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The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry

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DECLARATION

I undersigned name: **RAMA Mohammad Alzu'bi,** date of birth: 02/04/1995, declare under penalty of perjury and certify with my signature that the dissertation I submitted to obtain a doctoral (Ph.D.) degree is entirely my work.

Furthermore, I declare the following:

- I examined the Code of the Doctoral School of Management and Business and I acknowledge the points laid down in the code as mandatory.
- I handled the technical literature sources used in my dissertation fairly and I conformed to the provisions and stipulations related to the dissertation.
- I indicated the source of other authors' unpublished thoughts and data in the references section completely and correctly in consideration of the prevailing copyright protection rules.
- No dissertation which is fully or partly identical to the present dissertation was submitted to any other university or doctoral school to obtain a Ph.D. degree.

Debrecen, 30/03/2026

Rama Mohammad Alzu'bi

Signature

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Table of Contents

List of Tables

List of Figures

List of Abbreviations:

GM	Green Marketing
CV	Consumption Values
GPB	Green Purchase Behavior
TPB	The Theory of Planned Behavior
TCV	The Theory of Consumption Values
GCB	Green consumption behavior
SCB	Sustainable consumption behavior
GDP	Gross Domestic Product
JOD	The Jordanian Dinar
USD	The United States Dollar
ISO	International Organization for Standardization
JQM	Jordan Quality Marks
HACCP	Hazard Analysis and Critical Control Points
V1	General Strategy
V2	Implementation and Practices
V3	Impact and Performance
V4	Challenges and Barriers
V5	Future Directions
V6	Collaboration and Industry Perspective
PLS-SEM	Partial Least Squares Structural Equation Modeling
NMF	Non-Negative Matrix Factorization
MCA	Multiple Correspondence Analysis
CR	Composite Reliability
AVE	Average Variance Extracted
VIF	Variance Inflation Factors
α	Cronbach's Alpha
B	Path Coefficient (Beta)
SD	Standard Deviation

T	T-value (T-statistic)
P	P-value
R^2	Coefficient of Determination

1. General framework

The Chapter provides an overview of the topics of the current research. Then it describes the problem that will be addressed, the research its objectives and questions guiding the investigation, the importance of the study. Finally, the dissertation structure.

1.1 Introduction

Global warming has been universally accepted as posing the greatest environmental threat to mankind in the current century. The hotter temperatures helped fuel a slew of natural disasters as the world finally confronted the realities of climate change (Borunda, 2020; Sharma & Gandhi, 2016). Nowadays, costumers start becoming more aware about environmental problems. On global scale, there has been a 71% increase in online searches for sustainable items over the previous five years (Alisat & Riemer, 2015). As individuals' environmental consciousness grows, they actively search for eco-friendly products. The growing preoccupation about the sustainability of the natural environment is forcing firms to start showing concern towards the environment through green practices. Accordingly, adjusting marketing programs to achieve ecological sustainability is one way that companies can work toward sustainable development (Capatina & Stoenescu, 2015; Chandel et al., 2023). Therefore, a new concept has been used; green marketing (GM). In the past, the concept of green marketing was emphasized mainly on packaging and labelling of products and incentive strategies, but now the environment is an increasingly important issue for marketing, as it helps businesses to try to identify safe and environmentally friendly ways to conduct their day-to-day operations (Martins, 2022). Awareness about the negative impact of human activities on the environment raised the importance of starting to take action especially in consumer behavior. In the recent years, the notion of Green purchase behavior (GPB) has received significant research attention because of its impact on the environment (Jaini et al., 2020). Therefore, there is a need to have a paradigm shift from conventional purchase behavior to green purchase behavior to reduce the negative impact on the environment (Quoquab & Mohammad, 2017; 2019). To have more understanding about the nature of customer's decision making and behavior; it's important to start looking closely at the consumption values (CV). The influencing of customer decisions and behavior through green marketing strategies determines the success of the marketing initiative

(Papadas et al., 2017). However, even though the environmental issues are well-known globally, not all consumers exhibit green purchase behavior in their day-to-day activities (Joshi & Rahman, 2016; Quoquab & Mohamad, 2019). And, studies found that a positive attitude toward green product purchases does not lead to green purchase behavior all the time (Amin & Turun, 2021). Though most consumers hold positive intentions toward green product, but some of them still refuse to purchase it, so adding the consumption values as a mediator is an important issue to consider.

Over the past decades, the food market has grown significantly across the globe; as it should has a safer processes and not using synthetic inputs that impact the health and environment negatively (Tan et al., 2022). This is due to the growth of customer awareness of the environmental impact of food distribution and manufacturing, as their attitudes and behaviors around food production have shifted. However, an important aspect that is crucial for the success of any organization, especially in the food industry, given the current competitive market is focusing on customer satisfaction. So, to maintain a balanced degree of satisfied consumers, companies must prioritize meeting and surpassing customer expectations due to the presence of discerning consumers who highly value quality, taste, and above all protecting the environment. Additionally, there is a significant amount of information to be gained regarding the precise effects of environmentally-friendly activities on the environment, in particular within Jordanian companies (Rahahleh, et al. 2020). Thus, the main focus is on the food industry sector in Jordan.

Likewise, in order to enhance the comprehension about the behavioral intentions, changing behavior in an environmental context, and understanding consumer behavior in the selection of products and services, three highly influential psychology theories are introduced to investigates the internal and external elements that encourage Green Purchase Behavior (GPB). One is the Theory of Planned Behavior by Ajzen, (1991), the second is Stimulus-Organism-Response model (SOR) by Mehrabian and Russell (1974), and the other is the Theory of Consumption Values by Sheth et al. (1991).

1.2 Statement of problem and research gap

The continuous alarm of climatic situation and environmental state has created an urgent need to give a new direction to economic activities, especially toward sustainable development (Troudi &

Bouyoucef, 2020). Environmental problems, including Climate changes, the depletion of natural resources and environmental pollution are results of unsustainable degree of consumption globally. Awareness of environmental concerns has risen, and many individuals are willing to support companies that are developing and launching greener products to reduce their environmental impact.

The topic of green marketing has gathered a lot of attention in the past few years, as it had carved a niche for itself as a determining factor for consumer buying behavior. Hence, the need to delve deeper for the understanding is apparent when it comes to understanding consumer buying behavior, and the relationship between green marketing and consumer green behavior has been observed on the low side (Ali & Salhab, 2025), and the purchase decisions of green consumers are found to be the central theme in the present state of research on green consumer behavior. Subsequently, the phenomenon of green consumer behavior has been developed as a new model of marketing discipline of both scholars and marketers in the range of recent consumer studies. Therefore, more studies are needed (Vu et al., 2021). Although the environmental issues are well-known globally, not all consumers exhibit green purchase behavior in their day-to-day activities (Joshi and Rahman, 2016; Quoquab and Mohamad, 2019). Studies found that a positive attitude toward green product purchases does not lead to green purchase behavior all the time (Jaini et al., 2020). It can be explained as: though most consumers hold positive intentions toward green product purchases, but some of them still refuse to purchase it, so adding the consumption values as a mediator is an important issue to consider. For instance, in food and food material productions, the green production process can be conducted by minimizing environmental impacts, and the process should be in a sustainable manner (Martins, 2022). And focusing on the food sector is important; because the production of food should be carried out in way to provide the necessary quantities, at the right level of quality products, and to comply with basic ecological requirements (Ruscheva, 2019). Finally, determining what are the identification regarding the use of green concept in the Jordanian food industry, is an important issue to consider; as it can help pinpoint specific areas that need to be improved.

This research dose not only focuses on the ecological concern of marketing that may influence the green purchase behavior, but also identifies the influence of consumption values on customer's green purchase behavior.

Considering this, the present research attempts to shed some light the impact of green marketing on green consumer behavior and also the influence of consumption values as a mediator in the food industry sector.

Research Gap and Contribution

While previous research, has extensively examined green marketing and green purchase behavior, several important gaps remain. First, much of the existing literature has concentrated on industrialized markets, paying very little attention to emerging economies like Jordan, where market and institutional dynamics are very different (e.g., Paul, 2020; Taufique et al., 2021). Second, prior research has frequently examined green marketing practices or consumer behavior in isolation, without sufficiently integrate firm-level green strategies with consumer consumption values (Dahlquist, 2021). Third, a lot of research mostly uses single quantitative approaches, which limits deeper insight into how businesses and consumers interpret green marketing practices. Furthermore, despite its resource-intensive character, the food industry has seen relatively little sector-specific attention in research on green marketing (Esmaelnezhad, 2023).
This dissertation addresses these limitations by adopting a mixed-methods approach that integrates in-depth interviews with Jordanian food companies, consumer focus groups, and a quantitative SEM-based analysis to examine how green marketing practices shape consumption values and, in turn, green purchase behavior within the Jordanian food industry.

1.3 Research Objectives

This research aims to identify the relationship between Green Marketing (GM), Consumption Values (CV) and Green Purchase Behavior (GPB) in the Jordanian food industry sector. In order to do so, the following sub- objectives had been identified:

- Study the relationship between Green Marketing and Consumption Values.
- Study the relationship between Consumption Values and Green Purchase Behavior.
- Study the relationship between Green Marketing and Green Purchase Behavior.
- Identify the use of Green concept in the Jordanian food industry.
- Recommend some practical suggestions to related parties in the food industry.

1.4 Research Questions

The research aim to address the following research questions:

1. What is the influence of green marketing on green purchase behavior?
2. How do consumption values mediate the relationship between green marketing and green purchase behavior?
3. How do consumption values mediate the relationship between green marketing strategies and green purchasing behavior among consumers?

1.5 Research Importance

The contribution of this study is in investigating the relationship between Green Marketing, Consumption Values and Green Purchase Behavior, and identifying the use of green concepts in the Jordanian food industry sector.

- **The practical importance:** Is to suggest a number of recommendations to increase the environmental awareness about the environmental issues and green practices impact.
- **The theoretical importance:** due to the limited number of studies about the GM, CV, GPB concepts, and identifying the use of green concepts in the food industry in Jordan, so this study participates in filling the literature gap.

1.6 The Dissertation Structure

The present research will divide into five chapters. ***First chapter,*** with the "General Framework", provides an overview of the key topics addressed in the current research. It begins by presenting the background and context of the study, followed by a detailed description of the research problem that the study seeks to address. The chapter then outlines the research aim, objectives, and questions that guide the investigation, alongside a discussion of the study's significance from both theoretical and practical perspectives. Finally, it concludes with an overview of the dissertation structure, highlighting how each chapter contributes to achieving the overall research objectives. ***Second Chapter***, with "Literature Review and Conceptual Framework", presents the theoretical and conceptual foundations of the study. It begins by introducing the Theory of Planned Behavior (TPB), Theory of Consumption Values (TCV) and Stimulus–Organism–Response (SOR) model

which together guide the understanding of consumer behavior and the mediating role of consumption values. It then defines the concept of ”green” in business and discusses the key constructs of the study, Green Marketing (GM), Consumption Values (CV), and Green Purchase Behavior (GPB), explaining their interrelationships based on previous research. The chapter also examines the direct relationship between GM and GPB and the mediating role of CV in this relationship. Finally, it highlights the Jordanian food manufacturing sector as the study context and presents the conceptual model and hypotheses that will be tested in later chapters. ***Third Chapter,*** with the “Methodology”, the first section presents the research design and conceptual model, clarifying the overall approach used to achieve the study’s objectives. The second section describes the data collection procedures and details how the study variables were operationalized and measured. The third section explains the research materials and analytical techniques, including the study population, sampling methods, and procedures, as well as the statistical tools applied for data analysis. ***Fourth Chapter,*** with the “Research Findings and their Evaluations”, presents the study’s findings derived from three complementary sources: in-depth interviews with managers of Jordanian food companies, focus group discussions with environmentally aware and less aware consumers, and a questionnaire survey. The qualitative results are organized thematically to highlight key patterns, shared perspectives, and differences across participants, while the quantitative analysis empirically tests the hypothesized relationships between green marketing practices, consumption values, and green purchase behavior. Together, these findings offer a comprehensive and multi-dimensional understanding of how green marketing is implemented in Jordan’s food industry and how consumers perceive and respond to it. Finally, it ***Chapter Five***, with Conclusions and Recommendations, provides a final summary of the research findings, summarizing the primary findings derived from both the qualitative and quantitative analyses. It begins with a discussion of the key findings, highlighting how these results align with the theoretical framework, research objectives, and hypotheses, and integrates insights from all three research methods. This is followed by the main conclusions, then the theoretical, managerial, and practical implications that emerged from the study’s results, which demonstrating how the study contributes to the academic understanding and real-world applications. Building on those insights, tailored recommendations, are provided for food companies and managers, policy makers and regulatory authorities, and marketers and consumer education initiatives. After this, it outlines the limitations. Finally, a dedicated section on novel findings and future research directions

emphasizes the study's originality, contribution and identifies opportunities for further scholarly exploration. The chapter conclude with a comprehensive summary that integrates insights from all sections, providing an overarching reflection on the dissertation as a whole.

2. Literature Review

This chapter presents the conceptual and theoretical foundations of the study. It begins by introducing the key theoretical frameworks underpinning the research, namely the Theory of Planned Behavior (TPB), the Theory of Consumption Values (TCV), and the Stimulus-Organism-Response (SOR) model, and explains their relevance to understanding green purchase behavior. The chapter then discusses the concept of "green" within a business context and defines the core constructs of the study: green marketing (GM), consumption values (CV), and green purchase behavior (GPB). Subsequently, the relationships between green marketing and green purchase behavior are examined, with particular emphasis on the mediating role of consumption values. The chapter also contextualizes the discussion within the Jordanian food manufacturing sector. Finally, the conceptual research model and the study hypotheses are presented.

2.1 Theoretical Framework

2.1.1 The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) has gained significant prominence as a widely accepted socio-psychological framework for analyzing behavioral intentions across several research domains (Savari et al., 2023), particularly in relation to behavior change in environmental contexts. Recognizing the cognitive-emotional and behavioral components of decision-making is important for improving the effectiveness of preventive and sustainability-oriented actions (Jalilian et al., 2020). TPB was initially formulated by Ajzen (1991) as an extension of the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Ates, 2020; Liu et al., 2022). Although TPB is often applied for prediction, its broader value lies in explaining how individuals form intentions through complex cognitive processes (Joo et al., 2020).

According to Ajzen (2002), human behavior is shaped by behavioral, normative, and control beliefs, which together form the basis for individuals' evaluations and intentions. In TPB, behavior is primarily driven by behavioral intention, which is determined by three key factors: attitude, subjective norm, and perceived behavioral control (Ajzen, 2020; Sussman & Gifford, 2019). These factors influence intention and, through intention, the likelihood of performing the behavior.

Figure 1 illustrates the relationships between attitude, subjective norm, and perceived behavioral control, and how these determinants influence behavioral intention and behavior within the TPB framework (Ajzen, 1991).

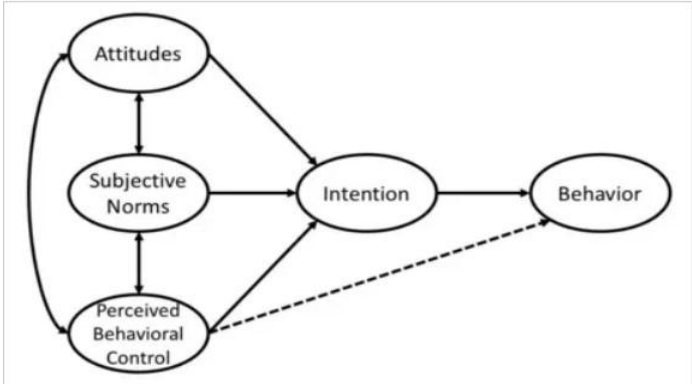


Figure 1: The Theory of Planned Behavior Model

Source: Ajzen (1991, p. 179-211)

Regarding the three determinants, attitude refers to an individual's evaluation of the behavior as positive or negative (Singh et al., 2018; Gibson et al., 2021), and is shaped by beliefs about expected outcomes and their desirability (Tseng et al., 2022). Subjective norm reflects perceived social pressure (e.g., approval or disapproval from family or peers) that influences intention (Rollon et al., 2020). Perceived behavioral control refers to the perceived ease or difficulty of performing the behavior (Demirel & Ciftc, 2020). TPB has been widely applied in environmental research to explain the determinants of decision-making and pro-environmental behavior (Si et al., 2019; Knauder & Koschmieder, 2019).

In the context of environmentally friendly conduct, attitude reflects how individuals evaluate sustainable actions and their perceived environmental benefits. Subjective norm refers to how people in the individual's social environment view and support sustainable behavior, while perceived behavioral control reflects whether individuals perceive sustainable actions as easy or difficult to perform within their daily routines. When sustainable behavior is perceived as beneficial, socially supported, and feasible, individuals are more likely to adopt environmentally friendly actions; when it is perceived as difficult, adoption is less likely.

Several recent studies on environmental and conservation behaviors have utilized TPB to explain why individuals adopt, or fail to adopt sustainable actions within broader social and organizational contexts (Yuriev et al., 2022).

In this study, TPB provides a theoretical foundation for understanding green purchase behavior (GPB) as an intention-driven outcome. The theory supports the logic that consumers' attitudes toward green products, perceived social expectations, and perceived behavioral control can shape the likelihood of engaging in green purchasing. Accordingly, TPB helps explain the proposed pathways through which green marketing influences GPB within the research model (Ajzen, 2020).

2.1.2 The Theory of Consumption Values (TCV)

Consumption patterns are influenced by a range of factors, including persuasion, cost-effectiveness, personal habits, health considerations, and social and institutional norms (Biswas, 2017). The Theory of Consumption Values (TCV), proposed by Sheth et al. (1991), explains consumer purchase decisions by emphasizing the role of perceived value in shaping product choice, brand selection, and consumption behavior. According to this theory, consumer decision-making is influenced by five distinct consumption values: functional, emotional, social, epistemic, and conditional values (Kaur et al., 2021).

The concept of perceived value holds a central role in consumer behavior research, as it reflects consumers' overall evaluation of the benefits and sacrifices associated with a purchase decision. This evaluation is shaped by consumers' purchasing experiences and interactions with products, brands, and sellers, and represents a comparison between perceived advantages and disadvantages (Lin et al., 2020).

According to Ali et al. (2019), the Theory of Consumption Values is based on three key principles: (1) consumer behavior is influenced by multiple consumption values, (2) the relative importance of each value varies depending on the decision-making context, and (3) each value operates independently. Consistent with this view, Sheth et al. (1991) emphasize that consumer choice is shaped by functional, social, emotional, epistemic, and conditional values. Figure 2 illustrates the five consumption values influencing consumer choice as proposed by Sheth et al. (1991).

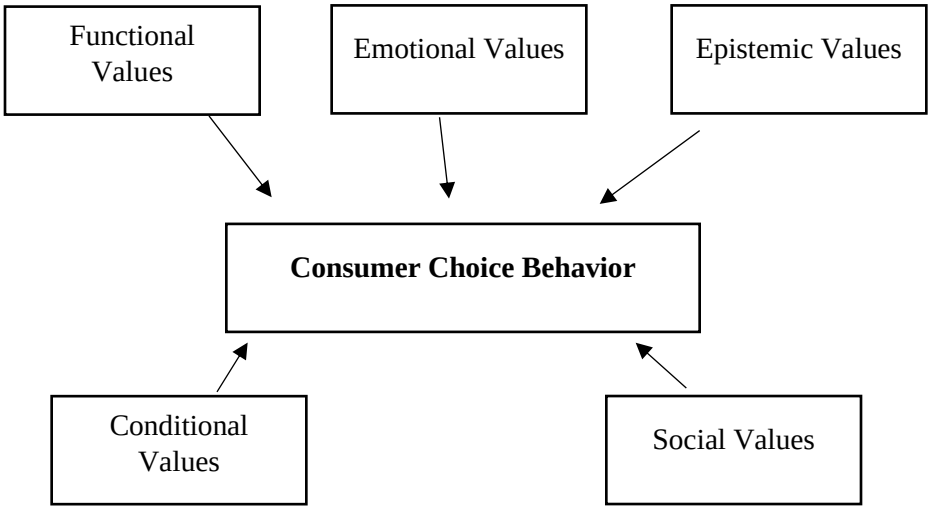


Figure 2: The Five Values Influencing Consumer Choice

Source: Own editing based on Sheth et al. (1991, p. 171-186)

The Theory of Consumption Values clarifies why consumers select or reject specific products or brands by focusing on the values derived from consumption (Rahnama, 2017). As a result, this theory has been widely applied in consumer behavior research to explain customer perceptions, decision-making processes, and consumer segmentation across various product categories (Wang et al., 2018).

More recently, the Theory of Consumption Values has been increasingly applied to examine consumption patterns related to environmentally friendly and sustainable products. Prior studies have used TCV to explain how different consumption values influence consumers' evaluations of green products and their willingness to engage in sustainable consumption (Ali et al., 2019; Biswas, 2017; Lin & Huang, 2012; Rahnama, 2017; Rahnama & Rajabpou, 2017). In this context, TCV provides a useful framework for understanding how consumption values shape environmentally responsible purchasing behavior. Table 1 summarizes the application of the Theory of Consumption Values within the green consumption context.

Table 1: Theory of Consumption Values Used in the Green Context

Authors & Year	Context	Findings
Lin & Huang (2012)	Green products	The findings of this study indicate that customer preference for green products is mostly influenced by psychological advantages, the desire for knowledge, a need for novelty, and special circumstances.
Wen & Noor (2015)	Hybrid car	The intentions to purchase hybrid cars were motivated by their functional value. The goal is not influenced by symbolic, novelty, and emotional values.
Suki & Suki (2015)	Green products	An empirical analysis has determined that functional value price, emotional value, and conditional value do not have any meaningful effects. Social values have a significant influence, mostly through their epistemic and functional value.
Rahnama (2017)	Organic products	The study indicated that epistemic value and health value exert the most significant influence on consumer choosing behavior.
Solaiman et al. (2017)	Environment-friendly and energy efficient electronics	The researchers discovered that the corporate image, functional, social, and conditional values had an impact on the green consumption behavior of environmentally-friendly and energy-efficient technology products.
Wang et al. (2018)	Green products	This study examines the differences between males and females in terms of their green consuming behavior. The findings indicate that females exhibit higher levels of conditional and epistemic value.

Source: Own editing based on the Authors in the Table (2025)

In this study, the Theory of Consumption Values provides the theoretical basis for conceptualizing consumption values as a mediating mechanism between green marketing practices and green purchase behavior. Specifically, TCV supports the assumption that consumers' functional, emotional, social, epistemic, and conditional values influence how green marketing initiatives are perceived and translated into purchasing decisions. Accordingly, this theory underpins the hypothesized mediating role of consumption values within the proposed research model.

2.1.3 Stimulus-Organism-Response Model (SOR)

The Stimulus–Organism–Response (SOR) model, originally proposed by Mehrabian and Russell (1974), provides a foundational framework for explaining how external environmental stimuli influence individuals' internal cognitive and affective states, which in turn lead to behavioral responses. Within this framework, the stimulus (S) represents external cues or marketing inputs, the organism (O) reflects consumers' internal evaluations, including emotions, attitudes, and perceived values, and the response (R) captures the resulting behavioral intention or action. In the context of green marketing, the SOR model has been widely used to explain how green marketing stimuli – such as eco-friendly packaging, green advertising, product labeling, and sustainable pricing – shape consumers' internal evaluations and emotional engagement, ultimately influencing green purchase behavior (Kumar & Ghodeswar, 2015; Lee & Lim, 2020; Wang et al., 2022). Figure 3 illustrates the conceptual framework of the SOR model within the green marketing context

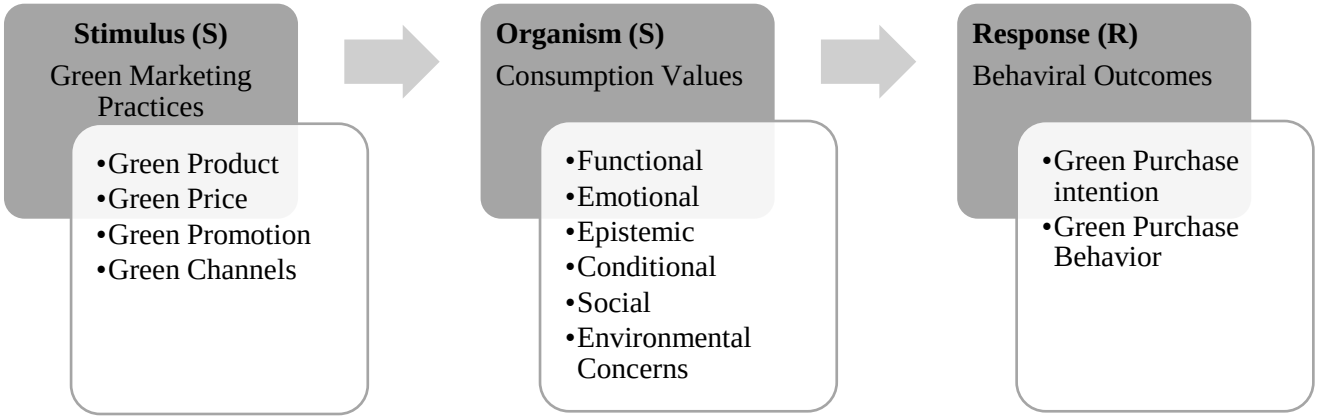


Figure 3: **Conceptual Framework of the SOR Model in Green Marketing Context**

Source: Own editing based on Mehrabian and Russell (1974, p. 8-10)

In this study, the SOR framework is applied to examine how green marketing practices function as external stimuli that influence green purchase behavior as a behavioral response, with consumption values representing the organism component. By integrating the SOR model with the Theory of Planned Behavior (TPB) and the Theory of Consumption Values (TCV), the study captures both the cognitive-behavioral and value-based mechanisms underlying sustainable consumer decision-making in the Jordanian food industry. This theoretical integration enables a

comprehensive understanding of how marketing stimuli, internal value perceptions, and behavioral intentions interact to shape environmentally responsible consumption.

2.2 Green Concept and Sustainability

Nowadays, sustainability is a major topic in business and environmental research, especially in sectors like the food industry that have a big environmental impact. Major environmental challenges, such as including high levels of packaging-related pollution, food waste, greenhouse gas emissions, and intensive water and energy consumption are strongly linked to the production, processing, and distribution of food (Pope et al., 2021; Wani et al., 2024). These challenges are particularly critical in the context of emerging economies, where resource constraints and environmental pressures are more pronounced. Consequently, sustainability in the food industry has drawn more attention, as organizations seek to strike a balance between economic performance with environmental responsibility, and long-term societal well-being (Stefanini & Vignali, 2024; Prasanna et al., 2025).

From an organizational perspective, sustainability refers to adopting strategies that reduce adverse environmental effects while preserving operational efficiency and profitability (Buallay, 2022). Waste reduction initiatives, energy-efficient production techniques, sustainable raw material procurement, eco-friendly packaging, and the incorporation of green marketing methods are a few examples of such practices in the food business. The main causes of environmental deterioration and rising greenhouse gas emissions are still human activity and industrial processes, highlighting the vital role that organizations play in promoting sustainability-focused changes (Mackay et al., 2022; Adams et al., 2023; Prasanna et al., 2025).

In the food industry specifically, sustainability also requires firms to address operational and supply-chain issues that are unique to food production and distribution. These include reducing losses during processing, minimizing waste across the chain, coordinating sustainability efforts among suppliers, manufacturers, distributors, and retailers and improving the environmental efficiency of production lines. Recent food-industry literature shows that sustainable performance in this sector depends not only on internal environmental practices, but also on how effectively sustainability is integrated into production design and supply chain management (Xian et al., 2017; Suksanchananun et al., 2023; Satpathy et al., 2024).

The green concept, which emphasizes environmentally responsible innovation, production, and marketing strategies, arises as a complementary approach to sustainability. Green initiatives are being adopted more and more in the food industry to reduce ecological harm across the product life cycle, from sourcing and manufacture to distribution and consumption (Puspitasari et al., 2025). In this regard, the food industry provides an important context for understanding how sustainability can be translated into practical business activities. Green production line design, more sustainable packaging choices, efficient resource use, and environmentally responsible supply chain coordination are all examples of how food firms can operationalize sustainability principles. This is particularly important because environmental improvement in the food sector often depends on decisions made throughout the entire value chain rather than at a single stage of production (Xian et al., 2017; Suksanchananun et al., 2023).

These initiatives are not only a reflection of regulatory and societal pressures, but also represent strategic reactions to consumers' increased awareness of the environment (Nozari & Nahr, 2021; Irfan, 2024). According to the United Nations (1987), Sustainability is refers to meeting present needs without compromising the ability of future generations to meet their own needs, while encompassing environmental, social, and economic dimensions.. By translating sustainability principles into concrete organizational and market-oriented actions, the green concept operationalizes this definition. Moreover, recent academic work shows that sustainability in the food industry has become an increasingly important research area, with growing attention to themes such as food waste, sustainable supply chains, environmentally responsible production, and green innovation. This growing body of literature reinforces the argument that sustainability in the food sector should be viewed as a strategic and multidimensional issue rather than merely a regulatory or ethical concern (Şimşek et al., 2024).

From a consumer behavior perspective, sustainability is closely linked to the level of environmental awareness among consumers. Customers that care about the environment are more likely to buy green products, reduce food waste, and support firms that practice environmental responsibility because they are aware of the negative effects that food production and consumption have on the environment (Chen, 2019; Wunderlich & Smoller, 2019; Zheng et al., 2023). In contrast, environmentally non-aware consumers might prioritize price, convenience, or habitual buying patterns over the impact on the environment (Demirtas, 2019; Ahmad et al., 2023). This distinction between environmentally aware and non-aware consumers is especially relevant in the

food sector, where daily consumption choices have cumulative and significant environmental consequences.

As a result, green purchase behavior (GPB) has consequently emerged as a central concept in research on sustainability and green marketing. It reflects consumers' willingness to incorporate environmental considerations into their purchasing decisions, particularly in relation to food products that are perceived as environmentally friendly or sustainably produced (Witek & Kuźniar, 2023). In recent years, GPB has increasingly received more scholarly interest; due to its potential to reduce environmental deterioration through responsible consumption patterns (Jaini et al., 2020; Troudi & Bouyoucef, 2020; Rustagi & Prakash, 2022; Sharma et al., 2023). Therefore, it is crucial to understand both consumer-level awareness and organizational sustainability policies in order to explain how green marketing strategies influence consumer purchasing behavior in the food industry.

2.3 Jordanian Food Manufacturing Firms

Food production is conducted with the aim of achieving two objectives: ensuring sufficient quantities of high-quality products and adhering to ecological standards in the processing of raw materials and their outputs. This approach also aims to safeguard the environment for future generations (Ruscheva, 2019). Food processing projects encompass the processing and packaging of many food items, including meat products, fish and shellfish, dairy products, fruits and vegetables, cereals, and beverage manufacture. The process includes the enhancement, conservation, and improvement of product quality, as well as the storage, handling, packaging, and canning. The processing entails the reception and storage of unprocessed or partially processed plant, animal, or other food substances, the transformation of these substances into final products, and the packaging and storage of the finished goods (Kaur et al., 2021). The primary objective of the General Food Law is to guarantee a superior standard of safeguarding human life, animal health and welfare, plant health, and the environment.

Now moving to the situation in Jordan, in 2016, the number of work opportunities increased by a mere 49,000, but the number of individuals seeking employment surged by almost 100,000. (Hundaileh & Fayad, 2019). However, according to Schumache (2017), Jordan's private sector offers prospects for expansion, ingenuity, and job creation. This can be proved by a report of the Strategic Planning and M&E Section in the Ministry of Labor, as the nation boasts over 156,000

officially documented enterprises, with a remarkable 98% of them having a workforce size of less than 20 individuals. These enterprises constitute 40% of Jordan's Gross Domestic Product (GDP) and provide employment to around 60 to 70% of the private sector workforce. On the other hand, according to the Department of statistics (2019), the Jordanian economy is presently encountering several obstacles. These indicators include a negative trade balance, slow business expansion, and a rising unemployment rate. According to the most recent government statistics, the unemployment rate reached 18.6% by the end of 2018. Simultaneously, Jordan's economic growth remains sluggish, with a gross domestic product (GDP) of 2.0% in 2018, failing to generate sufficient employment prospects.

The food industry in Jordan encompasses several sub-sectors, such as meat processing and preservation, dairy product manufacturing, canned goods production, soft drink manufacturing, vegetable oil and animal fat production, bakery product manufacturing, cocoa, chocolate, and sugar confectionery manufacturing, and production of other food products (Hundaileh & Fayad, 2019; Sarker et al., 2022). Based on a report from Mansur & Rashaida, (2022), the food industry is considered one of the most important sectors driving economic development in the Kingdom due to its diverse products and integration with various other economic sectors. Figure 4 showed the growth rates of each food sector (in JOD millions) in 2013-2016.

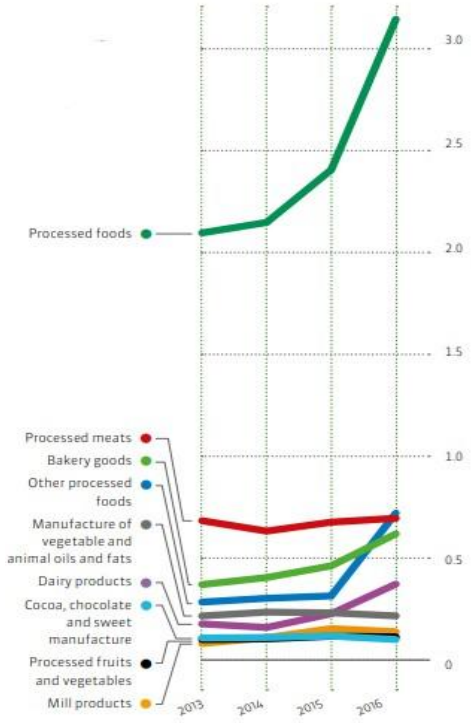


Figure 4: The Growth Rates Food Sector (in JOD millions) in 2013-2016
Source: Hundaileh & Fayad, (2019, p. 36-66.)

Therefore, according to Hundaileh & Fayad (2019), Jordan possesses significant industrial and agricultural production capabilities, which have positioned it as a key player in the local manufacturing sector. Thus, the most significant importance of this sector:

- Having 38,000 employees.
- The sector's exports reached 1.3 billion US dollars.
- The contribution of the sector in the Gross Domestic Product (GDP) is 2.1 billion US dollars.

The sector strictly adheres to worldwide norms and requirements, implementing a majority of international frameworks for food safety. The starting point of growth for this sector begin in 2011, when the food industry accounted for approximately 15 percent of the total value-added of the industrial sectors and employed around 20 percent of the labor force in the industrial sector (Fileccia et al., 2015). As a result, Jordanian exports experienced an impressive 8% growth in 2019 (Weldali, 2020). The Jordanian government is deeply committed to implementing the principles of the green economy through the enactment of several regulatory measures, such as the green investment law, renewable energy law, and other legislation pertaining to the green economy (Diab

et al., 2015). In 2019, the overall value of exports amounted to JD530 million, with the Jordanian food industry sector holding a 52 percent share of the local market. This sector plays a crucial role in ensuring food security and driving economic growth, as stated by a spokesperson from the Jordan Chamber of Industry (Weldali, 2020). Hence, a total of 60,000 employees, predominantly Jordanian nationals, are employed in 2,657 food manufacturing establishments across the country. These establishments have produced food products that have contributed to exports worth 558 million dinars in the previous year, accounting for approximately 6% of the gross domestic product (GDP) (Rabboh et al., 2023). Thus, Jordan exhibits self-sufficiency in many food commodities, particularly dairy and poultry products. According to Al-Zu'bi et al. (2015), the country's food exports are distributed to global markets, while its imports primarily originate from Europe, the United States, and Arab markets. Figure 5 illustrates an example of one of the biggest sub-sectors of the food industry in Jordan, which is the "Processed Food" exports (in USD thousand and percentage of total exports).

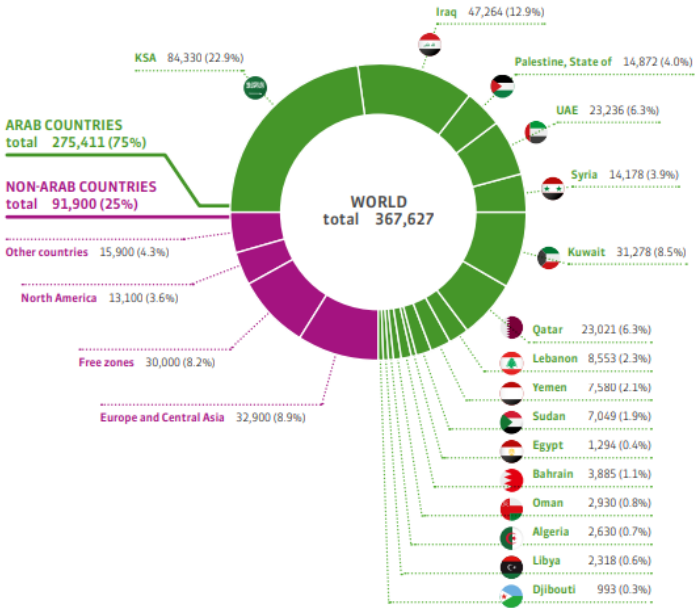


Figure 5: Extracted Data on Processed Food Exports (in USD thousand and percentage of total exports)

Source: Hundaileh & Fayad, (2019, p. 12-27)

Additionally, GM, CV, and GPB are crucial issues for the food industry in general and the Jordanian case specifically. Therefore, studying these aspects in this context is an issue to consider.

The Most Important Achievements of the Jordanian Food Manufacturing Firms:

Implementing the International Standards:

The products are manufactured according to the International standards and specifications including Food Safety Management System ISO22000:2005, Quality Management System ISO9001:2000& Jordan Quality Marks (JQM). They implemented the internationally recognized system (HACCP) which is important for reducing the risk of safety hazards in food, and it covers the entire food production process from raw materials to distribution and consumption. Also, in addition to ISO 22000, 9001 and HACCP2016 certifications, they are committed to heightened transparency by providing more information about how chickens are raised and processed.

Producing and developing products:

Each product is developed through careful laboratory testing, and market research, as for the machines they used an extremely hi-tech which end production not only just focuses on the technological aspects but also on health requirements during the process of production. And they focus on sourcing the finest raw materials and inputs, and controlling their storage under the best possible conditions. Furthermore, final stage vehicles are equipped with safety measures and stacking precautions, and they deal appropriately with their packaging and reducing their carbon emissions and energy use in their production and supply, and some of their products can be recyclable.

2.4 Core Constructs of the Study

2.4.1 Green Marketing

Corporations perceived as the root cause of environmental issues have been obliged to reassess their operational methods due to societal pressure. Due to heightened public consciousness regarding environmental concerns, there is a prevalent tendency among individuals to endorse companies who are dedicated to producing environmentally sustainable products (Chandel & Kumar, 2023). Therefore, international businesses have acknowledged the imperative to

effectively address sustainability concerns, resulting in modifications to their marketing initiatives. According to Kotler (2011), consistent with mainstream marketing theory, the integration of environmental considerations into marketing strategy reflects evolving consumer expectations and long-term value creation. As a result, company managers and owners must incorporate the ecological dimension into their administration. Sustainability encompasses a broad range of practices aimed at safeguarding the environment, including corporate social responsibility, recycling, green manufacturing, waste reduction, green marketing, etc. Thus, a new concept has been used; green marketing (GM). Marketing is the deliberate effort to establish enduring relationships with customers by employing many methods, such as promotional campaigns, pricing tactics, and the development and distribution of products and services. Also, marketing is typically associated with customers, however, a customer's position can be internal as well as external. An external customer refers to an individual or organization that is not part of the firm and consumes the final product (Jančíková & Milichovský, 2019). On the other hand, green marketing (GM) distinguishes itself from traditional marketing by not only addressing customers' wants and desires but also prioritizing environmental sustainability, in contrast to the profit-driven approach of traditional marketing (Alzu'bi & Kontor, 2023). Ideally speaking, concern for a healthy environment is the common point at which traders and clients meet. In the past, green marketing mostly focused on traditional aspects such as labeling, reward tactics, and packaging. Nevertheless, the marketing setting has transformed, and the ecological aspect has been more noteworthy. As it is imperative for businesses to actively seek out secure and ecologically sustainable organizational strategies employed to carry out routine activities (Martins, 2022). Green marketing (GM) has emerged as a strategic response to increasing environmental concerns and evolving consumer expectations regarding sustainability (Troudi & Bouyoucef, 2020; Chandel & Kumar, 2023). As businesses face growing societal and regulatory pressure, marketing strategies have progressively incorporated environmental considerations into product development, pricing, promotion, and distribution activities.Gelderman et al. (2021) and Sutduean et al. (2019) provide a definition of green marketing as a strategic framework for environmental management. It emphasizes the prioritizing of measures that aim to minimize or prevent adverse environmental impacts. The primary objective of this initiative is to improve the effectiveness of product and service distribution by strategically optimizing elements like as planning, location, and pricing. During the process of conducting research on green marketing, researchers may encounter

numerous terms that may seem interchangeable at first, but in reality, they are connected to specific features or specialized areas of study. According to Rahahleh et al. (2020), some of these terms are environmental marketing, ecology marketing, and sustainable marketing. According to Katrandjiev (2016), the ecological evolution of marketing has gone through four stages: 1) Embryo stage (pre-1974), 2) Ecological marketing (1975-1989), 3) Green marketing (1990-2000), 4) Sustainable marketing (post-2000). Table 2 shows a summary of those four stages.

Table 2: The Evaluation of Green Marketing (GM)

Stage	**Influencer**	**Characteristics**	**Significant**	**Consequences**
Embryo Stage (pre-1974)	It's a result of the systematic thinking of some marketing scientists in the late 50s-early70s period. The debate of the ecological factor of marketing activity was initiated in the late 1950s and early 1960s by ***Wroe Alderson.***	By the mid-1970s, it becomes evident that the ecological perspective is a prominent paradigm in marketing and begins to assume a more prominent position in marketing ideology.	This is an initial endeavor to precisely define the concept of marketing system between society and the environment.	Many researchers started to focus on this aspect. Therefore, surveys gained popularity and reached their peak in the late 1960s and early 1970s, when the ecological debate became a prominent concern.
Ecological Marketing (1975-1989)	1. ***Karl Henion and Thomas Kinnear*** published the book "Ecological Marketing" in 1975. This work is among the pioneering efforts in this subject, signifying the emergence of a completely novel direction in marketing development. But, it is worth noting that this work is not the first endeavor to address the correlation between marketing and	1. A notable characteristic of the evolution of the ecological marketing paradigm throughout the investigated time period is its "narrow focus" on specific environmental concerns, such as oil spills, air pollution, oil field depletion, and the detrimental effects of pesticides and herbicides on ecosystems. 2. "Tendency for identifying certain products and companies" that either cause ecological problems or can help solve them. 3. The ecological conception in marketing is shared by a	The works from this period focus on the connection between marketing and other ecological issues. The phrase "ecological marketing" gains recognition and widespread use from the mid-1980s.	1. The development of an ecological emphasis during that period had significant consequences for marketing, mostly resulting in revisions to legal regulations. 2. For the decision-makers in the field of marketing in this period, complying with the stated ecological standards is achieved through the assistance of corporation attorneys and engineers. 3. Companies primarily achieve adaptation to changing ecological standards by implementing enhancements in their manufacturing processes, with the aim of reducing

	environmental issues. 2. ***George Fisk's*** publication titled "Marketing and the Ecological Crisis" was released in the year 1974.	very narrow circle of companies and consumers. 4. Focused on the branches that directly influenced the environment's ecological status (petroleum industry, coal mining, chemical industry etc.)		pollution or, at the very least, preventing its increase. 4. Companies like 3M, Body Shop and others became a standard for ecologically responsible companies.
Green Marketing (1990-2000)	1. Two concrete achievements in the field of green marketing were the publication of two books, both titled 'Green Marketing'. They were authored by ***Ken Peattie*** (1999) in the United Kingdom and ***Jacquelyn Ottman & Books*** (1998) in the United States of America.	1. Embracing a broader international outlook on marketing management that considers crucial aspects such as global warming, climatic changes, ozone layer depletion, and so on. 2. The rise in consumer (and investor) fascination in environmentally-friendly products and services has led to the development of new entrepreneurial ventures such as environmentalism and green investment funds. 3. Unveiling novel aspects of marketing communication that redirect attention towards the environment – Ads should prioritize highlighting product attributes such as "biodegradable contents", "sulfate-free", "nitrate-free", "no preservatives", and other relevant features more often. 4. Heightened customer demand for ethically produced goods, such as eggs from free-range hens and cosmetic products that are cruelty-free. 5. Designing a new type of wrapper from recycled material.	1. The increasing of "green consumers", as they're demanding items that are environmentally pure and produced without pollution. They also show a preference for political parties that prioritize environmental protection and public health. 2. The companies and political parties swiftly establish their position and capitalize on the rise in environmental consciousness. 3. "Marketing thinking" during the green marketing stage changes significantly. As it expands the perimeter of branches and fields in which decisions regarding the environment become important.	1. The entire community becomes aware of the vulnerability of both the environment and humanity following a sequence of ecological disasters like: - The emergence of the ozone layer (1985) - The Chernobyl Disaster (1986). 2. A new trend is emerging among consumers who prioritize environmental sustainability, called "green consumers". 3. Increased significance and frequency of carrying out marketing research dedicated to ecological marketing issues.

Source: Own editing based on Katrandijiev (2016)

The concept of “Ecological Marketing” encompassed any marketing activities that aimed to address environmental concerns and potentially provide solutions to environmental problems (Dangelico & Vocalelli, 2017). On the other hand, “Green Marketing” period, which started in 1990, it’s the external and internal factors that influence and drive an organization’s marketing activities. The main feature of green marketing is “dynamism” which means the constant changes, due to technological advancement, innovations, and changes of customers' behavior. Additionally, according to Katrandijiev (2016), there were five main concepts identified in this period: the concept of sustainable development, the concept of waste-free technologies, the emergence of "green consumers”, the emergence of the concept of eco-performance, and the concept of ecological quality. Another concept related to green marketing is “Sustainable Marketing” by promoting brands, products and services that have social responsibility and commitments to the environment. Thus, it integrates core business functions to ensure that the firms practice what they promote, without affecting the value proposition, and the trust of the customers. According to Wang et al. (2023), it’s a concept that emphasizes the establishment and preservation of enduring relationships with customers, the environment, and society. It entails formulating plans to ensure the sustainable expansion of enterprises while safeguarding the environment from damage. It encompasses strategies such as minimizing waste generation, prioritizing the utilization of renewable resources over non-renewable ones whenever feasible, advocating for eco-friendly products or services to mitigate the environmental consequences resulting from consumer consumption patterns, and so on. Therefore, it’s the systematic management of the entire lifecycle of a product, encompassing planning, implementation, and control. This includes aspects such as product development, pricing, and distribution, with the aim of ensuring strict adherence to predetermined objectives.

Consequently, green marketing (GM) is a marketing concept that revolves around the organization and incorporation of marketing strategies with the aim of positively influencing consumer preferences, as it encourages individuals to actively participate in the acquisition of ecologically sustainable items (Sutduean et al., 2019). Table 3 shows the distinguish Characteristics of Green Marketing.

Table 3: Characteristics of Green Marketing

Intuitive	It is imperative to acknowledge the absence of inclination to alter purchasing patterns. The act of procuring organic or sustainable items presents inherent difficulties that beyond those encountered when obtaining conventional commodities.
Integrative	It is of utmost importance to conduct a comprehensive analysis and integration of the diverse advantages linked to commerce, technology, social impact, marketing and the environment.
Innovative	The concept of innovational aims to promote the purchase of ecologically friendly items, through creative ideas.
Informative	By disseminating knowledge through environmental education and promoting awareness.

Source: Own editing based on Liskova et al. (2016)

However, based on another bibliometric review of GM research conducted by Wang et al. (2023) between 1991 to 2021, it was found that green marketing is an essential trend in industry, with businesses increasingly targeting environmentally conscious consumers, from the past until the present and it will even grow in the future. Furthermore, companies are progressively adopting these practices in response to customer demand and environmental concerns, ensuring their continued growth in the present and future. GM tools, including as eco-labels, eco-brands, and environmental advertisements, facilitate the perception and knowledge of the traits and characteristics of green products. As a result, they guide consumers towards choosing environmentally friendly items. Furthermore, according to Kumar and Ghodeswar (2015), it is crucial to define a significant aspect of GM known as green customers. These individuals are characterized by their awareness of the environmental consequences of their consumption habits and their intention to modify their purchasing and consumption behavior in order to minimize their environmental impact. Nowadays, customers are increasingly willing to pay for environmental attributes such as sustainability, recycling, non-toxicity, and biodegradability. Eco-labels serve the purpose of informing consumers about a product's quality attributes by asserting that the product meets specific standards (Grover & Bansal, 2019).

Furthermore, 4 dimensions are identified to assess the level of Green Marketing (GM):

Green Product

Numerous factors contribute to the characterization of a green product. For instance, durability, recyclability, renewability, low emission, and local manufacture are among the specific attributes that exemplify green products (Sharma & Foropon, 2019).

Green Marketing Channels

According to Rahahleh et al. (2020), the decision of the location and timing of product manufacturing holds considerable sway over customer appeal, just as the choice of where and when to market the product does. Educating the channels of distribution on why it's crucial to integrate the concept of sustainability into their everyday operations is the primary goal of this metric.

Green Promotion

The term pertains to the dissemination and exchange of authentic environmental data to customers who are engaged in the firm’s activities (Rahahleh et al., 2020). Companies require of allocating significant resources towards effectively communicating environmental concerns, which presents a formidable undertaking (Gelderman et al., 2021; Grebmer & Diefenbach, 2020).

Green Price

The determination of prices for environmentally friendly items necessitates the careful consideration of consumers' price sensitivity and their inclination to pay a premium for products that exhibit enhanced environmental values. It is the customers' readiness to pay a premium that can effectively offset the costs associated with the production of eco-friendly products. Dangelico &Vocalelli (2017) assert that there are other factors that might contribute to an increase in product prices, such as elevated manufacturing costs due to stricter regulations or the utilization of higher-priced components to enhance product quality.

In this study, green marketing is conceptualized as a multidimensional construct encompassing green product, green promotion, green pricing, and green distribution practices. Within the proposed research model, green marketing functions as the primary stimulus influencing consumers' internal value perceptions and, ultimately, green purchase behavior. Accordingly, GM serves as the foundational independent variable in examining its direct and indirect effects on consumption values and green purchase behavior in the Jordanian food industry.

2.4.2 Green Purchase Behavior

Today, environmental ethics has emerged as a significant concern for both corporations and consumers. Throughout the middle of 1990s, there has been a noticeable escalation in the degree of environmental and social consciousness among individuals, namely within the consumer demographic. Since that time, significant changes have occurred in consumer buying behavior in relation to environmental considerations (Naz et al., 2020). The recognition of the adverse consequences of human actions on the environment has heightened the significance of initiating proactive measures, particularly in the realm of consumer behavior. Recently, the concept of green purchase behavior (GPB) has attracted increasing research interest in recent years; because of its environmental impact (Jaini et al., 2020). Green purchase behavior (GPB) applies to the procurement of environmentally advantageous products and the calculated avoidance of ecologically damaging products (Quoquab & Mohammad, 2017; Martins, 2022). Although the environmental issues are well-known globally, not all consumers exhibit green purchase behavior in their day-to-day activities (Joshi & Rahman, 2016; Quoquab & Mohamad, 2019). Studies found that a positive attitude toward green product purchases does not lead to green purchase behavior all the time (Jaini et al., 2020). The two most important variables in green consumers' decision-making processes are: essential factors influencing consumers include their environmental obligations, quest for information, self-interest, and dedication to environmental preservation, and external factors that have nothing to do with the product itself, but rather with the customers who buy it (things like pricing, promotion, and quality). On the other hand, marketers engage in green marketing to effectively convey their environmentally-friendly products to consumers. The primary goal of green marketing is to convert consumers into environmentally conscious individuals. Therefore, for a marketer it is important to understand the behavior of the consumers towards green products.

The Green Attitude - Behavior Gap

Prior to moving forward, it is necessary to establish the definitions of 'green consumption behaviour' (GCB) and 'sustainable consumption behaviour' (SCB). While these terms are frequently used interchangeably in the literature, it is possible to differentiate between them (Johnstone & Hooper, 2016). The focus here is on GCB as defining sustainable consumption behavior (SCB) is challenging due to the wide range of definitions and the ever-changing nature of the concept (Dolan, 2002). Moreover, the GCB is narrower as it focus on the product itself and how consumers behave in regard to it, unlike the second which vaster concept. Some scholars use the term "ecological consumption", while others use the term "green consumption". After the analysis and comparison of scholars, "green consumption" and "ecological consumption" are essentially consistent, and there is no essential difference between them (Li, 2020).

Similarly, the OECD (2008) asserts that sustainable development, which encompasses consumption, relies on attaining enduring economic growth that aligns with environmental and social requirements. The sustainability of consumption is evaluated from economic, environmental, and social perspectives. And for this reason, the main focus will be on GCB. Table 4 presents the differences between "Green Consumption Behavior" and "Sustainable Consumption Behaviour".

Table 4: The Differences between "Green Consumption Behavior" and "Sustainable Consumption Behavior"

Criteria	Green consumption behavior (GCB)	Sustainable consumption behavior (SCB)
Definition	Green consumption behavior refers to the actions taken by consumers to safeguard the ecological environment and reduce the adverse effects of their consumption on the environment across the whole lifecycle of products, including purchase, usage, and disposal.	It adheres to consumer health regulations and promotes resource conservation, while also ensuring the well-being of individuals and the environment.
Characteristics	1. It's kind of **prosocial behavior**, which is similar to self-control. For instance, individual's exhibit self-control by resisting the allure of delicious food in order to achieve weight loss goals. 2. It's kind of **environmental behavior**.	1. People's minimum consumption of resources and energy consumption (economic consumption). 2. The waste and pollutants result from the process of consumption is minimum (clean consumption). 3. The result of consumption do not endanger the health of consumers or others (safe consumption). 4. The results of consumption stay away from endangering human offspring demand (sustainable consumption) (Si, 2002)
Pioneers	Many forums discussed this concept, one of the main discussion boards which have provided guidelines to orient national governments are: Stockholm (1972) UN Conference on the Human Environment.	Elkington and Hailes (1987), British scholars, proposed the concept in their book (Green Consumer's Guide).
Significant	1. At the public level: Individuals' tendency to contribute higher taxes and support environmental regulations in order to protect the environment. 2. At individual level: Customers will utilize environmentally-friendly products and	1. Facilitating a shift in the direction of economic growth is essential for attaining sustainable development. 2. It fosters the promotion of balance between humans and the natural environment.

	brands as a means of constructing and expressing their identity to a certain degree.	3. Facilitates the comprehensive fulfillment of human survival and well-being, and advances the unrestricted and holistic progress of individuals, so achieving equitable, rational, and sustainable development of human society.

Source: Own editing based on Li (2020)

In addition, the prevalence of green consumption is on the rise as the educated population is becoming increasingly aware of their duty to protect the natural environment. People are embracing environmentally conscious activities, such as using eco-friendly products, in order to reduce their carbon footprints. Therefore, according to Sharma et al. (2020), there are main influencing factors the affect the GPB of consumers, such as cultural factors, ethical factors, individual factors, political factors and product-related factors. Table 5 include some examples of those factors. Thus, studying consumer intents and behaviors towards green products in emerging economies is crucial since the social, cultural, and economic variables of a society influence green consumerism by altering customers' thoughts and usage of such products.

Table 5: Factors Influencing Consumers Green Purchase Behavior

Factors	**Examples**
Cultural factors	Hofstede's (2001) cultural dimensions: - Uncertainty avoidance, individualism versus collectivism, long-term orientation.
Ethical factors	Ethical factors comprising of: - Personal norms (Munerah et al., 2021; Zhang et al., 2013). - Moral norms (Al-Adamat et al., 2020; Liu et al., 2019).
Individual factors	Consumers' attitudes, motives, behavior, and actions.
Political factors	Individual politics and liberalism have a significant effect on GPB (Larson & Farac, 2019; Leonidou et al., 2015).
Product-related factors	According to Sharma et al. (2023), examples of factors that have a positive impact on GPB are: Information about green products, functional values, conditional values, eco-label, perceived product features and quality, green brand image, epistemic value, green

	advertising, willingness to pay, marketing mix, product price, green products' availability.

Source: Own editing based on the authors in the table (2025)

Thus, to summarize, based from the previous studies about the positive influences of GPB, the focus here is on the "**product-related factors", that includes green marketing (GM) and consumption values (CV) dimensions.**

For the purposes of this research, environmentally conscious consumers refer to individuals who demonstrate awareness of environmental issues and actively incorporate environmental considerations into their purchasing decisions, including the preference for eco-friendly food products. In contrast, environmentally non-conscious consumers are defined as individuals who exhibit limited environmental awareness or do not systematically integrate environmental considerations into their purchase behavior. This distinction is particularly relevant for the qualitative component of the study, where participants were grouped based on their level of environmental awareness and purchasing orientation.

In this study, green purchase behavior represents the key behavioral outcome variable within the proposed research model. It reflects consumers' actual or intended purchasing decisions regarding environmentally friendly food products. Within the SOR framework, GPB constitutes the response component, influenced directly by green marketing practices and indirectly through consumption values.

2.4.3 Consumption Values

Marketers seek to ascertain the factors that appeal to specific consumers in relation to particular products. According to Jamrozy & Lawonk, (2017) marketers participate in "value creation" process, by designing and promoting their items to potential buyers. Consumers assess the perceived worth of a company's products and services, as well as those of its competitors, and then make judgments about what to consume. Value, in economic terms, indicates the utility of a product. Thus, a collection of research studies have examined the multifaceted nature of value, including utilitarian and hedonic values (Holbrook & Hirschman, 1982), the theory of consumer value (Sheth et al., 1991), and the customer value hierarchy (Woodruff, 1997). Table 6 presents the history development of the nature of value. Within marketing and consumer behavior research,

value has been conceptualized through multiple perspectives; however, this study adopts the consumption value framework developed by Sheth et al. (1991), which emphasizes the multidimensional nature of value in shaping consumer choice.

Table 6: The Historical Development of Value

Authors	**Contribution**
Holbrook & Hirschman (1982)	They were the first to introduce the experiential aspects of consumption, which allowed academics to explore intangible and emotional components that influence the act of consuming.
Barbin, Darden, & Griffin (1994)	They have advanced this research regarding utilitarian and hedonic concepts.
Hirschman & Holbrook (1982)	They also assisted marketing research, by recognizing the emotional aspects, regarded as equal as or even more valuable than the functional aspects.
Sheth, Newman, & Gross (1991)	The Theory of Consumption Values was formulated to ascertain the impact of consumption values on customers' purchasing behavior and their specific choices about product type and brand. The researcher's proposed five consumption values that have an impact on decision-making: The five types of value are: (1) functional value, (2) emotional value, (3) social value, (4) epistemic value, and (5) conditional value.
Woodruff (1997)	Created the customer value hierarchy, the hierarchical dimensions encompass attribute preferences, performance, and consequences.
William & Soutar (2000)	Conducted a qualitative research and discovered four distinct dimensions of value: functional, emotional, social, and epistemic.
Sweeney & Soutar (2001)	Created the PERVAL expanding upon the theory of consumption developed by Sheth et al. (1991).
Sanchez et al. (2006)	Built on the previous research by Sheth et al. (1991) and Sweeney and Soutar's PERVAL scale (2001).

Source: Own editing based on Jamrozy & Lawonk, (2017)

The global issue of environmental degradation has grown more serious as a result of excessive use and exploitation of natural resources. Furthermore, there is a growing awareness among individuals regarding the utilization of synthetic substances, such as chemical pesticides, hormones, and their impact on the environment (Lin et al., 2020). In the context of consumption

decisions, it is becoming increasingly crucial to take into account the various physical environmental concerns such as air pollution, water pollution, ozone layer depletion, waste disposal, and the unsustainable utilization of non-renewable resources. This consideration holds significant implications for the well-being and quality of life of future generations (Ali et al., 2019). Therefore gaining a better understanding of environmentally conscious consumption behavior has become essential to policymakers and marketers who are interested in encouraging consumers to support sustainable development methods (Halder et al., 2020). Furthermore, the extent to which the level of consumer need is met and satisfied related to a product is consumption values (CV). According to Long & Schiffman (2000), the concept of consumption value pertains to the subjective satisfaction derived from the consumption of a product, which subsequently influences the decision-making process of customers, the influence of several values, including functional, emotional, social, and epistemic values, on consumption alongside with environmental concern are evident. However, in adapting the consumption value framework to the context of green food products, functional value was replaced with environmental concern. Previous food-related research has operationalized functional value in diverse ways, including quality value, price value, and health-related attributes (Choe & Kim, 2018; Perrea et al., 2015; Finch, 2006). Given this conceptual breadth, environmental concern was considered more theoretically aligned with the sustainability focus of this study.

On the other hand, according to Sheth et al. (1991), a decision can be influenced by any or all of the five consumption values. Multiple academic fields, such as economics, sociology, psychology (in various areas), marketing and consumer behavior have provided theoretical frameworks and conducted research that is applicable to these values. Each consumption value contributes differently depending on various settings (Choe & Kim, 2018). Table 7 summarizes each dimension that has been used to measure the level of consumption values (CV).

Table 7: A Summary of Consumption Value's Dimensions

CV Dimensions	Definition
Environmental Concerns	It's largely about the rational behavior of preserving ecosystems on behalf of consumers, which is mostly measured by integrating items such as cognitive, affective and conative attitude (Martins, 2022).
Emotional Values	The term emotional value is explained as perceived utility of the customers that can be gained from the strength of arousing feelings, memories, affective states and emotion (Amin & Tarun, 2021).
Epistemic Values	Utility is often derived from stimuli that are unfamiliar and somewhat ambiguous or complex (Long & Schiffman, 2000). And in regards to green products, it's the utility of green products is enhanced by the dissemination of their attributes, information, and knowledge (Ali et al., 2019).
Conditional Values	The perceived value gained by an alternative due to the specific context or conditions faced by the decision maker (Wang et al., 2013). Thus, conditional value pertains to products and services that derive their worth from being utilized within a certain context.
Social Values	Several factors like social norms, social pressure, peer group influence and reference group opinion which may influence the decision-making process of the customer (Amin & Tarun, 2021; Wang et al., 2013).

Source: Own editing based on the authors in the table (2025)

In this study, consumption values represent the internal evaluative mechanism through which green marketing practices influence green purchase behavior. Positioned as the mediating variable within the proposed research model, CV captures the value-based perceptions that translate external marketing stimuli into purchasing decisions in the Jordanian food industry context.

2.5 Relationships among the Core Constructs

2.5.1 The relationship between Green Marketing and Consumption Values

Sustainability is a socially pertinent matter, since an increasing number of consumers are becoming conscious and inquisitive about the content and environmental consequences of their purchase

patterns. The number of consumers is increasing steadily, and corporations are consistently producing products to meet their demands. In response to the growing demand for environmentally friendly products, numerous corporations have embraced sustainability and implemented green marketing tactics (Kumar et al., 2014). Worldwide, an increasing number of corporations and individuals have been prioritizing environmental concerns and consumerism, prompted by numerous publications highlighting the detrimental effects of consumer behavior on the earth. As a result, there has been a growing recognition of green marketing, and consumers have been favorably responding to brands that endorse environmental accountability, particularly because firms' environmental initiatives are now commonly considered as part of their corporate social responsibility (Olsen et al., 2014). Also, according to Bailey et al. (2016), the growing recognition of environmental concerns and the promotion of environmentally-friendly marketing strategies is not limited to industrialized countries. Efforts have also been made to raise awareness in emerging economies. On the other hand, there is a growing scholarly inquiry in this field, as scholars strive to find solutions to many green marketing-related concerns, such as understanding the elements of consumption values that impact consumers' environmentally-conscious behavior (Armstrong et al., 2015; Haws et al., 2014). Many corporations have acknowledged the concept of green marketing and the crucial significance of green initiatives in marketing to meet client demands and enhance competition among firms. Also, a growing number of consumers are more concerned about environmental damage and the adverse effects of consuming environmentally harmful items. Therefore, there’s an important link between GM initiatives and consumer consumption values. This can be proved with a study conducted by Rivas et al. (2022), and they sated that green marketing, encompassing green products, prices, places, and promotions, has been crucial in addressing customers' environmental concerns and their need for eco-friendly purchasing choices. In addition, key measures in green marketing include organizations' marketing efforts to eliminate hazardous raw materials from production, minimize waste, and provide competitive prices through environmentally-friendly channels and promotions. According to Sohail (2017), if a green marketing strategy successfully satisfies customers' wants and needs, it will also impact their personal ethical standards and their willingness to adopt innovative green products. Thus, as a result of incorporating GM with CV, it was found that GM activities have a direct impact by having environmental mindset and promoting values related to consumption while establishing individual ethical standards. Additionally, green marketing aims to persuade consumers to acknowledge the

pressing environmental situation (Hafiz & Ali, 2018). Utilizing marketing strategies enables companies to alter customers' perceptions of environmental concerns, enhance their consumption values toward green products, and encourage the adoption of individual values related to environmental issues (Rivas et al., 2022).

2.5.2 The relationship between Consumption Values and Green Purchase Behavior

Promoting the adoption of more environmentally friendly consumption habits remains a pressing concern for government agencies and policymakers. This is due to the unsustainable nature of current consumption levels, which pose significant long-term environmental risks. While there is widespread awareness of environmental challenges, not all customers engage in environmentally friendly purchasing behavior in their daily lives (Joshi & Rahman, 2016; Quoquab & Mohamad, 2019). Research has shown that having a positive attitude towards buying environmentally friendly products does not always result in actually making green purchases (Jaini et al., 2020). It can be described as follows: while the majority of customers have favorable intentions towards purchasing green products, there are still some who choose not to buy them. Therefore, it is crucial to evaluate the role of consumption values as a main factor. Moreover, Alzu'bi & Kontor's (2023) literature review concludes, that there is a weak relationship between GM and GPB, as few customers may behave in an environmental context, but it is not necessary transferred into a comparable behavior in other situations. Therefore, putting CV as a mediator in the relationship between GM and GPB is an important issue to consider. The effectiveness of a marketing endeavor is dependent upon the ability to influence the customer decisions and behavior through the implementation of green marketing techniques (Papadas et al., 2017). But, one of the dimensions of CV, which is "environmental concern" used to determine if the level of concern individuals have for environmental problems may be used as a measure of their behavior towards green items. The findings indicate a good result, suggesting that individuals are really worried about the environment and willing to modify their behavior in order to reduce its impact (Lahri et al., 2014; Xu et al., 2020). On the other hand, another dimension that affect GPB is "social values", as individuals consistently engage with their social surroundings, their consumption behavior will be influenced to different extents by these social influences (Johnstone & Hooper, 2016). Figure 7 presents the social environment's influence on consumers' GPB. Additionally, when people value and recognize ecological behaviors, it motivates the customer to purchase green products (Kumar

& Ghodeswar, 2015). Also, several studies found that social values influences green purchase behavior (Biswas & Roy, 2015; Rahnama & Rajabpour, 2017; Suki & Suki, 2015; Testa et al., 2017).

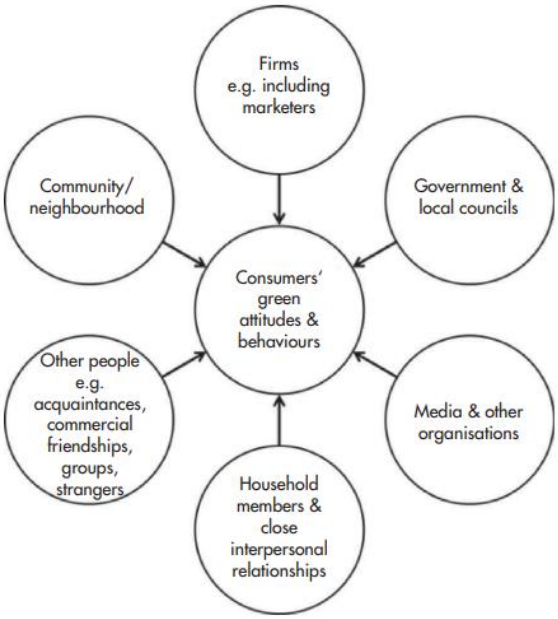


Figure 7: The Social Environment's Influence on Consumers' GPB
Source: Johnstone & Hooper, (2016, p. 827-855.)

As for "epistemic values" relationship with GPB, Lin and Huang (2012); Maniatis (2016) emphasized the crucial role of knowledge in the decision-making process when choosing to use products that are environmentally friendly, as it significantly influences consumer behavior towards green products. Subsequently, "emotional values" are crucial elements of behavior and have a significant impact on customer preferences and choices (Penz & Stöttinger, 2012). Furthermore, the experience of environmental protective feelings influences consumer behavior, leading customers to go "green" (Finch, 2006; Wen & Noor 2015; Kanchanapibul et al., 2014; Kilbourne & Pickett, 2008). Finally, the "conditional value" here proposes that changes in situations may affect consumer green purchase behavior (Gadenne et al., 2011). Therefore, the concept of conditional value for green products refers to the overall satisfaction gained from using green products instead of conventional alternatives, taking into account the perceived desire to receive personal benefits. Wen & Noor (2015) clarify that the provision of a conditional value, such as a cash rebate or government subsidy, can potentially incentivize individuals to engage in

environmentally friendly purchasing behavior. Which in return will influence GPB. In addition, Sharma et al. (2023) demonstrates that cultural, personal, political, psychographic, and ethical principles have an impact on green purchasing behavior. The variables that have been extensively investigated and found to have a significant impact on GPB include environmental concern, environmental knowledge, and conditional value.

2.5.3 The relationship between Green Marketing and Green Purchase Behavior

Significant progress is unlikely to occur until both industrial and individual consumers adopt environmentally conscious practices and actively participate in eco-friendly behavior. In the past, green marketing mostly focused on traditional aspects such as labelling, reward tactics, and packaging. Nevertheless, the marketing terrain has transformed, and the ecological aspect has gained growing importance (Martins, 2022). The growing concerns and increased awareness of the environment can be attributed to the heightened negative effects of human activities. Therefore, it is clear that taking proactive actions, especially in the field of consumer behavior is of great importance (Alzu'bi & Kontor, 2023). According to Jaini et al. (2020), the phenomena of green purchase behavior (GPB) has gained considerable scholarly interest in recent years, primarily due to its major environmental ramifications. Subsequently, Vu et al. (2021) stated that within the realm of contemporary consumer research, a novel framework related to the marketing discipline has emerged, responding to the needs of both marketers and scholars. On the other hand, the impact of marketing is contingent upon its capacity to modify consumer preferences and behaviors by employing green marketing strategies. However, the phenomenon of green consumer behavior has been developed as a new model of marketing discipline of both scholars and marketers in the range of recent consumer studies. Therefore, more studies are needed (Vu et al., 2021). According to Ali (2021), there exists a clear and compelling necessity to delve farther into the domain of knowledge in order to fully grasp the intricacies of customer purchasing behavior. Furthermore, previous research has shown a limited correlation between green marketing methods and customers' environmentally-friendly actions. And the impact of green marketing on consumers' purchasing choices has been acknowledged as the primary focal point in current research on green consumer's behavior (Kumar & Ghodeswar, 2015). Similarly, it is imperative to build a pivotal aspect of green marketing, specifically green consumers, these individuals exhibit conscientiousness in relation to the environmental impact of their consumption behavior, prompting them to modify their approach

to making purchases (Alzu'bi & Kontor, 2023; Chaudhary & Bisai, 2018; Laheri et al., 2014). Hence, consumers are increasingly showing a willingness to financially support environmentally conscious features such as sustainability, recyclability, and non-toxicity. In response the use of eco-labels has emerged as a means to tell consumers about the specific qualities of a product, by asserting that the product meets established criteria or standards (Grover & Bansal, 2019). Based on a bibliometric analysis conducted by Alzu'bi and Kontor (2023) regarding 2018 to 2023 it was found that the influence of GM factors on GPB is substantial. Therefore, the implementation of GM methods greatly improved customers' purchasing behavior. The variable that had the greatest impact on customer purchase behavior was "green promotion". Then, "green products" ranked second in terms of their substantial beneficial impact on GPB.

On the other hand, although there are various viewpoints related to consumer purchasing behavior, there is a scarcity of research that has particularly investigated the variable of "green marketing channels". This highlights the need for future investigations in this area. However, regarding the "green price" dimension, it has been recognized as an obstacle barrier to green purchase behavior, as stated by Gleim et al. (2013) and Nasir and Karakaya (2014). Similarly, according to Lahri et al. (2014), it has been also observed that green products, such as organic food and conventional farm food, are cost higher than what is normally available. The elevated prices serve as a barrier to transitioning to environmentally-friendly products

Thus, acquiring a thorough comprehension of various dimensions of green purchasing behavior, encompassing the impact of green marketing on customer attitudes, intentions, and behaviors towards environmentally sustainable products, can yield substantial benefits for organizations in their quest for valuable insights (Carrete et al., 2012; Thøgersen et al., 2015). Finally, the effectiveness of a marketing endeavour is dependent upon the ability to influence the customer decisions and behavior through the implementation of green marketing techniques (Papadas et al., 2017). And study presents a comprehensive collection of research papers spanning from 1995 to 2013 by Laheri et al. (2014) the findings indicate that all key parties involved, including marketers, consumers, and the government, exhibit a shared concern for the environment.

2.6 Research Model

Based on the theoretical background and literature studies, the following model had been built, then present the hypotheses of the study. Figure 8 present the research model that summarize the hypotheses and their connection.

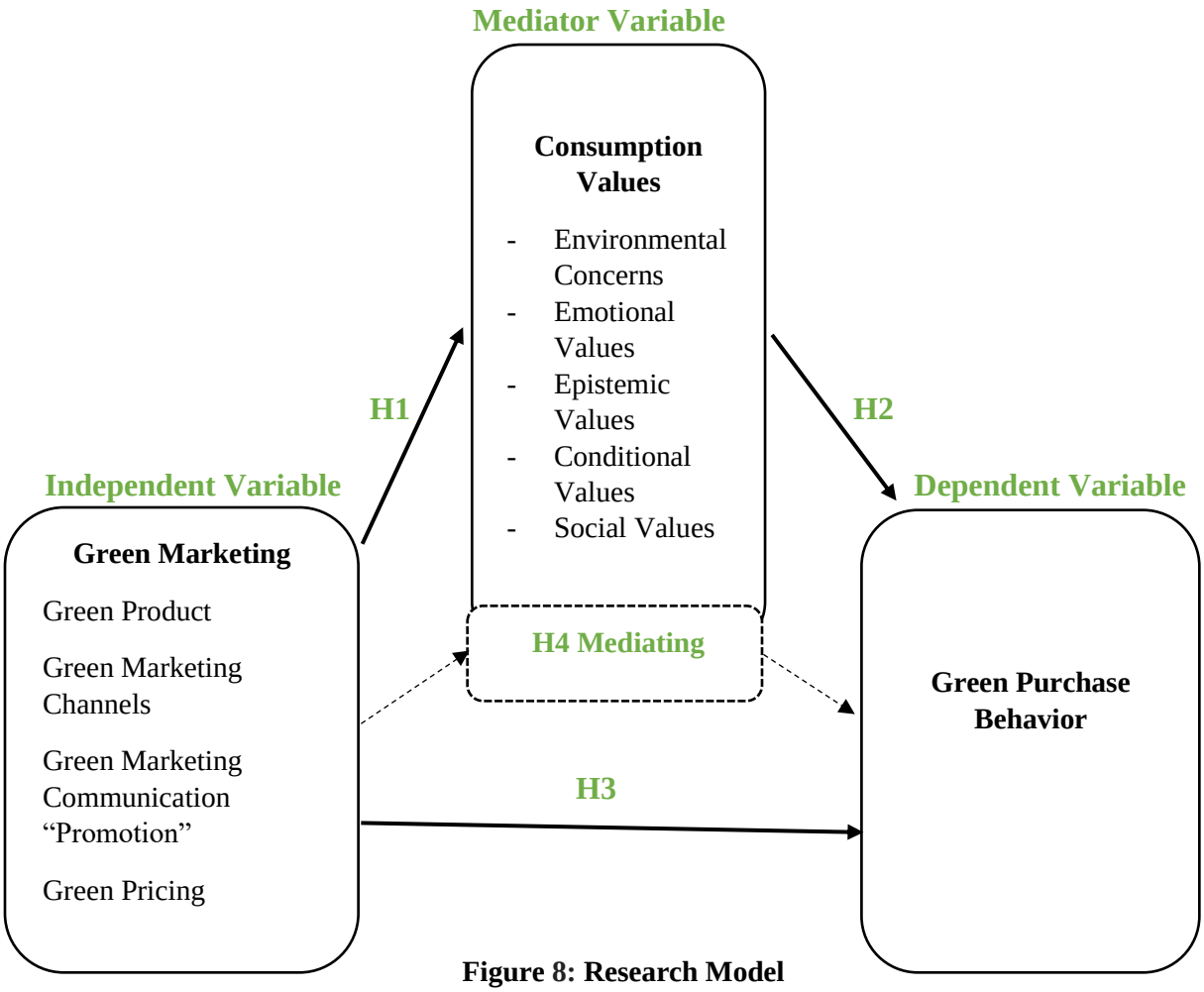


Figure 8: Research Model
Source: Developed by Alzu'bi (2025)

This research model developed for the aim of capturing the complex relationship between green marketing, consumption values and green purchase behavior. It assume that green marketing have a direct influence on consumer's green purchase behavior, by reflecting the immediate impact of environmentally focused marketing strategies on consumer behavior. However, the model propose that the relationship is partially mediated by consumption values; which means that green

marketing influence green purchase behavior not only directly, but also indirectly through the values that drive environmentally conscious behavior. This means that **green marketing can still have a direct effect** on green purchase behavior, but this effect might be **partially or fully** explained by the influence of consumption values. So, the model tests:

1. The **direct effect** of green marketing on green purchase behavior.
2. The **indirect effect** of green marketing on green purchase behavior through consumption values (mediator).
3. The **total effect**, which is the sum of the direct and indirect effects.

This approach aim to provide a more comprehensive analysis, capturing both direct and indirect pathway through which green marketing can influence green purchase behavior. Thus it provide a deeper insights into the motivation and psychological factors that shape decisions and behaviors.

2.7 Research Hypotheses

Based on the objectives of the study, the following hypotheses were formulated:

H1: Green Marketing has a significant positive influence on Consumption Values.

This hypothesis is divided into sub-hypotheses based on the GM Dimensions:

- H1.1: Green Product has significant positive influence on Consumption Values.
- H.1.2: Green Price has significant positive influence on Consumption Values
- H1.3: Green Marketing Channels has significant positive influence on Consumption Values.
- H1.4: Green Marketing Communication "Promotion" has significant positive influence on Consumption Values.

H2: Consumption Values has a significant positive influence on Green Purchase Behavior.

This hypothesis is divided into sub-hypotheses based on the Consumption Values Dimensions:

- H2.1: Environmental Concerns has significant positive influence on Green Purchase Behavior.
- H2.2: Emotional Values has significant positive influence on Green Purchase Behavior.
- H2.3: Epistemic Values has significant positive influence on Green Purchase Behavior.

- H2.4: Conditional Values has significant positive influence on Green Purchase Behavior.
- H2.5: Social Values has significant positive influence on Green Purchase Behavior.

H3: Green Marketing has a significant positive influence on Green Purchase Behavior.

- H3.1: Green Product has significant positive influence on Green Purchase Behavior.
- H3.2: Green Price has significant positive influence on Green Purchase Behavior.
- H3.3: Green Marketing Channels has significant positive influence on Green Purchase Behavior.
- H3.4: Green Marketing Communication "Promotion" has significant positive influence on Green Purchase Behavior.

H4: Consumption Values mediate the relationship between Green Marketing & Green Purchase Behavior

The operationalization of these constructs in the quantitative phase is detailed in Chapter 3.

3. Materials and Methods

This chapter is structured as follows: the first section, explains the reason for using a mixed-methods approach and presents the overall research design and model. The second section, describes the data collection methods and measurements of key variables. The third section, explain the research material and techniques including (population, sample selection, data collection procedures and statistical treatment). Finally, to make sure the results are credible, the validity and reliability of the research tools are assessed. Also, to maintain the integrity and credibility of the research process, ethical considerations are also covered, such as participant consent, confidentiality, and data protection.

Despite the increased focus on sustainability worldwide, there is still a lack of research on how green marketing impacts consumer green behavior in the food industry, especially in the Jordanian setting. Although earlier research has examined the efficacy of green marketing strategies, little is known about how consumption values function as a mediating component. Thus, this dissertation seeks to examine the relationship between green marketing strategies and green buying behavior, with an emphasis on the mediation role of consumption values given the significance of matching marketing strategies with changing consumer values.

Before going on to the subjects that will be investigated in order to evaluate and test the research's hypotheses, this chapter covers the study design and the methods required for data collecting. Because the purpose is to identify the relationship between Green Marketing (GM), Consumption Values (CV) and Green Purchase Behavior (GPB), it’s critical to show how they were utilized in the survey. Additionally, to test the major hypotheses and to answer the research question, the operational definition of the three variables (Independent, Mediator and Dependent) and their relationship was described in the literature review.

3.1 Research Design

The first step in properly addressing the study problem and choosing a suitable methodological approach is to establish specific research objectives (Heide-Jørgensen et al., 2018). Although this research was built upon descriptive findings, reported in previous literature review on green marketing & consumer behavior, its main goal is to explain how green marketing practices can

impact green purchase behavior within the Jordanian food industry. Furthermore, it seek to investigate how consumption values mediate this relationship, thereby adapting an explanatory research approach offer a more comprehensive understanding of the factors driving environmentally conscious consumers decision.

Based on the Literature review, this study proposed a conceptual framework that examine the relationship between (green marketing & consumption values, consumption values & green purchase behavior, green marketing & green purchase behavior and the mediating effect of consumption values on green marketing & green purchase). Using a combination of methods to answer research questions helped overcome some of the limitations of examining the relationship using a single method. Figure 9 below show the final Conceptual Framework illustrating the relationships between green marketing (GM), consumption values (CV), and green purchase behavior (GPB), including the mediating role of CV.

On the other hand, to provide a clear overview of the research design and to illustrate how the research phases build upon one another, a summary methodological diagram in Figure 10 presents the sequential mixed-methods design employed in this study. With the research began with in-depth interviews with food Mangers from multiple departments, to explore green marketing practices within the Jordanian food industry. Insights from this phase informed the refinement of the consumer focus group discussion guide. Focus group participants were classified into environmentally conscious and non-conscious groups based on screening survey criteria. Findings from both qualitative phases contributed to the refinement of the quantitative survey instrument, which was subsequently administered to test the proposed research model using SEM-PLS analysis.

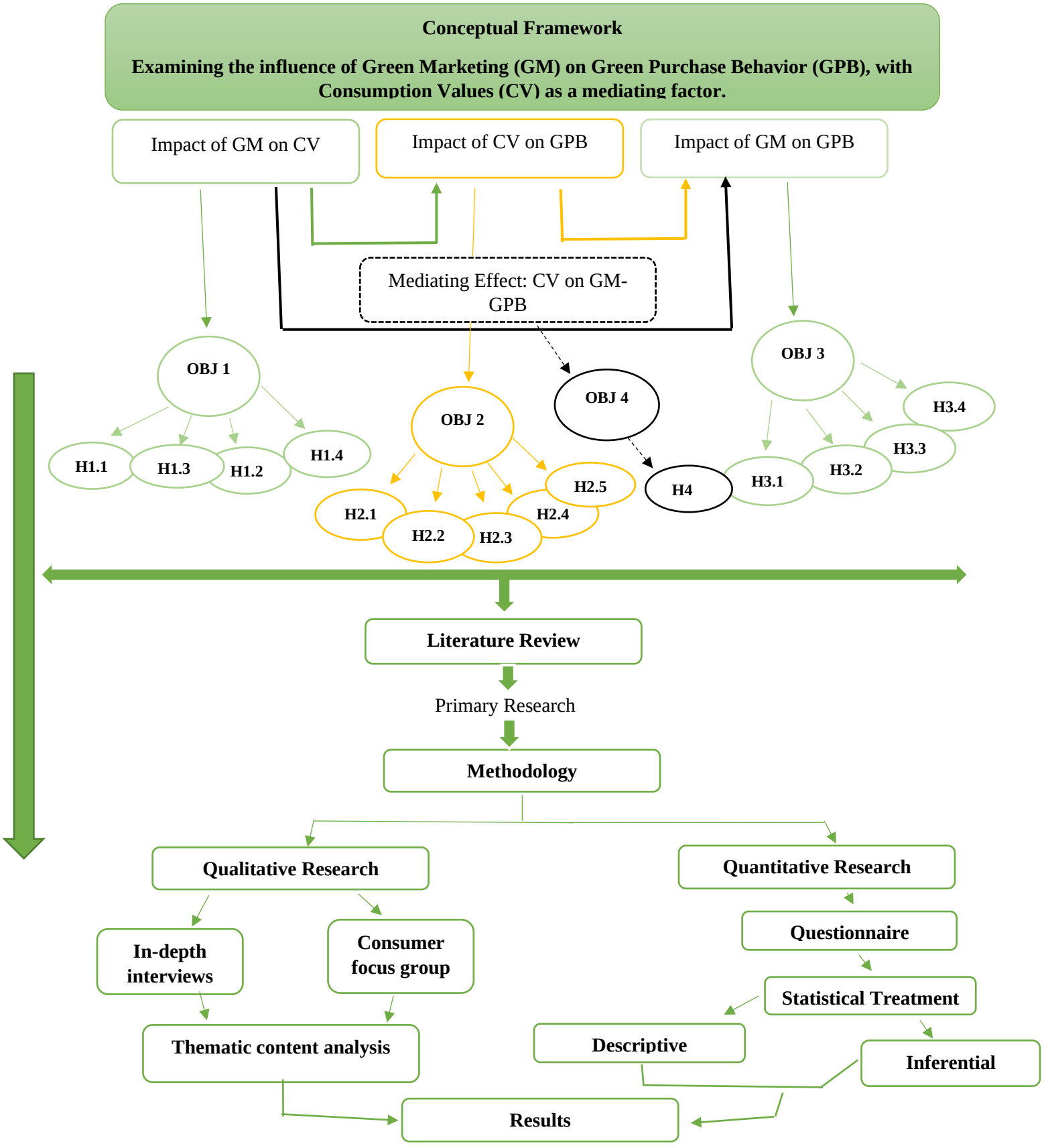


Figure 9: Research Process
Source: Own construction (2025)

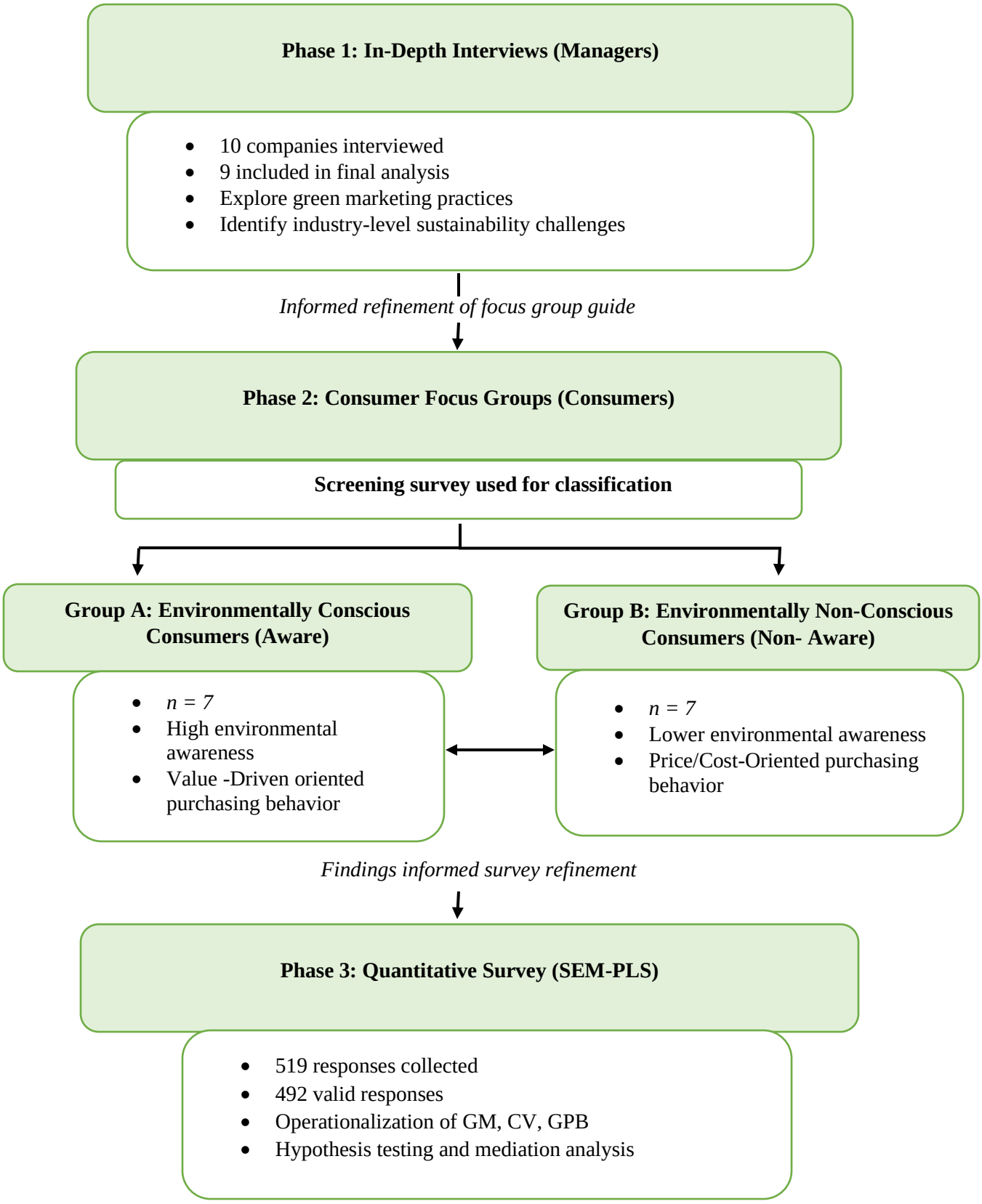


Figure 10: The Sequential Mixed-Methods Design
Source: Own construction (2026)

3.2 Research Methods

3.2.1 Qualitative Methods

3.2.1.1 In-depth interviews

As a qualitative research method, in-depth interviews involve conducting detailed interviews with a small number of participant to obtain a deeper insights into their perspectives, feelings, experiences, and the meanings they attach to specific topic or problems (Rutledge & Hogg, 2020). In contrast to other types of qualitative research, this method need significant time to invest with each participant, using a conversational format with mostly open-ended questions. In the social sciences, this approach frequently employed to explore complex phenomena and can be a useful part of multiple method research design.

The research process began with an extensive effort to gather data on all Jordanian food companies. To achieve this, obtained permission from the Amman Chamber of Commerce was the first step, which granted access to official records of firms operating in the sector.

All interviews were conducted according to the guidelines laid down in the Declaration of Helsinki and all procedures involving human subjects were approved by the Research Ethics Committee at the University of Debrecen, Faculty of Economics and Business (approval number: GTK-KB 002/2025. Verbal informed consent was obtained from all subjects. Verbal consent was witnessed and formally recorded. (The formal document to obtain participants consent & the support document from the university is in Appendices A).

As a result, in-depth interviews were successfully conducted with middle managers from various departments, including (Operations, Marketing, Sales, Logistics, and Production). The data collection process spanned one month and half, from 30/07/2024 to 15/09/2024, with interviews lasting within 30 minutes. All interviews were conducted in person at the respective company headquarters. In total, 10 interviews were completed, representing six large companies and four medium-sized companies. However, one interview was excluded from the analysis because they didn’t engage in green marketing activities, resulting in a final sample of nine valid interviews.

- **Variables and Measures**

Based on a thorough grasp of the research goals and the background of green marketing in the Jordanian food industry, six components was created that served as a framework for the in-depth interviews. These categories were created to thoroughly capture strategic, operational, and contextual aspects relevant to the application of green marketing strategies rather than being directly adopted from a particular prior research. This method made it possible to explore the many aspects of how businesses see, implement, and prepare for green marketing activities in their particular business environments with flexibility and depth. Furthermore, the structure was carefully aligned with the research questions of the study, to ensure the data collected effectively. A certain amount of guiding questions was added in each area to examine various aspects of green marketing implementation in Jordanian food industries. In particular, there were 4 questions in the General Strategy section, 8 in the Implementation and Practices section, 2 in the Impact and Performance section, 2 in the Challenges and Barriers section, 2 in the Future Directions section, and 3 in the Collaboration and Industry Perspective section. Prior to the interviews, every question was thoroughly examined to make sure it was suitable in meaning, clear in language, and in line with the goals of the study. The main questions and follow-up questions can be found in Appendices B. The six study variables were categorized as follows for ease of presentation of the results and discussion: V1 - General Strategy, V2 - Implementation and Practices, V3 - Impact and Performance, V4 - Challenges and Barriers, V5 - Future Directions, and V6 - Collaboration and Industry Perspective.

After being made aware of the study's objectives, participants verbally consented to the researcher recording their interviews for transcription and analysis. The six study variables were categorized, as for the general description of each variable, transcription and translation process and data coding and categorization Process can be found in details in Appendices C.

- **The population, sample and unit of analysis**

In this part of the research the whole population was focusing first on all Jordanian food companies to explore the adoption and impact of green marketing practices within this sector.

After obtaining permission to access company records, 50 Jordanian food companies were identified under the broader "Food and Drinks Industries" sector. These firms were classified into 11 categories based on their primary products Table 8 below present those list.

Table 8: Main Categories and Numbers of the Jordanian Food/ Drinks Industries

Categories	**Company Number**
Meat And Meat Products Sausages, Lunchen Meat	8
Frozen And Ready Made Food Processed And Preserved Foods	3
Edible Oil, Margarine And Ghee's	7
Juice Beverages	8
Biscuits, Chocolates, Confectionery and ice cream Products	6
Dairy, Products, chees, Confectionery Product	2
Canned Fruits	3
Honey, Jams And Diet Jams	2
Pizza Sauce And Ketchup Diet Baste And Hot Sauce	3
Products of grain mills and bakeries	2
Chips And Corn flex	6

Source: Amman Chamber of Commerce. (n.d.)

Given the large population, a *quota sampling method* was applied. The 11 categories were consolidated into six key categories most relevant to green marketing practices: (1) Meat and Meat Products, (2) Frozen and Ready-Made Foods, (3) Juice and Beverages, (4) Biscuits and Confectionery, (5) Chips and Cornflakes, and (6) Grain Mills and Bakeries. These categories were prioritized for three reasons:

1. **Relevance to green marketing** (e.g., food processing and beverage sectors often adopt eco-friendly packaging and sustainable sourcing).

2. **Firm size and representation** (medium and large companies were included proportionally).
3. **Feasibility** (focusing on six categories allowed for a deeper analysis within time and resource limits).

Other categories (e.g., dairy, canned fruits, sauces) were examined but excluded due to limited or inconsistent evidence of green marketing practices.

In total, 33 companies were targeted across the six categories. While interviews with CEOs were difficult to secure, middle managers were also included due to their involvement in implementing green marketing strategies. Ultimately, 10 interviews were completed (six with large companies and four with medium companies), covering departments such as operations, marketing, sales, logistics, and production. One interview was excluded due to a not using this concept. The firm was treated as the primary unit of analysis, with managers' perspectives providing the data.

3.2.1.2 Consumer Focus Group

Focus groups are a qualitative research technique that include facilitated conversations with a chosen group of individuals in order to learn more about their attitudes, beliefs, views, and perceptions about a concept, idea, service, or product (Mielinger & Weinrich, 2024). Usually consisting of 8-10 individuals who share common characteristics that are relevant to the research topic. Thus, employing focus group provides valuable insights about how consumers preserve green marketing and how it may impact their purchasing decisions. Especially, within the economic and cultural landscape of Jordan.

The focus group discussions were conducted online using Zoom to ensure convenience and accessibility for participants from different locations. The first group, representing environmentally conscious consumers, each lasting approximately *120 minutes,* while the second group, representing non-environmentally conscious consumers, each lasting approximately *80 minutes*.

This data collection phase took place over the course of 15 days, from the beginning of April 2025. A copy of the screening survey can be found in Appendices E. Also, in Appendices F you can find

a detailed process of the focus group structure and how it was measured with the transcription and translation Process.

- **Variables and Measures**

The focus group discusses were structured around a number of important factors related to the goals of the study in order to obtain a deeper insight into consumer behavior and perceptions. It included a number of open-ended questions and interactive exercises designed to capture the conscious and unconscious elements influencing consumers' decisions to make green purchases. The main questions for the focus group interview can be found in Appendices G.

- **The population, sample and unit of analysis**

Jordanian food industry consumers were the population, as for the sampling Purposive sampling was used for the consumer focus groups in this research. This non-probability sampling method was selected to guarantee that participants had certain characteristics related to the research's objective. It was crucial to include customers with varying degrees of environmental awareness because the research's primary objective was to investigate green purchasing behavior and the mediation function of consumption values. A screening survey was carried out before the focus group sessions in order to accomplish this. The purpose of the survey was to determine participants' environmental consciousness, enabling the creation of two separate groups:

1. Environmentally Aware Consumers: Consumers who have shown a high degree of awareness, knowledge and care for the environment.
2. Non- Environmentally Aware Consumers: Consumers with limited awareness, knowledge or concern regarding environmental practices.

This approach made it possible to incorporate a range of customer viewpoints while guaranteeing that the participants were closely related to the focus of the research. Therefore, the first group included 7 members, while the second group also consisted of 7 members, ensuring a balanced representation of participants for more comprehensive insights. As for the unit of analysis, it was *individual consumer* with their perceptions, attitude, behavior and opinion.

To ensure the selection of participants for the focus group discussion, a screening survey was first conducted. This approach was chosen for two primary reasons: **(1)** to differentiate between

environmentally conscious and non-environmentally conscious consumers, and **(2)** to reach a diverse sample of consumers from various regions across Jordan. The screening survey included 6 demographic items, as well as a set of 5 questions designed to measure participants' environmental awareness. These items were carefully crafted to categorize respondents into the two focus groups based on their level of environmental consciousness. At the end of the survey, participants were prompted to submit their email address or cell phone number for further contact with them. Appendices D provides a detailed overview of these demographic items.

To maximize reach and ensure a geographically diverse pool of participants, the survey was distributed using a variety of social media platforms, including Facebook & WhatsApp. As a result 20 responses were initially collected. However, out of them 6 individuals declined to participate in the focus group discussions, while 14 agreed to continue (7 environmentally aware, 7 not environmentally aware), representing various cities across Jordan, including Amman, Irbid, Zarqa, and other regions. The first aware group consists of (3 females and 4 males), aged between 23 and 60 years old, each of whom had completed at least a bachelor's degree. As for the second non-aware group, consists of (5 females and 2 males), aged between 22 and 55 years old, each of whom had completed at least a diploma-level education. This distribution ensured a balanced mix of gender, age and educational background, conforming a variety of viewpoints and experiences, as well as a thorough representation of various geographical and cultural perspectives.

3.2.2 Quantitative Methods

Researchers looking to investigate the relationships between variables are best served by quantitative approaches (Creswell, 2014). Quantitative research allows researchers to examine phenomena involving large groups, measure variables, test hypotheses, and examine the relationship between variables.

To collect primary and empirical, a questionnaire was created relying on academic, scientific sources and reference to previous studies. The purpose of this tool was to gather respondents' opinions about green marketing strategies, consumption values, and green purchases behavior in the Jordanian food industry. There were three primary sections to it: the first section explains the primary goal of the study and encourages them to give truthful and accurate replies, by assuring them that their answers will be treated with strict confidentiality. The second section gathers

demographic data. As for the third section which focus on the core variables of this research, including Green marketing (Independent variable), Consumption Values (Mediator variable) and Green Purchase Behavior (Dependent variable). The items in this are carefully designed to capture the complex relationships between these variables, offering valuable insights into the factors influencing green purchase behavior.

- **Questionnaire Design**

The researcher developed a questionnaire tool (Appendices H) to collect the primary data necessary for analyzing the impact of green marketing practices on green purchase behavior, with a focus on the Jordanian food industry. As for the core variables of the questionnaire it consist of 51 questions, concerning the independent variable, mediator variable, and dependent variables. Table 9 show those items in details.

Table 9: Distribution of the Variable's Question

Variables	Number of items that measure the variable	Questions number revered to each variable	Literature Sources
Green Marketing (GM)	21	1-21	7 Questions from Literature & 14 by researcher
Green Product	5	1-5	(Yadav & Pathak, 2017)
Green Marketing Channels	6	6-11	(Paik & Lee, 2021)
Green Marketing Communication "Promotion"	5	12-17	Developed by researcher
Green Pricing	5	17-21	(Bae & Rishi, 2018)
Consumption Values (CV)	25	22-46	12 Questions from Literature & 13 by researcher
Environmental Concerns	5	22-26	(Joshi & Rahman, 2019)
Emotional Values	5	27-31	(Haj-Salem et al., 2022)
Epistemic Values	5	32-36	(Nguyen et al., 2020)
Conditional Values	5	37-41	(Tanrikulu , 2021)
Social Value	5	42-46	(Escadas et al., 2019)
Green Purchase Behavior (GPB)	5	47-51	2 Questions from Literature & 3 by researcher. (Chen, 2020) (Mahadeval et al., 2024)

Source: Own construction (2025)

- **Variables and Measures**

The constructs examined in the quantitative phase were theoretically grounded in Chapter 2. For the purpose of empirical testing, established and previously validated measurement scales were adopted from prior quantitative studies. The specific empirical sources of these scales operationalize the conceptual definitions presented earlier, ensuring alignment between theory and measurement. The questions have been carefully to address the key dimensions of each core variable in this research. A point-by-point measures for each variable, covering green marketing (independent variable), consumption values (mediator variable), and green purchase behavior (dependent variable) can be found in Appendices I, by explaining how many dimensions were used. Also, some of these dimensions were chosen based on previous studies and new questions were formulated by the researcher.

- **Scale of the Questionnaire**

A five-point Likert scale was used, since it was simple to understand. The study sample shows the level of agreement based on the scale shown in Table 10.

Table 10: Five Likert Scale

Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	2	3	4	5

- **Translation and Distribution Process**

The questionnaire was prepared entirely in English, and then a modified version of it was developed in Arabic to facilitate understanding of the questionnaire paragraphs. One of the first decisions the researchers must make when translating questionnaire to the participant's words is whether to translate their texts literally or by using free translation, and because translating literally may result in very unnatural translations; the researcher translates the questionnaire using free translation by understanding it meaning and produces the same meaning in Arabic to create a more natural-sounding sentence.

A pilot survey was conducted with a 150 questionnaire, before the actual distribution of the questionnaire; to determine the integrity of the questionnaire and to fulfill its criteria it was

implemented by checking the face validity. A statistical method was used to evaluate the validity and reliability of the questionnaire, which will be explain later.

The questionnaire was distributed online by using Google Drive. It was distributed with the support of a specialized department of statistics in Jordan, to ensure wide and representative coverage of respondents across various sectors in Jordan. This effort was complemented by the use of social media platforms to reach a broader audience and capture diverse perspectives. The researcher received in a 2 months period from (March 2025 until August 2025) 519 response. Out of the 519 collected questionnaires, 492 were deemed valid and included in the analysis after data screening, representing a valid response rate of 94.8%. The analysis begins with descriptive statistics of the respondents' demographic characteristics, followed by the measurement model assessment and structural model results.

- **The population, sample and unit of analysis**

The population of this study consists of consumers in the Jordanian food industry, as the research investigates the impact of green marketing practices on green purchase behavior in this sector. Since it was not feasible to survey the entire population, a sampling strategy was required. The study employed a non-probability convenience sampling approach, as the questionnaire was distributed online and participation depended on respondents' accessibility and willingness to take part. While the sample naturally included variation in demographic characteristics such as gender, age, and education, no quotas were imposed to mirror the exact proportions of the Jordanian population. This approach was chosen due to practical constraints and is widely used in marketing and consumer behavior research, particularly when the focus is on testing theory-driven relationships rather than achieving perfect representativeness. A total of 519 responses were initially collected, of which 492 valid responses remained after data screening. This sample size is considered sufficient for PLS-SEM analysis, exceeding the minimum requirements suggested by Hair et al. (2014). The unit of analysis in this study is the individual consumer in Jordan, as the research seeks to understand individual perceptions, values, and behaviors regarding green marketing and green purchasing.

3.3 Data Analysis Techniques

Because this study used a mixed-methods approach, many data analysis approaches were used to properly evaluate the quantitative and qualitative data that were gathered.

3.3.1 In-depth interview statistical treatment (Qualitative Method)

1. Justification of the Analytical Approach for In-Depth Interviews

The analytical objective of the in-depth interview phase was to uncover latent structural relationships within the strategic discourse of food manufacturing companies. Specifically, the study sought to identify semantic clusters and visualize structural proximities between strategic terms and company characteristics. Given this objective, a computational qualitative approach was adopted.

While traditional inductive qualitative methods such as the Gioia methodology (Gioia et al., 2013) emphasize manual coding and hierarchical category development, recent advancements in marketing and consumer research increasingly advocate the integration of automated text analysis techniques to enhance analytical rigor and transparency (Humphreys & Wang, 2018; Berger et al., 2020). These approaches allow researchers to bridge qualitative richness with systematic, data-driven pattern recognition.

In this study, Non-negative Matrix Factorization (NMF) was employed as a topic modeling technique to identify latent semantic structures based on word co-occurrence patterns. As originally introduced by Lee and Seung (1999), NMF provides a "parts-based" representation of data, enabling the extraction of interpretable thematic components without imposing predefined researcher categories. This characteristic is particularly valuable when the objective is to allow patterns to emerge from the discourse itself rather than from externally imposed coding frameworks. Recent applications of NMF in marketing and consumer research further demonstrate its ability to extract interpretable semantic structures from unstructured textual data (Hu et al., 2025; An et al., 2023).

Furthermore, Multiple Correspondence Analysis (MCA) was applied to project textual elements into a low-dimensional Euclidean space, enabling the visualization of geometric relationships

between strategic terms and company types (Greenacre, 2017). Correspondence Analysis has been widely applied within textual statistics (lexiometry) and marketing research to explore structural associations within categorical data (Opoku et al., 2006; Kumar et al., 2023; Pareschi & Lusiani, 2020). This visualization technique allows for the identification of proximity patterns that may not be readily observable through traditional tabular or purely thematic representations.

Although manual thematic coding remains a valuable and widely respected qualitative technique, the objective of the present analysis extends beyond category construction toward structural mapping of discourse across organizational contexts. Therefore, computational qualitative analysis was considered methodologically appropriate for achieving the specific analytical aims of the in-depth interview phase. The resulting outputs serve as an evidential foundation for substantive interpretation rather than as purely technical artifacts.

2. Non-negative matrix factorization

In the course of the Non-Negative Matrix Factorization (NMF) procedure, authors have analyzed the term-document matrix that was constructed from the occurrence of subcategories in each sections studied. Each row in this matrix symbolizes a term (subcategory), while each column signifies a respondent (a given company), and the entry denotes the term's frequency. NMF was applied to the term-document matrix to yield the grouping of the subcategories into clusters (called term clusters). Moreover, respondents (as well as the six sections) could be associated with the most relevant term cluster. To find the appropriate number of clusters (components) in the NMF procedure, three methods (Ward, K-means, and complete linkage) were utilized in the clustering of the term-document matrix prior to the application of NMF. In order to validate the results three cluster quality measures (Silhouette, C-index, Dunn) were utilized in this process.

3. Multiple Correspondence Analysis and moonplots

Multiple Correspondence Analysis (MCA) is an extremely useful tool to study the relationships between qualitative data and capture patterns in the dataset geometrically. Simple Correspondence Analysis was first developed by Benzécri (1973), only in order to analyses cross tables of two

nominal variables. On the other hand, MCA was also applied as a factor analysis or principal component analysis of qualitative data (de Leew, 1973; Nishisato, 1980).

In this way, MCA allows the representation of complex datasets of more than two categorical variables as „clouds of points" by locating each variable/objects of analysis in a low-dimensional Euclidean space (generally two dimensions represented by component 1 and 2) (Costa et al., 2013). The so called „moon plot" can be created to detect special patterns and clusters. Objects are arranged within a circle so that the ones lie near the origin show similar characteristics to the average pattern with less variance, while objects located far from the origin have unique characteristics with more variance (Costa et al., 2013). Therefore, our major goal by the application of the MCA and moonplot was to create a joint map of the mentioned factors and clusters and relate factors to their clusters. MCA was applied on the result of the Non-negative Matrix Factorization.

4. Calculations

All calculations were performed using R 4.2.3. and RStudio 2022.07.2. (Build 576) software's. The term-document matrix (X) was constructed from the pre-processed corpus utilizing the "tm" package. Non-negative matrix factorization was applied using the NMF package. To detect the appropriate number of clusters and validate the results, the "Nbclust" package was employed. MCA analysis was conducted using the "correspond" function in the "MASS" package, while moon plots were generated using the "rthmlMoonPlot" and "plotrix" packages, saved, and subsequently edited in a support vector graphics format using Inkscape 0.91.

3.3.2 Consumer Focus Group (Qualitative Method)

The qualitative data obtained from the two focus group interviews were analyzed using thematic analysis, following the framework proposed by Braun and Clarke (2006). This approach was selected to systematically explore patterns of meaning within participants' narratives while preserving the depth and contextual richness of consumer discourse.

The analysis proceeded through the following stages (see Appendix J for detailed procedural documentation):

- **Familiarization with the Data:** Repeated reading of transcripts to develop an in-depth understanding of participant responses.
- **Initial Coding (Open Coding):** Inductive, line-by-line coding of meaningful textual segments.
- **Category and Sub-Category Development (Axial Coding):** Grouping related codes into higher-order categories and sub-categories (e.g., economic considerations, informational cues, emotional reactions).
- **Theme Development:** Synthesizing categories into overarching themes aligned with the study's qualitative research questions.
- **Comparative Analysis Between Groups:** Systematic comparison of patterns emerging from the environmentally conscious and environmentally non-conscious groups to identify convergences and divergences.
- **Presentation of Findings:** Structured reporting of key responses and illustrative quotations, followed by a thematic summary and interpretive discussion for each section.

Although qualitative software (e.g., Atlas.ti) can facilitate coding procedures, a manual coding approach was deemed appropriate due to the manageable dataset (two focus groups comprising fourteen participants). Manual analysis enabled close engagement with the data, allowing for careful interpretation of tone, emphasis, and contextual meaning within participant narratives.

The systematic coding and comparative procedures ensured analytical transparency and consistency across groups. This approach allowed for the identification of both shared thematic patterns and group-specific distinctions, thereby strengthening interpretive validity. The resulting thematic structure provided a robust qualitative foundation for interpreting consumer perspectives and informed the subsequent quantitative phase of the study.

3.3.3 Questionnaire (Quantitative Method)

As part of the mixed-methods design, this section presents the third method, the quantitative analysis of the questionnaire survey. The data collected were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS (version 4). This method was selected

because it is well-suited for complex models with multiple constructs and mediation effects, works effectively with non-normal data, and provides prediction-oriented results. The analysis was carried out in four main stages:

- **Descriptive Statistics:** It was first conducted to provide an overview of the respondents' demographic characteristics and to summarize the dataset. This step helped ensure that the sample was clean, reliable, and suitable for further analysis.
- **Measurement Model:** The measurement model was then assessed to establish the reliability and validity of the constructs. This included evaluating item loadings, Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), discriminant validity using the Fornell–Larcker criterion and multicollinearity checks using Variance Inflation Factors (VIF). Items that did not meet the recommended thresholds were removed in line with established guidelines (Hair et al., 2014).
- **Structural Model:** After validating the measurement model, the structural model was evaluated to test the direct hypotheses (H1-H3). This stage examined the relationships between green marketing, consumption values, and green purchase behavior within the framework of the SOR model.
- **Mediation Analysis:** Finally, the mediation hypothesis (H4) was tested to assess the indirect role of consumption values in the relationship between green marketing and green purchase behavior. This analysis provided a more comprehensive understanding of both direct and indirect effects in the conceptual model.

In line with best research practices, this chapter only describes the analytical techniques applied. The detailed statistical results, tables, and figures are presented and interpreted in Chapter 4 (Research Findings).

4. Research Findings

This chapter presents the results of the study from three sources: in-depth interviews with food company managers, focus group discussions with environmentally aware and less aware consumers, and a questionnaire survey. The qualitative findings are organized thematically, showing key patterns and differences across participants, while the quantitative analysis tests the relationships between green marketing practices, consumption values, and green purchase behavior. Together, these results provide a comprehensive picture of how green marketing is practiced in Jordan and how consumers respond to it.

4.1 In-depth Interviews

The interview findings offer significant insights into the implementation of green marketing practices among Jordanian food companies. Firstly, the analysis of the term-document matrix revealed prominent themes and significant concepts across various parts. The examination of the term-document matrix identified the most prevalent subcategories within each part as you can see in Table 11. There are two influential terms: consumer education and eco-friendly packaging that occurred in more than one section, showing their extensive impact on green marketing strategies within the industry. These findings indicate that companies acknowledge the importance of educating consumers about sustainable options and adopting eco-friendly packaging as essential elements of their green marketing strategies. Moreover, Table 12 identified the most influential categories, consumer education was the most frequently mentioned category (14 Frequency), followed by resource and expertise sharing (10 Frequency) and eco-friendly packaging (9 Frequency).

Table 11: The Most Common Terms in the Six Sections Analyses

Subcategory	Frequency	Section
environmental_protection	7	General Strategy (V1)
communication_of_values	6	
whole_implementation	5	
healthy_food	4	
consumer_education	3	
green_practices	2	
Innovation	2	
eco-friendly_packaging	2	
digital_and_traditional_channels	9	Implementation and Practices (V2)
third-party_oversight	9	
eco-friendly_packaging	5	
influencer_marketing	5	
supporting_local_suppliers	5	
brand_perception_shift	9	Impact and Performance (V3)
increased_revenue	4	
new_consumer_demographic	4	
awards_and_recognition	3	
consumer_education	7	Challenges and Barriers (V4)
expensive_sustainable_materials	5	
consumer_awareness	3	
cost_optimization	2	
internal_challenges	2	
brand_integration	5	Future Directions (V5)
interactive_digital_campaigns	4	
emissions_offsetting	3	
waste_reduction	2	
pioneer_in_green_marketing	2	
eco-friendly_packaging	2	
resource_and_expertise_sharing	9	Collaboration, Industry perspective(V6)
emerging_concept	7	
government_support	6	
consumer_education	4	
consumer_awareness	2	
trend_influence	2	
positive_industry_progress	2	

Source: Own construction (2025)

Table 12: The Most Influential Categories Regarding All Sections Together

Category	Frequency
consumer_education	14
resource_and_expertise_sharing	10
eco-friendly_packaging	9
digital_and_traditional_channels	9
third-party_oversight	9
brand_perception_shift	9
environmental_protection	7
government_support	7
emerging_concept	7
communication_of_values	6
whole_implementation	5
waste_reduction	5
emissions_offsetting	5
influencer_marketing	5
consumer_awareness	5
expensive_sustainable_materials	5
interactive_digital_campaigns	5
brand_integration	5
healthy_food	4
impact_reduction	4
electric_vehicles_for_transportation	4
local_sourcing	4
supporting_local_suppliers	5
increased_revenue	4
new_consumer_demographic	4
product_&_distribution_focus	3
gradual_steps	3
awards_and_recognition	3
cost_optimization	3

Source: Own construction (2025)

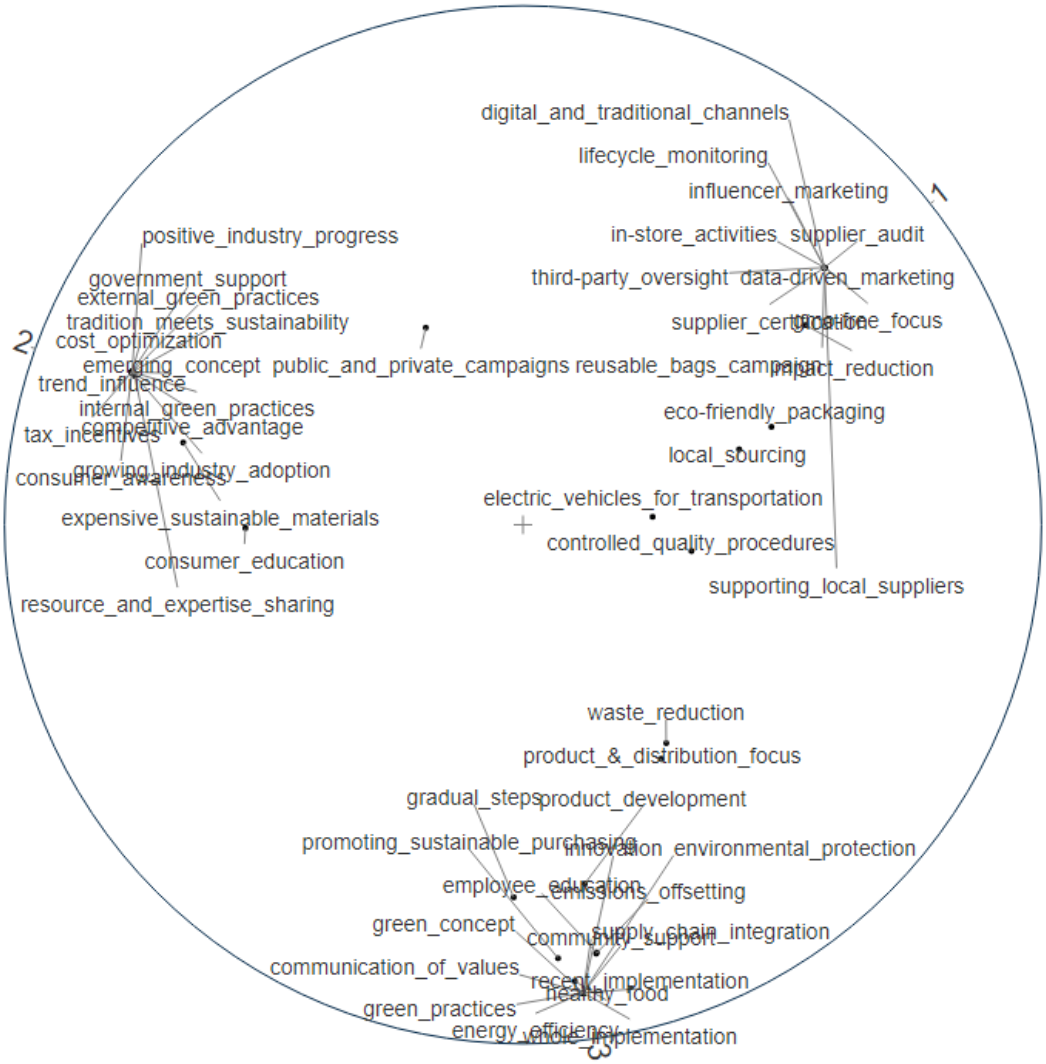


Figure 11: Moonplot Representation of Clusters and Non-Negative Matrix Factorization Results

Source: Own construction (2025)

Within the framework of moon plots as it appears in figure 11, the "average pattern" is represented by the origin of the circle. Those subcategories that positioned near to each other exhibit similar characteristics and can be grouped together. Subcategories near to the origin of the moon plot, exhibit similar characteristics to the average pattern, and can be less clustered into any groups. In contrast, subcategories, located farther from the origin and closer to the edge of the circle, show distinct attributes and indicate a larger variance from the average pattern. A closer examination of the Moonplot uncovers significant clusters of subcategories, illustrating interconnected elements

of green marketing implementation within Jordanian food companies. In this regard, "consumer education," "resource and expertise sharing," and "eco-friendly packaging" are situated closely together, emphasizing their connected impact on formulating green marketing strategies. This supports the findings from Tables 11 and 12, wherein these subcategories emerged as the most influential elements in the industry. Furthermore, concepts like "waste reduction," "energy efficiency," and "green practices" are situated in the margins of the plot, signifying a greater variance in corporate approaches to sustainability initiatives. This division indicates that although these initiatives exist, their execution differs markedly among organizations, potentially because to differences in financial resources, regulatory demands, or market demand. The clustering of "digital and traditional channels," "influencer marketing," and "third-party oversight" emphasizes the transforming function of marketing communication methods in the promotion of green products. These can be better grouped into different clusters. Based on the factor map of NMF, three clusters can be established, as in table 13.

Table 13: Term Clusters Based on the Non-Negative Matrix Factorization Components

1.Sustainable Marketing Practices	**2. Consumer Engagement & Industrial Collaborative**	**3. Holistic Strategies for Sustainable Development**
digital_and_traditional_ channels	resource_and_expertise_shar ing	environmental_protection
third-party_oversight	consumer_education	communication_of_values
eco-friendly_packaging	emerging_concept	whole_implementation
supporting_local_ suppliers	government_support	healthy_food
influencer_marketing	consumer_awareness	waste_reduction
impact_reduction	expensive_sustainable_ materials	green_practices
local_sourcing	trend_influence	emissions_offsetting
supplier_certification	tax_incentives	Innovation
lifecycle_monitoring	growing_industry_ adoption	gradual_steps
supplier_audit	positive_industry_ progress	energy_efficiency
data-driven_marketing	external_green_practices	community_support
in-store_activities	internal_green_practices	green_concept
electric_vehicles_for_ transportation	public_and_private_ campaigns	supply_chain_integration
reusable_bags_campaign	cost_optimization	product_&_distribution_focus
controlled_quality_ procedures	competitive_advantage	recent_implementation

gmo-free_focus	tradition_meets_ sustainability	promoting_sustainable_ purchasing
investing_in_renewable_ sources	internal_challenges	employee_education
influencers_marketing	interactive_digital_ campaigns	product_development

Source: Own construction (2025)

The clusters- Sustainable Marketing Practices, Consumer Engagement & Industrial Collaborative, and Holistic Strategies for Sustainable Development – provide a structured review of the key drivers and obstacles in the adoption of green marketing. Furthermore, Table 14 clarifies the alignment of these clusters with various sections of the study by presenting the average NMF component scores for each segment. Notably, the third cluster, "Holistic Strategies for Sustainable Development" is mostly linked to talks over general strategy with an average of (7.13), and future directions with (1.01). This indicates that businesses with a long-term sustainability viewpoint typically prioritize broad, integrative strategies, including systemic policy reforms and cross-sector activities. On the other hand, the second cluster “Consumer Engagement & Industrial Collaborative " associated with challenges and barriers with an average of (1.98), and collaboration, industry perspective with (5.17). Finally, the first cluster "Sustainable Marketing Practices" is most closely associated with the implementation and practices part with an average of (6.22). This suggests that firms that actively participate in green marketing prioritize tangible operational methods, such environmentally friendly packaging, waste reduction, and sustainable product development.

Table 14: Average NMF Component Scores per Section and by Cluster

Sections	***1.Sustainable Marketing Practices***	***2.Consumer Engagement & Industrial Collaborative***	***3.Holistic Strategies for Sustainable Development***
General Strategy (V1)	0.30	0.47	**7.13**
Implementation and Practices(V2)	**6.22**	0.02	0.09
Impact and Performance(V3)	0.07	0.05	0.03
Challenges and barriers(V4)	0.01	**1.98**	0.75
Future directions(V5)	0.37	0.06	**1.01**
Collaboration, Industry perspective(V6)	0.01	**5.17**	0.02
Source: Own construction (2025)			

Source: Own construction (2025)

Table 14 shows that which section is characterized by which term cluster the most. It can be seen that the terms belong to the third cluster "**Holistic Strategies for Sustainable Development**" which describe V1 & V5. The terms of the second cluster "**Consumer Engagement & Industrial Collaborative**" is related to V4; V6 the most. V2 are best connected to the terms in the first cluster "**Sustainable Marketing Practices**".

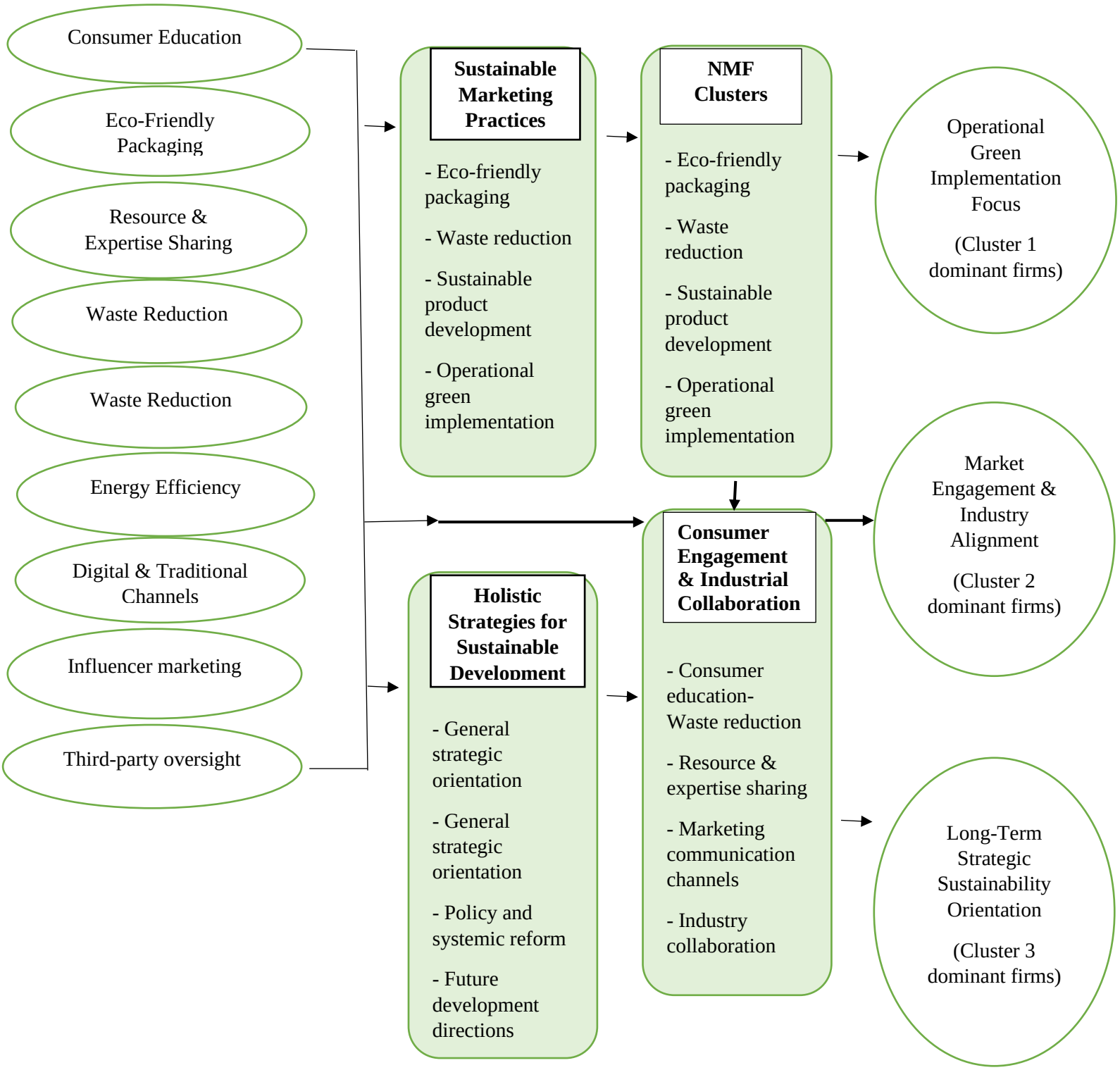
Table 15: Average NMF Component Scores per Respondent and by Cluster

Respondent	Size of the company	Sustainable Marketing Practices	Consumer Engagement & Industrial Collaborative	Holistic Strategies for Sustainable Development
1	Large	1.18	1.14	**2.21**
2	Large	1.48	**1.51**	1.29
3	Medium	0.98	**1.48**	1.10
4	Large	**1.54**	1.41	1.32
5	Medium	1.31	1.31	**1.47**
6	Large	1.01	1.09	**1.70**
7	Large	0.93	**1.19**	1.02
8	Medium	1.03	0.78	**1.87**
9	Large	1.02	**1.73**	1.57

Source: Own construction (2025)

Table 15 shows that which company (respondent) is characterized by which term cluster the most. It can be seen that the terms belong to the third cluster "**Holistic Strategies for Sustainable Development**" mostly dominates the opinion of two large companies (1 & 6), and two medium companies (5 & 8). The terms of the second cluster "**Consumer Engagement & Industrial Collaborative**" are related to three large companies (2, 7, 9), and one medium company (3). As for terms in cluster 1 "**Sustainable Marketing Practices**" can be related mostly to one large company (4).

To enhance analytical clarity and visually summarize the computational qualitative findings, Figure 12 below, presents the thematic structure derived from the Moonplot and NMF clustering results. The figure illustrates how dominant subcategories identified in the term-document matrix were grouped into three data-driven clusters, which represent distinct strategic orientations in the implementation of green marketing practices among Jordanian food companies. This visual synthesis clarifies the progression from textual data to strategic interpretation.



Term–Document Matrix → Moonplot Proximity → NMF Clustering → Strategic Dimensions

Figure 12: Data-Driven Thematic Structure of In-Depth Interviews- Quotes\Codes\Themes

Source: Own construction (2026)

4.2 Costumer Focus Group

4.2.1 Overview of the Roadmap and Analytical Structure of the Focus Group

This part presents the findings of the focus group interviews conducted with two distinct consumer groups: environmentally aware (P1–P7) and non-environmentally aware (P8–P14). The analysis followed a structured process, combining participant responses, thematic coding, and comparative interpretation. To ensure clarity and transparency, detailed participant responses are provided in the Appendix, while this chapter focuses on thematic analysis and interpretation.

The focus group analysis was conducted in seven main sections, each aligned with the interview guide. Within each section, participant responses were summarized, categorized into themes and subthemes, and interpreted in relation to the research questions. Comparative insights between the two groups were also developed to highlight key differences and similarities. Below in table 16 a roadmap of the analysis. And in Figure 13, you can find the analytical structure of focus group results.

Table 16: Roadmap of Focus Group Analysis

Step	Section Number	Section Title	Sub-Components
1	**4.2.1**	**Participants' Profile and Group Classification**	Overview of participant characteristics (coded P1–P14)
2	**4.2.2**	**Association Game: Cognitive and Associative Perceptions of Green Concepts**	Participant associations with green-related terms → Thematic Summary & Interpretation → Group comparison
3	**4.2.3**	**Shopping Motivations and Key Purchase Drivers**	
	4.2.3.1	Stated Shopping Motivations	Shopping habits, emotional associations, and food purchase motivations.
	4.2.3.2	Group Activity: Prioritization of Purchase Factors	Ranking of purchase factors → Follow-up: Label Reading Behavior & Eco-Friendly Product Recognition.
	4.2.3.3	Scenario-Based Decision Evaluation	Impact of Consumption Values on GM & GPB (Scenario: Snack Choice). Step 1: Observation & Perception → Step 2: Values & Choice → Follow-up: Price Sensitivity.
	4.2.3.4	What Matters Most in Product Choice	Participant reflections on product choice → Follow-up: Key Purchase Influences
4	**4.2.4**	**Barriers and Future Challenges**	Perceptions of eco-friendly consumption in Jordan and expectations for change
5	**4.2.5**	**Integrated Comparative Synthesis of Consumer Groups**	Table of a comparative summary of thematic patterns & figures of integrated thematic profiles of the environmentally aware\non aware consumers.

Source: Own construction (2026)

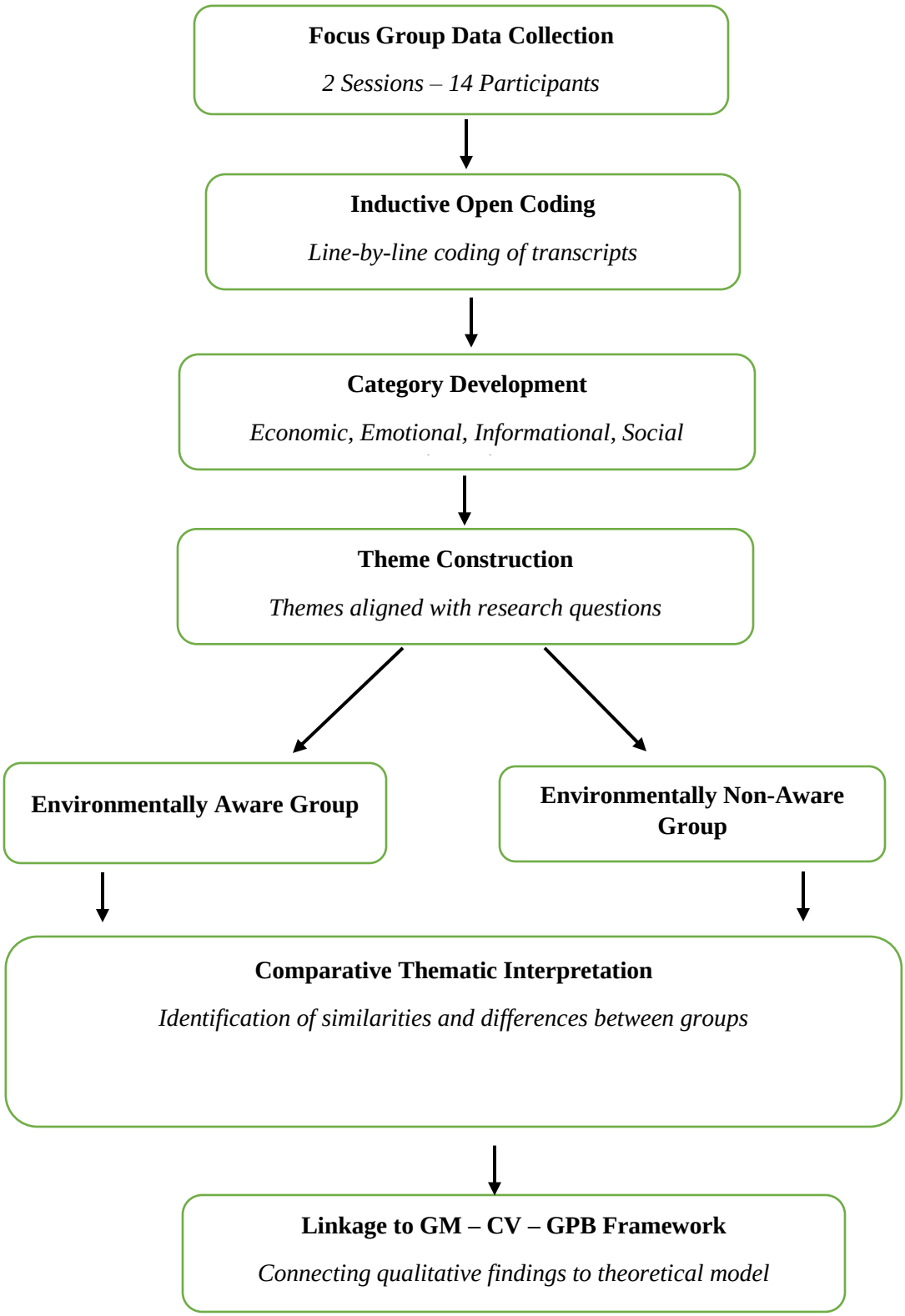


Figure 13: Analytical Structure of Focus Group Results.
Source: Own construction (2026)

4.2.1 Participant Profile and Group Classification

Environmentally Aware Group:

This focus group consisted of seven participants (P1–P7), aged between 23 and 60 years, mostly from Amman, Jordan. They represented diverse backgrounds and shared a general interest in sustainability. Several participants engaged in habits aligned with environmental responsibility, such as shopping for organic food, gardening, exercising outdoors, and attending wellness or sustainability events. These introductions highlighted their environmental awareness and values, which were further reflected in their responses throughout the discussion.

Non-Aware Group:

This focus group consisted of seven participants (P8–P14), aged between 24 and 55 years, from different regions of Jordan. They represented varied personal and professional backgrounds but generally showed lower engagement with sustainability-related issues. Their introductions reflected shopping habits primarily guided by convenience, affordability, and family needs, rather than explicit environmental or health considerations. These perspectives offered valuable contrast to the environmentally aware group and provided insight into mainstream consumer attitudes in Jordan.

4.2.2 Association Game: Cognitive and Associative Perceptions of Green Concepts

After Participant introductions, an association game was conducted with members of the environmentally aware/ non aware groups to explore participants' initial perceptions of green-related terms. Each participant was presented with ten terms commonly linked to green marketing and sustainability. They were asked to share the first thought or image that came to mind. This activity aimed to capture spontaneous emotional and cognitive reactions to sustainability-related language. The responses were thematically analyzed and categorized based on tone (positive, neutral, or concerned), and type (rational, emotional, or behavioral). Detailed participant responses of **participant associations with green-related terms** for both groups are presented in (Appendices K). The comparative thematic results are summarized in Table 17 below. While the

main text presents only the comparative tables and thematic summaries to highlight the key insights, below the thematic summary and interpretation of these results.

- Thematic Summary and Interpretation (Appendices K.1 "Aware Group"):

Participants' responses show a consistently positive and meaningful connection to green-related concepts, combining rational awareness, personal values, and lifestyle behaviors:

- **Sustainability** was viewed not only as environmental responsibility (*"My work," "Responsibility," "Smart agriculture"*) but also as something personal and systemic (*"It affects people's health"*, *"Positive impact"*).
- **Organic, Recycling, and Healthy** were deeply tied to health and trust, with participants expressing belief in their practical and ethical value (*"I trust it more," "A priority as a mother," "No chemicals"*).
- **Zero Waste** emerged as a shared aspiration, recognized as valuable but difficult to fully implement (*"Hard to achieve," "Long-term goal," "Difficult but necessary"*).
- **Local Product and Energy Saving** were praised not only for practical benefits but for contributing to economic and environmental sustainability.
- While most terms evoked positive and rational reflections, a few terms (e.g., *Zero Waste*, *Green Packaging*) revealed critical awareness of limitations in local context (*"Not very common," "Hard to access"*).

This pattern illustrates a deep level of engagement with environmental issues among aware participants, rooted in both individual habits and broader socio-ecological perspectives.

- **Thematic Summary and Interpretation (Appendices K.2 "Non-Aware Group"):**

The responses from the environmentally **non-aware group** revealed a **limited and mixed familiarity** with green-related terminology, with several participants indicating **uncertainty or first-time exposure** to certain terms, especially:

- **Green Packaging** and **Zero Waste**: Multiple participants stated they were unfamiliar with these terms (*"First time hearing it"*, *"Not available here"*, *"Nothing came to mind"*), suggesting **low exposure** or lack of discussion around such practices in their context.

- **Organic**: A few participants demonstrated awareness (*"No pesticides or chemicals"*), while others expressed confusion or equated it with unrelated ideas (*"Fertilizer"*, *"First time hearing it"*).
- **Sustainability & Healthy**: These terms generated **stronger associations**, often related to **environment, agriculture, or health,** reflecting that some **core ideas are understood,** even without a clear green behavior framework.
- **Local Product**: Frequently associated with being *"not popular"* or *"not supported"*, indicating a **lack of perceived value or appeal,** unlike the aware group who embraced it positively.
- **Energy Saving & Recycling** were among the more **recognized and action-linked concepts,** although primarily framed in **practical** or **cost-saving** terms.

In contrast to the aware group, responses here were **less emotionally or ethically driven**, and more often framed in **pragmatic, unfamiliar, or surface-level terms.** This indicates a **lower depth of environmental engagement,** although some potential for awareness-building exists around common areas like *health*, *energy*, and *basic recycling*.

- **Comparison: Aware vs. Non-Aware Groups**

This section compares how environmentally aware and non-aware participants responded to the ten green-related terms. The comparison highlights key differences in perception depth, emotional connection, and familiarity with sustainability concepts. Table 16 presents the differences between those 2 groups.

Table 17: Comparison - Participant Associations with Green-Related Terms

Term	***Aware Group***	***Non-Aware Group***
Sustainability	Seen as environmental responsibility, personal values, or professional role (*"Responsibility," "My work"*)	Linked to general concepts (*"Agriculture," "Long-term," "Protection"*) but with less clarity
Shopping	Viewed as a conscious activity (*"Enjoyment," "Opportunity to choose"*)	Associated mainly with supermarkets or clothing stores (*"Malls," "Clothing"*)
Organic	Trusted and associated with health (*"Free from chemicals," "Smart choice"*)	Often misunderstood or unfamiliar (*"Fertilizer," "First time hearing it"*)
Green Packaging	Positively viewed as necessary and future-oriented (*"Excellent alternative," "Important for the future"*)	Largely unknown or unfamiliar (*"Not very common," "Nothing came to mind"*)
Recycling	Linked to daily habits and civic responsibility (*"I try to stick to it," "Civic duty"*)	Basic recognition (*"Plastic recycling," "Paper recycling"*), but less personal involvement
Food	Associated with quality, life, and origin (*"Life," "Local production," "Variety"*)	Similar foundational ideas (*"Energy," "Source of life"*), but no environmental link
Zero Waste	Seen as an ambitious but valuable goal (*"Long-term goal," "Graduation project"*)	Often misunderstood or unknown (*"Fresh air," "Not available," "First time hearing it"*)
Local Product	Strong positive sentiment (*"Always the best," "Support Jordanian farmers"*)	Generally negative or indifferent (*"Not popular," "Oppressed," "Not supported"*)
Energy Saving	Viewed as personal responsibility and environmental contribution (*"I try at home," "Pay less"*)	Framed mostly as a cost-saving strategy (*"Reducing electricity," "Solar energy"*)
Healthy	Deeply valued and linked to lifestyle choices (*"Personal investment," "Fitness"*)	Linked mostly to physical health and food (*"Gym," "Healthy food," "Vegetables"*)

Source: Own construction (2025)

- **Comparative Thematic Summary and Interpretation:**
    1. **Familiarity & Awareness:** Participants in the aware group demonstrated greater familiarity with sustainability-related terms and concepts. In contrast, several non-aware participants expressed uncertainty, limited exposure, or more literal associations & surface-level interpretations.
    2. **Emotional & Ethical Framing:** Aware participants frequently used emotionally and ethically charged language (e.g., “trust,” “conviction,” “responsibility”), suggesting a deeper internalization of environmental values. Non-aware participants tended to reference practical or everyday concerns, focusing on price, daily habits, or general confusion about certain concepts.
    3. **Practical vs. Conceptual Engagement:** Responses from the aware group often reflected both conceptual understanding and real-life sustainable behaviors (e.g., recycling, choosing local or organic products). Non-aware participants showed limited engagement with these ideas, though some awareness of health and energy-saving behaviors was noted.
    4. **Differences in Perception:** These contrasts suggest varying levels of environmental literacy between the two groups, highlighting possible segmentation in consumer understanding and priorities.
    5. **Relevance to Green Marketing Communication:** The results suggest variation in how consumers interpret green-related terms. While the aware group may respond better to value-based messaging aligned with their environmental mindset, the non-aware group may benefit more from messages focusing on health, affordability, and product clarity.

4.2.3 Shopping Motivations and Key Purchase Drivers

4.2.3.1 Stated Shopping Motivations

This section explores the shopping habits, emotional associations, and food purchase motivations of participants from the environmentally aware group. Participants were asked about the frequency and location of their grocery shopping, the types of products they purchase most frequently, who is responsible for shopping in their household, and the main criteria they consider when making food purchases.

It involved open coding, followed by the development of categories and sub-categories, with the aim to capture how aware/ not aware consumers make food-related decisions, and what factors influence their choices. Detailed participant responses with the **main categories and sub-categories** for both groups are presented in (Appendices L). The comparative thematic results are summarized in Table 18 below. While the main text presents only the comparative tables and thematic summaries to highlight the key insights, below the thematic summary and interpretation of these results.

- Thematic Summary and Interpretation (Appendices L.1 "Aware Group"):

1. Participants from the environmentally aware group demonstrate structured and health-oriented shopping behaviors. Most participants reported weekly or bi-weekly grocery shopping routines, with fresh produce often bought more frequently (e.g., daily)
2. Shopping venues combine large retail stores (such as Carrefour and Safeway) with local markets and farmers' markets, reflecting a tendency to balance convenience with conscious consumerism.
3. Responsibility for grocery shopping is often shared between spouses or family members, particularly in households where awareness of health and sustainability is high.
4. When asked about the categories of products most frequently purchased, all participants mentioned vegetables, fruits, dairy, meat, and eggs, with some highlighting specific interest in healthy snacks or grains, reflecting their attention to nutritional diversity.
5. The top purchase criteria were highly consistent across participants:

- **Quality** emerged as the top priority.
- **Nutritional value** and **taste** were also dominant considerations.
- **Packaging** and **price** were frequently mentioned, often associated with the product's health or environmental aspects.
- Two participants went further, discussing **brand trust** and **product ingredients**, signaling deeper awareness of product content and branding.

- Thematic Summary and Interpretation (Appendices L.2 "Non-Aware Group"):

1. Participants in the non-aware group exhibit routine and price-conscious shopping behaviors, with most reporting shopping two times per week. Although some shop more

frequently or on an as-needed basis. Notably, P13 reported shopping intervals ranging from daily to monthly, showing flexibility in shopping habits.

2. Preferred shopping locations included large supermarkets and mall stores like Carrefour and C-Town, especially among younger or urban participants. Others also relied on nearby local markets, particularly for quick or daily essentials.
3. Shopping responsibilities varied across the group. Many participants mentioned that parents still take the lead in shopping, while others, especially married participants shopping tasks with their spouse. A few shop independently.
4. In terms of product categories, all participants regularly bought fruits, vegetables, and dairy products, while others also mentioned meat, grains, legumes, and general groceries. A few mentioned snacks as part of their usual purchases.
5. The most important purchase criteria for this group were:

- **Quality** and **Price**, mentioned by all participants.
- There was also strong attention to **taste** and **expiration or production dates**.
- Fewer participants referenced **packaging**, **brand**, or **ingredients**, and none explicitly mentioned environmental or ethical considerations, confirming a general **lack of green awareness** compared to the aware group.

- Comparison: Aware vs. Non-Aware Group

Table 18: Comparison - Main Categories and Sub-Categories

Aspect	***Aware Group***	***Non-Aware Group***
Shopping Frequency	Mostly once a week or every two weeks.	Majority twice a week, some daily or as needed (no fixed schedule).
Shopping Locations	Strong preference for large supermarkets (e.g., Carrefour, Safeway) and farmer/local markets.	Mostly malls and large stores (Carrefour, C-Town), fewer mentioned local markets.
Main Purchasers	Shared responsibility: self or with spouse.	More dependent on parents (especially mothers), though some shop alone or with spouse.

Food Categories Purchased	Emphasis on healthy foods: vegetables, fruits, dairy, meats, healthy snacks, juices.	Similar categories: vegetables, fruits, dairy, meats, but less emphasis on "healthy" or "organic".
Top Criteria for Purchase	Clear health-conscious values: quality, nutritional value, packaging, taste, and price.	Practical criteria: price, brand, taste, expiration date, and quality. Less focus on nutrition.
Green Awareness	Demonstrated awareness of sustainability, green packaging, and health impact of food.	No mention of environmental or sustainability-related factors in choices.
Emotional Mapping	Connected food choice to health, lifestyle, and environmental values.	Focused on necessity, affordability, and brand familiarity.
Unique Observations	Some link professional background (e.g., marketing, nutrition, agriculture, environmental engineering) to food choice.	Participants did not link career/lifestyle to food choice; decisions were more functional or habit-based.

Source: Own construction (2025)

- **Comparative Thematic Summary and Interpretation:**

1. The aware group clearly demonstrates a conscious and informed shopping behavior, often integrating green values, nutritional awareness, and personal lifestyle into food purchases. Their decisions appear value-driven, and they're more selective and reflective in evaluating product features such as packaging, source, and health impact.
2. In contrast, the **non-aware group** shows more **routine and cost-based behaviors,** with **less engagement** in topics related to health or sustainability. Their decisions revolve around **necessity**, **brand recognition**, and **affordability**, with minimal critical reflection on product origin or long-term impact.

4.2.3.2 Group Activity: Prioritization of Purchasing Factors

Based on the participants' responses, several key factors emerged as important or less important when choosing green or sustainable food products. These were grouped into main categories and sub-categories through manual open coding. And follow insights after it to Label Reading Habits & Environmentally Friendly Product Recognition. Detailed participant responses with the **key**

purchase decision factors categories, and with follow-up insights about label reading behavior & eco-friendly product recognition for both groups are presented in (Appendices M). The comparative thematic results are summarized in Table 19, and 20 below. While the main text presents only the comparative tables and thematic summaries to highlight the key insights, below the thematic summary and interpretation of these results.

4.2.3.2.1 Environmentally Aware Group

a) Main Question: Prioritization of Purchasing Factors

- Thematic Summary and Interpretation (Appendices M.1 "Aware Group"):

The environmentally aware participants emphasized health-related benefits as the top purchase motivator, closely followed by availability, quality, and trust in brands. Environmental protection, while noted, often took a secondary role unless aligned with health or ethical values. Some participants rejected brand trust and marketing labels unless backed by clear evidence. On the other hand, Factors mentioned by fewer participants (e.g., Ethical production, Peer influence) may still hold high thematic significance for segmentation and discussion in next chapter.

b) Follow-up Question: Label Reading Habits and Eco-Friendly Product Recognition

- Thematic Summary and Interpretation- label reading behavior & eco-friendly product recognition (Appendices M.2 "Aware Group"):

1. Label **Reading Behavior**: Most participants reported that they *always* read product labels, especially focusing on ingredients, additives, and nutritional information. Time spent ranged from 10 to 30 seconds.
2. **Level of Awareness**: Participants showed high awareness regarding the connection between food, health, and environmental impact. They demonstrated clear knowledge of sustainability concepts, such as ethical production and eco-friendly packaging.
3. **Examples of Environmentally Friendly Products**: Participants were able to name a variety of environmentally friendly food products, including *organic yogurt*, *Jordanian quinoa*, *local herbs*, and *recyclable or paper-packaged goods*.

4. **Decision-Making Drivers**: While health benefits, quality, and absence of additives were strong priorities, some also considered *ethical production* and *environmental impact* in their purchasing decisions, though to a lesser extent.

4.2.3.2.2 Environmentally Non-Aware Group

a) Main Question: Prioritization of Purchasing Factors

- Thematic Summary and Interpretation (Appendices M.3 "Non-Aware Group"):

1. The non-aware group emphasized core functional aspects in their food purchasing decisions. Participants consistently cited price, health benefits, taste, product availability, and ease of accessibility as primary considerations. In contrast, environmental factors, such as environmental protection, ethical production, or sustainable packaging, were largely marked as unimportant across interviews.
2. Responses generally reflected a pragmatic orientation, with food selection based on immediate personal or household needs. Several participants mentioned health as a reason for reading labels, often focusing on expiration dates, calorie content, or dietary compatibility. However, references to environmental friendliness were minimal, and when present, they tended to be vague or uncertain.

b) Follow-up Question: Label Reading Habits and Eco-Friendly Product Recognition

- Thematic Summary and Interpretation - label reading behavior & eco-friendly product recognition (Appendices M.4 "Non-Aware Group"):

- **Label Reading Behavior**: Most participants do not consistently read product labels. A few check for specific information like calories or expiration dates, but the habit is often irregular or absent. A few participants stated explicitly that they **never check** labels.

- **Time Spent on Labels**: The majority spend **less than 10–15 seconds**, often only glancing at expiry dates. Only one participant reported reaching up to **20 seconds**.

- Motivations: The main reason for checking labels is **health or diet-related** information (e.g., calories, fat). Brand trust and familiarity reduce the need to check labels for many.

- **Awareness of Environmentally Friendly Products**: Environmental awareness remains low. Some mentioned diet-related or whole food products (like oats or wheat), usually from a **health perspective** rather than sustainability. A few associated green packaging with eco-friendliness, but **most had limited or no awareness**.

- ***Comparison Main Question: Aware vs. Non-Aware Group***

Table 19: Comparison Main Question: **Prioritization of Food Purchase Factors**

Category	***Aware Group***	***Non-Aware Group***
Health & Safety	Strong emphasis on health benefits and being additive-free; seen as core motivators.	Frequently mentioned health benefits, but often without deeper elaboration or strong emphasis.
Product Attributes	Quality, taste, and packaging design were key factors, with packaging linked to environmental messaging.	Taste and quality were valued, but packaging was rarely tied to environmental meaning.
Accessibility	Availability in stores and ease of access were acknowledged, though not prioritized over health.	These were seen as essential, especially ease of access and store availability.
Economic Considerations	Price was important but not dominant; discounts appreciated by those with cost concerns.	Price and discounts were central concerns across the group.
Trust & Ethics	Trust in brands and ethical production mattered, especially when linked to health and sustainability.	Often listed trust in brands, but few connected it to broader ethical concerns.
Social Influence	Some influence from family/friends, mostly secondary to personal conviction.	Generally not influential; participants said food choices are personal and practical.
Environmental Concern	Several participants explicitly marked environmental protection as important.	Rarely seen as important; participants showed minimal connection to environmental impact.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation of Main Question:**
  - The aware group showed value-based decision-making, integrating health, ethics, and sustainability.
  - The non-aware group leaned toward pragmatic concerns: price, taste, convenience, with little reference to environmental or ethical aspects.

- ***Comparison Follow-up Question: Label Reading Habits and Eco-Friendly Product Recognition***

Table 20: Comparison Follow-up Question: Label Reading Habits and Eco-Friendly Product Recognition

Category	***Aware Group***	***Non-Aware Group***
Label Reading Frequency	- All participants reported always reading food labels. - Described it as a habit or even a professional requirement (e.g., nutritionist, engineer).	- Inconsistent reading behavior. - Only 1-2 participants read labels always. - Others said they read sometimes or rarely, and some never check labels.
Time Spent Reading Labels	- Most spent 10-30 seconds reading labels. - Higher involvement (e.g., 30 seconds if interested, or looking for ingredients, certifications).	- Majority spent under 10-15 seconds. - Only one mentioned up to 20 seconds, but for health purposes only. - Many only glance at expiry dates.
Motivations for Reading Labels	- Mainly health benefits, ingredient safety, and eco-certifications (e.g., organic, additive-free, recyclable). - Some even search online for more info.	- Primarily focused on expiry dates, calories, or diet-related info. - Lack of deeper engagement or concern about environmental claims.
Familiarity with Green Certifications	- Mentioned organic logos, recycling symbols, or certified ingredients.	- No mention of certifications or formal symbols.

	- Participants demonstrated active interest in product ethics and sourcing.	- Green packaging was mistakenly associated with being eco-friendly. - Awareness was low to absent.
Examples of Eco-Friendly Products	- Participants named specific items: local olive oil, organic yogurt, grains, paper-packaged legumes, natural juices, etc.	- Recalled generic diet or healthy foods like oats, whole wheat, or keto items. - Often chosen for health rather than environmental reasons.
Awareness of Environmental Link	- Clear link made between personal health, company responsibility, and environmental impact. - Viewed label-checking as a conscious green practice.	- Focus was on personal health or diet, not environmental protection. - Some participants did not know what an environmentally friendly product was.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation of Follow-up Question:**

- **Familiarity & Engagement with Labels:** Participants in the environmentally aware group consistently reported that they read food labels carefully, often noting ingredients, nutritional value, and sustainability markers (e.g., organic certification or eco-friendly packaging). In contrast, the non-aware group generally paid less attention to labels, with most participants only checking expiration or production dates.
- **Depth of Consideration:** Aware participants demonstrated deeper engagement with product attributes, including ethical production, additives, and environmental claims. Many reflected on how these factors aligned with their health goals and sustainability values. Non-aware participants, on the other hand, mentioned practical criteria such as taste, brand familiarity, or affordability, with fewer mentions of environmental or ethical concerns.
- **Time Spent Reading Labels**: Most aware participants reported spending between **10 to 30 seconds** reading food labels, with some even researching terms or certifications. In the

non-aware group, participants typically reported spending **5 to 15 seconds,** primarily focused on price or expiry dates.

- **Examples of Perceived Environmentally Friendly Products:** Aware participants identified specific examples such as **organic yogurt, local herbs, nuts in paper packaging, and Jordanian quinoa.** Non-aware participants, when they responded, gave vague or uncertain examples like **brown bread or oats,** and some openly expressed unfamiliarity with the concept.
- **Health vs. Environmental Drivers:** While both groups valued health to some extent, the aware group consistently connected health concerns to environmental responsibility (e.g., choosing products with fewer additives or sustainable sourcing). The non-aware group focused more on personal well-being or dietary needs without explicitly linking these choices to broader environmental awareness.

4.2.3.3 Scenario-Based Decision Evaluation

This section explores how participants' consumption values influence their food purchasing decisions, particularly in response to environmentally friendly product features. Through a scenario-based activity involving a choice between two snacks, one eco-friendly (Snack A) and one conventional (Snack B), participants revealed their perceptions, value-driven preferences, and trade-offs. The activity was structured in three steps: **Observation & Perception, Values & Choice, and Clarification** (informed by the moderator stating that Snack A is eco-friendly and locally sourced). Participant responses offer insights into the relative weight of environmental, health, and price factors in shaping green purchase behavior, especially when sustainability features are not the only variable at play. Detailed participant responses with **step 1 & 2 analysis: observation & perception → values & Choice, along a follow-up: snack price prompt** for both groups are presented in (Appendices N). The comparative thematic results are summarized in Table 21 and 22 below. While the main text presents only the comparative tables and thematic summaries to highlight the key insights, below the thematic summary and interpretation of these results.

4.2.3.3.1 Environmentally Aware Group

a) Main Question: Steps 1 &2: Observation & Perception → Values & Choice

- **Thematic Summary and Interpretation (Appendices N.1 "Aware Group"):**

- Participants in the aware group demonstrated a nuanced evaluation of both snacks, immediately recognizing environmental cues such as recyclable packaging, eco-labels, and the presence of organic ingredients. Snack A was consistently perceived as healthier and more environmentally friendly, while Snack B was associated with conventional packaging and processed content.
- In terms of values and choices, participants leaned toward Snack A when it's environmental and health advantages aligned with acceptable pricing and taste. While eco-friendly packaging and organic content were highly valued, many participants still weighed these attributes against practical concerns such as cost and availability. Several explicitly mentioned their interest in supporting sustainability, even if it required compromises, but not at the expense of affordability or flavor.

b) Follow-up Question: Snack Price Prompt

- Thematic Summary and Interpretation (Appendices N.2 "Aware Group"):

- The aware group demonstrated a strong inclination toward environmentally friendly options, but their loyalty was conditional. While most were willing to choose Snack A when the price difference was slight, a significant cost gap led to reconsideration. They consistently expressed a desire to balance **personal values (health, sustainability)** with **practical constraints (budget, affordability)**.
- This highlights that although environmental awareness shapes intention, actual **green purchasing behavior is moderated by price sensitivity,** a finding that has implications for green product pricing strategies.

4.2.3.3.2 Environmentally Non-Aware Group

a) Main Question: Steps 1 &2: Observation & Perception → Values & Choice

- **Thematic Summary & Interpretation (Appendices N.3 "Non-Aware Group"):**

- Participants in the non-aware group focused primarily on visual appeal, taste, and price when comparing Snack A and Snack B. Most participants recognized that Snack A appeared healthier or more organic, but preferred Snack B due to its eye-catching packaging, familiarity, and anticipated flavor. The design and color of the product emerged as significant influencers in their purchase decisions.
- Additionally, price sensitivity was consistently mentioned, especially in scenarios where participants viewed organic or eco-labeled products as potentially more expensive or less flavorful. Overall, this group demonstrated a more pragmatic, hedonic, and price-conscious approach, with minimal emphasis on environmental considerations.

b) Follow-up Question: Snack Price Prompt

- Thematic Summary and Interpretation (Appendices N.4 "Non-Aware Group"):

- Participants from the non-aware group showed high sensitivity to price differences, often choosing the more affordable option even if it was less healthy or less environmentally friendly. Taste and budget constraints were dominant drivers in their decisions.
- A few expressed conditional openness to choosing the greener option (Snack A) only if the price difference was minimal, but most stated that higher cost would deter them entirely. The majority did not weigh environmental considerations in their decision, reinforcing the earlier finding that hedonic and economic values drive their purchasing behavior more than ethical or environmental ones.

- ***Comparison Main Question: Aware vs. Non-Aware Group***

Table 21: Comparison Main Question: Step 1 and 2 Analysis- Observation and Perception → Values and Choice

Category	***Environmentally Aware Group***	***Non-Aware Group***
Product Perception (Step 1)	Identified eco-friendly packaging, organic labeling, and company values. Noticed sustainability cues (logos, certifications).	Focused on color, packaging design, and label attractiveness. Limited recognition of sustainability elements.
Packaging Evaluation	Saw packaging as a reflection of environmental commitment. Packaging aesthetics mattered, but so did biodegradability and recyclability.	Valued packaging only for its visual appeal and attractiveness. Sustainability wasn't recognized or seen as valuable.
Ingredient Awareness	Paid attention to ingredient lists, additives, and organic/natural content.	Rarely discussed ingredients unless prompted; focused more on taste and appearance.
Decision Drivers (Step 2)	Prioritized health benefits, environmental impact, and ethical production — but also price and taste to a lesser extent.	Chose based on price, taste, and visual attraction. Health and environment were minor or irrelevant to decision-making.
Value-Based Reasoning	Demonstrated integrated decision-making: ethical, health-conscious, and rational.	Demonstrated habitual or emotional decision-making based on familiarity and convenience.
Openness to Green Products	High but dependent on value alignment and affordability.	Low only if price and appearance are favorable.
Trade-Offs Acknowledged	Willing to compromise slightly on price or taste for environmental or health gains.	Unwilling to compromise on price or taste for eco-benefits.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation of Main Question:**

1. Depth of Perception: The aware group exhibited greater awareness and interpretation of sustainability cues, such as packaging materials and ingredient transparency. In contrast, the non-aware group interpreted products mainly through surface-level aesthetics.

2. Values as Decision Anchors: Aware participants often justified their choices through an internalized value system (health, environment, and ethics). Their evaluations were more holistic. Meanwhile, the non-aware group favored external, sensory, and price-based cues, showing limited connection to sustainability.

3. Behavioral Implications: This divergence suggests that green marketing targeting aware consumers should highlight ethical production, certifications, and eco-health intersections, while messaging toward non-aware consumers might be more effective if it connects sustainability with familiar benefits like taste, affordability, and social trends.

- Comparison: Follow-Up Question: Snack Price Prompt (Aware vs. Non-Aware Group)

Table 22: Comparison Follow-Up Question: Snack Price Prompt – Environmentally Aware/ Non-Aware Consumers

Theme	***Aware Group***	***Non-Aware Group***
Openness to Paying More	Most participants were open to paying slightly more for Snack A if the difference was reasonable and aligned with values (e.g., health, sustainability). **- P6:** "If the price difference isn't too large, I'd go for Snack A."	Most were not willing to pay more for Snack A. They often rejected the idea of spending more for eco-friendliness. **– P8:** "I would give up on everything organic."
Main Purchase Drivers	Health, environmental packaging, ethical sourcing, and long-term value were emphasized. Price was a factor, but not dominant.	Price and taste were the dominant factors. Environmental or health benefits were often secondary or ignored.

Conditional Choice	Many stated they'd choose Snack A if the price gap was small, balancing sustainability with personal budgets.	A few expressed similar views, but it was rare and mostly overridden by price concerns. Only one person saw potential value in Snack A under certain conditions (e.g., health goals, moderate pricing).
Perceived Value of Eco Products	Viewed as worth the investment if it aligned with personal or ethical values. **-P5:** "Supports farmers, so I'd consider paying more."	Often viewed as not justifying the higher price, especially if taste or familiarity was lacking.
Emotional/Ethical Framing	Responses often included concern for the environment, responsibility, or support for local production.	Emotionally neutral or pragmatic. Language focused on cost, habit, or appearance, not ethics or sustainability.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation of Follow-Up Question:**

1. **Price as a Decisive Factor (Both Groups):** Participants from both the environmentally aware and non-aware groups acknowledged that **price influences their final decision.** However, the **degree and rationale** varied notably between the groups.
2. **Aware Group- Price Considered, But Not Primary:** Most participants in the aware group were **willing to pay slightly more** for eco-friendly products, especially if aligned with health or ethical values. However, if the price gap became substantial, their purchasing decision would shift. This group showed a **value-driven compromise**, balancing environmental concern with budget constraints.
3. **Non-Aware Group- Price is the Primary Filter:** In contrast, the non-aware group consistently prioritized **affordability over sustainability**. Their responses indicated a **strong price sensitivity**, often dismissing Snack A (eco-friendly) outright if it was more expensive, regardless of its benefits. Visual appeal and taste also outweighed environmental or ethical considerations.

4. **Conditional Behavior in Both Groups:** Both groups expressed **conditional openness-** i.e., they would choose the more sustainable option if the price difference was small. This suggests a possible space for **green marketing strategies that emphasize cost-effectiveness.**
5. **Underlying** Values Influence Justification:

- Aware group justifies their spending decisions through **values such as health, sustainability, and ethics.**
- Non-aware group often justifies based on **practicality, familiarity, and immediate satisfaction** (taste, budget).

4.2.3.4 What Matters Most in Product Choice

This part of the discussion aimed to explore the core factors that guide consumers' food purchasing decisions beyond surface-level impressions. Participants were asked to reflect on what truly influences their choices, such as price, taste, packaging, health, environmental values, or social influence, to better understand the role of individual priorities in shaping real-life consumer behavior. Detailed participant responses with **step-based thematic (what matters most their choices), along a follow up question: "What matters most to you when buying food? (Step-Based Thematic: Key Purchase Influences)** For both groups are presented in (Appendices O). The comparative thematic results are summarized in Table 23 and 24 below. While the main text presents only the comparative tables and thematic summaries to highlight the key insights, below the thematic summary and interpretation of these results.

4.2.3.4.1 Environmentally Aware Group

a) Main Question: What Matters Most in Product Choice

- **Thematic Summary and Interpretation (Appendices O.1 "Aware Group"):**

- **Health and eco-friendliness are key attractors**: Most appreciated the snack's natural, local, or sustainable image. These aligned with their personal values of wellness and environmental responsibility.

- **Taste and price remain dominant deal breakers**: Even among the environmentally aware group, practical concerns like flavor and affordability were significant. Aesthetic or ethical appeal was often not enough on its own.
- **Brand trust and availability influence confidence**: Some expressed concern if the product came from an unfamiliar company or wasn't consistently stocked.
- **Gift vs. purchase behavior shows contrast**: Most said they'd gladly receive such a snack as a gift, yet some hesitated when it came to buying it with their own money, again due to cost or taste uncertainty.
- **Purchase intention is flexible but value-driven**: Most participants would try the snack, especially if the price wasn't too high. They balanced personal values with realistic daily shopping considerations.

b) Follow-up Question: Key Purchase Influences

- Thematic Summary and Interpretation (Appendices O.2 "Aware Group"):

- **Values-Driven Choices Dominate**: Most participants from the aware group emphasized **health**, **sustainability**, and natural ingredients as core decision drivers. Several were willing to pay more for products that matched these values.
- **Packaging & Aesthetics Still Matter**: While not the most important factor, packaging influenced perception, especially when it was simple, eco-friendly, or visually clean.
- **Social & Informational Influence:** Although not decisive, some participants were swayed by friends' opinions or online reviews, indicating a moderate level of peer influence.
- **Taste and Exploration**: Participants expressed openness to trying new products, particularly when they aligned with personal or environmental values, suggesting that curiosity and innovation also hold weight when matched with trust or familiarity.

4.2.3.4.2 Environmentally Non-Aware Group

a) Main Question: What Matters Most in Product Choice

- Thematic Summary and Interpretation (Appendices O.3 "Non-Aware Group"):

- Participants in the non-environmentally aware group primarily emphasized price and availability as dominant factors influencing their decisions. While the idea of receiving such a snack as a gift was welcomed by all, actual purchase intentions were largely conditional, based on promotions, discounts, or the product being reasonably priced and accessible.
- Environmental and health-related qualities were rarely prioritized, and when mentioned, were usually secondary to taste and cost. The group expressed a general reluctance to adopt eco-friendly or organic snacks as regular purchases due to perceived higher cost, limited availability, or doubt about taste quality.

b) Follow-up Question: Key Purchase Influences

- **Thematic Summary and Interpretation (Appendices O.4 "Non-Aware Group"):**

- This group prioritizes price across all responses, followed closely by taste and availability. Product packaging and brand names played a secondary but noticeable role. Environmental or sustainability-related attributes were entirely absent.
- There decisions are driven by budget-conscious practicality, with some openness to quality and flavor, but only if the product is accessible and affordable.

- ***Comparison: Main Question: Step-Based Thematic (What Matters Most their Choices) (Aware vs. Non-Aware Group)***

Table 23: Comparison: Main Question Step-Based Thematic (What Matters Most their Choices) - Environmentally Aware/ Non-Aware Consumers

Theme	***Aware Group***	***Non-Aware Group***
General Perception	Participants generally had **positive impressions** of the snack, especially due to its eco-friendly design and health positioning.	Participants were more **indifferent or skeptical**, with many stating that **eco-friendly** or **organic** claims didn't influence them.
Willingness to Buy	Most were **open to purchasing**, especially if the price was reasonable and the product supported local or sustainable values.	The majority were **reluctant to buy**, often citing price and taste as the primary reasons for not choosing it.
Barriers to Purchase	Main barriers were price, uncertain taste, and limited availability. However, some said they would still try it.	Barriers were more rigid: high price, low availability, and lack of trust in organic products. Taste was a decisive factor.
Reaction if Gifted	All said they would appreciate receiving it.	All were happy to accept it as a gift, even if they wouldn't choose to buy it themselves.
Change in Decision if Paying Themselves	Many said they would still buy it, especially if aligned with their values. Budget mattered, but values often outweighed cost.	Most would not buy it themselves unless price and taste were favorable. Environmental benefits were not a motivator.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation of Main Question:**

- **Aware participants** integrated **sustainability, health, and ethical values** into their purchasing decisions. **Price** mattered, but it was balanced against values like supporting local products or environmental responsibility.

- **Non-aware participants,** in contrast, prioritized **practical concerns** such as **price, taste, and availability.** They were less influenced by values such as sustainability or organic production and more by familiarity and budget.

- Comparison: Follow-Up Question: "What matters most to you when buying food?" (Aware vs. Non-Aware Group)

Table 24: Comparison: Follow-Up Question: Key Purchase Influences – Environmentally Aware/ Non-Aware Consumers

Theme	***Aware Group***	***Non-Aware Group***
Top Priority	**Health** and **sustainability** (e.g., ingredients, production method, eco-impact).	**Price** is the dominant priority across all participants.
Secondary Considerations	**Ingredients**, **packaging** (if eco-friendly), some mention of **brand** and **friends' opinions**.	**Taste**, **brand familiarity**, **availability**, and **packaging**. Environmental factors were not mentioned.
Packaging	Not a key motivator alone.	Noted as important if colorful or attractive.
Brand Influence	Seen as less important unless associated with sustainability.	Brand is a clear influencer, tied to trust and familiarity.
Social Influence	Some mentioned friend recommendations or online reviews.	Some mentioned that they're influenced by peers, and others not unless it's a big decision.
Novelty & Trying New Products	A few were open to new items if they match their values.	Willingness to try new products only if they look appealing or are on sale.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation of Follow-Up Question:**

- The **aware group** demonstrated a **values-based decision process**, prioritizing environmental and health factors. Their approach shows higher engagement with sustainability narratives and **a willingness to invest more** if it aligns with their beliefs.

- On the other hand, the **non-aware group** operated within a **price-first framework**, where health or sustainability only mattered if they did not conflict with affordability and availability. Their decisions were driven by **taste, budget, and familiarity**, with little consideration of long-term or ethical impacts.

4.2.4 Barriers and Future Challenges

This final section explores participants' reflections on the future of eco-friendly product consumption in Jordan. Participants were asked to consider whether there's a need to increase public interest in such products and to share their perspectives on what should change in how products are marketed, sold, and made available. Their insights reveal broader societal, economic, and policy-level considerations that go beyond individual preferences, offering a forward-looking view of how sustainable consumption might evolve in Jordan's local context. Detailed participant responses with **future challenges of eco-friendly product consumption in Jordan** for both groups are presented in (Appendices P). The comparative thematic results are summarized in Table 25 below. While the main text presents only the comparative tables and thematic summaries to highlight the key insights, below the thematic summary and interpretation of these results.

- **Thematic Summary and Interpretation (Appendices P.1 "Aware Group"):**

1. Participants from the aware group expressed a shared belief in the potential for eco-friendly purchasing to grow in Jordan, but only if several systemic and social challenges are addressed.
2. A major focus was on awareness and education. Some emphasized the importance of early education and generational shifts. Another noted a need to break the stereotype that green products are only for the wealthy. Participants viewed awareness as essential but not enough on its own.
3. The issue of accessibility and affordability featured prominently. Some highlighted the limited availability and high prices, pointing out that sustainable options need to be more affordable and widespread, not confined to upscale stores.
4. Several participants stressed that marketing must evolve. They argued for more storytelling-based marketing that connects with consumers emotionally. They supported

this, adding that messaging must clearly communicate both health and environmental benefits.

5. From a policy and systemic change perspective, participants pushed for government and institutional involvement, calling for partnerships between sectors and campaigns to promote change.
6. Finally, trust and transparency emerged as a crucial point. Participants noted that clarifying the environmental impact of products is vital to building confidence and driving green purchases.

In summary, they're hopeful for the future of sustainability in Jordan, but only if awareness, affordability, accessibility, emotional connection, and trust are jointly addressed through collaborative, well-planned efforts.

- Thematic Summary and Interpretation (Appendices P.2 "Non-Aware Group"):

1. Unlike the aware group, participants in the non-aware group expressed significant skepticism about the future of eco-friendly product adoption in Jordan. Across responses, the dominant concern was price, often seen as the sole or most critical factor in purchasing decisions. Many felt that Jordanian consumer culture does not currently prioritize environmental concerns, and this cultural inertia presents a serious obstacle to change.
2. However, some participants showed conditional openness, suggesting that if eco-friendly products became more affordable, especially through discounts or promotions, they might consider trying them. Yet overall, this group emphasized that behavioral shifts are unlikely unless green alternatives become competitive in price and widely available.

- Comparison: Future Challenges of Eco-Friendly Product Consumption in Jordan (Aware vs. Non-Aware Group)

Table 25: Comparison - Future Challenges of Eco-Friendly Product Consumption in Jordan- Environmentally Aware/ Non-Aware Consumers

Main Theme	***Aware Group***	***Non-Aware Group***
Perceived Potential for Growth	Optimistic: Participants believe that interest in eco-friendly products will grow, especially with generational change and increased awareness.	Skeptical: Most participants doubt that demand will grow unless prices are lowered or heavily discounted.
Key Drivers of Change	Education, emotional marketing, governmental support, and clear product transparency are seen as crucial for increasing adoption.	Lower prices, offers, and stronger visibility in stores are viewed as the only realistic triggers for increased interest.
Barriers to Adoption	High prices, lack of awareness in some areas, and limited availability are acknowledged but seen as addressable through education and collaboration.	Price is seen as the primary obstacle, and most feel environmental values alone are not enough to drive purchases.
Role of Marketing and Institutions	Emphasis on storytelling, ethical production, and cross-sector collaboration (schools, media, companies).	Very little trust in marketing or institutional support. Belief that unless prices align with regular products, no campaign will work.
Cultural Readiness	Participants recognize that sustainability is not yet a mainstream cultural value in Jordan, but believe it can shift through social and educational efforts.	Participants strongly feel that cultural habits are fixed and that people won't change unless financially incentivized.

Source: Own Construction (2025)

- **Comparative Thematic Summary and Interpretation:**

- The aware group sees change as possible and underway, with an emphasis on education, emotional connection, and long-term strategy.
- In contrast, the non-aware group views the situation as unlikely to change without immediate and tangible financial incentives.

- While the aware group talks about **"investment," "values," and "collaboration,"** the non-aware group focuses on **"price," "availability," and "realistic expectations."**
- Together, the findings highlight a **significant segmentation** in consumer perception, suggesting that green marketing strategies in Jordan must be **tailored**: combining **value-driven messaging** for environmentally aware consumers, and **pragmatic, price-focused messaging** for less aware segments.

4.2.5 Integrated Comparative Synthesis of Consumer Groups

- **Comparative Summary of Thematic Patterns**

Table 26 below, reveal a comparative summary, which indicate the differences between environmentally aware and non-aware consumers. The aware group demonstrated emotional, ethical, and value-driven engagement with green concepts, which translated into conscious purchasing and careful evaluation of sustainability cues. In contrast, the non-aware group showed more literal interpretations, cost-driven behavior, and reliance on surface-level product features. These differences highlight how environmental awareness shapes both perceptions and purchasing behavior in the Jordanian food context.

Table 26: A Comparative Summary of Thematic Patterns

Key findings by section	**Aware Group**	**Non- Aware group**
1. Association game	Emotional & ethical associations (e.g. trust, responsibility, conviction) Higher environmental literacy	Literal associations (e.g. cleanliness, farming) Practical and price-oriented thinking
2. Purchasing behavior	Conscious, value-driven decisions. Linked to sustainability, health, and personal beliefs	Habitual and cost-driven purchasing Focus on price, convenience, and brand familiarity

3. Product evaluation	Value-based evaluation of food products	Utility-based product evaluation (taste, price, convenience)
4. Perception of green products	Attention to eco-labels, recyclable packaging, ingredient transparency	Focus on packaging design, color, and visual appeal
5. Decision orientation	Sustainability, ethics, and health integrated into decisions	Sustainability, ethics, and health integrated into decisions
6. Future outlook (Jordan)	Optimistic, value-driven perspective	Skeptical, incentive-driven perspective (discounts, financial benefits)

Source: Own Construction (2026)

- **Thematic Structure of the Environmentally Aware\ Non Aware Consumers:**

To enhance transparency and provide a clearer synthesis of the qualitative findings, Figures 14 and 15 visually summarize the thematic structures of the environmentally aware and non-aware consumer groups. These diagrams illustrate how individual codes and observed behaviors were progressively elevated into thematic interpretations and ultimately consolidated into distinct consumer profiles. By presenting the findings in a structured visual format, the analytical progression from raw data to conceptual insight becomes more transparent and easier to follow.

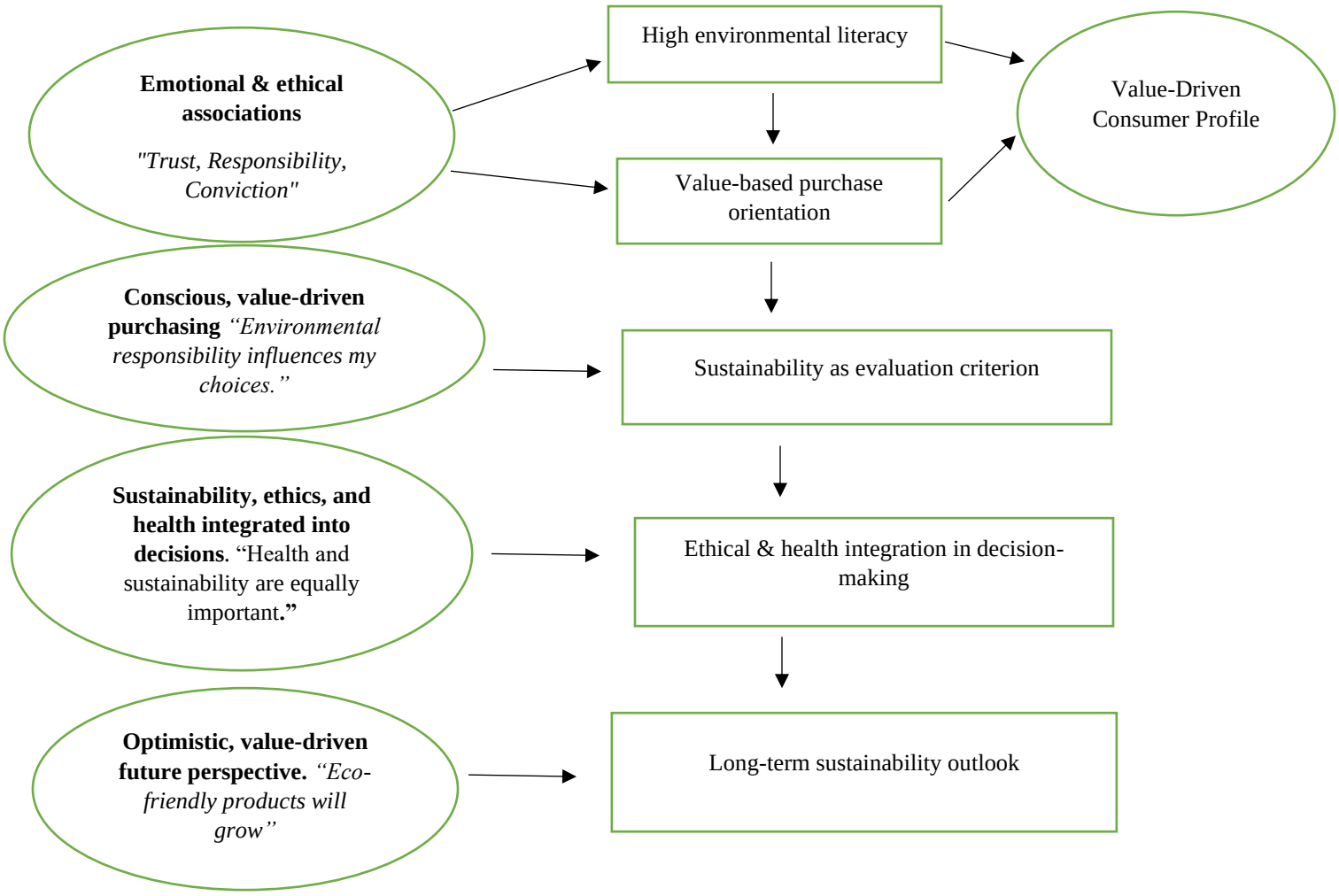


Figure 14: Thematic Structure of Aware Consumers Quotes\Codes\Themes

Source: Own Construction (2026)

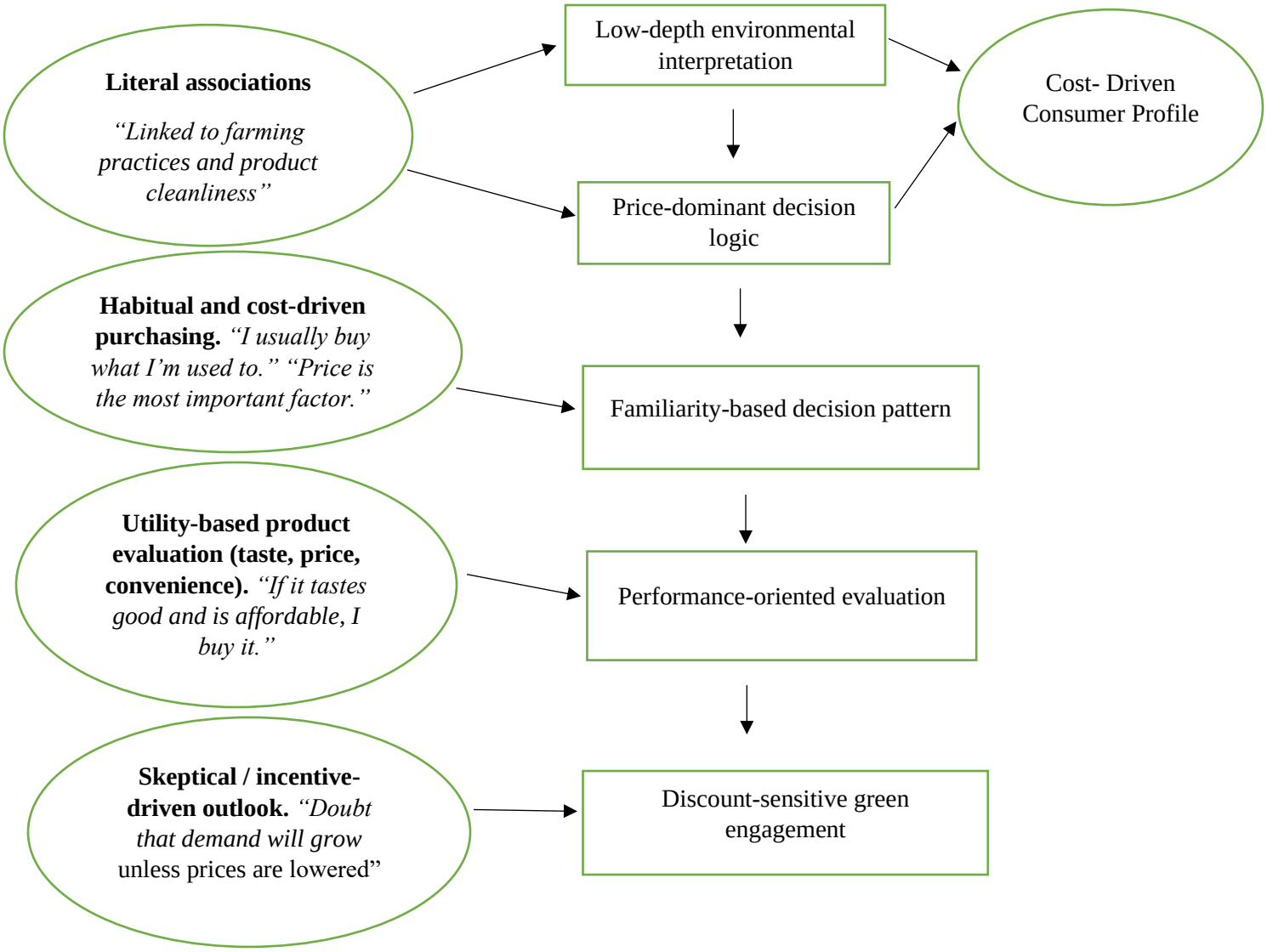


Figure 15: Thematic Structure of Non-Aware Consumers Quotes\Codes\Themes

Source: Own Construction (2026)

4.3 Quantitative analysis

This part presents the results of the quantitative analysis. Out of the 519 collected questionnaires, 492 were deemed valid and included in the analysis after data screening, representing a valid response rate of 94.8%. The excluded responses were removed because they were incomplete with missing answers. The analysis begins with descriptive statistics of the respondents' demographic characteristics, followed by the measurement model assessment and structural model results.

4.3.1 Descriptive Statistics

Combined Descriptive Statistics of Respondents' Characteristics

Table 27: Combined Descriptive Statistics of Respondents' Characteristics

Variable	Categories	Frequency	Percent
Gender	Male	286	58.1%
	Female	206	41.9%
Age	18-26	150	30.5
	27-35	76	15.4
	More than 35	266	54.1
Educational level	Primary Education	15	3.0
	High Diploma or less	76	15.4
	Bachelor	232	47.2
	Master Degree	58	11.8
	PHD	111	22.6
Occupation	Student	147	29.9
	Self-employed	40	8.1
	Employed	241	49.0
	Retired	58	11.8

	Other	6	1.2
Income Level	0 JD–400 JD	207	42.1
	401 JD–700 JD	97	19.7
	701 JD–1000 JD	64	13.0
	More than 1000 JD	124	25.2

Source: Own Construction (2025)

Table 27 illustrates the distribution of the study sample according to gender, showing that 58.1% of the respondents were male (n = 286), while 41.9% were female (n = 206). Males are somewhat overrepresented and females somewhat underrepresented in the sample. This difference is acceptable given the convenience sampling method used, and the sample still provides a reasonably representative view for the purpose of this study. On the other hand, the age distribution of the study participants indicates that the majority of respondents (54.1%, n = 266) were older than 35 years. The age group 18–26 years accounted for 30.5% (n = 150), while the smallest group was 27–35 years, representing 15.4% (n = 76). On the other hand, the distribution of the respondents according to their educational level show that nearly half of the participants held a Bachelor's degree (47.2%, n = 232). Respondents with a PhD degree accounted for 22.6% (n = 111), while those with a high diploma or less represented 15.4% (n = 76). In addition, 11.8% (n = 58) of the respondents had a Master's degree, and only a small proportion (3.0%, n = 15) reported having primary education. As for the distribution of respondents according to their occupation it revealed that almost half of the participants were employed (49.0%, n = 241), followed by students who constituted 29.9% (n = 147). Retired individuals accounted for 11.8% (n = 58), while 8.1% (n = 40) were self-employed, and only a small minority (1.2%, n = 6) reported other occupations. Finally, the distribution of the respondents according to their monthly income sjowed that the largest group of participants (42.1%, n = 207) reported an income between 0 and 400 JD. This was followed by 25.2% (n = 124) who earned more than 1000 JD, while 19.7% (n = 97) fell in the 401-700 JD category. The smallest group, representing 13.0% (n = 64), reported an income between 701 and 1000 JD.

4.3.2 Measurement Model Assessment

To ensure the reliability and validity of the constructs, the measurement model was assessed before testing the structural relationships. This evaluation focused on three main aspects: (1) convergent validity, which examines whether the indicators of each construct are strongly correlated and measure the same underlying concept; (2) discriminant validity, which assesses whether the constructs are distinct from one another; and (3) collinearity assessment, using the variance inflation factor (VIF), to ensure that multicollinearity was not present among the constructs. Convergent validity was tested using item loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). Discriminant validity was examined using the Fornell-Larcker criterion. Collinearity was assessed based on VIF values.

4.3.2.1 Convergent Validity

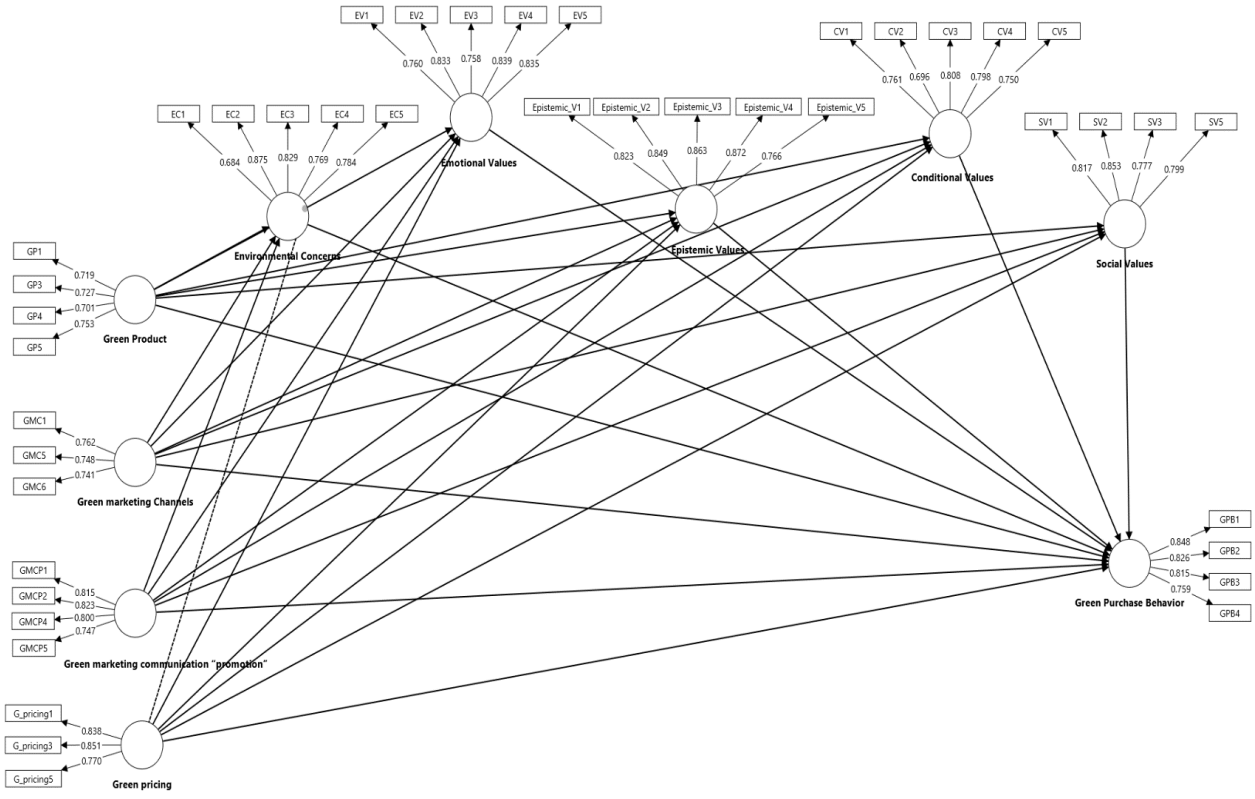


Figure 16: The Value of the Weights for Each Question of the Study Variables (Items Loading)

Source: Own construction (2025)

The outer loadings of the items in figure 16, are displayed on the paths linking each indicator to its corresponding construct. Most indicators showed satisfactory loadings above the recommended cut-off value of 0.70, reflecting good indicator reliability. Nevertheless, a number of items demonstrated loadings below this cut-off and were deleted to improve the measurement model, specifically GP2, GMC2–GMC4, GMCP3, GPricing2, GPricing4, SV4, and GPB5. These items were excluded because they did not adequately contribute to their respective constructs, while the remaining items were retained to preserve the theoretical integrity of the model. In particular, the Environmental Concerns (EC1) construct retained all of its indicators, although one item was slightly below the 0.70 cut-off; this was kept according to Hair et al. (2014), as in reflective measurement models, item loadings are ideally ≥ 0.70 for strong indicator reliability. However, loadings ≥ 0.60 may be acceptable under exploratory conditions or when retaining items for theoretical importance. Thus, it has theoretical importance in capturing consumers' environmental awareness.

Overall, the figure provides a visual representation of the relationships between the constructs and their measurement indicators, while the detailed statistical assessment of convergent validity (including Cronbach's Alpha, Composite Reliability, and Average Variance Extracted) is presented in table 28 below.

Table 28: Cronbach's Alpha (α), Average Variance Extracted (AVE), Composite Reliability (CR)

Dimensions	α	CR	(AVE)
Conditional Values	0.824	0.875	0.583
Emotional Values	0.865	0.902	0.650
Environmental Concerns	0.848	0.892	0.625
Epistemic Values	0.891	0.920	0.698
Green Product	0.701	0.816	0.526
Green Purchase Behavior	0.829	0.886	0.660
Green marketing Channels	0.615	0.794	0.563
Green marketing communication "promotion"	0.808	0.874	0.635
Green pricing	0.756	0.860	0.673
Social Values	0.828	0.885	0.659

Source: Own construction (2025)

Table 28 presents the reliability and convergent validity results for all constructs based on Cronbach's Alpha (α), Composite Reliability (CR), and Average Variance Extracted (AVE). In general, the results demonstrate that the measurement model has satisfactory internal consistency and convergent validity. For the mediating construct of **Consumption Values**, all dimensions exceeded the recommended cut-off levels. **Conditional Values** reported α = 0.824, CR = 0.875, and AVE = 0.583, meeting the required thresholds. **Emotional Values** (α = 0.865, CR = 0.902, AVE = 0.650), **Environmental Concerns** (α = 0.848, CR = 0.892, AVE = 0.625), and **Epistemic Values** (α = 0.891, CR = 0.920, AVE = 0.698) also demonstrated strong reliability and convergent validity. Similarly, **Social Values** achieved α = 0.828, CR = 0.885, and AVE = 0.659, confirming good construct measurement. For the independent construct of **Green Marketing**, the results showed mixed outcomes. **Green Product** (α = 0.701, CR = 0.816, AVE = 0.526), **Green Marketing Communication (Promotion)** (α = 0.808, CR = 0.874, AVE = 0.635), and **Green Pricing** (α = 0.756, CR = 0.860, AVE = 0.673) all exceeded the minimum thresholds, indicating acceptable reliability and convergent validity. However, **Green Marketing Channels** showed relatively lower values (α = 0.615, CR = 0.794, AVE = 0.563). While still above the minimum acceptable cut-off of 0.60 for α and AVE, this dimension reflects comparatively weaker reliability and should be interpreted with caution. For the dependent construct, **Green Purchase Behavior** achieved α = 0.829, CR = 0.886, and AVE = 0.660, all of which surpass the recommended cut-off values, indicating strong convergent validity.

Overall, all constructs met the commonly accepted thresholds of $\alpha \geq 0.70$, $CR \geq 0.70$, and $AVE \geq 0.50$ (Hair et al., 2014), thereby confirming that the measurement model demonstrates satisfactory reliability and convergent validity across all constructs.

4.3.2.2 Discriminant Validity

Table 29 presents the results of the discriminant validity assessment using the Fornell-Larcker criterion. The values on the diagonal represent the square roots of the Average Variance Extracted (AVE) for each construct, while the off-diagonal values represent the correlations between constructs. Discriminant validity is established when the square root of the AVE for each construct is greater than its correlations with other constructs (Fornell & Larcker, 1981).

Table 29: Discriminant Validity

Dimensions	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Conditional Values	0.764									
2. Emotional Values	0.597	0.806								
3. Environmental Concerns	0.523	0.750	0.791							
4. Epistemic Values	0.573	0.724	0.735	0.836						
5. Green Product	0.500	0.604	0.672	0.601	0.725					
6. Green Purchase Behavior	0.590	0.666	0.659	0.692	0.582	0.813				
7. Green Marketing Channels	0.428	0.455	0.540	0.485	0.625	0.496	0.750			
8. Green Marketing Communication	0.517	0.555	0.615	0.551	0.714	0.589	0.652	0.797		
9. Green Pricing	0.512	0.606	0.697	0.642	0.708	0.595	0.591	0.701	0.820	
10. Social Values	0.600	0.664	0.677	0.670	0.609	0.717	0.515	0.601	0.621	0.812

Source: Own construction (2025)

As shown in the table, all diagonal values are higher than the corresponding off-diagonal correlations, thereby confirming discriminant validity. For instance, the square root of AVE for **Conditional Values** was 0.764, which is greater than its correlations with other constructs (ranging from 0.428 to 0.600). Similarly, **Emotional Values** recorded 0.806 on the diagonal, which exceeded its correlations with other variables (ranging from 0.455 to 0.750). The same pattern was observed across the other constructs, including **Environmental Concerns** (0.791), **Epistemic Values** (0.836), **Green Product** (0.725), **Green Purchase Behavior** (0.813), **Green Marketing Channels** (0.750), **Green Marketing Communication- Promotion** (0.797), **Green Pricing** (0.820), and **Social Values** (0.812).

Overall, the results confirm that the Fornell-Larcker criterion was satisfied for all constructs, supporting the presence of discriminant validity in the measurement model, which was further supported by the guidelines of Hair et al. (2014) for PLS-SEM applications.

The Heterotrait–Monotrait ratio (HTMT) was examined as an additional assessment of discriminant validity (Henseler et al., 2015). Henseler et al. (2015) recommend threshold values of 0.85 (strict criterion) or 0.90 (more liberal criterion), while values approaching 1 may indicate a lack of discriminant validity. In the present study, most HTMT values were below 0.90. Elevated values were observed exclusively among the green marketing mix dimensions, specifically between Green Product and Green Pricing (0.971), Green Product and Green Marketing Channels (0.946), Green Product and Green Marketing Communication (0.945), and Green Marketing Channels and Green Marketing Communication (0.928).

These constructs represent theoretically integrated components of the green marketing mix, which are conceptually and strategically interdependent. As noted by Hair et al. (2019; 2022), HTMT is a conservative criterion and may yield elevated values when constructs capture closely related strategic dimensions within the same conceptual domain. In such cases, strong empirical correlations are theoretically expected and do not necessarily imply a lack of discriminant validity. Importantly, no elevated HTMT values were observed between green marketing constructs and theoretically distinct constructs such as consumption values or green purchase behavior. Therefore, considering the conceptual proximity of the green marketing dimensions and the satisfactory Fornell–Larcker results, discriminant validity was deemed acceptable within the proposed model.

4.3.2.3 Collinearity assessment (VIF)

Multicollinearity was assessed at both the indicator level (outer model) and the structural level (inner model) using variance inflation factor (VIF) values Hair et al. (2014).

Table 30: Collinearity Assessment (VIF Values for Items)

Items	VIF
CV1	1.674
CV2	1.666
CV3	1.897
CV4	1.704
CV5	1.660
EC1	1.432
EC2	2.535
EC3	2.194
EC4	1.768
EC5	1.765
EV1	2.062
EV2	2.396
EV3	1.761
EV4	2.176
EV5	2.137
Epistemic V1	2.142
Epistemic V2	2.439
Epistemic V3	2.557
Epistemic V4	2.667
Epistemic V5	1.780
GMC1	1.158
GMC5	1.280
GMC6	1.263
GMCP1	1.709
GMCP2	2.006
GMCP4	1.845
GMCP5	1.408
GP1	1.264
GP3	1.310
GP4	1.424
GP5	1.503
GPB1	1.900
GPB2	1.888
GPB3	1.837
GPB4	1.565
G pricing1	1.633
G pricing3	1.732
G pricing5	1.370
SV1	1.894
SV2	2.282
SV3	1.760
SV5	1.573

Source: Own construction (2025)

Table 30 presents the collinearity assessment using the Variance Inflation Factor (VIF). According to Hair et al. (2014), VIF values below 5.0 indicate that collinearity is not a critical issue, while more conservative cut-off values of 3.3 are often recommended to ensure robust results in PLS-SEM. As shown in the table, all items recorded VIF values ranging from 1.158 to 2.667. These results are well below the cut-off thresholds of 3.3 and 5.0, confirming that multicollinearity is not a concern in this model. For example, the items of **Conditional Values** ranged between 1.660 and 1.897, while **Environmental Concerns** varied from 1.432 to 2.535. Similarly, **Emotional Values** recorded VIF values between 1.761 and 2.396, and **Epistemic Values** ranged from 1.780 to 2.667, which are still within acceptable levels. The indicators for **Green Marketing Channels** (1.158-1.280), **Green Product** (1.264-1.503), **Green Marketing Communication – Promotion** (1.408-2.006), and **Green Pricing** (1.370-1.732) all fell comfortably below the cut-off values. Finally, the mediating dimension **Social Values** (1.573-2.282) and the dependent construct **Green Purchase Behavior** (1.565-1.900) also showed VIF values within the acceptable range.

Table 31: VIF values for Inner Model

Variables	**VIF**
Conditional Values -> Green Purchase Behavior	1.854
Green marketing Channels -> Environmental Concerns	1.914
Green marketing Channels -> Conditional Values	1.953
Green marketing Channels -> Epistemic Values	1.953
Green marketing Channels -> Social Values	1.953
Green marketing Channels -> Emotional Values	1.980
Green marketing Channels -> Green Purchase Behavior	1.982
Green Product -> Environmental Concerns	2.240
Green marketing communication “promotion” -> Environmental Concerns	2.375
Green pricing -> Conditional Values	2.428
Green pricing -> Epistemic Values	2.428
Green pricing -> Social Values	2.428
Green pricing -> Emotional Values	2.455

Social Values -> Green Purchase Behavior	2.524
Green Product -> Conditional Values	2.593
Green Product -> Epistemic Values	2.593
Green Product -> Social Values	2.593
Green Product -> Emotional Values	2.599
Green marketing communication “promotion” -> Conditional Values	2.666
Green marketing communication “promotion” -> Epistemic Values	2.666
Green marketing communication “promotion” -> Social Values	2.666
Green marketing communication “promotion” -> Emotional Values	2.667
Green marketing communication “promotion” -> Green Purchase Behavior	2.773
Green Product -> Green Purchase Behavior	2.835
Epistemic Values -> Green Purchase Behavior	2.866
Green pricing -> Green Purchase Behavior	2.867
Emotional Values -> Green Purchase Behavior	2.988
Environmental Concerns -> Green Purchase Behavior	3.428

Source: Own construction (2026)

In addition to the indicator-level assessment, collinearity was also examined at the structural level using inner model VIF values. This step ensures that multicollinearity among predictor constructs does not bias the estimation of path coefficients (Hair et al., 2019). As shown in Table 31, the inner model VIF values ranged from 1.854 to 3.428. The highest value (3.428) was observed for Environmental Concerns predicting Green Purchase Behavior. Although this value slightly exceeds the conservative threshold of 3.3, it remains below the commonly accepted cut-off value of 5.0. Therefore, multicollinearity at the structural level does not pose a critical concern, and the estimation of the structural relationships can be considered reliable.

Overall, the findings confirm that multicollinearity does not pose a threat to the estimation of the measurement or structural models, thereby supporting the robustness of the PLS-SEM results.

4.3.3 Measuring and Testing the Hypothesis of the Study

After establishing the reliability and validity of the measurement model, the next step was to evaluate the structural model in order to test the hypothesized relationships among the constructs. This assessment was based on the path coefficients (β), t-values, and p-values, which determine the strength and significance of the hypothesized paths. In addition, the explanatory power of the model was examined using the coefficient of determination (R^2).

4.3.3.1 The Main Hypothesis Result

- **Direct Effects:**

H1: Green Marketing has a significant positive influence on Consumption Values.

H2: Consumption Values has a significant positive influence on Green Purchase Behavior.

H3: Green Marketing has a significant positive influence on Green Purchase Behavior.

Table 32: Results of the Application of Path Analysis– Main Direct Effects

Variable	*B*	SD	T	*P*	R^2
Green Marketing -> Consumption Values	0.768	0.022	34.320	0.000	0.589
Consumption Values -> Green Purchase Behavior	0.760	0.031	24.449	0.000	0.578
Green Marketing -> Green Purchase Behavior	0.655	0.033	19.568	0.000	0.430

Notes: p<0.001
Source: Own construction (2025)

Table 32 presents the structural model results for the three main direct hypotheses. The findings indicate that Green Marketing has a strong and statistically significant positive effect on Consumption Values (β = 0.768, t = 34.320, p < 0.001), explaining 58.9% of the variance (R^2 = 0.589). Furthermore, Consumption Values significantly influence Green Purchase Behavior (β = 0.760, t = 24.449, p < 0.001), accounting for 57.8% of the variance (R^2 = 0.578). Green Marketing also exerts a significant direct effect on Green Purchase Behavior (β = 0.655, t = 19.568, p < 0.001), explaining 43.0% of the variance (R^2 = 0.430).

Overall, the model demonstrates substantial explanatory power, particularly in explaining Consumption Values and Green Purchase Behavior. These findings provide strong empirical support for the proposed structural relationships and align with the Stimulus–Organism–Response (SOR) framework, whereby green marketing practices shape consumer value perceptions, which subsequently influence environmentally responsible purchase behavior, while also exerting a direct behavioral impact.

- **In-direct Effects:**

H4: Consumption Values mediate the relationship between Green Marketing & Green Purchase Behavior

Table 33: Mediation Analysis of the Effect of Green Marketing on Green Purchase Behavior through Consumption Values

Variables	*B*	S.D	*t*-value	*P*	2.5% LL	97.5% UL	*Decision*
Consumption Values -> Green Purchase Behavior	0.630	0.052	12.129	0.000	-	-	**Supported**
Green Marketing -> Consumption Values	0.766	0.023	33.660	0.000	-	-	**Supported**
Green Marketing -> Green Purchase Behavior	0.171	0.053	3.241	0.001	-	-	**Supported**
Interactional effect							
Green Marketing -> Consumption Values -> Green Purchase Behavior	0.482	0.045	10.761	0.000	0.208	0.399	**Supported**

Notes: $p<0.001$
Source: Own construction (2025)

Table 33 presents the results of the mediation analysis for the fourth main hypothesis (H4), which proposed that Consumption Values mediate the relationship between Green Marketing and Green Purchase Behavior. The findings reveal that Green Marketing significantly influences Consumption Values ($\beta = 0.766$, $t = 33.660$, $p < 0.001$), while Consumption Values strongly predict Green Purchase Behavior ($\beta = 0.630$, $t = 12.129$, $p < 0.001$). The direct effect of Green Marketing on Green Purchase Behavior remains significant but relatively weak ($\beta = 0.171$, $t = 3.241$, $p = 0.001$). Importantly, the indirect effect of Green Marketing on Green Purchase Behavior through Consumption Values is strong and significant ($\beta = 0.482$, $t = 10.761$, $p < 0.001$). The bootstrapped 95% confidence interval for this indirect path ranges from 0.208 to 0.399, which does

not include zero, providing additional evidence of the mediation effect. Following the guidelines of Hair et al. (2014), these results confirm that Consumption Values partially mediate the relationship between Green Marketing and Green Purchase Behavior, thereby supporting hypothesis H4.

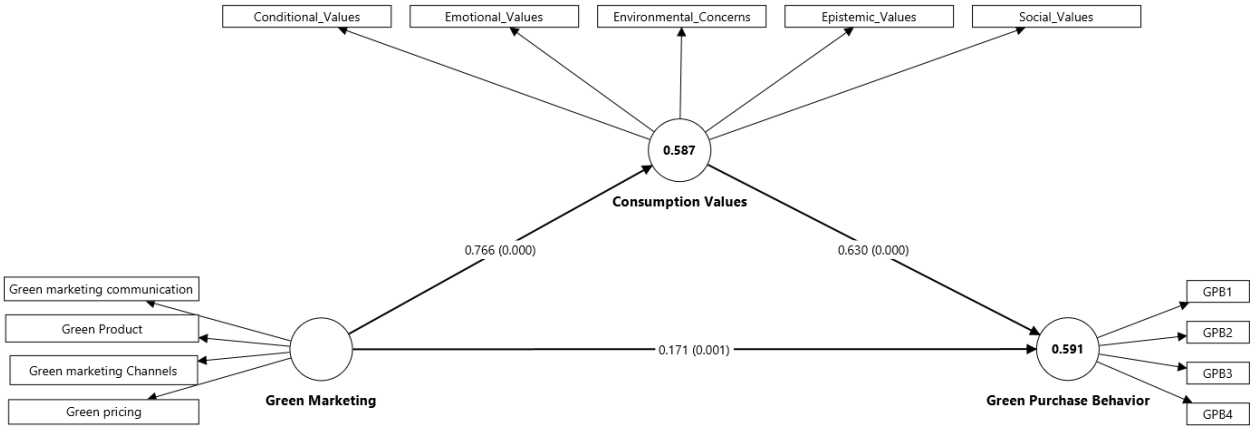


Figure 17: Mediation Effect of Consumption Values on the Relationship between Green Marketing and Green Purchase Behavior

Source: Own construction (2025)

Figure 17 illustrates the mediation model, showing that Green Marketing significantly predicts Consumption Values ($\beta = 0.766$, $p < 0.001$), which in turn strongly predict Green Purchase Behavior ($\beta = 0.630$, $p < 0.001$). The direct path from Green Marketing to Green Purchase Behavior remains significant but weaker ($\beta = 0.171$, $p = 0.001$), confirming the partial mediation effect of Consumption Values.

4.3.3.2 The Sub- Hypothesis Result

Table 34: Results of the Application of Path Analysis of Sub- Hypothesis: Green Marketing Dimensions → Consumption Values

Variable	*B*	SD	T	*P*	R^2
Green Product -> Consumption Values	0.691	0.025	27.081	0.000	0.477
Green pricing -> Consumption Values	0.712	0.026	27.428	0.000	0.507
Green marketing Channels -> Consumption Values	0.567	0.034	16.447	0.000	0.322
Green marketing communication -> Consumption Values	0.672	0.027	25.045	0.000	0.451

Notes: p<0.001
Source: Own construction (2026)

Table 34 presents the results for the sub-hypotheses examining the individual effects of green marketing mix dimensions on Consumption Values. All four dimensions—Green Product ($\beta = 0.691$, $p < 0.001$), Green Pricing ($\beta = 0.712$, $p < 0.001$), Green Marketing Channels ($\beta = 0.567$, $p < 0.001$), and Green Marketing Communication ($\beta = 0.672$, $p < 0.001$)—demonstrate significant positive effects. Among these, Green Pricing shows the strongest influence, explaining 50.7% of the variance in Consumption Values ($R^2 = 0.507$), followed by Green Product ($R^2 = 0.477$) and Green Marketing Communication ($R^2 = 0.451$). Green Marketing Channels, while still significant, exhibits comparatively lower explanatory power ($R^2 = 0.322$). Overall, these findings indicate that all dimensions of green marketing contribute meaningfully to shaping consumers' value perceptions.

Table 35 summarizes the results for the effects of individual consumption value dimensions on Green Purchase Behavior. All five value dimensions show statistically significant positive relationships. Social Values demonstrate the strongest influence ($\beta = 0.725$, $R^2 = 0.526$), followed by Epistemic Values ($\beta = 0.692$, $R^2 \approx 0.479$), Emotional Values ($\beta = 0.666$, $R^2 = 0.443$), and Environmental Concerns ($\beta = 0.659$, $R^2 = 0.434$). Conditional Values, although significant ($\beta = 0.590$, $R^2 = 0.348$), exhibit comparatively lower explanatory power. These findings suggest that both emotional and social value perceptions play a particularly important role in driving environmentally responsible purchase behavior.

Table 35: Results of the Application of Path Analysis of Sub- Hypothesis: Consumption Value Dimensions → Green Purchase Behavior

Variable	*B*	SD	T	*P*	R^2
Environmental Concerns -> Green Purchase Behavior	0.659	0.033	19.694	0.000	0.434
Emotional Values -> Green Purchase Behavior	0.666	0.041	16.429	0.000	0.443
Epistemic Values -> Green Purchase Behavior	0.692	0.034	20.530	0.000	0.479
Conditional Values -> Green Purchase Behavior	0.590	0.038	15.399	0.000	0.348
Social Values -> Green Purchase Behavior	0.725	0.028	25.986	0.000	0.526
Green Product -> Green Purchase Behavior	0.587	0.033	17.652	0.000	0.345
Green Pricing -> Green Purchase Behavior	0.598	0.040	15.051	0.000	0.358
Green Marketing Channels -> Green Purchase Behavior	0.498	0.040	12.567	0.000	0.248
Green Marketing Communication -> Green Purchase Behavior	0.595	0.035	17.033	0.000	0.353

Notes: $p<0.001$
Source: Own construction (2026)

Table 36: Results of the Application of Path Analysis of Sub- Hypothesis: Green Marketing Dimensions → Green Purchase Behavior

Variable	*B*	SD	T	*P*	R^2
Green Product -> Green Purchase Behavior	0.587	0.033	17.652	0.000	0.345
Green Pricing -> Green Purchase Behavior	0.598	0.040	15.051	0.000	0.358
Green Marketing Channels -> Green Purchase Behavior	0.498	0.040	12.567	0.000	0.248
Green marketing communication -> Green Purchase Behavior	0.595	0.035	17.033	0.000	0.353

Notes: $p<0.001$
Source: Own construction (2026)

Table 36 presents the results for the direct effects of green marketing mix dimensions on Green Purchase Behavior. All dimensions demonstrate significant positive effects. Green Pricing ($\beta = 0.598$, $R^2 = 0.358$) and Green Marketing Communication ($\beta = 0.595$, $R^2 = 0.353$) show relatively stronger effects compared to Green Product ($\beta = 0.587$, $R^2 = 0.345$). Green Marketing Channels,

while significant ($\beta = 0.498$, $p < 0.001$), exhibit the lowest explanatory power ($R^2 = 0.248$). These results indicate that pricing and communication strategies may have comparatively stronger direct behavioral influence, whereas distribution channels exert a more modest effect.

4.3.4 *Summary of Hypotheses Testing Results*

Table 37: Summary of Hypotheses Testing Results of the Application of Path Analysis

Hypothesis	Path	*B*	t-value	p-value	R^2	Decision
H1	Green Marketing → Consumption Values	0.768	34.320	<0.001	0.589	**Supported**
H1.1	Green Product → Consumption Values	0.691	27.081	<0.001	0.477	**Supported**
H1.2	Green Pricing → Consumption Values	0.712	27.428	<0.001	0.507	**Supported**
H1.3	Green Marketing Channels → Consumption Values	0.567	16.447	<0.001	0.322	**Supported**
H1.4	Green Marketing Communication → Consumption Values	0.672	25.045	<0.001	0.451	**Supported**
H2	Consumption Values → Green Purchase Behavior	0.760	24.449	<0.001	0.578	**Supported**
H2.1	Environmental Concerns → Green Purchase Behavior	0.659	19.694	<0.001	0.434	**Supported**
H2.2	Emotional Values → Green Purchase Behavior	0.666	16.429	<0.001	0.443	**Supported**
H2.3	Epistemic Values → Green Purchase Behavior	0.692	20.530	<0.001	0.479	**Supported**
H2.4	Conditional Values → Green Purchase Behavior	0.590	15.399	<0.001	0.348	**Supported**
H2.5	Social Values → Green Purchase Behavior	0.725	25.986	<0.001	0.526	**Supported**
H3	Green Marketing → Green Purchase Behavior	0.655	19.568	<0.001	0.430	**Supported**
H3.1	Green Product → Green Purchase Behavior	0.587	17.652	<0.001	0.345	**Supported**
H3.2	Green Pricing → Green Purchase Behavior	0.598	15.051	<0.001	0.358	**Supported**
H3.3	Green Marketing Channels → Green Purchase Behavior	0.498	12.567	<0.001	0.248	**Supported**
H3.4	Green Marketing Communication → Green Purchase Behavior	0.595	17.033	<0.001	0.353	**Supported**
H4	Mediation Effect (Green Marketing → Consumption Values → Green Purchase Behavior)	0.482 (Indirect)	10.761	<0.001	CV = 0.587 GPB = 0.591	**Supported**

Source: Own construction (2025)

5. Conclusions and Recommendations

This chapter starts with a summary the key findings drawn from the qualitative and quantitative analyses, and how these results align with the study's theoretical framework, research objectives, hypotheses and integrates insights from the three research methods all together. Then, conclusions, and the theoretical, managerial, and practical implications that emerged from those finding. After this, recommendations provided for food companies and managers, policy makers and regulatory authorities, and marketers and consumer education initiatives. Then, it outlines the limitations. Finally, a dedicated section on novel findings and future research directions emphasizes the study's originality, contribution and identifies opportunities for further scholarly exploration. The chapter conclude with a comprehensive summary that integrates insights from all sections, providing an overarching reflection on the dissertation as a whole.

5.1 Summary of Key Findings

This section summarize the main findings derived from the three research methods, highlighting how each contributes to understanding the impact of green marketing on green purchase behavior and the mediating role of consumption values. Alongside, integrative linkage across methods and theoretical frameworks.

5.1.1 Findings from In-depth Interviews

The interview findings offer significant insights into the implementation of green marketing practices among Jordanian food companies. Firstly, the analysis of the term-document matrix revealed prominent themes and significant concepts across various parts. The examination of the term-document matrix identified the most prevalent subcategories within each part as you can see in Table 10. Notably, two terms "consumer education" and "eco-friendly packaging" consistently emerged in various areas, showing their extensive impact on green marketing strategies within the industry. These findings indicate that companies acknowledge the importance of educating consumers about sustainable options and adopting eco-friendly packaging as essential elements of their green marketing strategies. Moreover, Table 11 identified the most influential categories, consumer education was the most frequently mentioned category (14 Frequency), followed by

resource and expertise sharing (10 Frequency) and eco-friendly packaging (9 Frequency). The findings indicate that Jordanian food companies emphasize customer awareness, resource-sharing partnership, and sustainable packaging as fundamental elements of their green marketing strategy. The significance of consumer education fits with prior studies highlighting the importance of consumer awareness in promoting sustainable purchasing behavior (Vu et al., 2021; Martins et al., 2023; Yang et al., 2024; Igbomor, 2024). Simultaneously, the focus on resource and expertise sharing indicates that businesses acknowledge the imperative of collaboration to overcome obstacles associated with cost and knowledge constraints, an aspect also documented in research on green marketing uptake in developing nations (Kumar & Polonsky, 2017). Finally, the frequent mention of eco-friendly packaging indicates a global trend in which sustainable packaging solutions are progressively gaining a competitive edge (Molina-Besch et al., 2019).

On the other hand, the Moonplot representation of clusters and non-negative matrix factorization (NMF) outcomes offers a visual overview of the interrelations across major subcategories revealed in the analysis. A closer examination of the Moonplot uncovers significant clusters of subcategories, illustrating interconnected elements of green marketing implementation within Jordanian food companies. In this regard, "consumer education," "resource and expertise sharing," and "eco-friendly packaging" are situated closely together, emphasizing their connected impact on formulating green marketing strategies. This supports the findings from Tables 10 and 11, where in these subcategories emerged as the most influential elements in the industry. Furthermore, concepts like "waste reduction," "energy efficiency," and "green practices" are situated in the margins of the plot, signifying a greater variance in corporate approaches to sustainability initiatives. This division indicates that although these initiatives exist, their execution differs markedly among organizations, potentially because to differences in financial resources, regulatory demands, or market demand. The clustering of "digital and traditional channels," "influencer marketing," and "third-party oversight" emphasizes the transforming function of marketing communication methods in the promotion of green products. Companies utilizing digital platforms and third-party certifications may be addressing heightened customer demands for openness and authenticity in sustainability declarations (Lee & Lim, 2020; Majeed et al., 2022; Graça & Kharé, 2023; Yang et al., 2024). Overall, the Moonplot investigation offers profound insights on the adoption of green marketing strategies by Jordanian food companies, highlighting prevailing strategies, developing trends, and areas of significant variance. These findings illustrate

the necessity for focused regulation interventions and cooperative industry initiatives to standardize and improve the efficacy of green marketing.

Building on the insights from the Moonplot visualization, the factor map generated via Non-Negative Matrix Factorization (NMF) enhances the thematic framework of green marketing strategies among Jordanian food companies. The study revealed three separate clusters of phrases, each signifying a particular aspect of sustainability initiatives within the sector, as presented in Table 12 the clusters- Sustainable Marketing Practices, Consumer Engagement & Industrial Collaborative, and Holistic Strategies for Sustainable Development- provide a structured review of the key drivers and obstacles in the adoption of green marketing. Furthermore, Table 13 clarifies the alignment of these clusters with various sections of the study by presenting the average NMF component scores for each segment. Notably, the third cluster, "Holistic Strategies for Sustainable Development" is mostly linked to talks over general strategy with an average of 7.13, and future directions with 1.01. This indicates that businesses with a long-term sustainability viewpoint typically prioritize broad, integrative strategies, including systemic policy reforms and cross-sector activities. These findings confirm prior research suggesting that companies with clearly defined sustainability plans are prone to attain long-term competitive advantages (Martins et al., 2023). On the other hand, the second cluster “Consumer Engagement & Industrial Collaborative " associated with challenges and barriers with an average of 1.98, and collaboration, industry perspective with 5.17. This underlines the external pressures, such as legal limits, supply chain interdependence, and competitive dynamics which influence organizations sustainability initiatives. Previous research has shown the importance of industry-wide collaboration in addressing sustainability challenges, especially in developing economies where regulatory assistance may be unreliable (Igbomor, 2024). Finally, the first cluster "Sustainable Marketing Practices" is most closely associated with the implementation and practices part with an average of 6.22. This suggests that firms that actively participate in green marketing prioritize tangible operational methods, such environmentally friendly packaging, waste reduction, and sustainable product development. The findings indicate that effective green marketing necessitates a balance between strategic commitment and practical execution, as evidenced by previous research on consumer-driven sustainability programs (Yang et al., 2024). The categorization of green marketing aspects into three clusters, along with the factor map and NMF analysis, offers a detailed comprehension of the structural organization of sustainability initiatives in the Jordanian food

business. Thus, the findings highlight the need of personalized approaches where organizations must negotiate both internal implementation efforts and external market forces to generate substantial progress in green marketing adoption.

Building on the thematic cluster analysis, Table 14 presents a company-level perspective, demonstrating which enterprises closely correspond with the detected term clusters. This differential provides vital insights into the approaches particular enterprises within the Jordanian food industry take towards green marketing, further strengthening the distinctions noted in prior investigations. The data reveal that four companies, two of which are large and two of which are medium-sized companies (1,5,6,8) are largely described by phrases from the third cluster "Holistic Strategies for Sustainable Development" This indicates that these companies prioritize future environmental commitments, long-term sustainability strategies and policy integration. Firms in this category usually employ a proactive strategy, concentrating on strategic structures and systemic changes instead of temporary operational modifications. Prior research has demonstrated that organizations with a strong strategic sustainability orientation generally obtain superior market positioning and stakeholder loyalty (Salhab et al., 2025). On the other hand, four companies, three of which are large companies and one is medium-sized companies (2,3,7,9) align most closely with the second cluster " Consumer Engagement & Industrial Collaborative " This indicates that their green marketing strategies are significantly shaped by external factors, including consumer expectations, regulatory compliance, and industry collaboration. These businesses may encounter higher hurdles in fully integrating sustainability because of resource limits or market-driven goals, which coincides with recent research on sustainability adoption barriers in emerging nations (Al-Zu’bi & Albloush, 2022). Finally, company 4 (large) is primarily associated with the first cluster "Sustainable Marketing Practices" This shows a larger focus on practical, implementation-driven techniques, such as eco-friendly packaging, direct communication with customers & green product development. This company reflect a hands-on, operational oriented sustainability strategy rather than a broad strategic framework. Such an approach aligns with corporations that consider green marketing as a competitive advantage rather than an ongoing business ideology (Almestarihi et al., 2024).

Integrative Linkage Across Methods and Theoretical Frameworks

In summary, the in-depth interviews gave a comprehensive understanding of how Jordanian food companies think about and apply green marketing strategies at various strategic levels, ranging from more general holistic sustainability frameworks to operational measures like eco-friendly packaging, consumer education initiatives, collaborations with partners and waste reduction. These organizational insights provide useful context to interpret consumer attitudes and behaviors, align with the Theory of Planned Behavior (TPB), which suggests that consumers green purchase intentions are influenced by attitudes, social norms, and perceived behavioral control. This happen by educating consumers and providing transparent, environmentally friendly products, which foster a positive attitude. Furthermore, the focus on collaboration and resource sharing reflect an effort to build a supportive social norm around green consumption. From the perspective of the Theory of Consumption Values (TCV), these strategies appeal to social values (influence from community and shared goals), emotional values (feeling proud or accountable for making environmentally friendly decisions), and functional values (such as product quality and packaging). Together, these values help shape how consumers evaluate and choose green products. On the other hand, as the findings from the in-depth interviews complement the insights obtained from the consumer focus groups, it also matches the quantitative survey, collectively reinforcing the Stimulus–Organism–Response (SOR) model. The emerging themes such as consumer education, eco-friendly packaging, and collaborations, show how green marketing stimuli influence organizational behavior and consumer response.

Linkage to other methods like focus groups, where these corporate strategies correspond to the perceptions of environmentally aware consumers, who seek transparency, sustainable sourcing and health-oriented benefits. As well as, the key themes identified in the interviews, focusing on educating consumers and promoting sustainable products were later reflected and validated in the quantitative findings. Thus, the survey analysis, conducted through PLS-SEM, statistically confirmed these patterns, showing that green marketing dimensions and consumption values significantly influence green purchase behavior among Jordanian consumers.

5.1.2 Findings from Consumer Focus Group

As detailed in chapter four, the focus group firstly focus on participants, as they were divided into two distinct segments according to their level of environmental awareness, explained: an **environmentally aware group** and a **non-aware group**. This segmentation was essential for enabling a comparative analysis of how different awareness levels affect attitudes toward green marketing, value perceptions, and purchasing behaviour. The comparison of these groups, illustrates the range of consumer involvement with sustainability in the Jordanian food industry, which ranges from proactive, environmentally conscious customers to those primarily motivated by functional needs and price considerations.

The second section focus on an association game showed the clear contrasts between aware and non-aware consumers, in their understanding and emotional engagement with green-related concepts. The aware group showed a deeper familiarity of sustainability words, frequently use expressions like "trust", "conviction" and "responsibility" that are motivated by emotions and ethics. These responses, which demonstrate a **higher level of environmental literacy**, suggest that sustainability is linked to internalized values and moral reasoning (Kals et al., 1999; Zsóka et al., 2013; Paço & Lavrador, 2017). In contrast, the non-aware group, showed limited exposure and more literal associations, often associating green terms with fundamental notions such as cleanliness or farming. Their focus on **practical** or **price-related concerns** highlights a more utilitarian approach to eco-friendly behavior. This is consistent with research that demonstrate that consumers who are less aware of the environment frequently rely more on tangible factors like cost or health benefits than on ethical or ecological motives (Steg et al., 2014; Wang et al., 2021). Overall, the results show that Jordan's food market has two distinct audience segments. While simplified communication that emphasizes affordability, clarity, and health relevance may be more effective for non-aware customers, value-based messaging that emphasizes responsibility and authenticity may better engage aware consumers.

The third section results reveal distinct shopping motivations and behaviors between the two consumer segments. The environmentally aware group shows conscious, responsible buying patterns that are in line with their personal beliefs, sustainability, and health. Their decision-making is **value-driven**, emphasizing nutritional quality, eco-friendly packaging, product origin,

and environmental responsibility. These consumers integrate what they buy into a more sustainable lifestyle, reflecting alignment with ethical consumption trends reported in prior studies (Nguyen et al., 2016; Joshi & Rahman, 2019). This kind of value orientation implies that health and environmental concerns are internalized forces rather than extrinsic factors. In contrast, the non-aware group showed a **habitual** and **cost-driven** purchasing, prioritizing convenience, price, and brand familiarity. In line with research by Gupta & Ogden (2009) and Young et al. (2010), which demonstrates that economic and habitual reasons frequently take precedence over environmental considerations among mainstream consumers, their conduct seems utilitarian, controlled by immediate household requirements and limited by budget awareness. While, Health or sustainability cues are not entirely absent, yet they are fragmented and peripheral rather than central to decision-making. Collectively, these contrasts highlights a dual-path consumer landscape in Jordan: one segments guided by consumption values and ethical considerations, and another by pragmatic, price-oriented factors. Understanding those differences can help marketers to better tailor their messaging, highlighting value alignment for consumers who are aware of it and tangible personal benefits (such price and quality assurance) for less- aware one.

The fourth section results showed a clear behavioral distinctions between environmentally aware and non-aware consumers in their approach to evaluating and selecting food products. Participants in the aware group demonstrate a **value-driven decision-making** process that included sustainability, ethics, and health as key factors. They tended to engage in a more reflective shopping, deliberated considering product features such as sourcing transparency, packaging materials, and their nutritional value. In line with research showing the importance of intrinsic incentives in green consumption, this behavior suggests a higher level of cognitive involvement and alignment between personal values and purchasing choices (Biswas & Roy, 2015; Joshi & Rahman, 2019). On the other hand, non-aware participants mostly concentrated on **practical and functional aspects**, such as taste, price, and convenience, which is consistent with previous findings showing that familiarity and cost remain dominant decision factors in emerging markets (Chekima et al., 2016; Graciola et al., 2020). Regarding label reading behavior, aware consumers consistently reported active engagement, often treating label-checking as routine habit or ethical practice. They not only reviewed nutritional information but also sought eco-certifications and additive-free claims, sometimes extending their inquiry through online research. These actions reflect a higher degree of environmental literacy and information-driven trust building, which is

consistent with previous research that highlight the impact of perceived knowledge and credibility on green purchases intentions (Taufique et al., 2016; Yadav & Pathak, 2017). In contrast, non-aware participants, showed limited attention to product labels, typically scanning only for expiry dates or prices, reflecting low involvement and a surface-level understanding of environmental claims. This gab in label engagement suggests a potential communication barrier, where eco-labels may fail to resonate with consumers lacking sustainability awareness or education. Overall, these findings highlight two important insights: (1) informed engagement with labels and criteria reveals internalized green values; (2) habitual or cost-based decisions indicate low environmental consciousness. This implies that marketers should employ segmented strategies for engaging non-aware consumers with cost-effective, simplified, and health-oriented messaging that gradually raises their understanding of sustainability while appealing to value-oriented consumers with authenticity and transparency.

The fifth section illustrate a clear contrast between the aware and non-aware participants in how they perceive and evaluate green products, as well as how they balance values and price considerations in purchase decisions. The aware group demonstrated deeper engagement with sustainability cues including ingredient transparency, recyclable packaging, and eco-labels. Their selections showed a more thoughtful and value-driven decision making process since they represented internalized values related to ethics, environmental responsibility, and health to their choices (Amin & Tarun 2022; Rahman & Harri, 2023). In contrast, the non-aware group relied primarily on surface-level features such as packaging design, color, and visual appeal, with limited recognition of sustainability indicators. Their evaluations were mostly guided by sensory impressions and practicality, echoing a habitual rather than a conscious purchase pattern (Onurluba, 2018; Mahmood et al., 2019). When evaluating product trade-offs, aware participants were more open to green products if they aligned with personal values and affordability, even expressing willingness to compromise slightly on price or taste for ethical or environmental gains (Peiris et al., 2022). Conversely, the non-aware group displayed a more cost-sensitive approach, prioritizing price, taste, and convenience, with limited consideration for environmental or ethical attributes (Liu & Tobias, 2024). This pattern extended to price sensitivity: while both groups acknowledged cost as a factor, the aware participants viewed modest price increases as acceptable when associated with health or sustainability benefits, whereas the non-aware participants largely rejected higher-priced eco-friendly options (Tan et al., 2025). These results highlight how

consumer behavior is divided into two groups: one is group balancing ethical and functional values, and another guided predominantly by immediate utility and affordability.

The sixth section present a distinct orientations toward green product choices. The aware group showed a value-driven decision-making, integrating sustainability, health, and ethical principles into their purchasing behaviour. They were generally open to purchasing eco-friendly products when prices were reasonable, viewing them as investments aligned with personal and societal well-being. This is consistent with prior research that found environmentally aware consumers associate pro-environmental decisions with moral obligation and self-congruence (Joshi & Rahman, 2019; Wang, 2024). Conversely, the non-aware group demonstrated pragmatic, cost-oriented behavior, prioritizing price, taste, and convenience over environmental or ethical attributes. High perceived costs and skepticism about eco-claims frequently restricted their desire to purchase green products. Yadav and Pathak (2017) confirmed similar results, pointing out that price sensitivity and a lack of trust continue to be significant obstacles in developing countries. When considering key purchase influences, aware participants emphasized health, sustainability, and ingredient transparency, while non-aware participants relied on brand familiarity, affordability, and availability. Social factors, such as peer recommendations, had an impact on both groups, but in different ways. For the aware, they reinforced value-based decisions, whereas for the non-aware, they reinforced habitual behavior (Biswas & Roy, 2015). Overall, the findings illustrate two orientations: 1. Aware group with **Value-Based Orientation,** balancing ethical beliefs with practicality. 2. Non- aware group with **Pragmatic Orientation**, centered on affordability and familiarity. These distinctions highlight the need for segmented green marketing strategies that align messaging with consumer values, motivations, and levels of environmental awareness.

The final section focused on Participants giving varying perspectives on Jordan's future eco-friendly consumption. The environmentally aware group adopted a value-driven and optimistic perspective, believing that sustainability adoption will expand through education, emotional engagement, and cross-sector collaboration. They viewed challenges such as availability and price as addressable through awareness campaigns and collective institutional action. This mirrors findings by Liobikienė and Poškus (2019), who highlighted that perceived consumer effectiveness and environmental knowledge are powerful indicators of the adoption of green behavior. In contrast, the non-aware group maintained a skeptical and pragmatic outlook, asserting that

behavior change would occur only with financial incentives or visible discounts. Thus, price continues to be the primary barrier for these customers, which is in line with previous research that found cost sensitivity and a lack of trust to be the main challenges in emerging economies (Yadav & Pathak, 2017; Yadav & Pathak, 2017). From a cultural readiness and marketing perspective, aware participants encouraged for storytelling, emotional appeals and transparent labelling to shift societal norms, while non-aware consumers doubted the efficacy of marketing without affordability. This aligns with studies suggesting that price perceptions and cultural values shape green product adoption (Biswas & Roy, 2015). Overall, the findings highlight a segmented pathway for green marketing in Jordan: 1. Environmentally Aware consumers focus on **Value-based strategies**, such as education, emotional narratives. 2. Less- aware consumers focus on **Pragmatic Strategies**, such as discounts, affordability emphasis. This dual approach supports a more inclusive and realistic roadmap for fostering sustainable consumption in emerging markets.

Integrative Linkage Across Methods and Theoretical Frameworks

The focus group findings reinforce and expand upon insights from the in-depth interviews and survey analysis, offering a comprehensive understanding of green marketing and green purchase behavior in Jordan. While the interviews with food companies highlighted the growing emphasis on eco-friendly packaging, consumer education, and cooperative partnerships, the consumer focus groups demonstrated how various consumer segments interpret and react to these strategic efforts. Specifically, environmentally aware consumers demonstrated internalized values, such as linking ethics, health and environmental consciousness, whereas less aware consumers made habitual, price-driven decisions, emphasizing taste, affordability and convenience. These patterns were further validated by the survey results, which confirmed the significant influence of consumption values, particularly environmental concerns, emotional, epistemic, social and conditional values on green purchase behaviour, and supported the mediating role of these values within the SOR (Stimulus–Organism–Response) and TPB frameworks. The three methods' alignment highlights how attitudes, perceived behavioral control, and subjective norms as suggested by TPB to shape intentions for green consumption, while TCV explains the diverse motivations, ranging from functional and monetary considerations to ethical and emotional, that guide consumer decision-making.

Overall, this triangulated evidence suggests that green marketing in Jordan must operate on dual fronts:

1. **Value-based strategies:** that appeal to ethically motivated and environmentally aware consumers.
2. **Pragmatic/ incentive- driven approaches:** engage less aware and price sensitive consumers. Like providing integrative insights by giving robust theoretical and strong theoretical and empirical basis for developing contextually appropriate green marketing strategies that link business goals with customer reality.

5.1.3 Findings from Quantitative Method (Questionnaire Survey)

The quantitative analysis, which was carried out using Partial Least Squares Structural Equation Modeling (PLS-SEM), provided empirical validation for the hypothesized relationships proposed in this study. According to Chin, (1998); Hair et al., (2021); Sarstedt et al., (2022), this method was selected for its suitability in exploring complex models and its ability to manage multiple relationships simultaneously while minimizing estimation errors.

A strong and significant relationship was found between Green Marketing and Consumption Values. This indicates that customers develop stronger ethical and environmental values when they are exposed to green marketing strategies, such as eco-friendly channels, fair pricing, sustainable product features, and responsible communication. overall, the green marketing dimensions (stimuli), including green product, green pricing, green marketing channels, and marketing communication “green promotion”, showed a significant direct effects on consumption values (organism), which, in turn, strongly influenced green purchase behavior (response). Those findings align with prior research emphasizing that well- designed green marketing strategies stimulate cognitive and emotional value proposition that drive environmentally conscious consumption (Biswas & Roy, 2015; Joshi & Rahman, 2019). The R^2 values across the model ranged from moderate to substantial, indicating acceptable explanatory power. For instance, $R^2=0.451$ for Consumption Values reflects a moderate level (Hair et al., 2021), while, $R^2=0.578$ for green purchase behavior represents a substantial effect, indicating that the model account for a large proportion of variance in environmentally friendly purchasing. Likewise, path coefficients (β) ranged between 0.567 and 0.768, indicating strong and significant direct effects ($p < 0.001$). These

findings confirm that green marketing stimuli effectively affect consumers' value perceptions and behaviors, which was in line with prior studies in similar emerging market contexts (Govender & Govender, 2016; Alamsyah et al., 2020). However, some relationships showed relatively weaker predictive power, such as when R^2=0.32–0.35, indicating partial influence and possible contextual moderating factors like limmited environmental literacy or income sensitivity. This variation highlights the necessity of segmented green marketing strategies, which emphasize tangible benefits (e.g., price, quality) for less-aware segments and strengthen value-based messaging for aware consumers (Kumar & Ghodeswar, 2015; Nguyen et al., 2020).

A partial mediation between Green Marketing and Green Purchase Behavior was confirmed by the mediation analysis, which also confirmed the indirect effect of Consumption Value. This specifies that while green marketing directly encourages green purchasing, its impact is amplified when consumers internalize social, functional and emotional values supporting the TCV's premise that consumption decisions stem from multiple intertwined value dimensions (Sheth et al., 1991; Rahman & Reynolds, 2016). From an SOR perspective, green marketing stimuli act as environmental cues that activate value-based emotional and cognitive response, that ultimately translating into purchase behavior and intention (Mehrabian & Russell, 1974). To better understand the strength and nature of the relationships tested in the structural model, the following paragraph interprets the relative power of each effect within the framework of environmental psychology.

In interpreting the structural relationships, the strength of the effects observed across the tested hypotheses offers deeper insight into the psychological mechanisms underlying green consumer behavior. The path from between green marketing to consumption values showed a strong positive impact, indicating that consumers' internal value systems are successfully activated by well-designed green marketing strategies (Hair et al., 2014; Nguyen et al., 2018; Rana & Solaiman, 2023). Likewise, the relationship between consumption values and green purchase behavior was significant and strong, suggesting that these values have a substantial influence on actual buying intentions and behaviors once they are triggered (Sheth et al., 1991; Nguyen et al., 2016). In contrast, the direct link between Green Marketing and Green Purchase Behavior was relatively moderate, implying that while marketing stimuli are important, their effectiveness is greatly enhanced when mediated by personal and social values. Those findings align with the

environmental psychology principles, particularly within the Stimulus–Organism–Response (SOR) framework (Mehrabian & Russell, 1974), which indicates that external stimuli (marketing cues) shape internal psychological states (values), which in turn influence behavioral responses (purchases). Thus, understanding the varying effect strength across direct and mediate paths underscores the critical role of internal cognitive and affective processes in driving sustainable consumption decision (Sheth et al., 1991; Hair et al., 2014; Nguyen et al., 2016).

Integrative Linkage Across Methods and Theoretical Frameworks

The integration of findings across the three methodological components: in-depth interviews, consumer focus groups, and the quantitative SEM-PLS analysis, reveals coherent narrative that supports the study's theoretical foundations within the Stimulus–Organism–Response (SOR) model (Mehrabian & Russell, 1974) and its extensions through the Theory of Planned Behavior (TPB) (Ajzen, 1991) and the Theory of Consumption Values (TCV) (Sheth et al., 1991). Across all methods, Green Marketing (Stimulus) consistently arise as the external driver that triggers internal evaluative and affective mechanisms (Organism), established through Consumption Values, which subsequently influence Green Purchase Behavior (Response). The qualitative findings, which were derived from both company and consumer viewpoints, demonstrated how important social, ethical, and emotional factors are in determining sustainable behavior. Consumption values acted as a powerful mediator in the quantitative validation of these ideas through the SEM-PLS results, demonstrating that sustainable purchasing behavior in Jordan is primarily value-driven and cognitively internalized rather than purely influenced by marketing stimuli. The theory that internal psychological factors, such as perceived responsibility, ethical orientation, and environmental concern, play a crucial role in turning sustainable intentions into actions is further supported by the moderate direct effect of green marketing on purchase behavior and the strong mediated effect through consumption value (Nguyen et al., 2016; Nguyen et al., 2018).

This convergence between qualitative depth and quantitative rigor highlights the multi- layered nature of sustainable consumption, align with Ajzen's (1991) framework that attitudes and perceived behavioral control drive pro-environmental behavior, and Sheth et al.’s (1991) framework on the multidimensional nature of value-driven decisions. Together, these combined results offer strong evidence that successful green marketing strategies must address not only

stimuli and awareness but also value activation and internal motivation, which will help consumers match their ethical beliefs and practical behavior with sustainable market choices, especially in emerging context like Jordan where green awareness is still evolving.

5.2 Conclusion

In order to provide a holistic understanding of how green marketing strategies impact consumers' perceptions, values, and behavioral intentions; the research employed a mixed-methods design, the research integrated qualitative in-depth interviews, consumer focus groups, and a quantitative SEM-PLS survey. In line of the suggested Stimulus–Organism–Response (SOR) framework, the results showed that Green Marketing significantly shapes customers' Consumption Values, which in turn strongly predict Green Purchase Behavior. As attitudes and perceived behavioral control emerged as significant underlying factors, the results also support the Theory of Planned Behavior (TPB), and the Theory of Consumption Values (TCV) by demonstrating the important roles that emotional, functional, and epistemic values play in motivating environmental purchase decisions. The reseach makes an empirical and practical contribution to our understanding of how and why consumers in emerging markets adopt green behaviors by using an integrated methodological approach. The in-depth interviews illustrated how Jordanian food companies understand and implement green marketing strategies, emphasizing topics like eco-friendly packaging, consumer education, and cooperative partnerships. By highlighting the distinctions between environmentally aware and less aware segments in terms of values, motivations, and price sensitivity, the consumer focus groups offered insightful information on consumer perceptions. Lastly, these connections were statistically validated by the quantitative analysis (SEM-PLS), which confirmed the mediating role of Consumption Values (CV), and varied strengths across Green Marketing (GM) dimensions.

Building on these insights, the study successfully fulfilled all its research objectives:

1. **The first objective:** Examine the relationship between Green Marketing (GM) and Consumption Values (CV), it was achieved, as SEM-PLS analysis confirmed a strong and significant positive link, indicating that effective green marketing strategies enhance consumer’s value perceptions, across functional, emotional, and epistemic dimensions.

2. **The second objective:** Analyse the relationship between Consumption Values (CV), and Green Purchase Behavior (GPB), it was also supported, demonstrating that higher consumption values translate into stronger engagement in green purchasing decisions.
3. **The third objective**: Explore the direct effect of Green Marketing (GM) on Green Purchase Behavior (GPB), it was confirmed, though with varying strengths across dimensions: Green Product and Green Promotion exerted the most substantial influences, while Green Pricing and Green Place showed moderate to relatively weak effects, reflecting potential barriers linked to cost perception and accessibility.
4. **The fourth objective:** Identify the use of the green concept within the Jordanian food industry, it was met through the qualitative findings, which showed increasing but uneven adoption of sustainable practices, with larger companies more proactive in implementing eco-friendly strategies than smaller firms.
5. **The fifth objective**: Recommend practical suggestions for stakeholders, it is achieved through the forthcoming sections on theoretical, managerial, and policy implications, aimed at strengthening green marketing integration and consumer engagement in Jordan.

In conclusion, this study offers strong evidence that green marketing strategies can significantly enhance green purchasing behavior when they are in line with customers' beliefs and motives. It emphasizes how crucial it is to create value-driven marketing plans, strike a balance between ethical responsibilities and realistic incentives, and modify messaging for both aware and less-aware consumer groups. When taken as a whole, these insights help advance the literature on green marketing in developing context and provide practical advice for fostering more sustainable consumption patterns in Jordan's food industry.

5.3. Theoretical, Managerial, and Practical Implications

5.3.1 Theoretical Implications

This research contributes to the existing body of knowledge on green marketing, consumer behavior, and sustainability, by integrating the Stimulus-Organism-Response (SOR) model, the Theory of Planned Behavior (TPB), and the Theory of Consumption Values (TCV). The findings empirically validate the mediating role of Consumption Values (CV) between Green Marketing (GM) and Green Purchase Behavior (GPB), offering a more nuanced understanding of how

consumers interpret environmental stimuli and convert them into behavioral outcomes. This research advances the SOR model by demonstrating that CV significantly mediates the GM–GPB relationship. This model proposes that green marketing stimuli (S), including price, product, channel, and communication, activate psychological mechanisms (O) reflected in consumption values, which in turn influence behavioral responses (R). This integrated model shows how these theories complement each other in understanding sustainable consumption in a developing market context, which builds on earlier research that looked at these theories separately (e.g., Mehrabian & Russell, 1974; Ajzen, 1991; Sheth et al., 1991). Additionally, it enriches the Theory of Consumption Values by empirically examining all five dimensions (functional, emotional, social, epistemic, and conditional), in the context of food industry, highlighting their differentiated influence on green purchase behavior. Theses insights suggest that consumer decision in emerging market are shaped by both rational (functional, conditional) and emotional (social, epistemic, emotional) value perceptions, reinforcing the multidimensional nature of green consumption. Furthermore, the study adds to the body of research on green marketing in developing economies, especially the Middle East, where empirical evidence remains limited (Ali & Salhab, 2025). Also, it strengthens theoretical reliability and contextual richness by using a mixed-methods approach that triangulates qualitative findings with quantitative validation.

5.3.2 Managerial Implications

The findings carry several implications for managers and practitioners in the Jordanian food industry. Firstly, businesses need to focus on genuine value communication rather than just eco-labeling, as evidenced by the significant impact of green marketing mix components, particularly green product, pricing, and promotion, on consumption values. Promoting ethical sourcing, health advantages, and transparency can increase consumer trust and strengthen their functional and emotional commitment to green products. Secondly, the necessity for marketers to create strategies that activate multiple value dimensions is highlighted by the mediating role of consumption values. Campaigns can, for example, connect social value (community well-being), and emotional value (environmental responsibility). This strategy can transform positive attitudes into real purchasing behaviors. Thirdly, the amount of customer awareness determined by the focus groups should serve as the foundation for segmentation strategies. While non-aware consumers need price-sensitive, convenience-focused advertising. Environmentally aware consumers react better to

value-based, ethical messaging. This distinction optimizes campaign efficacy and facilitates focused green marketing. Finally, the results encourage collaboration between industry stakeholders, policymakers, and NGOs to develop educational campaigns that enhance environmental literacy, thus expanding the green consumer base. This is consistent with the TPB since stronger subjective norms and perceived behavioral control might encourage sustainable buying intentions.

5.3.3 Practical Implications

On a practical level, this research provides actionable insights for policymakers, businesses, and sustainability advocates. Policymakers can use these findings to create incentive programs (such as tax reductions, eco-certifications, and subsidies for local producers) that make green products more affordable, addressing the price sensitivity barrier revealed in the focus groups and survey. According to the qualitative findings, businesses should place a high priority on eco-branding and transparent labeling that communicates both environmental and health benefits. Improving consumer education can foster long-term behavioral change and raise awareness of sustainability concepts through workshops, digital campaigns, and school programs. Businesses can also reinforce social and emotional consumption ideals by including corporate social responsibility (CSR) into their branding strategy. This boosts stakeholder trust and company reputation in addition to increasing market competitiveness. Lastly, embracing green innovation, like eco-packaging, local sourcing, and energy-efficient production, serves dual purposes: meeting customer expectations while also supporting Jordan's national sustainability agenda.

5.4 Recommendations

Built on the integrated findings from the qualitative and quantitative analyses, several actionable recommendations can be anticipated, to strengthen the adoption and impact of green marketing in the Jordanian food industry. These recommendations are directed toward, food companies, policymakers and marketers/educators, reflecting the study’s theoretical, managerial, and practical implications.

5.4.1 Recommendations for Food Companies and Managers

1. Segment and target consumers strategically: The research identified two distinct consumer segments "environmentally aware and non-aware". Thus, for the aware segment, marketing should highlight transparency, ethical values, and environmental impact. For the non-aware, communication should focus on convenience price, and health benefits, steadily building awareness through relatable messaging.

2. Integrate sustainability into core strategy: Instead of treating sustainability concepts as isolated marketing campaigns, businesses should incorporate them into their operations and goals. Using comprehensive green marketing strategies for product design, pricing, distribution, and promotion is part of this.

3. Invest in employee and partner training: Alignment and consistent message across all customer touchpoints are fostered by educating employees and supply chain partners on sustainability objectives and green marketing practices.

4. Enhance product labeling and transparency: Companies should make sure eco-labels are readable, credible, and easily visible because label reading is a crucial component for aware consumers. This includes offering digital resources like QR codes to support sustainability claims.

5.4.2 Recommendations for Policymakers and Regulatory Authorities

1. Strengthen public awareness campaigns: To create national environmental education programs, policymakers should work with the media and civil society, focusing on the link between environmental sustainability, ethical consumption, and individual health. This can close the awareness gap found among consumers that less environmentally conscious.

2. Incentivize sustainable business practices: Provide tax reductions, incentives, or subsidies to businesses who adopt sustainable sourcing, renewable energy, and eco-friendly packaging. The cost barriers that businesses perceive when implementing sustainable strategies can be addressed with the use of financial incentives.

3. Develop comprehensive green marketing guidelines: Clear national guidelines for green labeling, eco-certification, and sustainable claims should be established by the government and

relevant regulatory bodies such as the Jordan Food and Drug Administration and the Ministry of Environment. This will improve customer understanding and trust while decreasing greenwashing.

4. Promote green consumerism through legislation: Encourage businesses to reveal information about their product lifecycle and environmental impact by enforcing eco-labeling laws and demanding transparency in sustainability reporting.

5.4.3 Recommendations for Marketers and Consumer Education

1. Utilize multi-channel campaigns: To expand the reach of your message, combine digital and conventional marketing channels. Social media campaigns and collaborations with influential people can significantly increase the credibility of your brands.

2. Foster experiential learning and community engagement: Organize workshops, farmers' markets, and green fairs so that customers can have a hands-on look at sustainable products. Direct engagement encourages behavioral change and emotional connection.

3. Tailor communication strategies: Develop dual communication approaches by having **pragmatic "benefit-driven messaging"** linking health, affordability, and daily utility for non-aware consumers. The second approach is **value-based storytelling** emphasizing ethics, trust, and responsibility for aware consumers.

5.5 Limitations

While this study makes significant contributions to understanding the impact of green marketing on green purchase behavior with the mediating role of consumption values, within the Jordanian food industry, it is not without limitations. These limitations provide essential context for interpreting the findings and simultaneously highlight avenues for future research.

1. Sampling and Generalizability

The results might not be fully generalizable to other industry sectors or the total Jordanian population. Selection bias may be introduced since the sample is primarily reflective of participants who are accessible and willing. Nonetheless, this approach was deemed appropriate for a mixed-method exploratory study in an area with limited previous research. Future studies

could apply probability-based sampling for example to ensure proportional representation across demographics.

2. Measurement and Analytical Scope

Since PLS-SEM was selected, due to its strength in handling multiple latent constructs, moderate sample sizes, and mediating effects, which provided robust insights into both measurement and structural relationships. However, as with most cross-sectional designs, the data capture responses at a single point in time, which may limit the ability to infer long-term causal relationships. Thus, future research could adopt experimental or longitudinal designs to explore behavioral evolution over time. Also, researchers can apply the same research model in the scope of Hungary or other European countries and make a comparative study, which would be a valuable contribution to this topic.

3. Thematic and Cultural Interpretation

Although qualitative data were rigorously coded and analyzed using thematic content analysis, the interpretation of participant language may still contain subjective aspects, particularly given cultural differences in expressing environmental awareness or ethical values. To mitigate this, Cross-method triangulation and several coding cycles were used. Future research could benefit from mixed qualitative techniques, such as participant observation or cognitive mapping, to further validate interpretations.

In conclusion, this chapter provide the key findings from the qualitative and quantitative levels, demonstrating how the integrated use of in-depth interviews, consumer focus groups, and SEM-PLS survey analysis, provide a comprehensive understanding of green marketing dynamics, in the Jordanian food industry. The findings confirmed the crucial role of consumption values as a mediating tool linking green marketing practices to green purchase behavior, guided by the SOR, TCV, and TPB frameworks.

With the combination of contextual insights and empirical evidence, the chapter outlined the research conclusions, implications, and practical recommendations, addressing both academic and managerial audiences.

6. Novel Findings and Future Directions

This research represents one of the first comprehensive empirical investigations within the Jordanian context to explore the interrelationships among of Green Marketing (GM), Consumption Values (CV) and Green Purchase Behavior (GPB). A topic that has received limited scholarly attention in developing countries, particularly in the Middle East. Through, it mixed- methods design, the research not only validated theoretical relationships but also uncovered context-specific insights relevant to emerging markets. It provides a holistic and multi-perspective understanding of how green marketing practices influence consumer behavior through the mediating role of consumption values.

6.1 Novel findings and contribution

The dissertation offers several novel contributions:

1. Contextual Originality: To the best of the researcher's knowledge, this is the first research in Jordan's food industry to systematically examine green marketing using the SOR theoretical model combined with the Theory of Consumption Values (TCV), offering region-specific insights into sustainability-driven consumer behavior.

2. Methodological Innovation through Triangulation: The integration of three complementary research methods allowed triangulation of findings, bridging managerial perspectives (in-depth interviews), consumer perceptions (focus groups), and behavioral modeling (survey). This approach provides a more comprehensive picture of the market dynamics in emerging economies, and strengthens the validity of the results.

3. Practical Framework for Segmented Green Marketing Strategies: The research developed actionable insights for practitioners, by identifying distinct attitudinal and behavioral profiles of consumers. The clear differentiation between value-driven (Aware group), and price-driven (Non-aware group), segments offers a practical roadmap for targeted green marketing strategies, balancing ethical appeal and affordability messaging. This segmentation model can inform marketing interventions and policy across other developing markets. These insights extend prior

research, which has largely focused on Western markets, and highlight the distinct motivations and barriers in developing countries.

Overall, this research contributes original knowledge to the fields of Green Marketing, Consumer Behavior, and Sustainability studies, offering both practical guidance and theoretical enrichment for policymakers and marketers seeking to foster environmentally responsible consumption in Jordan and similar developing markets.

6.2 Future Research Directions

Building upon these contributions, several promising research paths emerge:

1. Cross-Sectoral Application: In order to investigate if the mediating function of consumer values is consistent across industries, future research could apply the integrated model to other areas like fashion, energy, or tourism.

2. Cultural and Regional Comparison: Cross-cultural generalizability can be improved by comparing Jordan with other Middle Eastern or developing countries, in order to pinpoint cultural differences that affect green behavior.

3. Longitudinal and Behavioral Tracking: Given the dynamic nature of consumer values, behavioral tracking studies or longitudinal designs may be able to track changes in green behavior over time and evaluate the long-term effectiveness of marketing.

4. Experimental and Neuromarketing Approaches: To deepen understanding of cognitive and emotional drivers, future research can adopt experimental or neuroscientific methods to measure subconscious responses to green stimuli.

5. Digital and AI-Based Green Marketing: With the rise of digital transformation, future research could explore how e-commerce platforms, AI and social media shape consumers trust and perceptions toward green products in emerging economies.

Summary

This dissertation investigates *the impact of green marketing on green purchase behavior, with the mediating role of consumption values in the Jordanian food industry*. This study is motivated by the growing importance of sustainability in business and consumer behavior. Particularly in developing economies were environmental awareness is still emerging. It aims to identify how green marketing practices, through the 4 marketing mix (Product, place "channels", price and promotion), shape consumer purchasing behavior, and how different consumption values (Environmental concerns, Emotional, Epistemic, Conditional and social), influence this relationship.

This study adapt a **mixed- methods approach**, to ensure a comprehensive understanding of the phenomenon. The **qualitative phase** includes in-depth interviews with managers of the Jordanian food companies, and two focus group with consumers, one environmentally aware, and the other non-aware, to explore the perceptions, motivation, and barriers toward green product. The **quantitative phase** employs a survey (n=492), analyzed using **Partial Least Squares Structural Equation Modeling (PLS-SEM)**, to test the conceptual model and hypotheses.

Findings from the **in-depth interviews** reveal that Jordanian food companies are increasingly aware of the importance of green marketing, particularly in areas such as consumer education, eco-friendly packaging and resource-sharing partnerships. However, they face challenges related to cost, consumer's awareness and regulatory support. The **focus group discussions** highlights clear differences between environmentally aware and non-aware consumers. The aware group demonstrates value-driven decision making, linking sustainability, ethics and health, while the non-aware group prioritizes affordability, convenience and familiarity. These insights emphasize the need for segmented marketing strategies tailored to consumer awareness levels.

Results from the **quantitative analysis** confirm that green marketing significantly influence both consumption values and green purchase behavior. Among the four dimensions **green product** and **green pricing** have the strongest direct effects on consumption values, which in turn significantly affect purchase intentions. The mediating analysis shows that consumption values partially mediate the relationship between green marketing and green purchase behavior, conforming the relevance of the **Stimulus- Organism-Response (SOR) model** and the **theory of consumption**

values (TCV). The findings collectively support the hypotheses and extend understanding of how psychological and conceptual factors shape green purchase in developing contexts.

The study contributes to the theory by integrating Stimulus- Organism-Response (SOR) model, theory of consumption values (TCV) and Theory of Planned Behavior (TPB) frameworks, demonstrating their joint applicability in explaining green consumer behavior. It also provides managerial and policy implications, urging Jordanian food companies to invest in consumer education, value-based marketing communication and pricing strategies that balance affordability with sustainability. Policymakers are encouraged to design emotional and epistemic appeals to strengthen consumer engagement.

Despite its robust design, the study is limited to the food industry in Jordan and to cross sectional data, which may restrict generalization. Further studies could explore longitudinal designs, comparative concepts, and additional mediating variables such as trust.

Overall, this dissertation advances academic understanding of green marketing impact on consumer behavior and offers practical guidance for promoting green consumption. By bridging theoretical frameworks with empirical evidence. It underscores the strategic role of green marketing and consumption values in shaping environmentally responsible purchasing decisions with emerging markets.

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Appendices

Appendices A: Support Document & participants consent

To whom it may concern,

She is Rama Alzu'bi, a doctoral student at the Károly Ihrig Doctoral School, Faculty of Economics and Business, University of Debrecen, Hungary. She is currently engaged in research for her PhD dissertation, "The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry."

Rama intends to collect data from Jordanian food companies as part of her research. The data to be collected also includes the use of in-depth interviews. The faculty's ethics committee has rigorously reviewed and approved the research project, ensuring that all data collection and handling meet the highest ethical standards and confidentiality requirements.

The collected information will be used exclusively for academic purposes and will contribute to expanding the knowledge of Green Marketing; the research results will be presented in Rama's dissertation.

Kind regards,

Prof. Honoris Causa, Prof. Dr.András Nábrádi
CSc, PhD, Head of Doctoral School

Interview Consent Form

Research project title: **The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry.**

Researcher: Rama Mohammad Alzu'bi

Research participants' name: ----------

You are invited to participate in a research study titled **The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry.**

This form explains the study's details and your rights as a participant. Please read this form carefully and ask any questions you may have before deciding whether or not to participate.

The interview will last approximately 40 minutes, and will be conducted by a Rama Mohammad Alzu'bi, a PhD student in Hungary at the University of Debrecen/ Economics and Business department. The interview will focus on the use of Green Marketing. The interview will be audio-recorded and transcribed. We do not anticipate any risks from your participation in this study. However, you are free to withdraw from the interview or to discontinue participation in the study at any time.

Your participation in this study is completely voluntary. We will keep all the information you provide confidential. We will not use your name in any reports or publications. We will analyze the data from this study in aggregate. This implies that we won't use any information that could personally identify you.

By signing this form, you acknowledge that you have read and understood the information provided above and agree to participate in this study.

Signature of Participant: _____

Date:_____

We appreciate your willingness to participate in the interview for the research study.

Appendices B: The Main Questions and Follow-Up Questions

The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry

• Green Marketing: the process of planning and implementation of appropriate marketing mix commonly known as the 4Ps (Product, Price, Place, and Promotion), with the objective of achieving economic, while also focusing on sustainability without using any type of ingredient that will harm the environment.

• Sustainability: Practices that meet the needs of the present without compromising the ability of future generations to meet their own needs. It considers environmental, social, and economic factors in food production and consumption.

Introduction:

This interview aims to understand your perspectives on the use of green marketing in your company within the Jordanian food industry. Your insights will be crucial for my research.

Icebreaker:

Briefly tell us about yourself and what your company do.

- **General Strategy**

1. Do you use green marketing concept in your company?

If No, why you are not considering using it?

If yes, continue with the following questions:

2. Can you describe your company's overall approach to green marketing?

    Follow-up: What are the core principles guiding your green marketing efforts?

3. How does your green marketing strategy align with your company's mission and values?

- **Implementation and Practices:**

4. What specific green marketing initiatives have you implemented?

    Follow-up: Can you provide examples of campaigns or programs that use eco-friendly materials?

5. How do you ensure that your products meet green standards?

6. How do you work with suppliers to ensure they meet your green standards?

7. How do you communicate your green marketing efforts to consumers?

    Follow-up: What channels and messaging strategies do you use?

8. How do you ensure that your green marketing claims are credible and substantiated?

Follow-up: Do you follow any specific guidelines or certifications & Standards?

- **Impact and Performance**

9. Can you share any specific outcomes or successes that have resulted from your green marketing initiatives?

10. How has consumer perception of your brand changed since implementing green marketing strategies?

- **Challenges and Barriers**

11. What challenges have you faced in implementing and promoting green marketing practices?

Follow-up: How have you addressed these challenges?

- **Future Directions**

12. What are your future plans for expanding or enhancing your green marketing efforts?

13. How do you see the role of green marketing evolving in your company over the next 5- 10 years?

- **Collaboration and Industry Perspective**

14. Do you collaborate with other organizations, or industry groups to promote sustainability?

Follow-up: Can you provide examples of such collaborations?

15. How do you perceive the overall state of green marketing within the food industry?

Follow-up: What improvements or changes would you like to see?

Closing:

- Thank you: "Thank you again for your valuable participation and insights today. Your contributions will be crucial in my research."
- Open-Ended Question: "Before we wrap up, is there anything else you'd like to share about sustainability in general or green marketing specifically in the Jordanian food industry? Perhaps you have personal experiences or suggestions that haven't been covered yet. Feel free to share anything that comes to mind."

Appendices C: General Description of Each Variable, Transcription and Translation Process and Data Coding and Categorization Process

General Description of Each Variable

1. General Strategy (V1): Guiding principles & overall approach that a company adopts to integrate green marketing into its business model. It includes the organization's commitment to sustainability, how green marketing strategy align with their mission and values and how environmental considerations are linked with the corporate values.

2. Implementation and Practices (V2): It's about the specific actions and techniques companies use to apply green marketing strategies, like eco-friendly packaging, energy-efficient production methods, sustainable sourcing and communication strategies that promote environmentally responsible products and services.

3. Impact and Performance (V3): This evaluates the effectiveness of green marketing efforts in achieving business and sustainable goals. It involves assessing consumer response, brand reputation, market expansion, new segments, awards for a specific initiative, sales growth and regulatory compliance resulting from using green marketing.

4. Challenges and Barriers (V4): It's the obstacles companies face when adopting and executing green marketing strategies. Barriers may include high costs, regulatory restrictions & low consumer education and awareness.

5. Future Directions (V5): It's the potential growth, partnerships, recommendations for policy changes, enhancements in sustainable practices, prospective collaborations & innovations that could enhance the future and adoption of green marketing in the industry.

6. Collaboration and Industry Perspective (V6): Involve broader look on green marketing within the food sector, considering competitive dynamics, industry-wide challenges and opportunities. It explores trends, third-party recommendations, and how businesses, government, and NGOs can work together to strengthen sustainability practices.

Transcription and Translation Process

The encoding method for the in-depth interviews included multiple systematic stages to guarantee the accuracy and reliability of the transcriptions and translations. Considering that Arabic is the main language in Jordan, the following actions were carried out:

1. Translation of Interview Questions: Firstly the interview questions have been translated from Arabic to English. The translation was evaluated by an additional expert to guarantee precision, resulting in a finalized version based on this assessment.

2. Transcription of Recorded Responses: The recorded responses were subsequently transcribed verbatim from the audio recordings, hand transcribed in Arabic to precisely reflect the participants' replies.

3. Translation of Transcribed Responses: After transcribing the responses, the next step was their translation into English. This step was performed manually to ensure the integrity of the responses' meaning. While Google Translate was occasionally employed for clarity, it was not relied upon for the final translation due to its literal translation approach.

4. Review and Refinement: Upon translation, the English version was reviewed and refined to guarantee clarity and consistency with the research context.

Data Coding and Categorization Process

Prior to the initiation of the formal analysis, the transcription data undergone a systematic coding procedure to guarantee an organized and significant categorization. A deductive approach was used in the coding process. The procedure adhered to these steps:

1. Data Preparation: Ten in-depth interviews were done. One interview was removed due to negative responses, resulting in nine interviews available for analysis.

2. Standardized Categories: Each interview was organized into six predefined sections that mentioned before to ensure consistency throughout the dataset. These categories remained uniform across all interviews to ensure comparability.

3. Sub-Coding Process: Due of the unique responses from each respondent, sub-categories were dynamically created depending on the emergent concepts inside each interview. This involved:

- Reviewing over each interview paragraph by paragraph and applying sub-codes to key ideas & themes.
- Recognizing that sub-categories differed from interview to interview due to the introduction of new concepts and perspectives.

4. Merging into Codes: After the sub-categories were established, any sub-codes that were similar or overlapped were merged into broader codes to bring together related ideas. This ensured a coherent structure and facilitated a more systematic analysis.

5. Preparation for Analysis: To facilitate a clear and organized dataset, the finalized set of categories and codes was then provided for further analysis.

Appendices D: Detailed Overview of the Demographic Items

Table E: Demographic Items for the Screening Survey

DEM 1	Gender of the individual respondent.
DEM 2	Age of the individual respondent.
DEM 3	Current place of residence
DEM 4	City of residence
DEM 5	Highest level of education completed
DEM 6	Contact information

Source: Own Construction (2025)

Appendices E: Screening Survey

Focus group interview screening questionnaire

University of Debrecen

Faculty of Economics and Business

Károly Ihrig Doctoral School of Management and Business

Dear participant!

My name is Rama Alzu'bi and as a doctoral student at the University of Debrecen, I would like to ask you to support my work and progress by participating in a focus group interview. The questions below are related to the focus group interview screening questions.

If you would like to participate in the above-mentioned focus group interview, please fill in the questionnaire below.

For the purposes of contacting you, personal data will be required, but the information you provide will be confidential and will be used strictly for the purpose of the research, will not be disclosed to third parties and will not be made public.

If you are selected as a research subject on the basis of your answers, I will be sure to let you know using the contact details provided.

The interviews are conducted online and require no preparation or special equipment, even a laptop, tablet or smartphone.

Best Regards,

Rama Alzu'bi

Supervised by:

Dr. Kontor Enikő

Email: ramazoubi24@gmail.com

Mobile: +962787903184

Details of the filler:

1. What is your gender?

   Female Male

2. Your age?---------- Years

3. Your current place of residence:_____

4. City:_____

5. Highest level of education completed?

   Primary Education Master Degree
   High Diploma or less PHD

6. How often do you buy food products in person or online?

   Almost never Rarely
   Very rarely Often
   Very often

7. How conscious are you when you shop?

   I am not at all conscious I am slightly conscious
   I am both conscious and not conscious I am conscious
   I am fully aware

8. How environmentally conscious are you when you shop?

   I am not at all conscious I am slightly conscious
   I am both conscious and not conscious I am conscious
   I am fully aware

9. Can you please give me your contact information to reach you?

Mobile---------- OR

Email Adress----------

Appendices F: A Detailed Process of the Focus Group Structure

- **Variables & Measures:**

The focus group discusses were structured around a number of important factors related to the goals of the study in order to obtain a deeper insight into consumer behavior and perceptions. It included a number of open-ended questions and interactive exercises designed to capture the conscious and unconscious elements influencing consumers' decisions to make green purchases. The main questions for the focus group interview can be found in (Appendix E). During the sessions, the following variables were measured:

1. **Participant Introductions:** Participants were first asked to share basic demographic information, including how they are, age, occupation, hobbies and general shopping habits related to food, to establish a context for their responses.
2. **Association Game:** Participants were presented with 10 green-related terms (Sustainability, Eco-friendly, Organic, Recycling, Green Packaging, Natural, Local, Energy Saving, Zero Waste, Healthy) and asked to share the first thing that came to mind. This exercise aimed to capture spontaneous associations and emotional responses to green concepts.
3. **Shopping Motivations & Emotional Mapping:** Questions covered the frequency of food shopping, preferred shopping locations, who make the purchase, and key criteria influencing purchase decisions, such as price, taste, health benefits, and brand trust.
4. **Prioritizing Factors When Buying Green Food Products:** Participants engaged in a group activity to rank factors (Important, not Important) that influence their green purchasing decisions, including: Price, Health Benefits, Environmental Protection, Free from additives, Availability in Stores, Trust in Brands, Packaging Design, Taste, Discounts, Peer Influence (Family & Friends), Ease of Accessibility, Quality & Ethical Protection. This section also included follow-up questions on packaging perceptions and the time spent reading labels, providing insight into the practical factors guiding purchase choices. This exercise aimed to capture the relative importance of these factors in decision-making.
5. **Consumption Values Impact on Green Marketing and Green Purchase Behavior:** Through a scenario activity, participants evaluated hypothetical snack choices, focusing on perceived differences, influencing factors, and potential trade-offs, such as price sensitivity versus environmental concerns.

6. **What Matters Most in Your Choice (Personal Product Evaluation):** Participants were asked to assess a hypothetical green snack product, exploring their likelihood to purchase it, perceived values, emotional values, conditional values and potential barriers, including price, taste, and brand influence, and other factors.
7. **Future Challenges and Opportunities:** The final section addressed broader perceptions about the future of green consumption and sustainability, including potential challenges and the role of awareness in promoting sustainable purchasing behaviors.

- **Transcription and Translation Process:**

This method follows a similar structure and process as the in-depth interviews, including the careful translation of questions, manual transcription of responses, and meticulous English translation to preserve the original context and meaning.

- **Data Coding and Categorization Process:**

The focus group data analysis followed the same rigorous coding and categorization process used for the in-depth interviews to maintain consistency in data interpretation. This approach ensured that the themes identified were comparable across both qualitative methods, allowing for a comprehensive understanding of the participants' perspectives.

Appendices G: The main Questions for the Focus Group Interview

The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry

1. **Introduction**

Thank you all for joining us today. My name is Rama Alzu'bi, and I am a PhD student in Business and Management at the University of Debrecen. My research focuses on "The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry."

Today, we will be discussing about Green Marketing. Your insights are incredibly valuable in helping us understand these dynamics, so I encourage you to share your honest thoughts and experiences.

Your cooperation in this discussion is highly valued, as it plays a crucial role in my research and contributes significantly to obtaining my PhD. I truly appreciate your time and willingness to participate.

During the discussion, you are welcome to speak up or raise your hand, whichever you feel comfortable with. There are no right or wrong answers; we are here to learn from your perspectives. If you have any questions at any point, please feel free to ask.

Before we begin, does anyone have any questions or comments?

2. **Participant Introductions (5 minutes)**

- Ask each participant to introduce themselves: age, occupation, and their general shopping habits when it comes to food.
- Encourage everyone to speak, especially quieter participants.

3. **Association Game (10 minutes)**

Thank you for the introductions! As a warm-up, I'd like to play an association game with you. I'll say a word, and I'd like you to say the first thing that comes to mind without overthinking it. *10 green-related terms will be given, please share the first thing that comes to mind. "This is purely to ease them into the discussion"*

- Sustainability
- Eco-friendly
- Organic
- Recycling
- Green Packaging
- Natural
- Local

- Energy Saving
- Zero Waste
- Healthy

4. **Shopping Motivations, Emotional Mapping (10 minutes)**

How often do you buy food? Where do you usually shop for groceries? What categories do you purchase most frequently? Who usually does the shopping in your family? Let's take examples! Imagine you want to buy a product like milk, yogurt, or snacks. What are the top five criteria you consider when making a purchase?

5. **Group Activity: Prioritizing Factors When Buying Green Food Products (10 minutes):**

*Instructions for Moderator:*Ask participants to work together to categorize the following factors into two groups:

1. **Important**
2. **Less Important**

Then, within each group, they should **rank the items in order of importance** (e.g., 1 = most important in the group, 2= less important in the group).

Factors to Discuss:

- Price
- Health Benefits
- Environmental Protection
- Free from additives
- Availability in Stores
- Trust in brands
- Packaging Design
- Taste
- Discounts
- Peer Influence (Family & Friends)
- Ease of accessibility
- Quality
- Ethical production

*Note to Moderator:*Encourage discussion and debate. Observe where there is consensus or disagreement. Allow participants to suggest additional factors if they wish.

Follow up question: Do you look at product labels or the information on their packaging when buying food? If yes, how often do you do this (never, sometimes, always)? How many seconds do you usually spend looking at a product label? Can you name some food products that you think are environmentally friendly?

6. **The impact of Consumption Values on GM & GPB (10 minutes):**

Scenario Activity: Snack Choice

Moderator Instructions:

Present participants with two different snack products (physically or using images). Do not explain them in detail at first. Simply refer to them as Snack A and Snack B.

Step 1: Observation & Perception:

"Here are two snack options. Please take a moment to look at both.

What differences do you notice between them?" (Encourage open discussion. Let participants identify differences such as packaging, labeling, branding, ingredients, etc.)

Step 2: Values & Choice

"Imagine you are in a store, choosing between Snack A and Snack B.

Which would you choose, and why?"

"What factors influenced your decision?"

(Prompt if needed: taste, health, packaging, price, environmental impact, brand trust, etc.)

Step 3: Clarification

Once participants have shared their thoughts:

"Snack A is considered environmentally friendly — it has eco-friendly packaging and is locally sourced. Snack B follows more conventional production and packaging methods."

Optional Follow-Up Question (Price Prompt):

"Let's say Snack A (eco-friendly) is slightly more expensive than Snack B. Would that influence your choice? Why or why not?"

7. **What Matters Most in Your Choice? (10 minutes)**

Let's say you care about things like health, the environment, or even just trying something new. Sometimes you see products that seem better for the planet — maybe they're locally made or come in eco-friendly packaging — but they also might cost a bit more or aren't available everywhere.

Now, imagine this:

You're given one of the two snacks we talked about earlier. Take a look at it. We'd like to know:

- What do you think about it?

- Would you actually buy it in real life? Why or why not?
- What might stop you from choosing it if you saw it in a store?
- If this snack was a gift, would you be happy to get it?
- What if you had to pay for it yourself - would your decision change?

Let's just talk about what matters to you when buying food. What helps you decide? Is it the price, taste, packaging, brand, what your friends think, how new it is, or something else?

8. Future Challenges - Time Frame: 8 Minutes

At the conclusion of today's discussion, I would like to ask you to share your thoughts on the future of purchasing eco-friendly products in Jordan. Do you think there is a need to increase people's interest in buying these products? Looking ahead, what changes do you think should occur in the way products are sold and how people shop?

Ending

Thank you all for your time and valuable input today. Your reflections and feedback have been extremely helpful in understanding how consumption values influence green purchase behavior and how different product features, like eco-friendly packaging or local sourcing, affect purchasing decisions. By exploring how these values mediate the relationship between green marketing and green buying behavior, you've contributed important insights into our research. If you have any final thoughts or questions, feel free to share them now. Otherwise, thank you once again for your participation!

Appendices H: Questionnaire Tool

Questionnaire in English

University of Debrecen

Faculty of Economics and Business

Károly Ihrig Doctoral School of Management and Business

- **Dear participant:**

My name is Rama Alzu'bi, I am conducting a study titled:

The Impact of Green Marketing on Green Purchase Behavior: The Mediating Role of Consumption Values in the Jordanian Food Industry

As a requirement to obtain PhD degree in Management and Business at the University of Debrecen. You have been chosen to participate in this study because I wanted to identify the use of green concepts in Jordan.

If you choose to participate, please answer all question with honestly and objectively, as your opinion have a great importance to achieve the purpose of this study. The completion is anonymous and voluntary and data will only be used in aggregate.

Thank you for taking time answering this questionnaire, if you have any question or you require additional information, you can contact me.

Sincerely,

Rama Alzu'bi

Supervised by:

Dr. Kontor Enikő

Email: ramazoubi24@gmail.com **Mobile: +962787903184**

Section 1: The Questionnaire

Please rate the following questions on a Five- Point Scale, ranging from strongly agree to strongly disagree.

First: Green Marketing-GM- **Green Product:**	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
1) It is important to me that the products I purchase are environmentally friendly?					
2) I consider the environmental impact of a product before making a purchase?					
3) It is likely for me to pay more for a product that is marketed as green or eco-friendly?					
4) I'm satisfied with the availability of green products in the market?					
5) I trust the environmental claims made by companies about their products?					

Green marketing Channels:	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
6) I use online platforms to purchase green products?					
7) Social media platforms effective in influencing my decision to buy green products?					
8) I prefer purchasing green products directly from manufacturers?					
9) I prefer purchasing green products through third-party retailers?					
10) I'm satisfied with the information provided by online retailers about green products?					
11) I come across green products in traditional retail outlets (e.g., supermarkets, department stores)?					

Green marketing communication "promotion":	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
12) Green product advertisements effective in influencing my purchasing decisions?					

13) I find the promotional messages about green products clear and trustworthy?					
14) I often see companies promoting their products as environmentally friendly?					
15) I find the environmental claims in advertisements credible?					
16) I Would support companies that actively promote environmental sustainability in their marketing campaigns?					

Green pricing:	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
17) I'm willing to pay for a product that is marketed as green or eco-friendly?					
18) I perceive the pricing of green products high compared to conventional products?					
19) I believe that green products offer good value for their price?					
20) I consider the price when deciding whether to purchase a green product?					
21) I'm aware of any price incentives or discounts offered for green products?					

Second: Consumption Values-CV-Environmental Concerns:	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
22) I'm concerned about the impact of my consumption on the environment?					
23) I choose products based on their environmental friendliness?					
24) I avoid products that have a negative environmental impact?					
25) It is important for me that companies are committed to environmental sustainability?					
26) I frequently engage in activities aimed at reducing my environmental footprint?					

Emotional Values:	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
27) I'm satisfied when I purchase environmentally friendly products?					
28) I feel a sense of pride when I make eco-friendly consumption choices?					
29) I experience guilt when I buy products that are not environmentally friendly?					
30) I frequently purchase green products to align with my personal values and beliefs?					

31) It is important for me to feel good about the products I purchase?					

Epistemic Values:	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
32) I'm interested in learning about the environmental impacts of the products I buy?					
33) I frequently seek information about the sustainability of products before purchasing them?					
34) It is important for me to stay informed about new eco-friendly products and innovations?					
35) I actively seek out brands that provide detailed environmental information about their products?					
36) It is likely for me to switch to a new brand or product because it offers better environmental benefits?					

Conditional Values:	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
37) Seasonal promotions influence my purchase of eco-friendly products?					

38) I buy environmentally friendly products when they are offered at a discount?					
39) External factors, like government incentives or social events, important in my decision to buy green products?					
40) Special occasions (e.g., Earth Day) motivate me to purchase eco-friendly products?					
41) It is likely for me to purchase green products when they are part of a limited-time offer?					

Social Values:	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
42) My friends influence my decision to buy environmentally friendly products?					
43) I purchase eco-friendly products to fit in with my social group?					
44) It is important for me to be seen as someone who cares about the environment?					
45) I'm influenced by celebrities/ public figures who promote green products?					

46) It is likely for me to recommend eco-friendly products to others?					

Third: Green Purchase Behavior -GPB-	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
47) I frequently buy products that are labeled as green or environmentally friendly?					
48) I prefer to buy from brands that are known for their sustainability practices?					
49) I believe that my individual purchases can make a difference in environmental conservation?					
50) My family influence my decision to buy environmentally friendly products?					
51) Lack of availability of green products prevents me from purchasing them?					

Section 2: Demographic variables:

Gender:

Male

Female

I do not wish to answer

Age:

18-26

27- 35

More than 35

Education level:

Primary Education

Master Degree

High Diploma or less

PHD

Bachelor

Occupation:

Student

Employed

Self-employed

Retired

Other: _____

Income Levels:

0 JD – 400 JD

401 JD -700 JD

701 JD -1000 JD

More than 1000 JD

Appendices I: A Point-By-Point Measures for Each Variable

This study makes reference to previous studies in the same area in order to develop a suitable instrument to assess study variables, to ensure the impact of Green marketing and the relationships between variables. The questions have been carefully to address the key dimensions of each core variable in this research. Below is a point-by-point measures for each variable, covering green marketing (independent variable), consumption values (mediator variable), and green purchase behavior (dependent variable). By explaining how many dimensions were used. Also, some of these dimensions were chosen based on previous studies as it mentions below, and new questions were formulated by the researcher.

1. **Green Marketing (GM):** Four dimensions were used which are (green product, green marketing channels, green marketing communication "promotion" and green pricing). Some of These dimensions were chosen based on previous studies as it mentions below, and new questions were formulated by the researcher, the selected questions are attached in Appendix (F).

- **Green Product:** it was measured by using 2 questions from (Yadav & Pathak, 2017), and 3 new questions were formulated by the researcher.
- **Green Marketing Channels**: it was measured by using 2 questions from (Paik & Lee, 2021), and 4 new questions were formulated by the researcher.
- **Green Marketing Communication "Promotion":** 5 new questions formulated by the researcher.
- **Green pricing:** it was measured by using 3 questions from (Bae & Rishi, 2018), and 2 new questions were formulated by the researcher.

2. **Consumption Values (CV):** Five dimensions were used which are (Environmental Concerns, Emotional Values, Epistemic Values, and Conditional Value & Social Value). Some of These dimensions were chosen based on previous studies as it mentions below, and new questions were formulated by the researcher, the selected questions are attached in Appendix (F).

- **Environmental Concerns:** it was measured by using 1 question from (Joshi & Rahman, 2019), and 4 new questions were formulated by the researcher.

- **Emotional Values:** it was measured by using 4 question from (Haj-Salem et al., 2022), and 1 new questions were formulated by the researcher.
- **Epistemic Values:** it was measured by using 2 question from (Nguyen et al., 2020), and 3 new questions were formulated by the researcher.
- **Conditional Value:** it was measured by using 3 question from (Tanrikulu, 2021), and 2 new questions were formulated by the researcher.
- **Social Value:** it was measured by using 2 question from (Escadas et al., 2019), and 3 new questions were formulated by the researcher.

3. **Green Purchase Behavior (GPB):** it was measured by using 2 question from (Chen, 2020; Mahadeva et al., 2024), and 3 new questions were formulated by the researcher.

Appendices J: Detailed Explanation Manual Thematic Analysis Process

The qualitative data collected from the two focus group interviews was analyzed using manual thematic analysis, following the principles outlined by Braun and Clarke (2006). This approach was chosen to capture the depth, complexity, and diversity of participants' perspectives in a structured and transparent manner. The analysis was conducted in several stages:

1. Familiarization with the Data:

All focus group sessions were transcribed in full. I read and re-read the transcripts to become deeply familiar with the content, paying particular attention to recurring words, phrases, and ideas.

2. Initial Coding (Open Coding):

Each transcript was manually coded line by line. Codes were generated inductively from the data, with labels attached to specific segments of text that reflected participants' experiences, perceptions, or behaviors. These initial codes often reflected concrete elements such as price, taste, availability, health benefits, environmental protection, or trust.

3. Generating Categories and Sub-Categories (Axial Coding):

The codes were then grouped into broader categories and sub-categories. For example, codes such as price and discounts were combined under the broader category of economic factors, while packaging design and label reading were grouped under informational and visual cues.

4. Theme Development:

Categories and sub-categories were further refined into overarching themes that captured the underlying patterns across participants. For instance, themes such as practical versus conceptual engagement or emotional and ethical framing emerged by comparing how environmentally aware and non-aware groups responded to the same questions.

5. Comparative Analysis Between Groups:

Since two focus group interviews were conducted with distinct consumer groups (environmentally aware and non-aware), a structured comparison was applied. Each section of the analysis included both within-group thematic insights and cross-group contrasts, highlighting key similarities and differences in values, motivations, and decision-making processes.

6. Presentation of Findings:

The results were presented in tabular form, showing individual participants' responses alongside categories and sub-categories. This was followed by a "Thematic Summary & Interpretation" to contextualize the findings, ensuring both the raw voices of participants and the researcher's interpretation were represented.

Appendices K: Participant Associations with Green-Related Terms

Appendices K.1: Participant Associations with Green-Related Terms (Aware Group)

Term	P1	P2	P3	P4	P5	P6	P7
Sustainability	Environment	It affects people's health	A smart marketing trend	Responsibility	Smart agriculture	My work	Positive impact
Shopping	Enjoyment	We need to teach people	An opportunity to choose	A necessity	Local market	Stores	I take my time and compare
Organic	A bit more expensive	I highly recommend it	Attracts people	Healthier	Free from chemicals	Smart choice	I trust it more
Green Packaging	Important for the future	Not very common	Increases product's value	Excellent alternative	Paper instead of plastic	Current necessity	Its design attracts me
Recycling	I try to stick to it	A great step toward awareness	Important for companies	Civic duty	Waste sorting	One of my priorities	I do it as much as possible
Food	Variety and quality	Balanced and seasonal	We must know its source	The foundation of life	Local production	Life	I care about its source
Zero Waste	Using fabric bags	Hard to achieve	Hard to access	A dream we aspire to	My graduation project	Long-term goal	Difficult but necessary
Local Product	Always the best	I always recommend it	A marketing strength	Support for the economy	Support Jordanian farmers	Always the best	I support it out of conviction
Energy Saving	I try at home	Important within the ecosystem	A competitive advantage	Sustainability of the future	LD lamps	Pay less	It reduces my use of tools
Healthy	Important for fitness/sports	My number one goal with patients	A behavior that differentiates	Lifestyle	Fresh food	Personal investment	A priority as a mother

Source: Own construction (2025)

Appendices K.2: Participant Associations with Green-Related Terms (Non Aware Group)

Term	P8	P9	**P10**	**P11**	**P12**	**P13**	**P14**
Sustainability	Long-term	Agriculture	Environment	The products we produce	Quality	Environmentally friendly	Protection from extinction
Shopping	Supermarket	Spending time	Clothing	Malls and markets	Clothing	Buying everything we need	Buying necessities and clothes
Organic	Food	First time hearing it	Fertilizer	Healthy	A new topic	Found in big malls	No pesticides or chemicals
Green Packaging	Not widespread here	Not very common	Nothing came to mind	A product with green packaging	First time hearing about it	First time hearing about it	Cardboard instead of plastic
Recycling	Plastic bags	Important for our lives	Plastic recycling	Products that we recycle, like paper	Reusing containers	Plastic recycling	Reusing product waste
Food	Energy	The reason for life	Foods	A primary source of life	The basis of life and our energy	The basis of life	Nutrition
Zero Waste	Developed countries	Difficult to achieve	Fresh air	Difficult to achieve	First time hearing about it	Not available here	Not very common
Local Product	Oppressed	Not supported	I hope it reaches global markets	Locally made and not very popular	Not desirable	Made within the country	Made within the country
Energy Saving	Solar energy	A competitive factor between companies	Using solar energy	Reducing costs	Reducing electricity consumption	Everyone is starting to apply it	Using cost-reducing tools
Healthy	Sports and healthy food	Sports	Eating vegetables and fruits, and exercising	Diet and gym	Healthy food	Sports and healthy food	Food with high nutritional value

Source: Own construction (2025)

Appendices L: Main Categories and Sub-Categories

Appendix L.1: Main Categories and Sub-Categories (Aware Group)

Main Category	Sub-Categories / Codes
Shopping Frequency	- Once a week (P2, P5, P6) - Every two weeks (P1, P4) - Every 3 weeks (P3) - Twice weekly + daily (P7)
Shopping Location	- Large supermarkets: Carrefour, Safeway, C-Town, Seefway (All) - Local/farmers' markets: P1, P3, P5, P6, P7
Shopping Responsibility	- Shared between spouses (P1, P2, P3, P6, P7) - Done independently (P4, P5's parents)
Common Food Categories	- Fruits & Vegetables (All) - Dairy, Meat, Eggs (All) - Healthy snacks, grains, legumes (P1, P5)
Purchase Decision Criteria	- Quality (All) - Nutritional value (Most) - Taste (Most) - Price (All) - Packaging (All) - Ingredients (P4) - Brand (P4)

Source: Own construction (2025

Appendices L.2: Main Categories and Sub-Categories (Non-Aware Group)

Main Category	Sub-Categories / Codes
Shopping Frequency	– Twice a week (P8, P9, P11, P12) – Two to three times weekly (P14) – Twice a month (P10) – No fixed schedule (P13)
Shopping Location	– Large supermarkets/malls: Carrefour, C-Town (P8, P9, P10, P14, P13) – Nearby/local markets: P11, P10, P12
Shopping Responsibility	– Parents (P8, P11, P14) – Shared with spouse (P9, P10) – Self (P12, P13)
Common Food Categories	– Fruits & Vegetables (All) – Dairy Products (All) – Meat, Chicken, Groceries, Rice & Legumes (Most) – Snacks (P14)
Purchase Decision Criteria	– Quality (All) – Taste (Most) – Price (All) – Production/Expiration Date (Most) – Packaging, Ingredients, Brand (Some)

Source: Own construction (2025)

Appendices M: Key Purchase Decision Factors & Label Reading Behavior & Eco-Friendly Product Recognition

Appendix M.1: Key Purchase Decision Factors (Aware Group)

Category	Sub-Category	Frequently Mentioned By Participants	Illustrative Quotes
Health & Safety	Health Benefits	Most Participants	**- P1:** "Of course, it should have health benefits for my body."- **P2:** "If the product isn't

	Free from Additives	Most Participants	beneficial to health, it really has no value."- **P3:"** Exercising almost daily makes me care about what I put into my body and aim for the highest nutritional benefits, so my efforts don't go to waste."- **P4:** It should have health benefits so our bodies can benefit from it. **P6:** "As I am an athlete… I care about getting the highest health benefits." –**P7:** "if the food we eat doesn't provide us with health benefits, we haven't achieved the main purpose…." **-P1:** "It must be healthy."- **P2:** "The presence of chemical additives can cancel out all the benefits."- **P3:** "Health is the most important thing we should focus on right now..." **– P6:** "Health is the primary motivation for aware people, so it must be free from any additives." **– P7**: "The presence of artificial additives and preservatives cancels out all the benefits our bodies need**.**" **–P5:** "Of course I want something healthy and harming my body."
Product Attributes	Quality Taste Packaging Design	Most Participants Some Participants Some Participants	**- P1**: "The product must be of high quality for me to keep buying it not just because it's green**."- P2:** "Quality matters because it's tied to nutritional value." **– P7**: "quality means it's safe and fresh." –**P4:** "It means it's safe and healthy." **- P2:** "Taste is important… some people can't tolerate certain types of food."**- P7:** "It doesn't have to be the most delicious, but it should have an acceptable taste." **–P1:** "It's important, but if the product is healthy and eco-friendly, I'll get used to it." **- P1:** "It's important because it reflects the company's concern…"- **P3:** ", the appearance of the product is a key factor in attracting customers."- **P5:** "It matters to me from an environmental perspective."
Accessibility	Availability in Stores Ease of Accessibility	Most Participants Some Participants	**- P1 & P4** "It's definitely better if it's always available."- **P6:** "The more available it is, the more I consume it."- **P7:** "The spread of sustainability… linked to its availability." **– P3** "Sometimes, green products aren't available everywhere, but if I need them, I look for them." **P5:** "The more available the selling points, the easier it is to access."- **P7:** "Ease of access is important."
Economic Considerations	Price	Most Participants	**- P1:** "Price is important to me."- **P5:** "Sometimes price matters as I'm a student."-

	Discounts	Some Participants	**P7:** "It's important, especially with today's expensive life." **P1:** "I buy even without discounts if I'm convinced."- **P3** ", discounts are a great incentive to encourage buying." **P7:** "It's nice if there's a discount, but it's not the main reason."
Social Influence	Peer Influence	Some Participants	- **P1:** "Family and friends influence my purchasing decisions."- **P6:** "I might be influenced if I see an aware person using it."
Trust & Ethics	Trust in Brands Ethical Production	Few Participants Few Participants	- **P3:** "Trust is the most important factor for long-term loyalty."- **P6:** "I don't trust just any green label; I need to research it." - **P4:** "Sometimes companies talk about the environment but ignore the workers."- **P6:** "It should focus on good health for all… and not harm the environment."
Environmental Values	Environmental Protection	Few Participants	- **P4:** "We buy green products to support the environment."- **P5**: "I choose a product if I know it doesn't harm the environment."

Source: Own construction (2025)

- **Follow-Up Insights- Label Reading Behavior & Eco-Friendly Product Recognition (Aware Group):**

Appendices M.2: Label Reading Behavior & Eco-Friendly Product Recognition (Aware Group)

Category	Sub-Category	Participants	Illustrative Quotes
Label Reading Habit	Frequency: Always Frequency: Sometimes	Most Participants One Participant	- **P1:** "I always read; it has become a habit. Sometimes, I search for more information online."- **P2:** "I always read carefully… I focus on calories and ingredients."- **P5:** "I pay a lot of attention to reading labels… especially as an agricultural student."- **P6:** "Of course, I always read the labels… especially if the product is new."- **P3:** "I no longer buy anything without checking the label" - **P7:** "Honestly, not always, but I try to read them, especially if I'm buying it for my kids."
Label Reading Habit	Time Spent (Estimates)	All participants	- **P1:** "I spend about 15 to 20 seconds."- **P2:** "Sometimes I spend 20 seconds or more."- **P3:** "I spend about 10 seconds."- **P4:** "About 10–15 seconds."- **P5:** "Up to 30 seconds."- **P6:** "About 10 to 20 seconds."- **P7:** "I might spend 5–10 seconds."
Reason for Checking Labels	Health or Nutritional Info Source and Ingredients	Most Participants Most Participants	**-P7:** "items labeled 'healthy' or 'additive-free." – ---- **P1**: "I search for more information" **-P1:** "I focus on calories and ingredients."

	Production Methods	One Participant	**-P3 & P5:** "the source and ingredients." –**P6:** "I focus on whether it contains preservatives or artificial flavors". **-P4:** "ingredients and production methods"
Eco-Friendly Product Recognition	Common Examples Given	All participants	**- P1:** "Fresh juices and grains like Jordanian quinoa."- **P2:** "Organic yogurt or legumes packaged in paper."- **P3:** "Organic yogurt or nuts in paper packaging."- **P4:** "Organic dairy, natural juices without additives, local whole grains."- **P5:** "Fresh local milk or dried Jordanian herbs."- **P6:** "Local olive oils and some types of organic bread."- **P7:** "Organic yogurt and dates wrapped in paper."

Source: Own construction (2025)

Appendices M.3: Key Purchase Decision Factors (Non-Aware Group)

Category	**Sub-Category**	**Frequently Mentioned By Participants**	**Illustrative Quotes**
Health & Safety	Health Benefits Free from Additives	All participants Most Participant	Participants mentioned this factor but did not elaborate. Participants mentioned this factor but did not elaborate. Only **P2** mentioned: "point 4 (Free from additives) it's not important"
Product Attributes	Quality Taste Packaging Design	Most Participant All participants Most Participant	Participants mentioned those factors but did not elaborate.
Accessibility	Availability in Stores Ease of Accessibility	All participants Most participants	Participants mentioned those factors but did not elaborate.
Economic Considerations	Price Discounts	All participants Most participants	Participants mentioned those factors but did not elaborate.
Social Influence	Peer Influence	Most Participants	Participants mentioned those factors but did not elaborate. Only for **P2:** "since it's a daily decision and not as important as buying a car or a house."
Trust & Ethics	Trust in Brands Ethical Production	Most participants None	Participants mentioned those factors but did not elaborate. Not mentioned or considered by any participant.
Environmental Values	Environmental Protection	None	Not mentioned or considered by any participant.

Source: Own construction (2025)

- **Follow-Up Insights- Label Reading Behavior & Eco-Friendly Product Recognition:**

Appendices M.4: Label Reading Behavior & Eco-Friendly Product Recognition (Non-Aware Group)

Category	Sub-Category	Participants	Illustrative Quotes
Label Reading Habit	Frequency: Always	One Participant	**-P14:** "Of course, I always read the labels..."
	Frequency: Sometimes	Most Participants	**- P10:** "Sometimes I check the packaging to confirm the expiration date or if there are specific ingredients I want to know about". –**P11:** "Sometimes I look, but not always..." **–P2:** "I only look at it to know the production and expiration dates..." **- P12:** "Sometimes I spend…" **- P13:** "Honestly, I never look at the packaging...")
	Frequency: Rarely-Never	Few Participants	**- P8:** "I don't pay attention to it".
Label Reading Habit	Time Spent (Estimates)	Most Participants	**- P8:** "It takes me about 5 seconds." **-P14:** "About 7 to 10 seconds." **-P10 & P11:** "About 10 seconds."- **P12:** "I spend around 15 seconds checking the expiration date". – **P9:** "It usually takes me about 15–20 seconds" **-P13**:" I never look..."
Reason for Checking Labels	Health or Nutritional Info	Most Participants	**- P11:** "Of course, I must look at the packaging to know the calories if I'm on a diet..." **- P14:** "To know protein and fat content..." **- P9:** "If I'm following a specific diet..."
	Expiry / Production Date	Most Participants	**-P8:** "I only check the expiration and production dates."
	Familiarity / Habit	One Participant	**-P13:** "If it's a product I've bought before and I trust it, then I don't bother reading the label."
Eco-Friendly Product Recognition	Named specific products	Most Participants	**- P9:** "Oats and brown wheat products in bread-making..." **- P10:** "Diet products like oats and whole wheat..." **- P11**: "Keto products..."
	Based on packaging color	One Participant	**-P12:** "Wheat and bread made from it..." **-P14:** "Usually have green packaging"

	No awareness	Most Participants	**-P13:** "I honestly have no idea."

Source: Own construction (2025)

Appendices N: Step 1 & 2 Analysis: Observation & Perception → Values & Choice, alongside Follow-Up: Snack Price Prompt

Appendix N.1: Step 1 & 2 Analysis: Observation & Perception → Values & Choice (Aware Group)

Category	Subcategory	Illustrative Quote
Packaging Perception	Eco-friendly packaging Labeling cues Visual appeal of packaging	**– P1**: "Snack A uses recyclable materials, while Snack B uses plastic materials." **– P6:** "Snack A has recyclable packaging." **– P3:** "Snack A has an organic and sustainable product logo." **– P4:** "Snack A has a clear eco-friendly label." **- P3:** "Snack A seems more distinctive in terms of packaging design."
Ingredient Evaluation	Organic/Natural vs. Processed Health-focused evaluation	**- P1:** "Snack A contains more organic ingredients compared to Snack B." **– P2:** "Snack A contains more natural ingredients." **- P2:** "Free from additives, health benefits and the quality of the ingredients are what matter most to me."
Decision Drivers	Preference for organic/sustainable values Health & environmental trade-offs Price sensitivity Balanced consideration	**- P5:** "I am interested in organic products, so I will choose Snack A." **- P4:** "Environmental packaging is important to me, but I consider it alongside other factors such as taste and health." **- P1:** "If Snack B is cheaper and tastes good, I might choose it." **– P6:** "If Snack A is much more expensive, I might have to choose Snack B." **- P5:** "I'm not too strict with my choices, but I try to balance different factors." **– P4:** "I try to balance these factors."

Source: Own Construction (2025)

- **Follow-Up: Snack Price Prompt:**

Appendices N.2: Follow-Up: Snack Price Prompt (Aware Group)

Category	Subcategory	Illustrative Quote
Price as a Deciding Factor	Budget-conscious decisions	**- P1:** "If the price difference is large, I might lean toward Snack B." **– P5:** "As a student, I still need to consider my budget."
	Willingness to pay more within reason	**-P3:** "I would still consider Snack A if the price difference is reasonable." **– P4***:* "If the price difference is small, I'd likely choose Snack A."
	Conditional loyalty to green values	**-P3:** "I value sustainability and health, but I also have to be practical." **– P2:** "Affordability does play a role."
Value-Driven Trade-Offs	Aligning values with affordability	**-P5:** "If the price is slightly more but supports sustainable agriculture, I'd be more inclined to choose it."
	Prioritizing health/environment first	**-P2:** "I prioritize health benefits and the quality of ingredients over price." **–P6:** "It aligns with my values."
	Price limits sustainability intention	**-P4:** "I believe in supporting eco-friendly products, but… I also need to consider my budget."

Source: Own Construction (2025)

Appendices N.3: Step 1 & 2 Analysis: Observation & Perception → Values & Choice (Non Aware Group)

Category	Subcategory	Illustrative Quotes
Perceived Healthiness	Visual labeling, naturalness	**-P8:** "I see that Snack A is healthy because it says 'natural.'" **– P12:** "Snack A is more natural and healthy." **–P14:** "Snack A is labeled as organic and 100% natural, while Snack B seems to have added and processed ingredients."
Packaging & Visual Appeal	Eye-catching design, bright colors	**- P8**: "Snack B is more attractive and eye-catching." **–P9: "**I like something that attracts me more, with colors that are cheerful."
Taste Preference	Anticipated flavor & satisfaction	**-P10:** "I would choose Snack B because I focus on the taste." **– P11**: "I don't prefer organic snacks because they wouldn't taste as good."
Familiarity & Habit	Known products, usual consumption	**-P12:** "Snack B feels more familiar to me, as it's something I usually buy."
Price Sensitivity	Affordability vs. ideal choice	**-P8:** "If Snack A is 100% natural, I feel it would be more expensive." **– P13:** "It has to be affordable for me." **-P14:** "The price plays a big role for me… but if the price difference isn't too big, I would definitely buy [Snack A] because… I prefer a healthy option."
Product Decision Drivers	Combination of packaging, price, and taste	**-P11:** "Taste, then price, then how it attracts me and its packaging." **– P12**: "I look for snacks that are practical and more affordable."

Source: Own Construction (2025)

- **Follow-Up: Snack Price Prompt:**

Appendices N.4: Follow-Up: Snack Price Prompt – Environmentally Non Aware Consumers

Category	Subcategory	Illustrative Quotes
Price Sensitivity	Strong rejection of higher price	**-P9:** "If Snack A is more expensive than Snack B, I won't buy it." **–P8:** "I would give up on everything organic."
	Budget prioritization	**-P12:** "I focus on my budget, and the most important factor for me is the price." **– P13:** "Price plays a big role in my decision."
Taste Over Sustainability	Taste outweighs green values	**-P10:** "Taste is the most important thing... price also plays a role." **– P11:** "Snack B is better because it looks like the taste will be more appealing."
Conditional Openness	Willingness if price difference is small	**– P14:** "If the price difference isn't too big, I would definitely buy it." **– P8:** "If the price difference is small, I would definitely buy it."

Source: Own Construction (2025)

Appendices O: Step-Based Thematic (What Matters Most their Choices) & Follow up Question: "What matters most to you when buying food?"

Appendices O.1: Step-Based Thematic (What Matters Most their Choices) (Aware Group)

Category	Subcategory	Participants	Illustrative Quotes
Perceptions of the Snack	Appealing Design / Eco-Friendly Look	Most Participants	**-P1:** "The product speaks for itself, it's clear that it is eco-friendly." **-P3:** "The design is eco-friendly, and its content looks healthy." **-P4:** "I like to see eco-friendly products, especially local ones." **-P6:"**The packaging is distinctive and eye-catching…."
	Healthy or Natural Image	Most Participants	**-P1:** "Its simple design suggests it's natural and healthy." **-P2:** "Especially if it's light and healthy." **-P5:** "The packaging and the messages are encouraging, especially if it's free from additives."
	Doubts About Claims or Brand	Few Participants	**-P3:** "It looks attractive, but I don't always trust such claims." **-P7:** "...need to know which company made it."
Purchase Intention	Willing to Buy	All participants	-"Yes, because this is the type of product I support." - Yes, especially if it's locally made."
	Conditional Purchase	Most Participants	**-P7:** "Most likely… if it's light and healthy." **-P5:** "Maybe… if the price is reasonable and it doesn't contain preservatives."
Barriers to Purchase	Price Sensitivity	Most Participants	**-P5:** "If the price is too high… I might choose Snack B."
	Taste Concerns	Most Participants	**-P1:** "Only if I didn't like the taste."
	Availability	Few Participants	**-P4:** "If it's not always available."
	Unfamiliar Brand	One Participants	**-P2:** "If it's not from a known brand."
Gift Acceptance	Happy to Receive	All participants	"Yes, I'd be happy. I like trying new things, especially eco-friendly ones."
Payment Decision	Willing to Pay (if Reasonable)	All participants	"I would pay for it, but the taste has to be good." "I'd pay, but only if the price isn't too high."

Source: Own Construction (2025)

- **Follow up Question: "What matters most to you when buying food?"**

Appendices O.2: Step-Based Thematic: Key Purchase Influences

Category	Subcategory	Participants	Illustrative Quotes
Product Values	Environmental Friendliness / Local Production	Most Participants	**-P1:** "I look for products that are environmentally friendly or locally produced." **-P6:** "The production method matters to me."
	Health & Natural Ingredients	Most Participants	**-P2:** "Health comes first; I pay close attention to the ingredients." **-P4:** I usually choose based on the ingredients and check if the product contains artificial additives or not."
Cost Sensitivity	Price Consideration	Most Participants	**-P5:** "Price matters, of course, as a student, but if the product is healthy and natural, I'm willing to pay a bit extra." **-P7:** "Price is what matters sometimes, especially with the family."
Packaging Appeal	Practical or Eco-Friendly Packaging	Most Participants	**-P3:** "Packaging is a big part of my decision because it reflects the quality of the product." **-P7:** "Packaging matters to me if it's practical and easy to open or store."
Influence of Others	Peer Influence / Reviews	Most Participants	**-P1:** "Sometimes, I buy based on recommendations or online reviews" **–P6:** "Sometimes I ask my friends if they've tried a new product."
Brand Preference	Trusted Brands	Few Participants	**-P4:** "A trusted brand helps with the decision."
Exploration	Willingness to Try New Products	All Participants	"I love trying new things, especially if they look neat and modern" "Sometimes, I like to try new products if they are locally made."

Source: Own Construction (2025)

Appendices O.3: Step-Based Thematic (What Matters Most their Choices) (Non-Aware Group)

Category	Subcategory	Participants	Illustrative Quotes
Perceptions of the Product	General impressions-Organic/environmental relevance	Most Participants	**- P8:** "My opinion aligns with others… availability and price are very important." – **P9:** "Honestly, being environmentally friendly doesn't matter to me." - **P10:** "Organic products usually don't taste good. **-P14:** "If it's available and reasonably priced, I'd buy it."

Willingness to Buy	Conditional interest- Reluctance	Most Participants	**-P8:** "Yes, I might, but not always… if there's a promotion." **- P9 & P10 & P13:** "No. -". **P14:** "Yes, if the price is reasonable." **-P12:** "If it's reasonably priced, I might consider it."
Purchase Barriers	Price sensitivity- Product availability- Taste	Most Participants	**-P11:** "If it's expensive or unavailable, I won't buy it." **-P9:** "Price and availability. **-P10:** "Availability and price might be an issue. **-P14:** "Same as everyone else, price and availability."
Reactions to Receiving as Gift	Positivity toward gifting	All participants	All participants expressed **happiness** at the idea of receiving the snack as a gift, regardless of whether they'd buy it themselves. - "Of course, I love receiving gifts. - "I'd be happy and might consider buying it."
Decision Change if Paying	Price impacts repeat purchase- Try once, not again	Most participants	**-P9:** "Might try once, if I like the taste, maybe again. **-P11:** "If it's expensive, I'll try it once or twice." **-P12:** "Price would be the main factor." **-P14:** "How often I buy it depends on the price."

Source: Own Construction (2025)

- **Follow up Question: "What matters most to you when buying food?"**

Appendices O.4: Step-Based Thematic: Key Purchase Influences

Category	**Subcategory**	**Participants**	**Illustrative Quotes**
Cost Sensitivity	Price Priority	All Participants	- "Price is important to me." - "Price is the most important factor." - "Price is always the first thing I look at."
Product Preferences	Taste & Flavor	Most participants	**- P9:** "Taste is very important." **-P12:**"Taste is also important because I like to see my family enjoying their food."
	Quality / Health Benefits	Most participants	**- P12:** "Quality matters to me as well." **- P14:** "Health benefits and quality."
Accessibility & Familiarity	Availability in Stores	Most participants	**-P8:** "Availability in stores." **-P11:** "If the price is too high or I'm not sure it's always available."
Packaging Appeal	Packaging Design	One participants	**-P9:** "Packaging matters."

Brand Preference	Trusted Brand Names	Few participants	**-P8:** “Of course, the brand name.” - **P14:** “Brand is important to me.”

Source: Own Construction (2025)

Appendices P: Future Challenges of Eco-Friendly Product Consumption in Jordan

Appendices P.1: Future Challenges of Eco-Friendly Product Consumption in Jordan (Aware Group)

Main Category	Subcategory	Illustrative Quotes
Need for Awareness & Education	Early education & societal influence	**- P1:** "There needs to be early education about these values, and collaboration between different entities: schools, media, and stores."
	Breaking stereotypes about eco-products	**- P2:** "Many eco-friendly products are not well-known, or they are associated with the idea that they are only for 'the elite'."
	Youth involvement & generational change	**-P5:** "I believe demand will gradually increase, especially with our generation becoming more aware."
Accessibility & Affordability	Price remains a major challenge	**-P6:** "The biggest challenge is the price, so there must be solutions to support these products without the consumer bearing all the costs."
	Need for wide availability	**-P5:** "It's important for these products to be available everywhere, not just in big supermarkets."
Role of Marketing	Storytelling and emotional appeal	**-P3:** "Marketing plays a big role... focus on emotion and values, not just facts. Highlight the story behind the green product."
	Clarity of green value proposition	**- P3 & P4:** "Marketing needs to be clearer and focus on the health and environmental benefits."
Institutional & Policy Support	Public-private collaboration	**- P7, P6 & P4:** "There has been some improvement, but we still need more efforts from both the public and private sectors."
	Governmental campaigns & systemic push	**-P1:"**There needs to be early education about these values... and collaboration between different entities." **-P2, P4, P3 & P5:** "There needs to be support from the government."
Transparency & Trust	Comparing green vs. regular product	**- P6 & P2:** "Companies must clarify the environmental impact of the product compared to the regular product."
	Building consumer trust through information	**- P7:** "If there's more transparency, people will trust and buy."

Source: Own Construction (2025)

Appendices P.2: Future Challenges of Eco-Friendly Product Consumption in Jordan (Non Aware Group)

Main Category	Subcategory	Participants	Illustrative Quotes
Affordability Barrier	Price as primary obstacle	All Participants	- "If prices were adjusted or affordable options were provided, the demand might gradually increase."

			- “People care more about the price... If eco-friendly products were cheaper or had attractive offers, the demand might increase.” - “Even with future changes... if they're more expensive, it will be hard for people to accept the concept.”
Lack of Cultural Habit	No strong trend of green consumption	Most Participants	-**P8:** “The Jordanian society has not adopted a culture of buying green products.” - **P11:** “People don’t care about environmental issues as long as cheaper products are available.” - **P13:** “People here are used to a certain way of eating and living... making it difficult to change.”
Conditional Openness	Willingness if prices align	Most Participants	-**P14:** “Unless these products are priced the same as regular ones... I don’t think many will buy them.” -**P10:** “If companies offer them at reasonable prices, the situation might gradually change.” - **P12:** “Discounts and special offers might encourage the idea.”
Need for Incentives	Offers, discounts, accessible alternatives	Most Participants	-**P9:**”If eco-friendly products were cheaper or had attractive offers...” -**P11:** “People prefer discounts and promotions.” -**P12:** “Special offers might encourage the idea.”

Source: Own Construction (2025)

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