

# THE IMPACT OF GREEN PROMOTIONAL MIX ELEMENTS ON CONSUMER PURCHASING BEHAVIOR (AN EXPLORATORY STUDY OF A SAMPLE OF CONSUMERS IN THE MARKETS OF THE CITY OF SULAYMANIYAH)

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## Abstract

Green marketing has great interest to business organizations that seek to preserve the natural environment by producing green products that are friendly to them, and presenting them to customers through the green promotional mix, which is a link between the organization and its customers. The promotional mix has an effective role in directing the consumer towards sustainable green consumption and generates for its environmental awareness and responsibility that make it part of the organization's endeavor to preserve the environment. This study aimed to identify the importance and the role of green promotional mix element on consumer purchasing behavior. The main focus of promotional mix includes green advertising, sales promotion, personal selling and public relation. Based on theoretical framework, five hypotheses were developed and statistically tested. To achieve the objectives of the study, a questionnaire was developed for collecting data. A total of 200 questionnaires were distributed to a random sample from the study population, 134 from the questionnaires were returned back to researcher. For data analysis SPSS 16.0 software has been used and the hypothesis tested by applying multiple regression method. This study concluded that there is significant and positive impact of green promotional mix elements on consumer purchasing behavior. Therefore, organizations should work on developing the appropriate promotional policy and pay attention to the promotional elements that have the most influence on the consumer's purchasing decision in a way that stimulates and pushes consumers towards green products.

**Keywords:** green marketing, green promotion, consumer behavior

## 1. INTRODUCTION

Recently, complex environmental issues have emerged at the global level, such as climate change, pollution, global warming, and pollution of the natural environment as a result of industrial waste...etc. As a result of the production and marketing of industrial products that are harmful to human health and the environment in general, these are all serious issues that must be stopped because of the problems and harm they cause to the environment and consumers. Therefore, responses have recently emerged from governments, associations and institutions concerned with preserving the environment with their interventions by spreading environmental awareness among consumers and taking the necessary measures to be in line with the new reality. In response to these calls and appeals, business organizations began to give environmental aspects and issues greater and different attention in their production and marketing strategies alike. With social and environmental responsibility.

One of the most important elements of the green marketing mix affecting the intention and purchasing behavior of consumers and bringing about a change in them is the green promotion represented by its dimensions (green advertising, sales promotion, personal selling and public relations). Enhancing their environmental knowledge and awareness, which leads to a gradual impact on their attitudes and opinions towards the environment and change their purchasing intentions, and to show their willingness to adopt environmental consumption or what is called green.

### **The study Problem**

The social responsibility of organizations and their awareness to the importance of environmental aspect in marketing their products necessitate them to delve into and search more and seriously in the elements of the green marketing mix. And because of its effective and positive position in obtaining competitive advantages for organizations, that enable them to create a significant impact on consumers who are most interested in the environment in which they live. And the new opportunities it creates that contribute to achieving its desired goals. Based on these matters, the research problem can be formulated by asking the following questions:

1. Is there an effective effect of green advertising on the purchasing behavior of the consumer?
2. Is there an effective effect to sales promotion on the purchasing behavior of the consumer?
3. Is there an effective effect of personal selling on the purchasing behavior of the consumer ?
4. Is there an effective effect of public relations on the purchasing behavior of the consumer?

### **The importance of study**

The importance of this study lies in:

1. Make a leap in the quality of products provided by organizations to consumers in line with their orientations and requirements regarding environmental affairs in protecting them, and this is through a promotional mix that is completely different from the traditional promotional mix, which has an effective impact on the consumer's purchasing behavior to urge the purchase and consumption of green products the most environmentally friendly.
2. Attempting to direct consumers towards a different behavior in the consumption process, in order to move towards products that are less harmful to the environment.
3. Highlighting the environmental dimension in the productive and marketing strategies of organizations through green marketing and through a serious sense of social responsibility. As well as showing the positive role played by the elements of the green promotional mix in influencing the purchasing intention of consumers to buy products that are not harmful to the environment.
4. Highlighting the importance of the elements of the green promotional mix in exploiting the environmental dimensions in order to reach economic gains for the organization, and

in terms of environmental concern, it enables it to achieve competitive advantages that distinguish it from other organizations in light of the intense competition.

### **Objectives of the study**

The objectives that this study seeks to achieve are:

1. An attempt to construct a theory that explains the main role played by the elements of the green promotional mix in changing decisions and the purchasing intention of the consumers.
2. Measuring the extent of the impact of using the elements of the green promotional mix on the purchasing behavior of the consumer and the extent of the consumer's willingness to consume green products.
3. Educating the consumer of the need to move towards consuming products that are less harmful to the environment. And knowing the importance of the elements of the green promotional mix in stimulating the purchasing behavior of consumers to deal with environmentally friendly products.
4. Demonstrating the extent to which organizations have adopted the concept of green marketing and the culture of preserving the environment, reminding them of the necessity of producing and marketing environmentally green products and providing more space for them in their future strategies.

### **The study hypotheses**

Based on the study questions

1. There is no statistically significant effect of the dimensions of the green promotional mix on the purchasing behavior of the consumers.
2. There is no statistically significant effect of green advertising on the purchasing behavior of the consumers.
3. There is no statistically significant effect of stimulating sales on the purchasing behavior of the consumers.
4. There is no statistically significant effect of personal selling on the purchasing behavior of the consumers.
5. There is no statistically significant effect of public relations on the purchasing behavior of the consumers.

## **2. LITERATURE REVIEW**

### **2.1 Concept and definition of green marketing**

In response to the increasing environmental challenges in the current time, green marketing came to light, which is seen as a translation of the requirements of social responsibility for organizations. Their orientation is environmentally oriented to work towards achieving a clean

and safe environment. Green marketing works to oblige organizations to produce and market environmentally friendly commodities, that is, commodities with characteristics that are not harmful to the environment and society, and to carry out their marketing activities within the framework of compatibility with environmental issues and within certain controls that ensure their preservation and non-harm (Al-Bakri Thamer, Hadil Ismail, 2016). Green marketing is defined as "the process of developing, pricing, distributing and promoting products that do not harm the natural environment" (Pride. W & Ferrel, 2014). This is consistent with the definition of green marketing indicated by (Polonsky, 1995) that green or environmental marketing takes into account all activities that can generate and facilitate any kind of exchange that aims to satisfy human needs and desires so that it does not have a negative impact on the natural environment. It was defined (Al-Bakry Thamer, 2006) in a more comprehensive definition that green marketing is an integrated system that aims to create an impact on consumer choices in a way that prompts and motivates them to switch to demand and consumption of products that are not harmful to the environment and modify their consumer habits in line with environmental situations, as it requires Organizations Work to provide products that live up to the environmental orientation of consumers, in addition to achieving the profit goals of the organization. (Burzak Assia, 2015) indicated that green marketing can be viewed as a translation of the requirements of social and ethical responsibility for marketing, and that it came to light as a response to the growing environmental challenges in the present time. (Al-Halama and Al-Sarayrah, 2009) believes that green marketing is the effort made by organizations to produce, promote, package and present products in a sensitive and more responsive manner to environmental issues.

Based on the foregoing, and based on the definitions that were received, it can be said that all definitions are compatible with each other in their content, which focuses on carrying out marketing activities that are sensitive to environmental aspects and working with an environmental orientation when presenting products to the market. There is no doubt that this orientation does not conflict with the profit goals of organizations. Consumers should also have the necessary awareness towards the environment by consuming products that are less harmful to the environment. So green marketing is an integrated social process between both individuals as consumers and producer organizations.

## **2.2 The concept of green promotion**

It is referred to as providing sufficient information about products in a way that affects the material and moral interests of consumers (Hashem and Al-Rifai, 2011). Green promotion is considered one of the most complex components and elements in the green marketing mix, as it works on translating the organization's messages for marketing its products to consumers to convince them of the goods or services it offers that contribute to preserving the environment, in addition to conveying the environmental orientation and positive image of the organization to its customers (Fahim, 2020). It is considered one of the most difficult elements in the marketing mix because it works to bring about a change in consumer convictions regarding the goods or services it provides. Organizations in all fields constantly need the element of promotion to reach their desired goals. One of the most important of these goals is to create a

positive image among consumers about it, and thus reflect positively on creating demand for its products (Al-Bakri and Hadeel, 2016). It is the effort made by organizations to produce, promote, package and present products in a manner that is sensitive and more responsive to environmental problems (Novera, 2013). Green promotion involves communicating information about environmental commitment and efforts made by companies to preserve their consumers (Shirsavar & Fashkhan, 2013). This element in the marketing mix includes many activities such as advertising, public relations, sales promotion, personal selling, and promotional exhibitions (Fan & Zeng, 2011). The visual image of the product as an aesthetic through packaging can be used as an effective marketing tool when the consumer has no knowledge about the product. Where packaging works to display, protect, identify and describe the product, which makes it possible to promote it, and it is believed that many consumers choose green products through their influence on good packaging made of degradable materials or the possibility of recycling, moreover, they tend to buy products that are compatible with the environment (Jeevarthnam & Tushya, 2016). Thus, the green promotion process in its content does not focus on achieving profit only, but rather goes further and towards how to influence consumers and persuade them to consume environmentally friendly products, through an interactive dialogue that shows what the green product can do to serve the environment and achieve satisfaction at the same time, and to achieve this requires the existence of several means And tools that guarantee its achievement, and among the most important of these means are accurate and correct information, ways to communicate with potential customers, and other promotional activities within the environmental framework (Kumar, 2015). According to the American Marketing Association, green promotion has several marketing aspects, including social and environmental. He defined it as declaring products that seek to be environmentally safe or developing and marketing products that minimize negative effects. In addition to the efforts made by organizations to promote, package and present products in a way that is responsive to environmental concerns (Novera, 2013).

From the foregoing, it can be said that green promotion is the environmental orientation of organizations in the process of marketing their products and trying to attract consumers to buy their products and create demand for them by reducing their environmental concerns by convincing them that their products are healthy and less harmful to the environment, and that the motive of organizations is not only profit but beyond that. To create this effect, it needs several promotional elements, including green advertising, personal selling, sales promotion, public relations and good packaging.

### **2.3 The importance of green promotion**

All promotional operations are within the environmental orientation, in which the common factor is following integrity, transparency and credibility in presenting environmental and health information for products in a manner consistent with real facts (Maroush Ikram, 2016) and to narrow the distance associated with environmental information through promotion, a number of strategies that promote Green environmental orientation entrusted to green organizations (Kinoti M, 2011). Which, in turn, reflects the importance of doing green

promotion for organizations, and the following points show that (Al-Bakri and Al-Banna, 2014):

1. Environmental problems can be solved through green products and by increasing consumer education about them.
2. Enable targeted consumers to reach solutions that help them protect health and preserve the environment through the use of environmental products.
3. Consumers are reassured about the performance of green products, as many of them believe that they are less reliable than traditional products.
4. Enabling environmental consumers to receive environmental messages and make them more receptive to them through an appropriate mix of means of communication through direct marketing, public relations, packaging and others.
5. Highlighting the advantages and benefits of green products through the slogan of consumer self-interest.

#### **2.4 green promotional mix**

The green promotional mix refers to the development and implementation of promotional strategies to promote environmental well-being. Organizations usually refer to the implementation of green policies when it comes to providing products (Thoria, 2018), which refers to the provision of authentic information regarding products in a way that does not affect the material and ethical concerns of marketing. Green promotion includes promotional tools through which affiliates seek to win the trust and trust of the consumer in the product, whether it is a commodity or a service. One of the concerns of green marketing is producing and presenting environmentally friendly products and introducing them through green promotion, which relies on images and principles related to the environmental field and by clarifying the characteristics The environmental problems of the product and the manifestation of the environmental problems and the proposed solutions that they provide, in addition to the profits that can be achieved by the organizations (Sabri, 2020). The elements of the green promotional mix are:

##### **Green advertisement**

The main pillar in the green promotion process is advertising, as organizations often focus within their green promotion strategic efforts on green advertising in order to deliver their environmental messages that customers know about, as it centers on promoting factors related to the environment (Fahim, 2020). Advertising is usually relied upon as a means to remind consumers that the product consists of natural resources suitable for the environment or to show a positive image about the organization that it cares about environmental affairs and that it works towards it directly or indirectly and through three types of green advertisements as advertisements that deal with the relationship between the goods or service with the environment surroundings, or advertisements that promote a green lifestyle and advertisements that present an image of environmental responsibility for the organization (Tiwari et al., 2011). To the target market as the first environmental car in the world, it has published its promotional



messages through which it aimed to educate consumers on the purchase and use of this type of car, which helped to sell 1800 of them immediately. The company relied on a variety of means such as newspapers, the World Wide Web, television, flyers, and billboards (Fahim, 2020). Green advertising is defined as “any advertisement that meets one or more of the following criteria: explicitly or implicitly addressing the relationship between the product/service and the natural environment, encouraging a green lifestyle with or without highlighting the product” (Othman and Siddig, 2017). Or it is the effort that organizations make to deliver their advertising messages to their audience regarding their environmental philosophy and strategies (Al-Samadi, 2008). Green advertising persuades targeted consumers to buy green products by highlighting the environmental and health importance of products and by focusing on the values and culture of environmentally friendly consumption, without neglecting the traditional characteristics of advertising such as the clarity of the idea of advertising, transparency, credibility and frankness (Peter et al, 2022).

### **Sales promotion**

Sales promotion is meant as “all unusual methods in the promotion process that do not fall within the advertising, personal selling or public relations process” (Kotler, 1998). It is also known as those various things that contain a set of stimulating tools, whose effect is quick and short-term, for the purpose of expediting the realization of the purchase of goods by consumers or merchants (Al-Bakri, 2006). The American Marketing Association defined sales promotion as the marketing activities other than personal selling, public relations and advertising that stimulate the effectiveness of consumer or agent purchasing so that it adds value to the product for a specific period of time (Swaidan, 2009). Business organizations should seek to inform customers about the advantages of green products by providing free samples and distributing labels, brochures, and publications that show and highlight their importance (Mustafa, 2018). Like the strategy adopted by Toyota in order to activate its green promotion, it used the mechanism of stimulating sales and by providing attractive offers, discounts and financial incentives that affect the purchase decision. In order to promote and stimulate its sales of environmentally friendly cars, the organization already sells a “Prius” car at approximately the same production cost, which is considered an incentive offer that contributes to revitalizing the sales of this hybrid car (Fahim, 2020).

### **Personal selling**

The personal selling function is one of the tasks practiced by individuals to communicate with others and through the goods or services they provide, and with the development of time it has a promotional role in motivating customers to complete the purchase process and thus stimulating system sales. This is done by relying on influential means such as direct personal conversations or through various means of marketing communications. Personal selling plays an important and essential role in the promotional mix, being the element that ends with the sales process and the customer's interaction with the product (Al-Bakri, 2006). Personal selling can be defined as face-to-face contact with one or more potential buyers in order to carry out the sale (Kotler, 1998). Or it is the process of selecting target consumers and persuading them to buy products through personal contact (Swedan, 2009). They are all steps aimed at defining

and persuading consumers to buy a good or service through a personal communication process. One of the tasks of salesmen is to search for customers, prepare a communication plan with potential buyers, as well as display or present the product in a way that arouses their attention and encourages them to buy it (Ashour and Odeh, 2006). In order for potential consumers to be convinced of the benefits that green products can bring; salesmen must have adequate information about the environmental benefits of green products. Therefore, winning customers depends to a high degree on the sales efforts made by salesmen (Sabri, 2020).

### **Public relations**

Public relations is a basic function or activity within marketing communications, which can be used inside or outside the organization because it is an important tool in achieving communication with the various parties that the organization deals with, whether they are employees or customers. It is an effective tool used in all organizations, whether profitable or not, as long as it seeks to draw a positive image in the environment in which you work (Al-Bakri, 2006). It defined as the art of dealing with the masses or the policy of coping with people to achieve their satisfaction and keep up with them in order to gain their trust and support. It is a planned program of behavior models that aims to build and support public confidence in the organization and increase mutual understanding between them by publishing news through various means of communication, holding special events and participating in public events positively. It leads to building trusting relationships with the internal public, communicating with the external public, and studying and following up on public opinion (Suwaidan, 2006). In order to maintain the general positive image of the organization, public relations is an effective promotional tool. The strength of the organization's communications with the general public through the provided and clear information often achieves the transparency of the organization and proves its credibility and harmony with the public and the environment (Fahim, 2020).

### **2.5 The concept of green consumer purchasing behavior**

Environmental concern has shifted from environmental protection groups to consumers who have become more aware of environmental affairs and more sensitive to its issues, so they have begun to demand more environmentally friendly products (Al Jamal, 2018). And in light of the well-known conditions that countries are going through around the world, and the increase in environmental pollution rates requires highlighting it and increasing the attention of organizations by increasing environmental awareness among consumers by adopting the concept of green marketing (Al-Badrawi, 2008). Therefore, the study of consumer behavior is one of the important topics because it is closely related to the consumer's purchase decision-making process and therefore the products he consumes (Al-Janabi, 2011). Before delving into the concept of green consumer behavior, this type of consumer must be defined, which makes it easier to know his behavior and what affects his purchasing intentions.

The green consumer, or what is called the environmental consumer, whose importance cannot be overlooked in relation to the marketing process, as organizations seek to gain his confidence and satisfaction with his products in general, especially the green ones, as he focuses his



interests on consuming products of an environmental nature. Where (Heba, 2017) sees the green consumer as the consumer who deals with products with environmental characteristics and who has deep environmental awareness and relies mainly on the principles he believes in, which may drive him to buy products that preserve the environment and avoid any products of questionable environmental orientation. The purchasing behavior of this type of consumer can be defined as “the possibility that the consumer will buy a specific product as a result of his environmental needs (Novera, 2013). Mosaedia and Darbush (2021) also referred to consumer behavior as the entire behavior associated with individuals in how they purchase and use various products. (Goods or services), and these behaviors include all the steps followed before the purchase process that may affect the purchasing decision. There are several definitions of consumer behavior, as it is defined as a personal act that is based in essence on the benefit and economic use of goods and services, and includes a number of operations resulting from Achieving the decision for that action (Badrawy, 2008) It was also defined as the attitude of the individual that he expresses when he is affected by an internal or external motive that is commensurate with his unsatisfied needs (Al-Amr, 2005: 146). He is exposed to external or internal stimuli that pushes him to obtain a specific good or service that satisfies his needs and desires. As (Soloman et, 2009) referred to consumer behavior as the steps that individuals follow in choosing, purchasing and using goods, services or ideas that lead to satisfying their needs and desires. Also, it is the purchasing behavior of final consumers who buy goods and services for personal or family consumption (Kotler & Armstrong, 2011). From the above definitions, it can be said that the consumer's purchasing behavior is tantamount to the personal response to internal and external influences and incentives that affect individuals in their purchasing decision-making process. Organizations should try to win the loyalty of customers by paying attention to what consumer’s demand of environmentally friendly products that are compatible with their purchasing behavior, and thus try to win the support of the community, which will increase their sales and future profits.

## **2.6 Factors affecting consumer purchasing behavior**

The consumer's purchase decision-making process is affected by a number of factors and forces that participate in determining his behavior and decide how the consumer behaves when placing the purchase process. Organizations cannot develop their marketing strategies without knowing how the consumer thinks and how the consumer behaves (Suwaidan, 2009). Among the most important of these factors are the following:

### **First: the personal (psychological) effects.**

The actions and choices of individuals are affected by many internal forces such as needs and motives, perceptions, experiences, learning, attitudes, as well as personality characteristics (Swidan, 2009). Motivation is an internal motive that pushes the individual and urges him to a certain behavior to search for a need that satisfies his desires, whether emotional or rational motives (Ashour and Odeh, 2006). Perception can be defined as the mechanism of individual organization of internal and external stimuli and how to interpret them. Therefore, salesmen (marketers) have to pay attention to how consumers respond to products and their awareness of its various aspects such as quality, price, brand, and the image of the product in the mind of

the consumer (Schiffman, 2012). Likewise, the consumer has environmental awareness towards products and various environmental issues related to the environment and ways to preserve it. Contemporary environmental issues largely occupy the consumer's attention, which prompts him to search for green products with environmental preservation properties that reduce the phenomenon of pollution (Al-Bakri and Hadeel, 2016).

### **Second: social and cultural influences**

As long as the environment in which consumers live is characterized by complexity, he is affected by what surrounds him and the prevailing culture in society when choosing the type of product. These factors include social status, family, social class, level of education, groups to which they belong, reference groups and sub-cultures...etc. Based on these factors, consumers decide the activities and actions that they would like to do, the food they eat, or the clothes they wear (Swidan, 2009). Thus, these influences are among the things that are close to the individual and greatly affect his purchasing and consuming behavior. Thus, in its content, it is a continuous knowledge gathering to follow a specific behavior for the individual and is limited to the limits of buying (Al-Bakri, 2006).

### **Third: the economic factors**

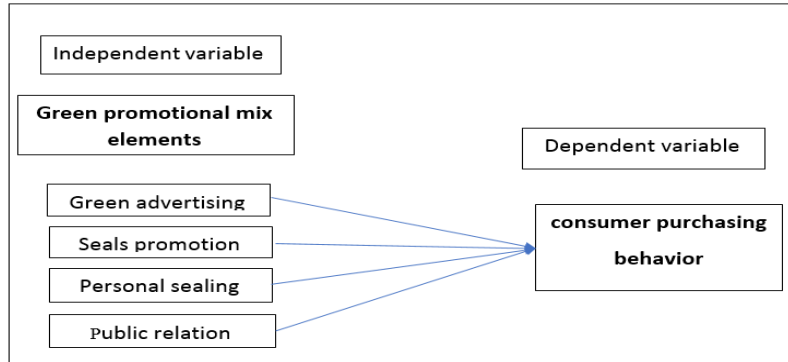
The economic position of the consumer consists of his ability to spend, represented by income. Many economic influences lead the individual to specific purchasing behavior, such as the prices of goods and services, the economic situation such as growth, recession, or stagnation. The person who needs to buy a product will buy it if he is able to spend, so the choice of the individual will be affected by his economic position. Therefore, marketers should note the general trends in people's income, savings, interest rates, etc. (Kotler & Armstrong, 2011). The economic model is based on the interpretation of consumer behavior on the fact that he acts rationally because he possesses complete information about the product and the market, and when he makes the purchase, he balances the benefits he obtains and the sacrifice of what he offers. Therefore, the rational consumer is the one who obtains the maximum capacity for satisfaction and benefit in exchange for the lowest price (Ashour and Odeh, 2006).

## **3. METHODOLOGY**

### **3.1 Introduction**

This chapter includes a description of the study methodology, the study model, design, the study population and sampling. The instrument used, the methods of testing hypothesis, the validity and reliability of the instrument are all the key terms of the chapter. The purpose of this chapter is to provide a clear and complete description of the specific steps and procedures employed in this research for data analysis.

### 3.2 Conceptual Model of the Study



**Figure 1: The study’s conceptual model**

### 3.3 The Research Design:

An explanatory study was made to achieve the objectives of the study and answer the research questions. The study is descriptive to highlight the importance of green promotional mix on consumer purchasing behavior and to point out how this approach can be used to impact on consumers purchasing intentions

### 3.4 The Study Population and Sampling

The study population consists of consumers in general in the markets of the city of Sulaymaniyah - Kurdistan Region of Iraq. A random sample of consumers was selected in this community, and in particular the focus was on those who hold an educational qualification diploma or above, given that environmental awareness is commensurate with the high level of education and the fact that this category of consumers More interested and aware of environmental issues. They were contacted by sending the questionnaire electronically via e-mail and other means of communication such as social networks. A total of 200 questionnaires were distributed to the respondents. And 134 from the questionnaires were returned back that are complete and suitable to be analyzed.

### 3.5 The Instrument Development.

In order to test the research hypotheses and achieve the objectives of the study, a questionnaire was developed as an instrument for data collection by analyzing variety of literature, previous studies and related references to the concept of green promotional mix. The questionnaire was utilized to measure and identify a range of responses within the questions. The questions were coded according to Likert scale which is the most commonly used tool for this purpose. Likert scale model as follows:

**Table 1: Likert scale model**

Answer	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Weight	5	4	3	2	1

The survey questionnaire consists of two sections:

**Section (A)** is for personal information (demographic information) of respondents which includes (gender, age, and level of education).

**Section (B)** is for measurement the hypotheses which include (23) questions distributed by variables for (Green advertising, Sales promotion, Personal selling, Public relations, and Consumer purchasing behavior)

### 3.6 The Instrument Validity And Reliability

To ensure that the questionnaire that was prepared includes all the elements necessary for the analysis and that its paragraphs are clear and honest, it was presented to specialized arbitrators to ensure its suitability for the objectives of the study. Regarding to the suggestions and guidance a reconsidered has been made in some statements by adjusting some and deleting others. For validity, statistical analysis such as correlation was used to know the ability of the measures (questions) to make accurate predictions. And to show the relationship between variables, to know whether the relationship is positive or negative and the strength of relationship. Its numerical value ranges from (0 - 1) which gives us an indication of the strength of relationship. Table 2 shows the overall degree of correlation coefficient (Pearson correlation coefficient) between all the paragraphs of the instrument according to the study variables:

**Table 2: The correlation coefficient of each area of the questionnaire**

#	Instrument variables	Pearson correlation coefficient
1	Green advertising	0.743**
2	Sales promotion	0.861**
3	Personal selling	0.622**
4	Public relations	0.693**
5	Consumer purchasing behavior	0.739**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

For internal consistency reliability of the instrument, Cornbrash's alpha was used to measure the stability of the questionnaire and to ensure the reliability of answers. Which mean re-distribution the instrument (questionnaire) in the same circumstance and conditions, we will get same answer. The value is between 0-1, if the alpha coefficient for the items is  $\geq 0.6$ ; indicate that the items have relatively high internal consistency. The reliability coefficients of the instrument variables are shown in table 3:

**Table 3: The reliability coefficient of each construct of the questionnaire**

#	Variable	Number of Items	Cronbach's alpha
1	Green advertising	5	0.897
2	Sales promotion	5	0.798
3	Personal selling	4	0.847
4	Public relations	4	0.890
5	Consumer purchasing behavior	5	0.899

Given the results recorded in the table 3 shows that the value of alpha coefficient for the five variables (Green advertising, Sales promotion, personal selling, public relations, and consumer purchasing behavior) are 0.897, 0.798, 0.847, 0.890, 0.899 respectively. And the average value of Cronbach's alpha coefficient for all the questionnaire phrases has reached 0.8662 which is a high percentage of constancy, suggesting that the questionnaire phrases are in internal consistency and reliability. That is the reason which makes them fit for study, analysis and draws conclusions.

### 3.7 Data Analysis

#### 3.7.1 Data analysis technique

Data were analyzed using SPSS program version 28.0 For the purpose of answering all the objectives set, the researcher carried out both descriptive and inferential statistics analysis.

- i) Descriptive Statistics to provide the frequencies, percentage, measurement of central tendency (mean) and standard deviation
- ii) The test (Cronbach's alpha); to know the reliability of the questionnaire.
- iii) Pearson correlation coefficient; to measure the sincerity of the paragraphs and correlation between the variables.
- iv) Simple regression coefficient to evaluate the strength of the relationship between one independent variable and one dependent variable.

#### 3.7.2 Correlations between the variables

In research project that included several variables, according to Sekaran (2003), the researcher beyond knowing the mean and standard deviation of the dependent and independent variable would often to know how one variable is related to another. Correlation analysis indicates the nature, direction and significance of the relationship between the variables used in the study. The correlation matrix between dependent variable and independent variable exhibited in table 4 as below:

**Table 1: Pearson Inter-Correlation between the variable**

Variable	Green advertising	Sales promotion	Personal selling	Public relations	Consumer purchasing behavior
Green advertising	1	0.732**	0.681**	0.669**	0.812**
Sales promotion		1	0.745**	0.731**	0.769**
Personal selling			1	0.733**	0.671**
Public relations				1	0.795**

\*\* Correlation is significant at  $p < .01$  level (2-tailed)

Given the results recorded in table 4 above shows that the value of inter correlation between independent and dependent variables was strong. And R-value obtained from inter correlation analysis is between 0.60-0.90 which according to Hinkle et al, (2003) are considered as high (strong) correlation.

### 3.8 Descriptive Analysis

Descriptive analysis was conducted for the independent and dependent variables such as mean, standard deviation, median, frequencies and percentages of respondents' answers and all variables were evaluated based on a 5-point scale.

The mean, median, standard deviations for each variable used in this study are recorded in table as follow:

**Table Error! No text of specified style in document.2: Descriptive statistics of Green Advertising**

Question	Mean	Std. deviation
Green advertising enables me to identify environmentally green products	4.25	0.83
The advertisement explains the environmental dimensions of the most environmentally green products	4.16	0.85
Green advertising influences my decisions to buy green products that are more environmentally	4.11	0.91
The green advertising makes me more interested in environmental matters and encourages me to move towards a green life	3.81	1.03
The green advertising provides information on environmental problems and promotes a sense of responsibility towards the environment	2.73	1.21
<b>Total average</b>	3.81	0.96

Table 5 above shows that independent variable which is green advertising had scored an average of mean (3.81) with standard deviation of (0.96). This indicates that the average degree of the response to this variable increases the degree of neutrality which is 3.

**Table 3: Descriptive statistics of Sales Promotion**

Question	Mean	Std. deviation
Promotions by organizations stimulate the purchase of green products	4.65	0.86
The possibility of trying green products provides the motivation to buy more of them	4.61	0.88
Organizations seek to show the importance of green products by distributing pamphlets and pamphlets showing the importance of their products	4.88	0.82
Organizations provide their products in boxes and packaging that can be recycled	4.88	0.73
Exhibitions and promotions held by organizations encourage the purchase of green products	4.49	0.92
<b>Total average</b>	4.7	0.84

Table 6 above shows that independent variable which is sales promotion had scored an average of mean (4.7) with standard deviation of (0.84). This indicates that the average degree of the response to this variable increases the degree of neutrality which is 3.



**Table 4: Descriptive statistics of Personal Sealing**

Question	Mean	Std. deviation
Salesmen often try to convince consumers to buy environmentally friendly products	4.38	0.80
The salesmen try to remind the consumer of the environmental benefits of the products he is trying to sell	4.23	0.77
Salesmen are often knowledgeable about the products they are trying to sell to the consumer	3.89	0.86
Salesmen try to instill confidence in the consumer in the products he is trying to sell as environmentally	4.21	0.91
<b>Total average</b>	4.1	0.84

Table 7 above shows that independent variable which is personal sealing had scored an average of mean (4.1) with standard deviation of (0.84). This indicates that the average degree of the response to this variable increases the degree of neutrality which is 3.

**Table 5: Descriptive statistics of Public Relation**

Question	Mean	Std. deviation
The consumer learns about green products through associations active in the field of environmental protection	3.25	1.058
Organizations try to highlight the positive images of their products through their employees	3.62	0.972
Organizations hold educational seminars and lectures to deliver sufficient and comprehensive information about their green products	3.65	0.96
Public relations personnel in organizations deal decently and respectfully with potential consumers	2.93	1.171
<b>Total average</b>	3.36	1.04

Table 8 above shows that the independent variable which is public relation had scored an average of mean (3.36) with standard deviation of (1.04). This indicates that the average degree of the response to this variable increases the degree of neutrality which is 3.

**Table 6: Descriptive statistics Consumer Purchasing Behavior**

Question	Mean	Std. deviation
Green (environmentally friendly) products enjoy high quality and reasonable price	3.88	0.867
Green products are more healthy and good for the environment	3.73	0.927
Green products are easy to find in stores and I am willing to pay more to get them	3.75	1.00
I plan to switch to green products that have been advertised as less polluting and safer to use	3.84	0.803
It is best to obtain relevant information about the product before purchasing	3.34	1.012
<b>Total average</b>	3.7	0.92

Table 9 above shows, that the dependent variable which is consumer purchasing behavior had scored an average of mean (3.7) with standard deviation of (0.92). This indicates that the average degree of the response to this variable increases the degree of neutrality which is 3.

### 3.9 Testing the Hypothesis

The hypotheses were tested by regression coefficient to assess the relationship between the dependent and independent variables. Study the impact of green marketing mix elements on the purchasing behavior of consumer

#### 3.9.1 The first hypothesis (main hypothesis)

**H1**= There is no significant effect of green promotional mix on consumer purchasing behavior

This hypothesis was tested by analysis of multiple regression. The table 10 show the results obtained of multiple linear regression.

**Table 7: Result of multiple regression between green promotional mix and Consumer purchasing behavior**

Consumer purchasing behavior	Independent variables: green promotional mix				
	correlation coefficient R	coefficient of determination R <sup>2</sup>	Adjusted R Square	Std. Error of the Estimate	Sig
	0.855	0.732	0.724	3.19231	.000 <sup>a</sup>

According to the results obtained from table 10 shows that the value of correlation coefficient R = 0.855, and this indicates there is a significant linear relationship between green promotional mix and Consumer purchasing behavior. Also, the value of coefficient of determination R<sup>2</sup> = 0.732 mean that 73.2% of Consumer purchasing behavior is due to the application of green promotional mix elements. Which is consumer purchasing behavior can be explained by the four independent variables (Green advertising, Sales promotion, personal selling and public relations). Through the significance value (p-value) is 0.000 which is less than the value of 0.05 (Sig<0.05), mean there is a significant effect of green promotional mix elements on consumer purchasing behavior. Therefore, the null hypothesis will be rejected and the alternative hypothesis accepts which is:

**H1**=There is a significant effect of green promotional mix on consumer purchasing behavior

#### 3.9.2 The second hypothesis

**H2**=There is no significant effect of green advertising on consumer purchasing behavior.

This hypothesis was tested by analysis of simple linear regression and analysis of variance (ANOVA), the table 11 below show the results obtained of simple linear regression and analysis of variance ANOVA to know the effect of green advertising on consumer purchasing behavior.

**Table 11: Result of regression coefficient between green advertising and consumer purchasing behavior**

Dependent variable: consumer purchasing behavior	Independent variables: Green advertising			
	correlation coefficient R	coefficient of determination R <sup>2</sup>	Regression coefficient B	Sig.
	0.633	0.642	0.784	0.000

According to the results obtained from table 11 shows that the value of correlation coefficient  $R = 0.633$ , this indicates there is strong relationship between green advertising and consumer purchasing behavior. Also, the value of coefficient of determination  $R^2 = 0.642$  mean that green advertising can explain about 64.2% of consumer purchasing behavior. In addition, the regression coefficient  $B = 0.784$  confirms the existence of a positive (direct) effect of green advertising and consumer purchasing behavior. And through the Significance value (p-value) is 0.000 which is less than the value of 0.05 the significance level of confidence interval approved ( $Sig < 0.05$ ), means there is a significant effect of green advertising on consumer purchasing behavior. Therefore, the null hypothesis will be rejected and the alternative hypothesis accepts which is:  $H_2 =$  There is a significant effect of green advertising on consumer purchasing behavior

### 3.9.3 The third hypothesis

**H3=** There is no significant effect of sales promotion on the consumer purchasing behavior. This hypothesis was tested by analysis of simple linear regression and analysis of variance (ANOVA), the table below show the results obtained of simple linear regression and analysis of variance (ANOVA) to know the effect of sales promotion on consumer purchasing behavior.

**Table 12: Result of regression coefficient between sales promotion and consumer purchasing behavior**

Dependent variable: consumer purchasing behavior	Independent variables: sales promotion			
	correlation coefficient R	coefficient of determination R <sup>2</sup>	Regression coefficient B	Sig.
	0.678	0.513	1.043	0.000

According to the results obtained from table 12 shows that the value of correlation coefficient  $R = 0.678$ , this indicates there is strong relationship between sales promotion and consumer purchasing behavior. Also, the value of coefficient of determination  $R^2 = 0.513$  mean that continuous improvement can explain about 51.3% of consumer purchasing behavior. In addition, the regression coefficient  $B = 1.043$  confirms the existence of a positive (direct) effect of sales promotion on consumer purchasing behavior. And through the Significance value (p-value) is 0.000 which is less than the value of 0.05 the significance level of confidence interval approved ( $Sig < 0.05$ ), mean there is a significant effect of sales promotion on consumer purchasing behavior. Therefore, the null hypothesis will be rejected and the alternative hypothesis accepts which is:

**H3=** There is a significant effect of sales promotion on consumer purchasing behavior.

### 3.9.4 The fourth hypothesis

H4= There is no significant effect of personal sealing on consumer purchasing behavior. This hypothesis was tested by analysis of simple linear regression and analysis of variance (ANOVA), the table below show the results obtained of simple linear regression and analysis of variance ANOVA to know the effect of personal sealing on consumer purchasing behavior.

**Table 13: Result of regression coefficient between personal sealing and consumer purchasing behavior**

Dependent variable: consumer purchasing behavior	Independent variables: personal sealing			
	correlation coefficient R	coefficient of determination R <sup>2</sup>	Regression coefficient B	Sig.
	0.598	0.576	0.890	0.000

According to the results obtained from the table 13 shows that the value of correlation coefficient R = 0.5980, and this indicates there is strong relationship between personal sealing and consumer purchasing behavior. Also, the value of coefficient of determination R<sup>2</sup> = 0.576 mean that personal sealing can explain about 57.6% of consumer purchasing behavior. In addition, the regression coefficient B = 0.890 confirms the existence of a positive (direct) effect of personal sealing on consumer purchasing behavior. And through the Significance value (p-value) is 0.000 which is less than the value of 0.05 the significance level of confidence interval approved (Sig<0.05), mean there is a significant effect of personal sealing on consumer purchasing behavior. Therefore, the null hypothesis will be rejected and the alternative hypothesis accepts which is:

H4= There is a significant effect of personal sealing on consumer purchasing behavior.

### 3.9.5 The fifth hypothesis

H5= There is no significant effect of public relation on consumer purchasing behavior. This hypothesis was tested by analysis of simple linear regression and analysis of variance ANOVA, the tables below show the results obtained of simple linear regression and analysis of variance ANOVA to know the effect of public relation on consumer purchasing behavior.

**Table 14: Result of regression coefficient between public relation and consumer purchasing behavior**

Dependent variable: consumer purchasing behavior	Independent variables: public relation			
	correlation coefficient R	coefficient of determination R <sup>2</sup>	Regression coefficient B	Sig.
	0.781	0.611	0.971	0.000

According to the results obtained from the table 14 shows that the value of correlation coefficient R = 0.781, and this indicates there is strong relationship between public relation and consumer purchasing behavior. Also, the value of coefficient of determination R<sup>2</sup> = 0.611 mean that public relation can explain about 61.1% of consumer purchasing behavior. In addition, the regression coefficient B = 0.971 confirms the existence of a positive (direct) effect of public relation on consumer purchasing behavior. And through Significance value (p-value)

is 0.000 which is less than the value of 0.05 the significance level of confidence interval approved (Sig<0.05), mean there is a significant effect of public relation on consumer purchasing behavior. Therefore, the null hypothesis will be rejected and the alternative hypothesis accepts which is:

H5= There is a significant effect of public relation on consumer purchasing behavior.

## **4- CONCLUSIONS AND RECOMONDATIONS**

### **4.1 Conclusions**

The study concludes that the application of the elements of green promotional mix has a positive impact on consumer purchasing behavior. This research also revealed that interest to the environment has increased at the global and local levels, especially after the problems aggravated due to its neglect and the damage caused to the individual, society and other living organisms. This interest in the environment by organizations is due to the factors of pressure exerted by the stakeholders and the beneficiaries of its outputs and the existence of awareness of the need to preserve the environment. And organizations adopt the concept of green marketing, emphasizing their environmental orientation, so some organizations have reconsidered their marketing strategies in creating an impact on consumers through the green promotional mix that is commensurate with their objectives by directing consumers towards green products.

In light of the environmental orientation of consumers, the study showed that green advertising affects purchasing decisions, makes them more concerned with environmental matters, and encourages them to move towards a green life. The element of sales promotion enables producers to motivate consumers to buy green products through demo offers or the possibility of trying them through free samples in exhibitions and promotional offers. Personal selling also has a high impact on consumer behavior in the process of purchasing products. Organizations often try to persuade them to buy environmentally friendly products through their salesmen. And because the salesmen are familiar with the information about the products they are trying to sell, they instill confidence in the consumer in the need to buy them with their environmental advantages.

In addition, public relation in organizations have the highest percentage of influence on consumer purchasing decisions. Through them, organizations try to highlight positive images of their products and communicate sufficient information about green products. The consumer prefers to obtain information related to the product before making the purchase. Therefore, organizations should intensify their efforts in establishing a strong relationship with their customers and be honest in fulfilling their promises to the environment and community service, and thus this is reflected in their profitability goals.

## 4.2 Recommendations

Based on findings, the study recommends dissemination the culture of environmental protect among consumers as well as procedures. The need to adopt green marketing in marketing activities to preserve the natural environment. The organizations must coordinate and intensify promotional efforts and pay attention to all its elements in order to have an effective and significant role in directing consumer behavior towards green consumption. Organizations should pay attention to the elements that positively influence consumers to turn towards their green products.

Organizations should focus in their green advertisements on the environmental dimensions of their products and show the environmental problems of traditional products, as well as introducing consumers to environmentally friendly products .The need to hold exhibitions and shows, and the possibility of experimenting with green products in order to push the consumer to buy more of the .Organizations should hire salesmen who are able to convince consumers to buy environmentally friendly products. Work to highlight the positive images of the organization's green products through its employees, and hold educational seminars and lectures to deliver sufficient information about its products and educate public relations employees to deal properly and respectfully with potential consumer.

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