, legitimacy theory, and resource dependency theory. These theories are used to develop a conceptual understanding of how environmental disclosure impacts consumer behavior and green consumption practices. (Rustam et al., 2020) The theories have been applied to understand and analyze different aspects of green marketing, such as consumer behavior, attitudes, motivations, and decision-making processes. Attitude theory focuses on the evaluation and formation of attitudes towards green products and services, while attitude-behavior theory explores the relationship between attitudes and actual behavior. (Groening et al., 2018)

Hagger et al. maintained that the three aforementioned factors can be used to predict behavioral intentions and behavior. TPB's core components, attitudes, subjective norms, and perceived behavioral control are especially relevant for investigating how consumers perceive and decide on eco-friendly choices in restaurants. The study includes the mediating role of environmental awareness, TPB offers a structured model to analyze how these psychological factors influence both behavioral intentions and the development of environmental consciousness. Leveraging TPB's predictive power, the study not only enhances the theoretical grounding of its research but also provides practical insights for interventions and strategies (Chen & Hung, 2016)

#### 2.15 Theoretical Framework

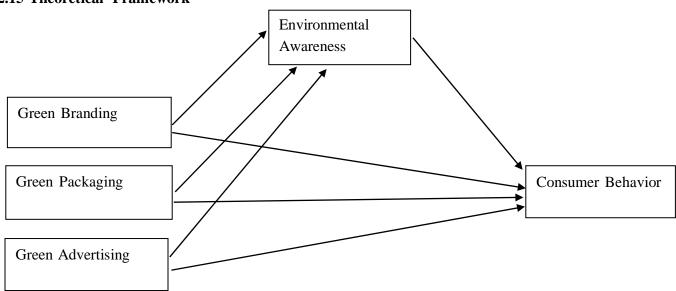


Figure 2.1 Theoretical Framework of Study

# Chapter 3

# Methodology

# 3.1 Research Design

# 3.1.1 Research Strategies

The research strategy used for the study is a survey method. Questionnaires were filled in by the target population which consisted of 30 questions including demographic questions.

# 3.1.2 Unit of Analysis

Unit of analysis for the study are individuals who are middle managers in restaurant industry in Pakistan.

#### 3.1.3 Time Horizon

A cross-sectional approach was used as this approach allows for cost-effective data collection, exploration of relationships between variables, and comparisons within the same timeframe. The timeframe for the study will extend over a defined period to capture any potential variations in consumer behavior.

# 3.2 Research Philosophy

The Positivism paradigm was used, as it aligns with the scientific method, promoting a structured approach to testing hypotheses, generating generalizable results, and minimizing researcher bias.

#### 3.3 Research Type

The study utilized a quantitative research approach due to its capability to generalize findings effectively. This method, endorsed by Blanche, Durrheim, and Painter (2006) as well as Johnson and Christensen (2019), is preferred for its strength in making generalizable conclusions. Additionally, Ledgerwood and White (2006) highlighted that quantitative research is adept at assessing the magnitude of participants' attitudes and the degree to which these attitudes change.

# 3.4 Research Approach

The research approach for the study is deductive where hypotheses are drawn with the help of prevailing theory.

# 3.5 Population and Sample

The target population for the study is middle managers working in restaurants in the twin cities.

Approximately 110 restaurants are operating in the twin cities, out of those 25 restaurants agreed

to participate in the study. So, this study collected data from 25 restaurants. To select the number of employees Krejcie and Morgan table was used. In each restaurant on average there are 3 managerial employees. So, multiplying the number of organizations by 3 we got our population that is 75 and to carry out sufficient research the sample size is 63 (N= 75, S=63). So, we distributed 100 questionnaires.

# 3.6 Sample Technique

The sample population is unknown, so convenience sampling emerges as the most appropriate technique. According to Etikan, I., Musa, S. A., & Alkassim, R. S. (2016), convenience sampling is advantageous in research due to its speed, cost-effectiveness, ease of use, and the ready availability of subjects. This method is particularly useful when population parameters are not well-defined or when obtaining a representative sample through more rigorous sampling methods is challenging.

#### 3.7 Research Ethics

Consent was acquired from the sample and all ethical guidelines were followed to maintain the confidentiality of the responses of the participants.

# 3.8 Measurement Instrument

We used SPSS to perform demographic, descriptive and correlation analysis. SmartPLS 4 was used for analysis of structural and measurement models.

#### 3.9 Sources of Instruments

"Green Branding" used five item scale adopted from (Basharat Ali, 2018) "Green Packaging" used five item scale adopted from (Anh, 2017) "Green Advertising" used five item scale adopted from (H. Ahmad et al., 2010) "Environmental Awareness" used five item scale adopted from (Basharat Ali 2018) "Consumer Behavior" used five item scale adopted from (Tariq, 2014)

The items were measured on a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree.

Table 3.1 Sources of Instruments

Variable	Source	Number of Scales
Green Branding	(Basharat Ali, 2018)	05
Green Packaging	(Anh, 2017)	05
Green Advertising	(H. Ahmad et al., 2010)	05
Environmental Awareness	(Basharat Ali 2018)	05
Consumer Behavior	(Tariq, 2014)	05

# Chapter 4

# **Findings and Analysis**

#### 4.1 Introduction

Data analysis of the survey response was conducted to verify and validate the model. The purpose is to provide a specified analysis of the data collected from the respondents using the questionaries. This chapter also presents the survey demographic, descriptive and correlation analysis, The next section discusses the measurement model, as well as the reliability and validity of the data, which is followed by an assessment of the structural model.

# 4.2 Demographic Profile

The data was analyzed based on 100 respondents. A total of 72 male and 27 female respondents completed the questionnaire. The analysis showed that 62% of people were between the ages of 18-25, 34% were between the ages of 26-35, 3% were between 36-45 and 1% was between 46-55. 7 respondents had done Matriculation and 34% had done Intermediate. 44% of the respondents were graduates and 15% of the respondents were postgraduates. The analysis showed that 35% of the respondents had experience between 0 -2 years, 33% had experience between 3-5 years, 15% had experience between 6-8 years, 4% had experience between 9-11 years and 13% had experience of over 11 years.

Table 4.1 Demographic Profile of Respondents

Category	Number of respondents	Percentage	Cumulative Percent
Gender			
Male	73	73	73
Female	27	27	100
Age			
18-25	62	62	62
26-35	34	34	96

36-44	3	3	99
45-56	1	1	100
Above 55	0	0	0
Education			
Matriculation	7	7	7
Intermediate	34	34	44
Graduate	44	44	85
Postgraduate	15	15	100
Experience			
0-2 years	35	35	35
3-5 years	33	33	68
6-8 years	15	15	83
9-11 years	4	4	87
Above 11 years	13	13	100

# 4.3 Descriptive Analysis

The descriptive statistics for the study's key variables including green branding (GB), green packaging (GP), green advertising (GA), environmental awareness (EA), and consumer behavior (CB) provide insightful details about their distribution and central tendencies among the respondents. Each variable was measured on a scale from 5 to 25, with 100 valid responses recorded for each.

Green branding (GB) had a mean score of 18.02 with a standard deviation of 4.69, indicating generally positive perceptions among respondents but with some variability. Green packaging (GP) followed closely with a mean of 17.77 and a slightly lower standard deviation of 4.54, suggesting a similar trend. Green advertising (GA) showed a mean of 17.84 and a standard deviation of 4.30, reflecting a slightly more consistent perception among participants. Environmental awareness (EA) had a mean score of 17.76 and the highest standard deviation of 4.72 among the variables, implying a broad range of awareness levels among the respondents. Finally, consumer behavior (CB) recorded the highest mean of 18.48 and a standard deviation of 4.75, suggesting that consumer behavior was positively influenced by the green marketing

efforts, with some variation among respondents. These statistics reveal that while perceptions of green branding, packaging, and advertising are generally positive, there is variability that highlights the need for more consistent and effective strategies. Environmental awareness appears to be a crucial mediating factor influencing consumer behavior, as indicated by its substantial mean score and its strong correlation with other variables.

Table 4.2 Descriptive Statistics

	N	Minimum	Maximum	Me	an	Std. Deviation
	11	William	Waximum	1710	Std.	Deviation
	Statistic	Statistic	Statistic	Statistic	Error	Statistic
GB	100	5.00	25.00	18.0200	.46925	4.69253
GP	100	5.00	25.00	17.7700	.45368	4.53684
GA	100	5.00	25.00	17.8400	.42987	4.29874
EA	100	5.00	25.00	17.7600	.47229	4.72287
СВ	100	5.00	25.00	18.4800	.47535	4.75348
Valid N (listwise)	100					

# 4.3 Correlation Analysis

The correlation analysis provides valuable insights into the relationships between green branding (GB), green packaging (GP), green advertising (GA), environmental awareness (EA), and consumer behavior (CB) in the restaurant industry. The results indicate that green branding has strong positive correlations with green packaging (r = .784), green advertising (r = .774), environmental awareness (r = .713) and consumer behavior (r = .686). This suggests that effective green branding is closely associated with improvements in green packaging and advertising, and significantly enhances environmental awareness and influences consumer behavior positively.

Green packaging exhibits strong positive correlations with green advertising (r=.752) environmental awareness (r=.704) and consumer behavior (r=.653) This indicates that improvements in green packaging are often coupled with better advertising strategies, contribute to raising environmental consciousness, and positively impact consumer behavior. Green advertising also shows strong positive correlations with environmental awareness (r=.664) and consumer behavior (r=.700), highlighting its crucial role in enhancing environmental awareness and influencing consumer behavior towards sustainability. The most significant correlation is between environmental awareness and consumer behavior (r=.787), underscoring the critical role of environmental awareness as a mediator. This strong positive correlation implies that higher environmental awareness is strongly associated with more sustainable consumer behaviors.

Table 4.3 Correlation

		GB	GP	GA	EA	CB
GB	Pearson Correlation	1	.784**	.774**	.713**	.686**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	100	100	100	100	100
GP	Pearson Correlation	.784**	1	.752**	.704**	.653**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	100	100	100	100	100
GA	Pearson Correlation	.774**	.752**	1	.664**	.700**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	100	100	100	100	100
EA	Pearson Correlation	.713**	.704**	.664**	1	.787**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	100	100	100	100	100
СВ	Pearson Correlation	.686**	.653**	.700**	.787**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	100	100	100	100	100

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

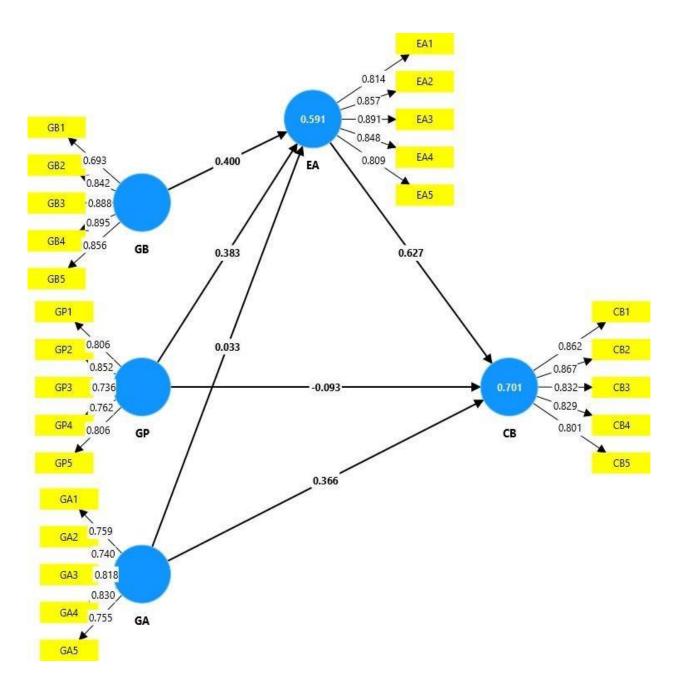


Figure 4.1 Measurement Model

#### 4.1 Measurement Model

The measurement model illustrates the relationship between latent constructs and their observed variables, assessing their measurement properties. In this study, five constructs were analyzed: green branding, green packaging, green advertising, environmental awareness, and consumer behavior. These constructs were measured using 25 items, with the analysis conducted using SmartPLS 4. Typically, the assessment of a measurement model focuses on evaluating reliability and validity. Confirmatory Factor Analysis (CFA) was utilized to examine the reliability and validity of all scales. Figure 4.1 displays the model, with circles representing the constructs and rectangles denoting the items used to measure these constructs.

# 4.1.1 Outer Loading

To analyze the measurement model focusing on outer loadings, we first examined each indicator's loading on its respective construct, ensuring they meet the threshold of 0.70 or higher, which signifies strong indicator reliability. For the construct Consumer Behavior (CB), the outer loadings are CB1 (0.862), CB2 (0.867), CB3 (0.832), CB4 (0.829), and CB5 (0.801), all above 0.70, indicating high reliability. Similarly, Environmental Awareness (EA) had loadings ranging from 0.809 to 0.891, Green Advertising (GA) from 0.740 to 0.830, Green Branding (GB) from 0.693 to 0.895, and Green Packaging (GP) from 0.736 to 0.852. While most indicators meet the desired threshold, GB1 (0.693) and GP3 (0.736) are slightly below but close to 0.70, suggesting acceptable but marginal reliability. These outer loadings confirm that the indicators reliably measure their respective constructs, providing a strong foundation for further analysis of the measurement model.

Table 4.4 Outer Loading

	Outer loadings
CB1 <- CB	0.862
CB2 <- CB	0.867
CB3 <- CB	0.832
CB4 <- CB	0.829
CB5 <- CB	0.801
EA1 <- EA	0.814
EA2 <- EA	0.857
EA3 <- EA	0.891
EA4 <- EA	0.848
EA5 <- EA	0.809

GA1 <- GA	0.759
GA2 <- GA	0.740
GA3 <- GA	0.818
GA4 <- GA	0.830
GA5 <- GA	0.755
GB1 <- GB	0.693
GB2 <- GB	0.842
GB3 <- GB	0.888
GB4 <- GB	0.895
GB5 <- GB	0.856
GP1 <- GP	0.806
GP2 <- GP	0.852
GP3 <- GP	0.736
GP4 <- GP	0.762
GP5 <- GP	0.806

# 4.1.2 Construct Reliability and Validity

The analysis of construct reliability and validity indicates that all constructs exhibit strong reliability and convergent validity. Consumer Behavior (CB) has a Cronbach's alpha of 0.895, composite reliability (rho\_and rho\_c) of 0.899 and 0.922 respectively, and an AVE of 0.703, which signifies high reliability and excellent convergent validity. Similarly, Environmental Awareness (EA) shows robustness with a Cronbach's alpha of 0.899, composite reliability of 0.900 and 0.925, and an AVE of 0.713. Green Advertising (GA) presents good reliability with a Cronbach's alpha of 0.840, composite reliability of 0.846 and 0.887, and an AVE of 0.610, demonstrating adequate convergent validity. Green Branding (GB) also shows high reliability, with a Cronbach's alpha of 0.892, composite reliability of 0.906 and 0.921, and an AVE of 0.702. Lastly,Green Packaging (GP) achieves good reliability with a Cronbach's alpha of 0.854, composite reliability of 0.870 and 0.894, and an AVE of 0.630, indicating adequate convergent validity. These results confirm that the constructs are both reliable and valid, underscoring the robustness of the measurement model.

Table 4.5 Construct Reliability and Validity

	Cronbach's	Composite	Composite	Average
	alpha	reliability	reliability	variance
		(rho_a)	(rho_c)	extracted
				(AVE)
СВ	0.895	0.899	0.922	0.703
EA	0.899	0.900	0.925	0.713
GA	0.840	0.846	0.887	0.610
GB	0.892	0.906	0.921	0.702
GP	0.854	0.870	0.894	0.630

# 4.1.3 Discriminant Validity (Heterotrait-monotrait ratio (HTMT))

The discriminant validity assessment using the Heterotrait-Monotrait ratio (HTMT) shows that most constructs in the model are sufficiently distinct from each other. Specifically, the HTMT values for EA <-> CB (0.887), GA <-> CB (0.806), GA <-> EA (0.768), GB <-> CB (0.770), GB <-> EA (0.801), GP <-> CB (0.750), GP <-> EA (0.805), and GP <-> GB (0.898) are all below the threshold of 0.90, indicating good discriminant validity. However, the HTMT value for GP <-> GA is 1.006, which exceeds the 0.90 threshold, suggesting that Green Packaging and Green Advertising are not sufficiently distinct constructs in this model. This indicates a potential issue that may require further investigation or model adjustment to ensure clear differentiation between these constructs. Overall, except for the issue between Green Packaging and Green Advertising, the constructs demonstrate adequate discriminant validity.

Table 4.6 Discriminant Validity

	Heterotrait-monotrait ratio (HTMT)
EA <-> CB	0.887
GA <-> CB	0.806
GA <-> EA	0.768
GB <-> CB	0.770
GB <-> EA	0.801

GB <-> GA	0.893
GP <-> CB	0.750
GP <-> EA	0.805
GP <-> GA	1.006
GP <-> GB	0.898

# 4.1.4 R Square

The R-square values for consumer behavior (CB) and environmental awareness (EA) indicate that the structural model explains 70.1% of the variance in consumer behavior and 59.1% of the variance in environmental awareness, with adjusted R-square values of 70.0% and 59.0%, respectively. These high R-square values suggest that the independent variables including green branding, green advertising, and green packaging effectively predict environmental awareness, which in turn significantly predicts consumer behavior. This indicates that environmentally oriented marketing strategies substantially contribute to enhancing consumer awareness and influencing their behavior towards sustainable practices. Consequently, businesses and policymakers can leverage these insights to design effective green marketing campaigns that foster environmental consciousness and drive consumer engagement in eco-friendly behaviors.

Table 4.7 R Square

	R-square R-square adjusted	
СВ	0.701	0.700
EA	0.591	0.590

### 4.1.5 f-Square

The f-square values provide insight into the effect sizes of the relationships between constructs in the structural model. An f-square value of 0.609 for the relationship between environmental awareness (EA) and consumer behavior (CB) signifies a large effect size, indicating that environmental awareness is a strong predictor of consumer behavior. The f-square values for the relationships between green advertising (GA) and consumer behavior (0.116), and between green branding (GB) and environmental awareness (0.134), indicate moderate effect sizes, highlighting

their significant, though relatively smaller, contributions. The relationships between green advertising (GA) and environmental awareness (0.001), green packaging (GP) and consumer behavior (0.006), and green packaging (GP) and environmental awareness (0.082) exhibit small effect sizes, indicating weaker predictive power. Overall, this analysis shows that while green branding and advertising are important, environmental awareness is crucial in influencing consumer behavior towards sustainability. This underscores the importance of educational and awareness-raising initiatives in green marketing strategies.

Table 4.6 f-Square

	f-square
EA -> CB	0.609
GA -> CB	0.116
GA -> EA	0.001
GB -> EA	0.134
GP -> CB	0.006
GP -> EA	0.082

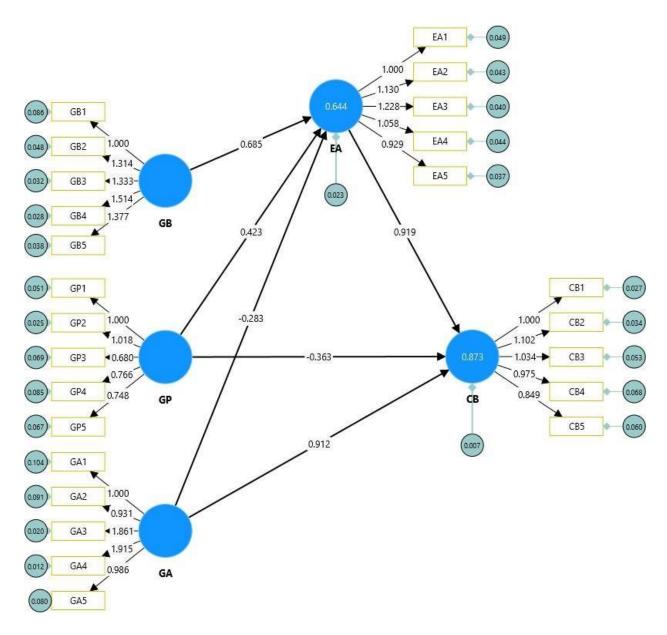


Figure 4.2 Structural Model

### 4.2 Structural Model

The structural model analysis reveals insightful relationships between green marketing constructs and consumer behavior, contributing significantly to the overarching thesis on sustainability marketing. With robust outer loadings, high R-square values for consumer behavior and environmental awareness, and substantial composite reliability and AVE values, the model demonstrates strong explanatory power and construct validity. Specifically, environmental awareness emerges as a pivotal factor, exerting a large effect on consumer behavior, while green advertising and branding also wield moderate influence. These findings underscore the importance of cultivating environmental consciousness among consumers through strategic green initiatives.

### 4.2.1 Outer Loading

The structural model analysis based on the provided outer loadings values reveals significant insights into the relationships between green branding (GB), green advertising (GA), green packaging (GP), environmental awareness (EA), and consumer behavior (CB). The high outer loadings for CB (0.638 to 0.821) and EA (0.752 to 0.839) suggest that these constructs are well-defined by their respective indicators. The R-square values indicate that the model explains 70.1% of the variance in CB and 59.1% in EA, highlighting the substantial influence of the predictor variables. Notably, the f-square value of 0.609 for the EA-CB relationship signifies a large effect size, underscoring the critical role of EA in driving CB. In contrast, the moderate effect sizes of GA on CB (0.116) and GB on EA (0.134) indicate their meaningful yet lesser impacts. Smaller effect sizes for other paths suggest weaker predictive power. Overall, the analysis underscores the importance of environmental awareness in influencing consumer behavior, while green branding and advertising also play significant but secondary roles.

Table 4.7 Outer Loading

	Outer loadings (standardized)
CB1 <- CB	0.821
CB2 <- CB	0.819
CB3 <- CB	0.732
CB4 <- CB	0.665
CB5 <- CB	0.638

0.752
0.808
0.839
0.785
0.772
0.470
0.467
0.913
0.949
0.512
0.588
0.788
0.846
0.889
0.832
0.810
0.894
0.627
0.631
0.667

# 4.2.2 Construct Reliability and Validity

The analysis of construct reliability and validity for the structural model reveals strong internal consistency and satisfactory convergent validity across the constructs. Cronbach's alpha values, both standardized and unstandardized, are above the commonly accepted threshold of 0.70 for all constructs, indicating good internal consistency. Specifically, consumer behavior (CB) has a Cronbach's alpha of 0.895 (standardized) and 0.894 (unstandardized), environmental awareness (EA) is at 0.899 and 0.900, green advertising (GA) at 0.840 for both, green branding (GB) at 0.892 and 0.891, and green packaging (GP) at 0.854 and 0.853. Composite reliability (rho\_c) further supports these findings, with all values exceeding 0.70, demonstrating reliable measurement

models: CB (0.852), EA (0.894), GA (0.811), GB (0.893), and GP (0.852). The average variance extracted (AVE) values for EA (0.626) and GB (0.633) surpass the 0.50 threshold, indicating good convergent validity. However, GA (0.487) and GP (0.538) show slightly lower AVE, suggesting moderate convergent validity, while CB's AVE (0.546) is adequate. Overall, the constructs exhibit reliable and valid measurement properties, though there may be a need for further refinement in green advertising to enhance convergent validity.

Table 4.8 Construct Reliability and Validity

	Cronbach's	Cronbach's	Composite	
	alpha	alpha	reliability	Average variance
	(standardized)	(unstandardized)	(rho_c)	extracted (AVE)
СВ	0.895	0.894	0.852	0.546
EA	0.899	0.900	0.894	0.626
GA	0.840	0.840	0.811	0.487
GB	0.892	0.891	0.893	0.633
GP	0.854	0.853	0.852	0.538

### 4.2.3 Discriminant Validity (Heterotrait-monotrait ratio (HTMT))

The discriminant validity analysis using the Heterotrait-Monotrait ratio (HTMT) indicates that most constructs in the model are distinct from one another, with HTMT values below the recommended threshold of 0.90. Specifically, the HTMT value between consumer behavior (CB) and environmental awareness (EA) is 0.887, which is slightly below the threshold, suggesting adequate discriminant validity. The HTMT values between CB and green advertising (GA) at 0.806, CB and green branding (GB) at 0.770, and CB and green packaging (GP) at 0.750 all indicate good discriminant validity as they are well below 0.90. Additionally, the HTMT values between EA and GA (0.768), EA and GB (0.801), and EA and GP (0.805) confirm good discriminant validity for these pairs. However, the HTMT value between GA and green packaging (GP) is 1.006, which exceeds the threshold, indicating a potential issue with discriminant validity between these two constructs. This suggests that while most constructs in the model are distinct, there is a notable

overlap between GA and GP, which may require further investigation and potential refinement of the measurement items to ensure clear distinction.

Table 4.9 Discriminant Validity

	СВ	EA	GA	GB	GP
СВ					
EA	0.887				
GA	0.806	0.768			
GB	0.770	0.801	0.893		
GP	0.750	0.805	1.006	0.898	

# 4.2.4 R Square

The R-square values indicate the proportion of variance in the dependent constructs explained by their predictors in the model. For consumer behavior (CB), the R-square value is 0.873, which means that 87.3% of the variance in CB is explained by the predictors like environmental awareness and other factors related to green initiatives. This high R-square value suggests that the model has a strong explanatory power for consumer behavior, indicating that the constructs of green branding, green advertising, and green packaging, along with environmental awareness, are significant predictors of consumer behavior.

For environmental awareness (EA), the R-square value is 0.644, indicating that 64.4% of the variance in EA is explained by its predictors (such as green branding, green advertising, and green packaging). This value suggests that while the model explains a substantial portion of the variance in environmental awareness, there is still room for other factors not included in the model that might influence EA.

Overall, the high R-square value for CB highlights the effectiveness of the model in predicting consumer behavior, while the substantial R-square for EA underscores the importance of the predictors in explaining environmental awareness. However, it also suggests that additional variables could be explored to further enhance the explanatory power for EA.

Table 4.10 R-square

	R-square
СВ	0.873
EA	0.644

#### 4.2.5 Path Coefficient

The structural model analysis reveals significant insights into the relationships between environmental awareness (EA), green advertising (GA), green branding (GB), green packaging (GP), and consumer behavior (CB). The path from environmental awareness to consumer behavior (EA -> CB) is exceptionally strong, with a parameter estimate of 0.919, a standard error of 0.046, a T value of 20.092, and a P value of 0.000. This indicates that increased environmental awareness significantly enhances consumer behavior towards green products. Similarly, the influence of green advertising on consumer behavior (GA -> CB) is highly significant, with a parameter estimate of 0.912, a standard error of 0.076, a T value of 12.052, and a P value of 0.000, underscoring its substantial impact.

However, the path from green advertising to environmental awareness (GA -> EA) shows a negative parameter estimate of -0.283 but remains significant (T value of 4.408, P value of 0.000), suggesting a complex relationship where certain aspects of green advertising might negatively influence environmental awareness. Green branding positively impacts environmental awareness (GB -> EA), with a parameter estimate of 0.685, a standard error of 0.058, a T value of 11.882, and a P value of 0.000, indicating that strong green branding enhances environmental awareness.

The effect of green packaging on consumer behavior (GP -> CB) is negative, with a parameter estimate of -0.363, a standard error of 0.040, a T value of 9.185, and a P value of 0.000, suggesting that current green packaging strategies might not be perceived positively by consumers. Conversely, green packaging positively influences environmental awareness (GP -> EA), with a parameter estimate of 0.423, a standard error of 0.040, a T value of 10.504, and a P value of 0.000, indicating its role in boosting environmental awareness. Overall, the analysis underscores the complexity and varying impacts of green marketing strategies on consumer behavior and environmental awareness.

Table 4.11 Path Coefficient

	Parameter			
	estimates	Standard errors	T values	P values
EA -> CB	0.919	0.046	20.092	0.000
GA -> CB	0.912	0.076	12.052	0.000
GA -> EA	-0.283	0.064	4.408	0.000
GB -> EA	0.685	0.058	11.882	0.000
GP -> CB	-0.363	0.040	9.185	0.000
GP -> EA	0.423	0.040	10.504	0.000

# Chapter 5

# **Discussion and Conclusion**

### 5.1 Discussion

The study was aimed to research on the impact of green branding, green packaging and green advertising on consumer behavior with mediating role of environmental awareness. The objectives were studied in detail, ten hypotheses were proposed, and literature support has been taken to support these hypotheses. The data was collected from middle managers in restaurants by questionnaire. This study provides a comprehensive overview of how these variables interact and influence one another, offering valuable implications for businesses and policymakers aiming to foster environmentally responsible consumption patterns.

Demographically, the majority of respondents were young adults aged 18-25, primarily male, with a diverse range of educational backgrounds and work experiences. This demographic distribution indicates a significant interest and engagement in green marketing among younger consumers, suggesting a generational shift towards environmental consciousness. The high engagement from this demographic highlights the importance of targeting young adults in green marketing campaigns, as they are likely to be more receptive to environmentally friendly messages and practices. Descriptive analysis shows that overall perceptions of green branding, advertising, and packaging are generally positive, although there is some variability in specific items, highlighting areas for potential improvement. Green advertising and packaging, in particular, received varied responses, suggesting the need for more consistent and effective strategies in these areas. For instance, while green branding generally evokes positive responses, green packaging requires improvements in design and clarity to enhance its appeal and effectiveness. Similarly, green advertising needs to be more targeted and transparent to better communicate the environmental benefits of products.

Correlation analysis revealed strong positive correlations between all the constructs, indicating that effective green branding, packaging, and advertising are crucial for enhancing environmental awareness and influencing consumer behavior. Environmental awareness emerged as the most

influential factor driving consumer behavior, underscoring the importance of educational initiatives in green marketing strategies. This finding suggests that companies should invest in campaigns that not only promote their green products but also educate consumers about environmental issues and the impact of their consumption choices.

The measurement model demonstrated high reliability and validity, with most outer loadings meeting or exceeding acceptable thresholds, confirming the robustness of the measurement model. Construct reliability and validity analyses showed strong internal consistency and good convergent validity for all constructs, except for green advertising, which requires further refinement. This indicates that while the overall model is sound, the components of green advertising need to be revisited to ensure they are accurately capturing the intended constructs. Structural model analysis revealed that the predictors explain a substantial proportion of variance in consumer behavior and environmental awareness. Environmental awareness has a large effect size on consumer behavior, highlighting its critical role in driving sustainable consumption practices. This suggests that efforts to increase environmental awareness can significantly influence consumers' purchasing decisions.

These findings have several practical implications. Businesses should adopt an integrated approach to green marketing, ensuring consistency and coherence across branding, packaging, and advertising efforts to maximize their impact on consumer behavior. Given its significant influence, enhancing environmental awareness should be a key focus of marketing strategies. This can be achieved through educational campaigns and transparent communication about the environmental benefits of green products.

Green advertising needs further refinement to improve its effectiveness and consistency. Marketers should focus on creating compelling, informative, and credible advertisements that resonate with environmentally conscious consumers. This could involve using clear, evidence-based claims about the environmental benefits of products, engaging visuals that highlight sustainability features, and endorsements from trusted environmental organizations to build credibility. Finally, green packaging should be designed to not only be environmentally friendly but also to communicate its green attributes effectively. Clear labeling, attractive design, and informative content about the environmental benefits and disposal instructions can help consumers make informed choices and reinforce their commitment to sustainability.

The study highlights the importance of a holistic approach to green marketing, where branding, advertising, and packaging work synergistically to enhance environmental awareness and influence consumer behavior. By focusing on these areas and continuously refining their strategies, businesses can play an important role in promoting sustainable consumption and contributing to environmental conservation.

#### 5.2 Conclusion

This study investigates the impact of green branding, packaging, and advertising on consumer behavior within the Pakistani restaurant industry. It underscores the interconnectedness of these elements and their collective influence on environmental awareness and consumer choices. The findings reveal a positive association between robust green branding and favorable consumer behavior, indicating that environmentally conscious branding strategies significantly shape purchasing decisions.

Furthermore, the study highlights the need for refinement in green packaging and advertising approaches, despite generally positive perceptions. While green branding evokes favorable responses, there is room for improvement in packaging design and advertising messaging clarity to enhance their effectiveness in communicating environmental benefits. Notably, the demographic analysis reveals a significant interest in green marketing among young adults aged 18 -25, suggesting a promising shift towards environmental consciousness among this demographic. Correlation analysis demonstrates strong positive relationships between all studied constructs, emphasizing the importance of green marketing strategies.

In conclusion, the study advocates for an incorporated approach to green marketing, emphasizing the synergy between branding, packaging, and advertising efforts. By prioritizing environmental awareness and refining marketing strategies to resonate with consumers, businesses can play a pivotal role in fostering sustainable consumption practices and contributing to environmental conservation in the restaurant industry and beyond.

### 5.3 Recommendations

Based on the findings of this study, several important recommendations can be provided to businesses and policymakers to improve the effectiveness of green marketing strategies and encourage sustainable consumer behavior:

- Businesses should prioritize educational campaigns that inform consumers about environmental issues and the impact of their consumption choices. This could involve creating content that explains the benefits of green products, the importance of sustainability, and practical steps consumers can take to reduce their environmental footprint.
- Ensure consistency and coherence across all green marketing elements. Green branding should clearly reflect the company's commitment to sustainability, and this message should be reinforced through all advertising and packaging efforts.
- Focus on creating compelling, informative, and credible advertisements that
  highlight the environmental benefits of products. Use clear, evidence-based claims
  to build trust and credibility with consumers.
- Design packaging that is not only environmentally friendly but also effectively communicates its green attributes. Use clear labeling, attractive design, and informative content to help consumers understand the environmental advantages.
- Given the significant engagement from younger demographics, tailor green marketing campaigns to appeal to young adults, who are more likely to be environmentally conscious and receptive to green products.
- Continuously invest in research to improve the sustainability of products and packaging.
- Collaborate with environmental organizations, NGOs, and other stakeholders to enhance the credibility of green marketing efforts. Partnerships can provide valuable endorsements and amplify the reach and impact of sustainability campaigns.

By adopting these recommendations, businesses can enhance the effectiveness of their green marketing strategies, promote greater environmental awareness, and encourage more sustainable consumer behavior. This integrated approach not only benefits the environment but also sets companies as leaders.

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# Appendix

# Questionnaire

Demographics
Q1. Gender
☐ Male ☐ Female
Q2. Please indicate your age-group
□ 18-25 □ 26-35 □ 36-45 □ 46-55 □ Above 55 years
Q3. Please indicate your level of education
☐ Matriculation ☐ Intermediate ☐ Graduation ☐ Post Graduation
Q4. Please indicate your level of experience
□ 0-2 years □ 3-5 years □ 6-8 years □9-11 years □Above 11 years
O5 What is the name of your restaurant?

Sr		1	2	3	4	5
No		Strongly	Disagree	Neural	Agree	Strongly
		Disagree				Agree
	Green Branding					
1	I can quickly recall the green image of green					
	brands					
2	Green brands are safe for the environment					
3	Green brands provide better quality than other					
	brands					
4	Green brands use renewable sources of energy					
5	Green brands help us saving the environment					
	Green Packaging					
1	Packaging made from green material (i.e: recycle					
	material, biodegradable material) is also good as					

	plastic packaging				
2	Packaging made from eco-friendly material is				
	solid as plastic one				
3	After using original product, I reuse green				
	packaging many times				
4	Packaging made using minimal material is lack				
	of ability to keep product in the best quality.				
5	I will purchase product that has packaging made				
	from material safe for human health				
	Green Advertising				
1	The contents of environmental advertisements				
	are of little relevance to daily life				
2	The advertiser of the advertised product does not				
	bear an ecofriendly image				
3	I would definitely intend to buy those products				
	that are environmentally friendly				
4	I like those advertisements that contain				
	information regarding the environmentally				
	friendly products				
5	The alleged eco-friendliness of advertised				
	product does not match with the respondent's				
	previous consumption experience				
	<b>Environmental Awareness</b>		L	I.	
1	Green products provide higher quality than				
	regular ones with the exact same characteristics				
2	I have more knowledge about recycling then an				
	average person				
3	I know where I can find products that create less				
	wastage				
4	I have knowledge about the sustainability				
		<u> </u>	l	<u> </u>	l

	symbols used on product packages
5	I am knowledgeable about environmental and social issues
	Consumer Behavior
1	I try to buy products that can be recycled
2	When there is a choice, I choose the product that cause the least pollution
3	I avoid buying products that have excessive packaging
4	I have switched products/brands for environmental reasons
5	Whenever possible, I buy products packages in reusable containers

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