

T.C.

ISTANBUL TICARET UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES INSTITUTE

DEPARTMENT OF MARKETING MANAGEMENT

MASTER PROGRAM

**AN EMPIRICAL RESEARCH ON GREEN MARKETING AND ITS IMPACT
ON CONSUMER BUYING BEHAVIOR ON THE ACADEMICS AND
STUDENTS IN THE UNIVERSITY OF SANA'A, YEMEN**

Master's Thesis

OMAR AL-DUBAI

ISTANBUL, 2022

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To whom bore my absent for days and months and wait my return by holding the joy
and success

To whom gone to God without witnessing and say good bye and accordingly the joy
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To my beloved mother, may God protect her

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completion of this study

Abstract

Environmental awareness is growing, as is consumers' interest in ecologically friendly products. As a result, businesses have adopted green marketing methods to fully use resources by decreasing waste, accomplishing organizational goals, and adhering to environmental regulations. This study aims to look at how green marketing and the marketing mix have evolved through time. Furthermore, this study focuses on consumers purchasing habits regarding green products. The primary goal of this questionnaire is to determine the impact of green marketing on consumers' awareness of the green product in Yemen. It's a descriptive-analytical approach to achieve the research objectives and the study tool is a questionnaire. The questionnaire is made up of twenty items. Within the participants it is found that the actuality of green marketing mix elements was high, with the green product element coming top, followed by green promotion, green pricing, green place, and finally green product. Furthermore, it's found that consumers' knowledge of green products is quite strong and that there is a statistically significant influence of green marketing mix elements on environmental consumer awareness, culture, directions, and behavior. The study is made in Yemen and this makes the study unique. It is offered a series of suggestions as a highlight of the study results, including the need for enterprises to provide numerous green options and satisfy consumers in Yemen.

Keywords: Green marketing, Green marketing Mix, Green environment, Consumer behavior

Özet

Müşterilerin çevre dostu ürünlere ilgisi arttıkça çevre bilinci de artmaktadır. Sonuç olarak işletmeler, atıkları azaltarak, organizasyonel hedeflere ulaşarak ve çevresel düzenlemelere bağlı kalarak kaynakları tam olarak kullanmak için yeşil pazarlama yöntemlerini benimsemiştir. Gerçek başarı, yalnızca toplumun çevre bilincine sahip olma ve nihayetinde küresel iklim değişikliğinin yol açtığı endişelere son verecek uygun çevre koruma önlemlerine uyma ihtiyacına ilişkin farkındalığı ile ölçülebilir. Bu çalışma, yeşil pazarlamanın ve pazarlama karmasının zaman içinde nasıl geliştiğini incelemeyi amaçlamaktadır. Ayrıca bu çalışma, tüketicilerin yeşil ürünlerle ilgili satın alma alışkanlıklarına odaklanmaktadır. Bu anketin birincil amacı, yeşil pazarlamanın Yemen'deki yeşil ürün hakkında tüketici farkındalığı üzerindeki etkisini belirlemektir. Araştırmacı, araştırmanın amaçlarına ulaşmak için betimsel-analitik bir yaklaşım benimsemiştir ve çalışma aracı bir ankettir. Anket, yirmi maddeden oluşmaktadır. Araştırmacı, yeşil pazarlama karması öğelerinin gerçekliğinin yüksek olduğunu, yeşil ürün öğesinin en üstte olduğunu, ardından yeşil promosyon, yeşil fiyatlandırma, yeşil dağıtım ve son olarak yeşil ürünün geldiğini bulmuştur. Ayrıca araştırmacı, yeşil ürünler hakkında tüketici bilgisinin oldukça güçlü olduğunu ve yeşil pazarlama karması unsurlarının çevresel tüketici bilinci, kültürü, yönleri ve davranışı üzerinde istatistiksel olarak anlamlı bir etkisi olduğunu da bulmuştur. Bu çalışmanın özgünlüğü araştırmanın Yemen'e yönelik olmasıdır. Araştırmacı, şirketlere yeşil ürün fiyatı ve talep büyüklüğü arasındaki ilişkiyi incelemelerini ve yeşil ürünler için uygun fiyatlar geliştirmelerini ve ayrıca yeşil ürünlerin önemini açıklığa kavuşturmak için programlar, forumlar ve konferanslar hazırlamanın önemini önermektedir.

Anahtar Kelimeler: Yeşil Pazarlama, Yeşil Pazarlama Karması, Yeşil Çevre, Tüketici Davranışı

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CHAPTER 1

INTRODUCTION

Consumers are more aware that their purchasing decisions have a substantial environmental impact. According to Philip Kotler (2011), 5% of buyers prefer to purchase products and services from businesses that have clever environmental names. The technique of exchanging products or services based on their environmental advantages is known as green marketing. Some of these items or services may be ecologically friendly or manufactured and/or packaged responsibly. Green marketing is the promotion of items that are said to be environmentally friendly. Phosphate-free and recyclable are two examples. Some of the terms consumers associate with green marketing are refillable, Ozone-friendly, and ecologically friendly (Mishra & Sharma, 2014).

Environmental factors should be considered in every step of marketing, including new product creation, communication, and everything in between. Ecological/environmental marketing is another term for green marketing. Although consumer habits have gotten the greatest attention, research in this field has grown. Non-consumer and post-consumer actions such as energy-saving, effective waste disposal, and recycling are commonly linked with these consumers. Overall, it is acknowledged that consumers may have a substantial environmental influence. These behaviors are seldom cost-effective, need repeated effort, and can cause discomfort to green goods attempting to accomplish their jobs (Kotler & Gertner, 2002).

Consumers' abilities and resources, which include the requisite skills, knowledge, and time, have a big role in whether or not they can engage in certain acts such as ecological behavior. Beliefs and norms are important behavioral determinants that encompass a wide range of values and attitudes, as well as those particular to green consumer behavior. Studies have indicated that the main hypothesis about these aspects is significant for household energy usage, conservation behavior, and the adoption of green products (Armstrong & Kotler, 2005).

Despite its advantages, greenmarketing has several drawbacks that require additional research and improvement. One of the most serious concerns in green marketing, according to experts, is the use of deceptive promotions and false promises by some firms and organizations to gain consumers' trust. As a result, some consumers are hesitant to purchase green products. As a result, the study's purpose is to see how green marketing mix elements influence consumers' environmental behavior and direction (Hasan & Ali, 2015).

CHAPTER 2

LITERATURE REVIEW

Green marketing is becoming a popular research topic, and several theories concerning green marketing and buyer behavior have been offered. The researcher will discuss numerous aspects of green marketing in this section, including the evolution of green marketing and the green marketing mix from various customer perspectives.

2.1. Evaluation of green marketing

The idea of green marketing has been around at a minimum starting around 1970. In the last part of the 1980s, green marketing arose. During the 1990s, advertising research demonstrated that numerous consumers were worried about the climate. Many firms reacted to this worry by changing their special missions. There is presently a developing revenue in green promoting and maintainable impetuses using greening techniques and environmental naming practices, particularly in Europe. Characterizing green marketing is certainly not a basic assignment. A greater part of individuals accepts that green displaying alludes only to the advancement or publicizing of items with ecological qualities. Many terms that are frequently connected with green marketing are recyclable, Ozone friendly, and harmless to the ecosystem (Peattie, 1999).

Green marketing is most often connected with the greening of the various parts of customary promotion. This largely includes the creation of "green" items available to be purchased by green consumers who are keen on reusing the loss from their utilization. Research in green purchaser conduct proposes that concerning the natural correspondence procedures to arrive at consumers, they should target defeating mental hindrances that keep the planned consumers from the genuine acquisition of green items. It is suggested that green advertising correspondences ought to be based on and redone to the various necessities of the consumer's change of conduct (Kotler & Gertner, 2002).

According to Peattie (1999), collaboration propensities all the more intimately with consumers practices and stay uncertain about their effect on the acquisition of high-

inclusion green items. Whether or not individuals can participate in explicit activities like green conduct relies significantly upon their abilities and assets. Among these squares, measure the necessary abilities and information time accessible status cash, and proficiency. Qualities, convictions, and tandards are key attitudinal elements that incorporate more broad qualities and perspectives close to those particular to specific green consumer practices.

A key hypothesis connecting these variables has been used in investigations and is seen as critical for family energy utilization protection conduct and green item use. Nonetheless, green marketing has progressed through a variety of periods. According to Peter Kangis (1992), there are three stages to the development of green marketing: The first stage was dubbed " Ecological" green advertising, and at this time, all marketing activities were focused on assisting natural difficulties and providing answers to environmental problems. The next level was "Environmental" green showcasing, with the focus shifting to clean innovation, which included detailed preparation of innovative new things that address pollution and waste concerns. Green advertising that was "Sustainable" was the third level. In the late 1990s and early 2000s, it became a force to be reckoned with.

2.2. Green marketing mix

Traditional marketing is used to create a green marketing mix. It usually has four P's in it. On the other hand, each company adapts its preferred marketing mix. As a result, the green marketing mix is not restricted to only four ingredients, but may also include additional successful variables. Bradley (2007), has introduced the notion of a green marketing mix. He initially presented this notion in the late 1980s, but he has changed it regularly since then. According to the author's knowledge, few studies have been undertaken on how organizations gather their marketing mix. Bradley has established himself as a key figure in this field. However, because Bradley's study is limited and is not considered a high-quality academic publication, more research into the green marketing mix is required. According to the authors, many academics feel that a thorough examination of the green marketing mix is necessary. The establishment of a strong marketing mix is seen as a significant problem for every business, and it is always important to a company's future growth.

As a result of these facts, this is an essential topic to research and investigate (Polonsky, 2001).

Several viewpoints on how to integrate green marketing have been identified by other green marketing mix specialists. Prakash (2002), discusses how the product and price are greened, and shows how some researchers only address some topics and focus on other elements of their research. This is thought to be one of the most likely studies on the gap theory's existence. There isn't a single researcher who has figured out how to bring the green marketing mix together. Researchers provide an abstract to what other researchers have mentioned while examining different areas. Another reason for the theoretical gap is that experts always do and propose the greening of the marketing mix since consultants do not publish their work as academic studies (Prakash, 2002). Green product marketers, like traditional marketers, must contend with the following four marketing modes:

1. Product:

Green product characteristics may be divided into two groups. To begin with, the social and environmental consequences of product and service experiences are obvious. Several organizations employ the concept of the "five Rs" in their plans to make afe post-use recycling of items easier. Repair, reconditioning, reuse, recycling, and re-manufacture are some of these options. The second set of characteristics is concerned with product development and the traits of a responsible business. (Tiwari & Jaya, 2004).

According to Mahmoud (2017), the product is at the heart of the green marketing mix, and green products encompass all aspects of the product, including the materials utilized, the production process, the product packaging, and so now. A green product is an ecologically sustainable product that promotes the protection of the natural ecosystem while reducing negative environmental consequences.

Eco-friendly items have grown in popularity in Yemen as green consciousness has grown, and Yemenis have worked to eliminate single-use plastic materials. Bamboo, glass, and steel have all been employed as sustainable materials. To reduce

environmental strain, several beverage businesses and restaurants have begun to employ bagasse boxes instead of disposable and plastic items.

2. Price:

In the green marketing mix, price is a critical component. Green items are generally more expensive than traditional products. The phrase "premium pricing" in the green context refers to the extra cost that buyers are ready to pay for ecologically friendly items. The green marketing strategy's pricing strategy is a blend of brevity and sensitivity. The most important factor influencing a consumer's decision to purchase a green product is the price (Fan & Zhang, 2011).

In industrialized nations, particularly in Europe, where three-quarters of consumers claim to be able to spend more for ecologically friendly items, the desire to pay more for green products is increasing. Consumers bear the environmental cost associated with less damaging items. Green goods at a fair and competitive price, so that existing green criteria may be met and enterprises can adopt more efficient production techniques (Tiwari & Jaya, 2004).

3. Promotion:

According to Mahmoud (2017), stated that by delivering advertising, marketing materials, sales promotions, direct marketing, on-site promotions, films, and other promotional tactics, green promotion, which is a marketing concept does not harm the materialistic consumer interests. Green promotion is an effective promotion approach that piques consumers' attention while also satisfying them. The major goal of green advertising is to influence consumers purchasing behavior by raising awareness of the product's environmental benefits and encouraging them to utilize it.

Green item advertisers utilize different advancement devices to sharpen their likely customers on the advantages of their items. Deals advancements, direct promoting, advertising, and publicizing are a portion of the method for passing on to the consumer the center message of greenness. The point of such missions ought to be to convince purchasers to alter their impression of green products. An essential issue in such a manner is the utilization of related terms that might be befuddling to shoppers.

Organizations meaning to make their items engaging ought to foster methodologies that will assist expected consumers with appreciating the terms (Nandini , 2016).

4. Place:

A product's location determines whether or not it is available for purchase. The term "green place" refers to the process of managing logistics to decrease transportation emissions and hence lower one's carbon footprint. Furthermore, the green place is an essential part of the green marketing mix since it focuses on giving consumers greener access to their products along the distribution process. Those participating in the distribution chain, including those who ship products from the manufacturer to the market, as well as those who distribute and convey products from stores to customers (Fan & Zeng, 2011).

Environmental factors influence the fuel utilized and materials generated for transportation because of the massive environmental implications of manufactured products. Carbon taxes will have a significant impact on how profits are distributed. It will strive to help firms replace production and distribution networks. (Nandini , 2016).

2.3. Green marketing concept

Green marketing means making, advancing, deciding costs, and circulating goods that make negligible or no damage to the regular biological system. Procedures incorporate changing the creation interaction, item alteration, or developing advancement strategies. The beginning of the idea traces back to the 1970s with the development of green marketing, which zeroed in on industrial facilities that seriously affected the climate. It was additionally during this time that expanding accentuation was put on corporate social obligation (CSR). The period starting in the mid-1990s was described by the rising mindfulness and interest in eco-accommodating items, prompting the development of the ideas of the green buyer. From that point forward, green marketing has drawn the consideration of researchers, earthy people, firms, and the general population (Zaharia & Zaharia, 2015).

As of now, green marketing keeps on getting expanding consideration as companies plan to improve their endurance, the elements that have prompted this example to

incorporate the developing number of eco-touchy buyers, rising government pressures, and expanding hippie crusades toward a green economy (McClendon, 2010). In any case, the reception of green methods by firms stays low as they battle to offset ecological necessities with their monetary obligation. McClendon (2010), conducted a study associated with green marketing, they found that enterprises that fuse green methods of reasoning enjoy a few serious upper hands over their non-green counterparts. Investigators bunch these advantages into five classifications: opportunities or competitive advantage, corporate social responsibilities, those connected with government pressures, cost/benefit issues, and those related to competitive pressure.

2.4. Green marketing importance

Green marketing is viewed as a critical entry point for consumer and environmental protection in the communities where consumers reside. The significance of green marketing may be divided into two categories: the first is related to the institution's reputation and abilities, and the second is associated with what green marketing achieves, which is associated with human and environmental protection. One of the most essential aspects of green marketing is meeting consumer wants and providing alternatives that do not damage or hurt the environment due to a lack of resources, which is based on the economic definition. A study of how humans use their limited resources to meet their seemingly endless desires (McTaggart, Findlay, & Parkin, 1992). As a result, solutions with limited resources must be found to meet these infinite demands for each sector and individual while being compatible with business aims.

Firms are currently concentrating on product development and strategies to link it with sustainability. The methods for manufacturing, distribution, usage, and recycling must have a minimal detrimental impact on the environment. It's crucial to look at the resources utilized in each step, as well as what resources are necessary throughout the product life cycle and whether the methods employed are ethical (Ottman, 2011). Firms in society have increasing responsibilities, and as a result, their active role is growing more significant. Firms must believe that their policies and activities are ethically committed to having a beneficial impact on the

environment (Azzone, Giovanni, & Manzini,1994). As a result, companies that employ green marketing techniques have a competitive edge over companies that do not engage in responsible activities. This present trend is increasing to better meet the demands of consumers (Polonsky,2001).

On the other hand, increased pollution and the detrimental effects of global warming, are examples of human damage that devastate the ecosystem. As a result, we can see how social responsibility has grown in importance in today's society. As a result, marketers must not only undertake operations that are more interesting to them, but customers must also do so and modify their behavior patterns. This notion uncovers the consumer's thoughts and how to cope with environmental challenges, allowing it to become a "primary core value" rather than something that is too obvious and has an impact on consumption and marketing decisions. Other advantages of being green include technological advancements that favor recycled materials and the utilization of novel products. The widespread usage of technology has shaken our everyday lives, and this issue is constantly blending technology and nature. As a result, it is critical to creating products and services that cause little harm to our ecosystem and climate (Winner,1986).

In terms of formulation strategy, planning, reengineering in manufacturing, and dealing with customers, a green marketing approach in the product sector encourages environmental sensitivity in all aspects of the firm activity. Thus, to remain competitive in the challenge framework proposed by environmental protection experts, businesses must find solutions through marketing strategies, product and service redesign, consumer treatment, and other means. In this regard, businesses may invest in new technologies to deal with waste, sewage waters, and air pollution. It is possible to measure items to ensure that they are ecologically safe. In this regard, concerned businesses must be informed of what happens to their products during and after this period. Firms can assess the harm by experimenting with reevaluation and rethinking product life cycle techniques. Revaluation of the life cycle focuses on environmental factors in product development and design, such as energy, inputs, and outputs in manufacturing, consuming, and disposing of goods. It is feasible to manage the life cycle of a product in an environmentally acceptable manner using ecologically efficient technologies. Environmental adequacy refers to

using or consuming natural resources in a way that allows nature to regenerate itself. The product life cycle is explained in Table 1.

Table 1: The product Life cycle

Stage-I	Development stage: Traditionally characterized as the acquisition of raw materials, parts, and subassemblies. the alternative approach advocated here encourages manufacturers to check the environmental programs of suppliers to require minimal packaging of inputs and to consider sources of materials that could be easily replenished are recycled.
Stage-II	Production stage: Companies in the manufacturing industry are encouraged to decrease emissions, toxicity, and waste, as well as preserve water and energy. They're also encouraged to look for and discover new applications for waste products, as well as adjust the production process to reduce waste and energy consumption or try to locate alternate energy sources.
Stage-III	Consumption stage: Packaging reduction, energy-saving, and waste reduction from product maintenance and servicing are all strongly recommended.
Stage-IV	The final stage of a product is its disposal: In addition to the notion of waste reduction, green marketing introduces the concepts of reuse and recycling.

Table 1: The Product Life Cycle (Saaksvuori & Immonen, 2008).

As a result, green marketing has a significant difficulty in meeting customers' infinite wants within the constraints of limited resources by incorporating current management strategies such as TQM, 6-Sigma, and the 4Rs (Reduce, Reuse, Recycle, and Recovery) into manufacturing processes. At the moment, the primary concern is the complete product for marketing and production activities, which includes pollution and waste.

2.5. Green consumer purchasing model

The green customer-buying model sums up the buying cycle of green buyer innovation items. The model comprises five components: general green values and knowledge, green criteria for purchase, barriers and facilitators, Product purchase, and feedback (Young, Hwang, McDonald, & Oates, 2010).

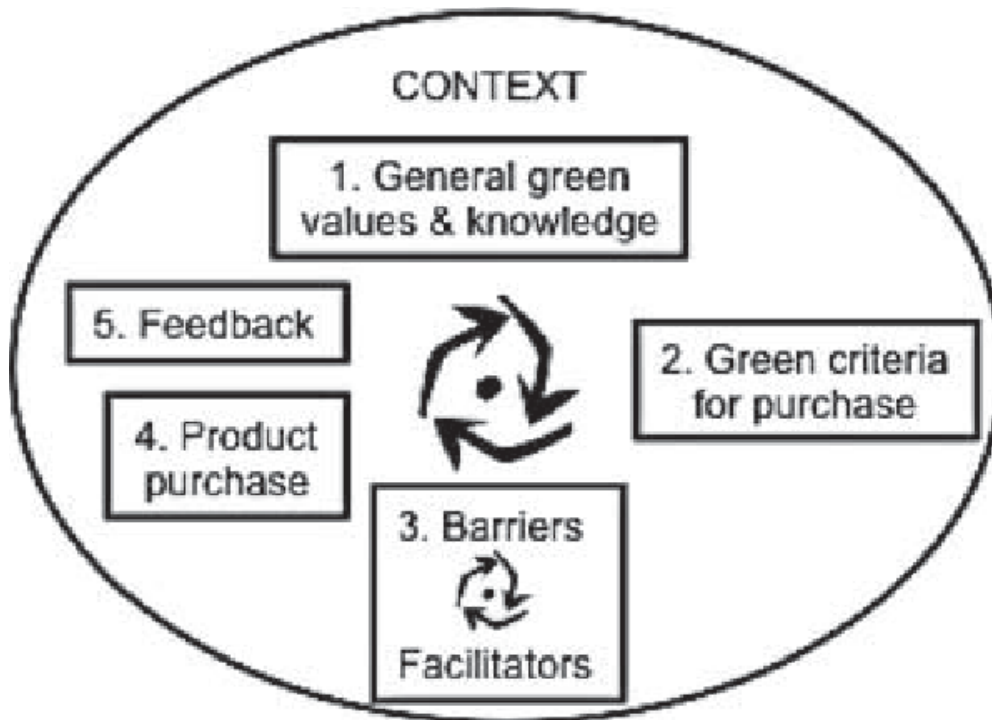


Figure 1: Green consumer Purchasing model:(Young, Hwang, McDonald & Oates, 2010).

1. **General green values and knowledge:** When the buyer chooses to explore the item, essential and optional green measures are shaped from exploration to the morals of an item or maker. This includes conversing with a family, or companions or looking for other data. No matter what the customers esteem the most widely recognized basis for the shoppers is the natural execution of the item.
2. **Green criteria for purchase:** During the buy, various boundaries and facilitators influence interaction purchasers. Assuming that one boundary is too solid this might influence the purchaser's green rules.
3. **Barriers and facilitators:** green marks on the items, accessibility, and assuming the customer feels a feeling of responsibility. The referenced

obstructions could be the absence of time cost of the item and the absence of data.

- 4. Product purchase & feedback:** The buy insight and information acquired from each buying cycle are criticism of the buyer's qualities and information, which affects the purchaser's next buy (Young et. al, 2010).

Correlation of green versus non-green buy process: There exist a few distinctions and similitudes when contrasting the two kinds of procurement processes. A few distinctions exist concerning the need acknowledgment stage; it is accepted that a need acknowledgment of some sort is fundamental for a wide range of essential buy processes. From the beginning, getting or having the right information/data is influencing the first stages in quite a while.

There exist various obstructions and facilitators in the buy interaction when contrasting them and one another, influencing the buy choice, like monetary elements. It is likewise a fact that individuals are getting criticism from others like loved ones when settling on their buy decisions in the two cycles. The last stage criticism/post-buy conduct is significant for future buys in both buy processes and affects future buys and other possible purchasers. In the two cycles. The choice relies upon the singular shopper as interior factors like qualities.

2.6. Consumer behavior

In modern marketing, the consumer is the cornerstone. Organizational success is determined by how well consumers' wants and desires are met. It is well known that the one thing that all humans have in common is that they are all consumers, regardless of their positions, cultures, educational levels, or purchasing abilities. They all utilize food, clothing, communication equipment, and other essential and complementary requirements regularly.

Most businesses attempt to research customer behavior, starting with their motivations and demands, and then analyzing their actions by understanding the influencing elements and requirements. Consumer behavior research has become one of the most essential elements relied on product marketing authorities, and effective

marketing programs creators attempt to contact consumers and meet their needs. Marketers have concluded that their activity begins and finishes with the consumer.

2.7. Consumer behavior concept

People engage in environmental behavior, according to Hallin, McCarty and Shrum (2001), as a consequence of their desire to solve environmental problems, become a role models, and believe that they can assist protect the environment. Nonetheless, consumer indications of a better situation on environmental concerns may not necessitate actual purchases or environmentally beneficial behavior (Laroche et al., 2002). The majority of customers do not buy things just for environmental reasons, and they do not examine other product qualities to get a better deal (Yam Tang & Chan, 1998).

According to literature analysis, product attributes and green purchasing behavior have received minimal attention. Product features are important in product creation because they influence product consumption possibilities and assist marketing authorities in meeting customers' demands, desires, and aspirations. For example, Roozen and Pelsmacker (1998) investigated the relative value of several green product qualities to customers. Their research focuses on how consumers identify green products. While some authors focus on green characteristics, they overlook other product attributes that may influence a consumer's buying choice. According to Wessells et al. (1999), stated that environmental elements of products are more difficult for consumers to assess than other qualities of items that may be immediately alerted. According to a report issued by the Massachusetts Department of Environmental Protection in 2002, one of the barriers to green product acquisition is the difficulty of identifying green items. One way to address this issue is to use eco-labeling (or green labeling) initiatives to offer customers information while also addressing environmental concerns. An environmental sign is an optional assertion that a product has fewer negative impacts on the environment as a result of its use or consumption. In light of the preceding facts, consumer behavior may be defined as a collection of beliefs and preferences that morphed into real demand for a certain commodity or service. Various elements, such as economic, social, psychological, and environmental factors, influence this behavior.

2.8. Green consumer concept

The term "green consumer" refers to customers who are concerned about the environment when making purchases. Furthermore, it highlights actions associated with the market and consumer habits, as well as their impact on the natural environment. However, these fears are not limited to products; they may also affect how green customers travel, work, or vacation. In general, any customer who exhibits environmentally beneficial behavior is referred to as a "green consumer."

Stern defines behavior as "any action that affects the quantity of energy or natural resources available, as well as the structure and dynamics of an ecosystem or environment space." Consumer green behavior may be split into two groups. The first group includes truncation behaviors, which are associated with minimizing energy resource usage. Green buying behavior is the second category, which includes purchase decisions and actions. Truncation behaviors such as minimizing the usage of special automobiles, lowering the temperature of heating equipment, or lowering water and power use always result in the expenditure of greater funds. It is also necessary to adjust personal behaviors on a regular basis. Nonetheless, the majority of green purchasing behaviors in the near term are accompanied by increased expenditures. Purchases of green items, new equipment for separate residences, CFL automobiles, or environmentally friendly and energy-efficient autos are all examples of green behavior purchases. In order to effectively sell green products, it is vital to discover several available sectors for customers in the green market. To separate distinct characteristics of customers, researchers employed geographical, demographical, psychological, and behavioral data and they categorizes green customers into five groups depending on their environmental activity (Shabani et al., 2013).

As a result, a green consumer is someone who, while making a purchasing decision, considers the environment and looks for things that are environmentally friendly. He also has a good understanding of how to choose those things. Furthermore, a consumer's orientation may be green, but he lacks the ability to pick greener items, or he may have a green orientation, but his culture and education degree prevent him from distinguishing between green and traditional products. Furthermore, the

researcher believe that green consumers have good attitudes about green products, but that their comparatively high pricing may be a barrier to purchase.

2.9. Factors effect in green marketing mix

Green marketing process consists of external and internal Ps. After integrating external and internal Ps, green success will automatically come through four Ss. Here external 7 Ps consists of Paying customers, Providers, Politicians, Pressure groups, Problems, Prediction and Partners; internal 7Ps contains of Products, Promotion, Price, Place, Providing information, Processes and Policies. After integrating external and internal 7Ps, we can find out the green successes through seven Ps such as Satisfaction of stakeholder needs, Safety of products and processes, Social acceptability –of the company and Sustainability of its activities.



Figure 2: The Green Marketing Process Source: (Peattie, 1992)

2.10. Implications of practicing green marketing mix

Firms that brag by the new products, services and procedures that highlight on their interest in environmental and social benefits achieve some positive advantages. Kumar and Bhimasingu, (2015) described the advantages achieved by green marketing as follow:

1. **Easy to reach new markets:** Consumer who may not interest previously with your products may present good interest when they see your sustainable or recycling products.
2. **Become moneymaking:** Due to your ability to reach into new markets, it is probable to see increase in your selling where smart consumers may exchange their traditional brand to one who boasting more environmental consciousness.
3. **You can overcome your competitors:** If you want to stand between seas of competitors, you are not anymore only marketing the price of your product. Instead, you can only focus on its environmental and social advantages.
4. **It is easy to save money (at the end):** Matter may require more investment to obtain friendly environment industrialization operations or change your marketing modes but on the long-term, it is easy to save money by your friendly environment practices. For instance, money may require you to install solar panels at the beginning but decreasing energy consumption will provide high amounts of money in future.
5. **Raise awareness around significant issues:** Coca-Cola Company focused at more of its marketing on lack of drinking water in underdeveloped countries. This led to establish partnerships between Coca-Cola and other authorities on an attempt to provide clean drinking waters for those communities.
6. **Encourage each of environmental and corporate social responsibility:** Social responsibility says that we have to behave in a way that benefit the society at all. Green marketing can encourage individuals inside and outside your organization to think more in its effect.
7. **Gain goodwill in public eye:** you do not have to decrease the importance of your green marketing initiative when the matter associates with public. Many

people became more focus on purchasing interest in environment. In addition, it is possible to establish the loyalty of brand.

The literature refers environmental development will provide many benefits for business such as increasing sales, develop customers opinions, being close from customers, increase competitive capability and develop business image (Keleş 2007). In addition, firms prefer green marketing for many reasons such as evaluate green marketing as an opportunity supported by the government, obeying sanctions, increase competitiveness capability, decrease wastes and costs through reusing. Moreover, according to study conducted by Mathur and Mathur (2000) on 73 companies, investors agree green marketing activities as advance condition. As well as, in terms of companies that have better financial situation, green marketing create positive perspective and make investors feel better at this condition

2.11. Consumer behavior decision making

The decision-making process is a selection of an optional base for hand problems. Apart from making smart judgments, there are positive and bad outcomes for such an option. People frequently contrast the advantages and disadvantages of various options with their alternatives (Business Dictionary, 2017). There must be a hand difficulty in the decision-making process, and it must be addressed or overcome. As a result, while making a purchase decision, people pretend to be well-informed about their options. The behavioral influence and the experimental perspective are the two sorts of decisions. Individual instinct drives behavioral influence decisions, which may be made with or without advertising and selling efforts. From an experimental standpoint, all decisions must be made in such a way that customers may successfully participate (Solomon, 2010). When buying, the customer always walks inside the store or compares two stores before making a purchase since comparing items takes time (Mokhlis, 2009).

2.12. Consumer responsiveness and eco--labelling

Eco-labelling encroaches on the buying examples of green items. An eco-name perceives the total ecological inclination of an item or administration inside an item arrangement concerning its life cycle. Associations could utilize Eco-names as evidence to represent to their purchasers that they have involved ecologically significant creation just as conveyance techniques. Eco-naming is upheld by "point of view measures just as normalization of standards" for eco-accommodating items, consequently separating the item from others to guarantee shoppers of its principles (Rust and Oliver 1994). The makers of eco-naming plans are probably going to be authorized through free outsiders state or private office who assess whether or not the makers are consenting to the naming guidelines. Rust and Oliver (1994), express that there are north of 30 eco-marking strategies right now and Germany was the primary country to present an eco-naming plan called Blue Angel and revealed that purchasers need trust when eco-marks are concerned. As well, recommend that the explanation for this shopper doubt is not perceived to its maximum capacity. The discernment that is perceived recommends that eco-marks draw in buyers by clarifying the item's natural effect. As a result, Eco-naming may be a significant variable in persuading customers to purchase green items. Eco-marking can impact purchasers to address an exceptional cost by showing extra advantages of the items like quality, naturally protected, non-risky, more productive, etc.

2.13. Green branding

Green positioning, which may be characterized as functional or emotional, is one of the most important aspects of green branding initiatives. Emotional components of branding and product green positioning are seen a more significant than functional parts of branding and product green positioning (Meffert & Kirchgeorg, 1993). According to Sarkar (2012), When it comes to business strategy, green positioning may be based on a variety of emotional brand advantages, such as selflessness linked with the sense of well-being, benefits such as auto-expression that come with employing socially recognized green brands, and nature-related benefits (Sarkar, 2012, p. 47). Green positioning has a beneficial impact on brand attitudes, implying that green product purchases are the consequence of good branding communication with the market.

Brands can affect shopper conduct towards natural item utilization. One of the significant elements for a firm to acquire the upper hand in its commercial center is bundling of shopper items. A calm interest in bundling can prompt speeding up brand deals in contrast with publicizing and advancement of items. For instance, Dell utilizes green marking of their eco-accommodating items utilizing "Practice environmental safety with Dell" as their marking technique. They likewise use bundling that is eco-accommodating. Aside from this, Dell centers on effective and green advancements. Then again, certain organizations utilize green advertising as their apparatus for notoriety, which incites an absence of confidence in shoppers as far as green drives. This raises questions in buyers about the validity of firms' green exercises (Raska & Shaw, 2012).

2.14. Similar studies

Leire and Thidell, (2005), provided a study about green buys and green advertising. In Malaysian examination including 526 respondents, pointed out that customers have an uplifting perspective and response to green buys and green advertising because of their familiarity with eco-marks. As indicated by, the portion of the overall industry of an organization that utilizes natural assembling techniques and maintainable showcasing methodologies can be improved by advancing their eco-accommodating exercises utilizing eco-names. In actuality, distinguished that shoppers' green buys are not driven by their eco-mark mindfulness. They utilized a system created by the US-EPA to gauge the adequacy of eco-naming. Thus, it was observed that customers recognize eco-names yet they do not really purchase those items or that they do not follow the data they determine in the overview.

Kinner and Taylor, (1973) explored green brand issues utilizing quantitative investigation with 500 respondents. Their discoveries showed that purchasers' biological worries affected their impression of the brand. On the use of the trial plan technique, they found a constructive outcome on the brand because of shoppers' view of green brand situating. Comparative exploration was completed in different countries and it was observed that buyers have a negative view of eco-accommodating items. They accept there is a stamped compromise between utilitarian brand execution and natural impacts. It was additionally observed that

passionate brand benefits go about as an indispensable empowering factor for green buys by affecting buyer conduct.

Awan and Raza (2010), provided a study about role of green marketing in development consumer behavior towards green energy. The study aimed to identify the more green marketing strategies effect in development consumer behavior towards the use of green energy. In order to achieve the study goals, the descriptive and analytical curriculum is used and the study tool was a questionnaire applied on a sample of people amounted 400 persons in a train station in Sweden.

According to the findings, consumer utilization of green energy is minimal. It is clarified that only (27%) of respondents use green energy. In addition, it is illustrated that green marketing has a significant role in developing consumer behavior towards green energy. The researchers recommended by the necessity of formulate marketing strategies depend on green marketing and its elements in consumer awareness to the green energy and importance of its use and motivation towards it.

Cherian & Jacob (2012) stated that consumers' attitudes toward environmental issues have shifted as a result of increased awareness. They underlined that consumer behavior is shifting toward a green lifestyle. People are actively attempting to lessen their environmental effects. However, there is a little shift that has been recognized by businesses and organizations who are attempting to get a competitive edge by utilizing the green marketing sector. The study presented the notion of green marketing from many perspectives, with different customers associating different attributes with green marketing. A framework is supplied, and data is examined using it. The goal of the study was to determine the link between several aspects of customers' attitudes toward green marketing. The study used analytical methodologies to examine a sample of customers and their use of environmentally friendly products in several Southeast Asian enterprises. The research came up with a few recommendations, including raising consumer knowledge of different environmental issues and reducing these issues by purchasing environmentally friendly foods and leading a green lifestyle

CHAPTER 3

RESEARCH METHODOLOGY

In this chapter, the researcher will analyze the research methodology of the study and the most important procedures that have been implemented to perform the study. The researcher will address and explain each procedure that is implemented separately.

3.1. Research Importance

The study has theoretical and practical importance as follows:

- 1) **Theoretical importance:** The theoretical importance of the study can be summarized as follows:
 - The study is important as it associates with green marketing and consumer awareness and directions towards green products especially that they are optimal ways to preserve human health and environment where he lives.
 - The importance of our study lies as it helps in treating many challenges faced by the Yemeni community where suitable directions towards environment and green products preserve environment became an important issue.
 - Adopting green marketing and depending on friendly environment products increase customer trust by companies and organizations. Thus, studying green marketing and marketing mix elements are important issues.
 - The study is considered the first attempt on a local level that associates between green marketing elements and consumer behavior in green products.
 - Results of the current study provide advantages for some researchers and are interesting in the field of management and marketing.

2) Practical Importance

- To buyers, this study will build attention to the advantages that might be gotten from green marketing and the standards of maintainable monetary practices.
- To advertising specialists, this study will give advertisers devices for assessing the accomplishment of green promoting. Just as strategies for deciding purchasers' ecological mentalities, aims, and practices.
- To business and government pioneers, the discoveries of the review will allow to organizations just as open arrangement producers a reasonable comprehension of buyer inclinations of different green promoting approaches.
- This study is significant in deciding the significant variables that would affect respondents who are partaking or not taking an interest in ecological related exercises (as if saving water, saving nature, including in reusing, establishing trees and giving ecological related instruction). Their exercises and association in ecological insurance works may significantly affect administrative green strategies.
- This study is critical to get a handle on their green conduct and make them the representative in empowering others (overall population) towards green utilization.

3.2. Problem of Study

Mid-twenty-first century, the social and natural results of the unquestioning quest for financial development have become progressively clear. Expanding levels of nursery gasses in the climate, an opening in the ozone layer, inescapable obliteration of the rainforests, and a developing rundown of jeopardized species and environments are only a couple of the pointers that everything isn't well. For promotion, the test is two-crease. For the time being, natural and social issues became fundamental outer impacts on partnerships and subsequently the business sectors among those they work with. Organizations are responding to changing consumers' needs, new guidelines, and another social soul, which reflects expanding worry about the socio-natural effects of business (Mullekyal & Akhil, 2016).

Most current company platforms believe green marketing to be a need since it represents the ideal path toward tackling rising environmental concerns and appropriate ways for preserving a pollution-free environment. In addition, rising efforts on environmental impacts have resulted in a rise in the dimensions and activities of their repercussions. Significant issues arose in the philosophical orientation of marketing theory, and the phrase "green marketing" was coined (Banyte et al., 2010).

Eco-friendly, safe, and clean things that do not pollute the environment are becoming increasingly popular among customers. Green marketing has an impact on two fronts, according to Yazdanifard and Mercy (2011), consumer satisfaction and environmental conservation. The importance of the study lies as it helps in treating many challenges facing the Yemeni community where suitable direction towards the environment and green products preserve the environment became an important issue. As a consequence, the research problem is simplified to a single main question: What impact does green marketing have on consumer attitudes regarding green products?

3.3. Aim of the Study

- To discover the consciousness of shoppers in regards to green items.
- To investigate the conduct and demeanor of buyers towards green items.
- To concentrate on the significance of green marketing in the advancement of future brands.
- To evaluate assuming consumers' support of ecological worries, familiarity with eco-accommodating items, and information on natural issues influence their purchasing of eco-accommodating items.
- To distinguish assuming that shoppers will pay something else for eco-accommodating items.

3.4. Research Hypotheses

This study includes four hypotheses as follows:

First hypothesis: There is a statistical difference at ($\alpha \leq 0.05$) for marketing mix elements on consumer awareness in green products.

Second hypothesis: There is a statistical difference at ($\alpha \leq 0.05$) for marketing mix elements on consumer environmental behavior.

3.5. Research Methodology

In this study, the descriptive analytical curriculum is used where the descriptive analytical curriculum is defined as an analytical method to the phenomenon in an organized way to reach a solution to the problem by describing the study phenomenon. The phenomenon of the study is the effect of green marketing on the behavior of consumers towards green products: a case study of academics and students in the University of Sana'a and an analysis of the study results and the relationship between its components and operations included. The descriptive curriculum has not stopped at data collection to describe the phenomenon but it extends to include the clarification of the relationship and the reasons behind specific behavior.

3.6. Data Collection Instruments

The quantitative method is used in this study since it is the most common approach to this sort of research. The research is based on a primary data analysis in which the questionnaire is distributed to University of Sana'a academics and students by collecting the data from the study sample by using a questionnaire of 20 items.

The questionnaire is formed by two parts. In the first part, questions 1 to 12 are cited from Laddha, D. S., & Malviya, P. M. (2015). The topic is related to Green Marketing and its impact on consumer buying behavior (NBR E-JOURNAL, 1(1), 1–7). And in the second part, the questions 13 to 20 are cited from Bukhari, S. S. (2011). The topic is related to Green Marketing and its impact on consumer behavior (*European Journal of Business and Management*, 3, No.4, 375–383).

The gathered data will be evaluated, and the findings will be acquired using the Statistical Package for the Social Sciences (SPSS 22.0). Furthermore, the theoretical part of the research is based on green marketing journal, articles, theses, university publications, and books, which are named as secondary data analysis. The study's participants are students and academics from the University of Sana'a who were contacted via a paper questionnaire delivered between February 20th and March 10th, 2022. The researcher circulated 250 papers, and 200 acceptable answers were received. The study sample is selected randomly including students and academics and the conditions of the sample have been taken into account in terms of describing the job nature.

3.7. Data Analysis

The study tool consisted of 20 items that follow five rankings "Likert" and the data is symbolized and entered by using the computer by the use of Statistical Package for Social Science (22) as clarified in Table 2.

Table 2: Method of Entering and Symbolizing Data

Degree	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Symbol by the computer	1	2	3	4	5

The information was gathered by a questionnaire using the Likert Scale, which ranges from 1 to 5, with 1 indicating strong agree and 5 indicating strongly disagree. Green marketing was used to ask questions like: would you like green products, would you pay more for them, is your purchase choice influenced by green marketing, and so on. The acquired data were analyzed using the Statistical Program for Social Sciences (SPSS).

To assess the results, the researcher utilized a variety of statistical methods to examine the study questions, such as the mean and standard deviation of Cronbach's alpha coefficients. "mean and standard deviation" is the value given by the participants in answering questions about a particular construct. For the present study, to test the main hypotheses, Pearson correlation coefficient, and regression model as productive approaches, correlation analysis is used to test the relationship

between the two variables, whether it is solid or weak. All Cronbach's Alpha coefficients are more than (0.9), with the overall Cronbach's Alpha coefficient of (0.96). This average is deemed quite high and relates to the stability and reliability of the questionnaire answers.

3.8 Demographic Information of Study

The demographic information of the study includes gender, age, and educational level. Table 3 explain the demographic information of the study sample.

Table 3: Demographic Information of Study

Gender	Frequency	Percentage
Female	37	18.5%
Male	163	81.5%
Age category		
Less than 25 years old	100	50%
25 to less than 35 years old	53	26.5%
35 to less than 45 years old	35	17.5%
45 years old and more	12	6%
Educational level		
Bachelor degree	108	54%
Master degree	75	37.5%
Doctorate degree	17	8.5%

Table 3 shows that the study gender is male and female where the percentage of the female is 18.5 percent followed by the male with a percentage of 81.5. It is clear from Table 3 that the largest percentage of survey participants in the age category less than 25 years old with a percentage of 50 percent followed by the age category of 25 to less than 35 years old with 26.5 percent. In terms of educational level, Table 3 shows that the largest percentage of participants are with bachelor's degree and their percentage is 54 percent followed by the participants who hold a master's degree with 37.5 percent and the last percentage are those who hold a doctorate with 8.5 percent.

The main reason behind the selection of this slice of participants is that most of them are students and academics at the University of Sana'a and they can understand the questionnaire statements and give opinions about green marketing and its impact on

the consumer buying behavior and they can express carefully about the reality of green marketing in Yemen and especially in Sana'a.

3.9. Reliability of Questionnaire

Reliability means the accuracy of the survey or its consistency where the questionnaire is considered reliable if the same individual obtains the same degree or close degree at the same measure or a set of qualified items when it is applied more than once. Reliability means stability and non-high change of results if it is reapplied many times under the same conditions and circumstances. To check the reliability of a questionnaire, the researcher implemented Cronbach's Alpha coefficient. This test is based on calculating Cronbach's Alpha coefficient for each item of the questionnaire. Table 4 illustrates the results of Cronbach's Alpha coefficient for each item of the questionnaire.

Table 4: Cronbach's Alpha Coefficient Test

Item-Total Statistics				
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I desire green products.	32.6170	291.502	.607	.966
pay extra for green products.	32.5319	287.167	.605	.966
My purchasing decision affected by green marketing.	32.4681	282.341	.797	.964
I'm concerned about organizations polluting environment.	32.3830	278.024	.720	.965
Organizations should practice green marketing.	32.3617	274.236	.829	.964
Companies should abide by environmental laws.	32.3404	272.577	.833	.964
customers affected by green marketing while making purchasing	32.1277	271.027	.780	.964

decisions.				
Buyers prefer to repurchase such products which are green.	32.3617	277.105	.870	.964
I would describe myself as environmentally responsible.	32.3191	275.700	.777	.964
Increase in greenhouse gases will affect the future of next generation.	32.4255	278.380	.803	.964
I have convinced members of my family or friends not to buy products which are harmful to the environment.	32.3830	276.502	.810	.964
There is no truth in to environmental problem issue.	32.1277	272.505	.778	.964
Global warming is biggest threat for the degradation of environment.	32.2979	278.127	.641	.966
Rapid industrialization is harming environment.	32.2128	273.867	.750	.965
I am fully aware about the product promoting green are using environment friendly process.	32.1064	270.141	.754	.965
Companies using green process are incurring extra cost for the production process.	32.0426	270.955	.747	.965
I would not buy a product if the company which sells it is environmentally irresponsible.	32.1064	270.575	.859	.963
Companies do not use	32.1064	273.880	.759	.965

eco-friendly processes in manufacturing and packaging of their products				
I would buy a toilet soap if it wrapped in recycle paper.	32.2340	276.401	.742	.965
I would buy products of those companies which are fulfilling their electricity need through renewable sources.	32.4468	282.079	.783	.965

Table 4 refers that all Cronbach's Alpha coefficients are greater than (0.9) and Cronbach's Alpha coefficient for whole questionnaire results amounted to (0.96) this average is considered relatively high and refers to the stability and reliability of the questionnaire results.

CHAPTER 4

RESULT OF THE STUDY

This is the axis of the questionnaire and includes 20 questions. The objective of this section is to collect the opinions of the participants about green marketing and its impact on consumer buying behavior. The questionnaire includes two axes and each axis includes many fields that can be described as follow:

First axis: Consumer awareness in green products (twelve items) (Laddha & Malviya, 2015).

Second axis: Consumer environmental directions (eight items) (Bukhari , 2011).

Q1. I desire green products

This question aims to discover the knowledge of the participants who desire green products. Where the answer of the participants is shown in Table 5.

Table 5: I Desire Green Products

I desire green products	Frequency	Valid Percent
Strongly Agree	94	47%
Agree	59	29.5%
Neutral	28	14%
Disagree	13	6.5%
Strongly Disagree	6	3%
Total	200	100%

Table 5 shows that the largest percentage of the participants strongly agree and agree that they desire green products with percentages of 47 percent and 29.5 percent respectively. The mean and standard deviation values are 1.89 and 1.064 respectively. It is clear from the values of mean and standard deviation that participants desire green products.

Q2. I pay extra for green products

The purpose of this question is to find out the knowledge of the participants who pay extra for green products where the answer and frequencies of answers are shown in Table 6.

Table 6: I Pay Extra for Green Products

I pay extra for green products	Frequency	Valid Percent
Strongly Agree	85	42.5%
Agree	48	24%
Neutral	44	22%
Disagree	14	7%
Strongly Disagree	9	4.5%
Total	200	100%

Table 6 shows that the largest percentage of the participants strongly agree and agree that they pay extra for green products with percentages of 42.5 percent and 24 percent respectively. The mean and standard deviation values are 2.07 and 1.154 respectively. It is clear from the values of mean and standard deviation that participants pay extra for green products.

Q3. My purchasing decision affected by green marketing

The purpose of this question is to find out the knowledge of the participants whose purchasing decisions are affected by green marketing where the answer and frequencies of answers are shown in Table 7.

Table 7: My Purchasing Decision Affected by Green Marketing

My purchasing decision affected by green marketing	Frequency	Valid Percent
Strongly Agree	89	44.5%
Agree	50	25%
Neutral	39	19.5%
Disagree	12	6%
Strongly Disagree	10	5%

Total	200	100%
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Table 7 shows that the largest percentage of the participants strongly agree and agree that their purchasing decision is affected by green marketing with percentages of 44.5 percent and 25 percent respectively. The mean and standard deviation values are 2.02 and 1.155 respectively. It is clear from the values of mean and standard deviation that participants purchasing decisions are affected by green marketing.

Q4. I am concerned about organizations polluting environment

This question aims to discover the knowledge of the participants who are concerned about organizations polluting the environment. where the answer of the participants is shown in Table 8.

Table 8: I Am Concerned about Organizations Polluting Environment

I am concerned about organizations polluting environment	Frequency	Valid Percent
Strongly Agree	100	50%
Agree	45	22.5%
Neutral	34	17%
Disagree	16	8%
Strongly Disagree	5	2.5%
Total	200	100%

Table 8 shows that the largest percentage of the participants strongly agree and agree that they are concerned about organizations polluting the environment with percentages of 50 percent and 25.5 percent respectively. The mean and standard deviation values are 1.90 and 1.10 respectively. It is clear from the values of mean and standard deviation that participants are concerned about organizations polluting the environment.

Q5. Organizations should practice green marketing

This question aims to discover the knowledge of the participants who said that Organizations should practice green marketing where the answer of the participants is shown in Table 9.

Table 9: Organizations Should Practice Green Marketing

Organizations should practice green marketing	Frequency	Valid Percent
Strongly Agree	89	44.5%
Agree	56	28%
Neutral	35	17.5%
Disagree	14	7%
Strongly Disagree	6	3%
Total	200	100%

Table 9 shows that the largest percentage of the participants strongly agree and agree said that organizations should practice green marketing with percentages of 44.5 percent and 28 percent respectively. The mean and standard deviation values are 1.96 and 1.083 respectively. It is clear from the values of mean and standard deviation that participants said that organizations should practice green marketing.

Q6. Companies should abide by environmental laws

This question aims to discover the knowledge of the participants who said that companies should abide by environmental laws where the answer of the participants is shown in Table 10.

Table 10 : Companies Should Abide by Environmental Laws

Companies should abide by environmental laws	Frequency	Valid Percent
Strongly Agree	100	50%
Agree	47	23.5%
Neutral	36	18%
Disagree	12	6%

Strongly Disagree	5	2.5%
Total	200	100%

Table 10 shows that the largest percentage of the participants strongly agree and agree said that companies should abide by environmental laws with percentages of 50 percent and 23.5 percent respectively. The mean and standard deviation values are 1.87 and 1.065 respectively. It is clear from the values of mean and standard deviation that the participants said that companies should abide by environmental laws.

Q7. Customers affected by green marketing while making purchasing decisions

At this question, it is aimed to discover the knowledge of the participants who said that customers affected by green marketing while making purchasing decisions where the answer of the participants is shown in Table 11.

Table 11: Customers Affected by Green Marketing While Making Purchasing Decisions

Customers affected by green marketing while making purchasing decisions	Frequency	Valid Percent
Strongly Agree	81	40.5%
Agree	46	23%
Neutral	43	21.5%
Disagree	21	10.5%
Strongly Disagree	9	4.5%
Total	200	100%

Table 11 shows that the largest percentage of the participants strongly agree and agree said that customers are affected by green marketing while making purchasing decisions with percentages of 40.5 percent and 23 percent respectively. The mean and standard deviation values are 2.155 and 1.195 respectively. It is clear from the values of mean and standard deviation that the participants said that Customers are affected by green marketing while making purchasing decisions.

Q8. Buyers prefer to repurchase such products, which are green

This question aims to investigate if the participants responded that buyers prefer to repurchase such products, which are green. The answer to this section is shown in Table 12.

Table 12: Buyers Prefer to Repurchase Such Products, Which are Green

Buyers prefer to repurchase such products, which are green	Frequency	Valid Percent
Strongly Agree	81	42%
Agree	55	27.5%
Neutral	39	19.5%
Disagree	13	6.5%
Strongly Disagree	12	6%
Total	200	100%

Table 12 shows that the largest percentage of the participants strongly agree and agree that buyers prefer to repurchase such products, which are green with percentages of 42 percent and 27.5 percent respectively. The mean and standard deviation values are 2.10 and 1.181 respectively. It is clear from the values of mean and standard deviation that the participants prefer to repurchase such green products.

Q9. I would describe myself as environmentally responsible

This question aims to investigate if the participants described themselves as environmentally responsible. The answer to this section is shown in Table 13.

Table 13: I Would Describe Myself as Environmentally Responsible

I would describe myself as environmentally responsible	Frequency	Valid Percent
Strongly Agree	84	42%
Agree	49	24.5%
Neutral	40	20%
Disagree	22	11%

Strongly Disagree	5	2.5%
Total	200	100%

Table 13 shows that the largest percentage of the participants strongly agree and agree that they would describe themselves as environmentally responsible with percentages of 42 percent and 24.5 percent respectively. The mean and standard deviation values are 2.075 and 1.133 respectively. It is clear from the values of mean and standard deviation that participants would describe themselves as environmentally responsible.

Q10. Increase in greenhouse gases will affect the future of next generation

The purpose of this question is to investigate if the sample has read previously that an increase in greenhouse gases will affect the future of the next generation. The answer to this question is illustrated in Table 14.

Table 14: Increase In Greenhouse Gases Will Affect The Future of Next Generation

Increase in greenhouse gases will affect the future of next generation	Frequency	Valid Percent
Strongly Agree	97	48.5%
Agree	50	25%
Neutral	35	17.5%
Disagree	15	7.5%
Strongly Disagree	3	1.5%
Total	200	100%

Table 14 shows that the largest percentage of the participants strongly agree and agree said that the increase in greenhouse gases will affect the future of next-generation with percentages of 48.5 percent and 25 percent respectively. The mean and standard deviation values are 1.885 and 1.042 respectively. It is clear from the values of mean and standard deviation that participants said that increase in greenhouse gases will affect the future of the next generation.

Q11. I have convinced members of my family or friends not to buy products, which are harmful to the environment

The purpose of this question is to take participants' opinions who convinced members of their family or friends not to buy products, which are harmful to the environment, The answer to his questions is clarified in Table 15.

Table 15: I Have Convinced Members of My Family or Friends not to Buy Products, Which are Harmful to the Environment

I have convinced members of my family or friends not to buy products, which are harmful to the environment	Frequency	Valid Percent
Strongly Agree	79	39.5%
Agree	55	27.5%
Neutral	34	17%
Disagree	27	13.5%
Strongly Disagree	5	2.5%
Total	200	100%

Table 15 shows that the largest percentage of the participants strongly agree and agree that they have convinced members of their family or friends not to buy products, which are harmful to the environment with percentages of 39.5 percent and 27.5 percent respectively. The mean and standard deviation values are 2.120 and 1.149 respectively. It is clear from the values of mean and standard deviation that participants have convinced members of their family or friends not to buy products, which are harmful to the environment.

Q12. There is no truth in to environmental problem issue

The purpose of this question is to find out the knowledge of the participants who said there is no truth in environmental problem issues where the answer and frequencies of answers are shown in Table 16.

Table 16 : There Is no Truth in Environmental Problem Issues

There is no truth in to environmental problem issue	Frequency	Valid Percent
Strongly Agree	82	41%
Agree	43	21.5%
Neutral	37	18.5%
Disagree	28	14%
Strongly Disagree	10	5%
Total	200	100%

Table 16 shows that the largest percentage of the participants strongly agree and agree said that there is no truth about environmental problem issue with percentages of 41 percent and 21.5 percent respectively. The mean and standard deviation values are 2.205 and 1.253 respectively. It is clear from the values of mean and standard deviation that participants said that there is no truth about the environmental problem issue.

Q13 Global warming is biggest threat for the degradation of environment

At this question, participants give their opinions if they notice that global warming is the biggest threat to the degradation of the environment. The answer to this question is shown in Table 17.

Table 17: Global Warming Is Biggest Threat For The Degradation of Environment

Global warming is biggest threat for the degradation of environment	Frequency	Valid Percent
Strongly Agree	90	45%
Agree	52	26%
Neutral	29	14.5%
Disagree	17	8.5%
Strongly Disagree	12	6%
Total	200	100%

Table 17 shows that the largest percentage of the participants strongly agree and agree said that global warming is the biggest threat to the degradation of the environment with percentages of 45 percent and 26 percent respectively. The mean and standard deviation values are 2.045 and 1.216 respectively. It is clear from the values of mean and standard deviation that participants said that global warming is the biggest threat to the degradation of the environment.

Q14. Rapid industrialization is harming environment

At this question, participants are asked about their feeling if rapid industrialization is harming environment . The answer of this question is shown in Table 18.

Table 18: Rapid Industrialization Is Harming Environment

Rapid industrialization is harming environment	Frequency	Valid Percent
Strongly Agree	87	43.5%
Agree	59	29.5%
Neutral	33	16.5%
Disagree	12	6%
Strongly Disagree	9	4%
Total	200	100%

Table 18 shows that the largest percentage of the participants strongly agree and agree said that rapid industrialization is harming the environment with percentages of 43.5 percent and 29.5 percent respectively. The mean and standard deviation values are 1.985 and 1.118 respectively. It is clear from the values of mean and standard deviation that participants said that rapid industrialization is harming the environment.

Q15. I am fully aware about the product promoting green are using environment friendly process

At this question, participants give their opinions if they are fully aware of the product promoting green are using environment-friendly process The answer to this question is shown in Table 19.

Table 19: I Am Fully Aware about the Product Promoting Green are Using Environment Friendly Process

I am fully aware about the product promoting green are using environment friendly process	Frequency	Valid Percent
Strongly Agree	78	39%
Agree	57	28.5%
Neutral	42	21%
Disagree	15	7.5%
Strongly Disagree	8	4%
Total	200	100%

Table 19 shows that the largest percentage of the participants strongly agree and agree that they are fully aware of the products promoting green are using environment-friendly processes with percentages of 39 percent and 28.5 percent respectively. The mean and standard deviation values are 2.090 and 1.121 respectively. It is clear from the values of mean and standard deviation that participants are fully aware of the products promoting green are using environment-friendly processes.

Q16. Companies using green process are incurring extra cost for the production process

At this question, participants give their opinions if they notice that companies using the green process are incurring extra costs for the production process. The answer to this question is shown in Table 20.

Table 20: Companies Using Green Process Are Incurring Extra Cost for The Production Process

Companies using green process are incurring extra cost for the production process	Frequency	Valid Percent
Strongly Agree	87	43.5%
Agree	53	26.5%
Neutral	37	18.5%

Disagree	15	7.5%
Strongly Disagree	8	4%
Total	200	100%

Table 20 shows that the largest percentage of the participants strongly agree and agree that they notice that companies using the green process are incurring extra costs for the production process with percentages of 43.5 percent and 26.5 percent respectively. The mean and standard deviation values are 2.020 and 1.134 respectively. It is clear from the values of mean and standard deviation that participants notice that companies using the green process are incurring extra costs for the production process.

Q17. I would not buy a product if the company which sells it is environmentally irresponsible

The purpose of this question is to take participants' opinions who said that they would not buy a product if the company which sells it is environmentally irresponsible. The answer to this question is shown in Table 21.

Table 21: I Would not Buy A Product If The Company Which Sells It Is Environmentally Irresponsible

I would not buy a product if the company which sells it is environmentally irresponsible	Frequency	Valid Percent
Strongly Agree	75	37.5%
Agree	62	31%
Neutral	34	17%
Disagree	19	9.5%
Strongly Disagree	10	5%
Total	200	100%

Table 21 shows that the largest percentage of the participants strongly agree and agree that they would not buy a product if the company which sells it is environmentally irresponsible with percentages of 37.5 percent and 31 percent respectively. The mean and standard deviation values are 2.135 and 1.167

respectively. It is clear from the values of mean and standard deviation that participants would not buy a product if the company which sells it is environmentally irresponsible.

Q18. Companies do not use eco-friendly processes in manufacturing and packaging of their products

At this question, participants are asked about their feeling if companies do not use eco-friendly processes in the manufacturing and packaging of their products. The answer to this question is shown in Table 22.

Table 22: Companies Do not Use Eco-Friendly Processes in Manufacturing and Packaging of Their Products

companies do not use eco-friendly processes in manufacturing and packaging of their products	Frequency	Valid Percent
Strongly Agree	81	40.5%
Agree	48	24%
Neutral	48	24%
Disagree	12	6%
Strongly Disagree	11	5.5%
Total	200	100%

Table 22 shows that the largest percentage of the participants strongly agree and agree said that companies do not use eco-friendly processes in the manufacturing and packaging of their products with percentages of 40.5 percent and 24 percent respectively. The mean and standard deviation values are 2.120 and 1.171 respectively. It is clear from the values of mean and standard deviation that participants said that companies do not use eco-friendly processes in the manufacturing and packaging of their products.

Q19. I would buy a toilet soap if it wrapped in recycle paper

The purpose of this question is to take participants' opinions who said that they would buy a toilet soap if it was wrapped in recycled paper. The answer to this question is shown in Table 23.

Table 23: I Would Buy a Toilet Soap If It Wrapped in Recycle Paper

I would buy a toilet soap if it wrapped in recycle paper	Frequency	Valid Percent
Strongly Agree	81	40.5%
Agree	43	21.5%
Neutral	42	21%
Disagree	20	10%
Strongly Disagree	14	7%
Total	200	100%

Table 23 shows that the largest percentage of the participants strongly agree and agree that they would buy a toilet soap if it was wrapped in recycled paper with percentages of 40.5 percent and 21.5 percent respectively. The mean and standard deviation values are 2.215 and 1.267 respectively. It is clear from the values of mean and standard deviation that participants would buy toilet soap if it was wrapped in recycled paper.

Q20. I would buy products of those companies which are fulfilling their electricity need through renewable sources

The purpose of this question is to take participants' opinions who said that they would buy products of those companies which are fulfilling their electricity need through renewable sources. The answer to this question is shown in Table 24.

Table 24: I Would Buy Products of Those Companies Which are Fulfilling Their Electricity Need Through Renewable Sources

I would buy products of those which are fulfilling their electricity need through renewable sources	Frequency	Valid Percent
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Strongly Agree	79	39.5%
Agree	56	28%
Neutral	43	21.5%
Disagree	14	7%
Strongly Disagree	8	4%
Total	200	100%

Table 24 shows that the largest percentage of the participants strongly agree and agree that they would buy products of those companies which are fulfilling their electricity need through renewable sources with percentages of 39.5 percent and 28 percent respectively. The mean and standard deviation values are 2.080 and 1.117 respectively. It is clear from the values of mean and standard deviation that participants would buy products of those companies which are fulfilling their electricity needs through renewable sources.

4.2. Hypotheses Test

- **First hypothesis:** There is a statistical difference at ($\alpha \leq 0.05$) for marketing mix elements on consumer awareness of green products.

Table 25 illustrates Pearson correlation coefficient, R square and significance value for the regression of (green marketing mix elements with consumer awareness of green products).

Table 25: Pearson Correlation Coefficient, R Square and Significance Between Green Marketing Mix Elements With Consumer Awareness of Green Products

Variables	Pearson correlation	R Square	Sig. value
Green marketing mix	0.510	0.260	0.000
Consumer awareness by green products			

It is clear from Table 25 that the Pearson correlation coefficient between green marketing mix elements and consumer awareness by green products is (0.510) and the R square is (0.260) which means that this change in green marketing mix

elements explains (26.%) from the change in consumer awareness with green products. Therefore, companies working in this field must be interested in green marketing fields in order to increase consumer awareness of green products. The regression model between green marketing mix elements and consumer awareness by green products is shown in Table 26.

Table 26: Regression Model Between Green Marketing Mix Elements and Consumer Awareness of Green Products

Model	Coefficient	(t) value	Sig. value
Constant	1.178	6.406	0.000
Green product	0.022	0.299	0.766
Green price	0.460	4.789	0.000
Green promotion	-0.148	-1.366	0.174
Green place	0.220	2.763	0.007

It is clear from Table 26 that most of sig. values (significance values) are less than (0.05). This refers that regression model is significantly affected and there is effect with statistical degree for green marketing mix on consumer awareness towards green products.

- **Second hypothesis:** There is statistical difference at ($\alpha \leq 0.05$) for marketing mix elements on consumer environmental behavior.

Table 27 illustrates Pearson correlation coefficient, R square and significance value for the regression of green marketing mix elements with consumer environmental behavior).

Table 27: Pearson Correlation Coefficient, R Square and Significance Between Green Marketing Mix Elements With Consumer Environmental Behavior.

Variables	Pearson correlation	R Square	Sig. value
Green marketing mix	0.406	0.164	0.000
Consumer environmental behavior			

It is shown in Table 27 that Pearson correlation coefficient between green marketing mix elements and consumer environmental behavior is (0.406) and R square is

(0.164). This clarifies that change in green marketing mix elements explain (16.4%) from the change in consumer environmental behavior and thus, companies must interest in green marketing fields in order to increase the level of consumer environmental behavior. The results of regression model is shown in Table 28.

Table 28: Regression Model Between Green Marketing Mix Elements and Consumer Environmental Behavior

Model	Coefficient	(t) value	Sig. value
Constant	0.907	4.155	0.000
Green product	0.520	5.934	0.000
Green price	-0.092	-0.803	0.423
Green promotion	0.227	1.765	0.080
Green place	-0.098	-1.036	0.302

Table 28 refers that most of the significance values are less than (0.05), this denotes that regression model is significantly affected, and there is effect with statistical degree for green marketing mix elements with consumer environmental behavior.

CHAPTER 5

Conclusion and Recommendations

Because of its important role in environmental preservation and the capacity of businesses to maintain their social and financial status by minimizing waste and raw materials, green marketing is one of the most important concerns for business platforms. Companies nowadays work in a fast-paced, changing environment. As a result, it is critical to stay up with this transformation by continuously enhancing their performance via the development of goods and services that satisfy the changing wants of consumers. Furthermore, businesses aim to use green marketing elements to get a competitive advantage over their competitors, as well as to enhance manufacturing capabilities and improve marketing effectiveness.

The researcher arrived at a set of outcomes and conclusions after studying and interpreting the data. The findings revealed that the actuality of marketing mix elements ranked first. The green product aspect came first, followed by green advertising, green price, and finally green location. Furthermore, the survey found that customer knowledge of green products is rather strong. According to the findings, consumer environmental culture is medium. According to the findings, there is a strong environmental trend toward green products and the environment. According to the findings, there is a statistically significant influence for green marketing mix ingredients on consumer environmental culture. Green marketing mix ingredients have a statistically significant influence on consumer awareness. In addition, there is a statistically significant influence on consumer environmental orientations. Furthermore, there is a statistically significant influence for green marketing mix items on customer environmental behavior.

Green marketing research is very new and significant, and more should be done in this field, particularly studies on the impact of green products on consumer loyalty. As well as studies on green culture among academics and students in Yemeni universities and how it relates to their environmental attitudes. The researcher also wants to undertake research on the parts of the green marketing mix and their link with customer loyalty. The researcher also examines the importance of enterprises in Yemen adopting green goods and their impact on consumers, as well as the level of

environmental knowledge among students in Yemeni colleges and its link with green product loyalty. Furthermore, research links the impact of green marketing mix elements on consumer behavior in various groups, such as school teachers and personnel in health institutions.

Adopt green marketing term is considered a necessity on most modern business platforms as it represents the correct direction towards solving the increased environmental problems and good methods in how to preserve a free environment from pollution. The study is made in Yemen and this makes the study unique because this study lies as it helps in treating many challenges facing the Yemeni community where suitable direction towards the environment and green products preserve the environment became an important issue and It is offered a series of suggestions a highlight the study results, including the need for enterprises to provide numerous green options and satisfy consumers in Yemen.

5.1. Limitations and recommendations for future studies

This research has two limitations that will be discussed. To begin, this research looked at green marketing and its impact on consumer's purchasing behavior. It was distributed among 250 selected students and professors at the University of Sana'a, making it impossible to reach all students and academics. Furthermore, the sample group must be larger to get a more scientifically representative result. More study is needed to evaluate consumer habits and lifestyle features to analyze more deliberate and behavioral aspects so that Yemeni consumers may engage in sustainable behavior. Second, the questionnaire's variables were limited and focused solely on the influence of green marketing, leaving the results ambiguous. More study is needed in the future to fully comprehend green marketing and its impact on consumer's purchasing behavior, particularly in Yemen. However, future studies can learn the relationship of green marketing with other consumer theories such as consumer loyalty, consumer trust, or consumers' consumer awareness. Finally, in the research green marketing elements such as products, price, place, and promotion are studied; however, other terms related to sustainability such as knowledge, environmental awareness people can be related to purchase behavior.

5.2 Recommendations

- In Yemen and other nations, commercial organizations and corporations must implement various and satisfactory green alternatives to meet consumers demands.
- The importance of price-to-demand compatibility for green products, and so enterprises should research this relationship and implement appropriate pricing for green products.
- Place a high value on green products since they help to realize the notion of land development.
- Organizing programs, seminars, and conferences to emphasize the relevance of green goods in the context of environmental issues and natural resource concerns.
- The need for businesses and organizations to make an effort to publicize environmental culture. Through pricing processes, companies and business organizations must evaluate the predicted benefits of green products.
- Adoption is required of commercial groups and corporations.
- Companies and commercial groups must conduct magazines in order to promote green products.
- National firms must establish plans to create environmentally friendly areas, often known as green places.
- The government must keep track of green spaces and explain their value to customers.
- Raise Yemeni people's understanding of green culture, particularly among students in schools and universities.

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APENDIX A

QUESTIONNAIRE

Green Marketing and its Impact on Consumer Buying Behavior: A Case Study the Academics and Students in University of SANA'A.

First Section: Demographic Information

- **Gender**

male Female

- **Age:**

less than 25 years old from 25 to less than 35 years old

from 35 to less than 45 years old from 45 to less than 55 years old

Older than 55 years old

- **Educational level**

Bachelor Degree Master Degree Doctorate Degree

Resource for Questions 1-12

Laddha, D. S., & Malviya, P. M. (2015). Green Marketing and its Impact on Consumer Buying Behavior. NBR E-JOURNAL, 1(1), 1-7.

1	I desire green products.					
2	Pay extra for green products					
3	My purchasing decision affected by green marketing					
4	I'm concerned about organizations polluting environment.					
5	Organizations should practice green marketing.					
6	Companies should abide by environmental laws.					
7	Customers affected by green marketing while making purchasing decisions.					
8	Buyers prefer to repurchase such products which are green.					
9	I would describe myself as environmentally responsible.					
10	Increase in greenhouse gases will affect the future of next generation.					
11	I have convinced members of my family or friends not to buy products which are harmful to the environment.					
12	There is no truth in to environmental problem issue.					

Resource for Questions 13-20

Bukhari , S. S. (2011). Green Marketing and its impact on consumer behavior. *European Journal of Business and Management*, 3, No.4, 375–383.

13	Global warming is biggest threat for the degradation of environment.					
14	Rapid industrialization is harming environment.					
15	I am fully aware about the product promoting green are using environment friendly process.					
16	Companies using green process are incurring extra cost for the production process.					
17	I would not buy a product if the company which sells it is environmentally irresponsible					
18	Companies do not use eco-friendly processes in manufacturing and packaging of their products					
19	I would buy a toilet soap if it wrapped in recycle paper					
20	I would buy products of those companies, which are fulfilling their electricity need through renewable sources.					