

## أثر التسويق العكسي على القرار الشرائي للمستهلك "دراسة ميدانية على مستهلكي الأكياس البلاستيكية أحادية الاستخدام في أسواق محافظة حماه"

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### الملخص:

هدف البحث إلى تحديد أثر التسويق العكسي بعناصر مزيج (المنتج العكسي، الترويج العكسي، التوزيع العكسي، التسعير العكسي) على القرار الشرائي لمستهلكي الأكياس البلاستيكية أحادية الاستخدام في محافظة حماه. استخدمت الباحثة المنهج الوصفي وقامت بتوزيع 500 استبانة على عينة ميسرة من مستهلكي الأكياس البلاستيكية في محافظة حماه، وقامت الباحثة بتحليل البيانات باستخدام برنامج التحليل الإحصائي (SPSS 28). خلصت الباحثة إلى وجود أثر ذو دلالة إحصائية لجميع عناصر المزيج التسويقي العكسي على القرار الشرائي لمستهلكي الأكياس البلاستيكية أحادية الاستخدام في محافظة حماه. وقدم البحث مجموعة من التوصيات أهمها: الحرص على استخدام التسويق العكسي للحد من استخدام الأكياس البلاستيكية ضمن إستراتيجية اجتماعية وثقافية واقتصادية متكاملة.

**الكلمات المفتاحية:** التسويق العكسي، القرار الشرائي للمستهلك، الأكياس البلاستيكية أحادية الاستخدام.

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## **The Impact of De Marketing on the Consumer's Purchasing Decision "A field study on consumers of single–use plastic bags in the markets of Hama Governorate**

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### **ABSTRACT:**

The research aimed to determine the impact of de marketing with its mix elements (de product, de promotion, de distribution, de pricing) on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.

The researcher used the descriptive approach and distributed 500 copies of questionnaires to a facilitated sample of plastic bag consumers in Hama Governorate. The researcher analyzed the data using the statistical analysis program (SPSS 28).

The researcher concluded that there is a statistically significant impact of all elements of the de marketing mix on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.

The research presented a set of recommendations, the most important of which are: Ensuring the use of De marketing to reduce the use of plastic bags within an integrated social, cultural and economic strategy.

**KEYWORDS:** De marketing, Consumer's Purchasing Decision, single–use plastic bags.

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## 1. Introduction

De marketing is one of the most important contemporary and modern concepts in the field of marketing, and it has received great attention from institutions of various types, especially recently, as a result of the increased demand for some products, and their excessive and irrational consumption. It is considered one of the appropriate strategies for rationalizing consumption and regulating the demand for products, as well as introducing a well-disciplined manner for using certain products in a way that serves the consumers themselves, the organizations, the society, the environment and the economy as a whole.

Based on the above, this research came to study the impact of De marketing on the consumer's decision to buy single-use plastic bags, as they represent the most important factors that contribute to increasing environmental pollution rates in the streets, especially with the inability to recycle these plastic bags, which negatively affects citizens' sense of quality of life, in addition to its impact on important economic sectors such as tourism, which represents one of the basic resources for the economy of most countries.

## 2. Literature Review

2.1 (Afify, 2024): "Customer Perception of De-Marketing Domestic Water Consumption in Egypt". This research aimed to highlight the importance of de-marketing strategies as a mechanism to reduce domestic consumption of water in an effort to face the decreasing supply of water, preserving one of the most important natural resources and at the same time contributing to the efforts of sustainable development. Using the descriptive approach, the study concluded that the water conservation campaigns are effective in influencing individuals to reduce their water consumption in various areas of their daily lives. The research recommended that more de-marketing efforts and education procedures are needed to address the shortage in water. This will help in reducing personal usage of water in households which constitutes a

large percentage of the water demand and hence it will be reflected on the national consumption.

This study agrees with our study in terms of the independent variable, (De marketing), and differs from it in terms of the dependent variable, as this study was concerned with the effect of De marketing on rationalizing water consumption, while our study is concerned with the subject of the purchasing decision regarding plastic bags. They also differ in the application environment.

2.2 (Saleh, 2024): “The effect of De-marketing on the use of single-use plastic bags by shoppers – a field study in the governorates of Upper Egypt”. The study aimed to identify the extent of the impact of De-marketing and the extent of the impact of each element of the De-marketing mix on the use of single-use plastic bags by shoppers in Upper Egypt. Using the descriptive approach, the results of the study came to show that there was a weak effect of De marketing of 52.6%.

This study agrees with our study in the independent variable (De marketing), and differs from it in the dependent variable, as this study focused on the use of plastic bags, while our study relied on the purchasing decision, and the two studies also differ in the application environment.

2.3 (Al-khazraje, 2024): “Using De marketing to Reduce Consumer Addiction and Shift towards a Green Consumer: An exploratory study of the opinions of a sample of soft drink consumers”. This research aimed to discover the impact between de marketing, reducing consumer addiction, and shifting towards the green consumer. Using the descriptive approach. The results of this research revealed a positive moral effect of using de marketing in reducing consumer addiction by encouraging the green consumer.

This study agrees with our study in terms of the independent variable, De marketing, and differs in terms of the dependent variable, as this study focuses on reducing consumers’ spending and shifting to green consumers,

while our study focuses on the purchasing decision of consumers of single-use plastic bags. The two studies also differ in the application environment.

2.4 (Lawrence and Mekoth, 2023): “De marketing for sustainability: A review and future research agenda”. Aimed to enrich the discussion on de marketing research through a systematic and comprehensive review of 64 articles published between 2000 and 2022. Using TCCM framework. Their systematic literature review found that research in de marketing has been growing considerably over the past two decades, twice as much in the last decade compared to the previous decade with spill-over to new sectors. The literature review, through the lens of ‘triple bottom line’ approach, is able to establish that de marketing can be employed to effectively address the sustainability challenges encountered by policymakers and practitioners.

This study agrees with our study in terms of the independent variable, de marketing, and differs from it in terms of the dependent variable, as the previous study was limited to the de marketing dimension, while our study focused on the impact of de marketing on the purchasing decision of consumers of single-use plastic bags.

### **3. Methodology**

The researcher relied on the deductive approach, as a method of thinking. and on the descriptive approach, as a procedural method, by referring to the sources, and periodicals that dealt with the concepts, and elements included in the research, by conducting a literary review of many scientific articles; in order to describe the research variables, to build the theoretical framework of the study, and its proposed model, and the field study by collecting primary data from sample individuals, using the questionnaire as a study tool, and analyzing it on the statistical analysis program Spss version 28, to conduct statistical description and test the research hypotheses.

#### 4. Research Problem

The researcher conducted a survey study, in different areas of Hama Governorate. Noticed the large quantities of plastic bags, thrown on the roads and in landfills, causing great damage, whether in terms of their nature, due to the inability to recycle, or their inappropriate appearance, and their high cost, as their manufacture depends on imported components in foreign currency, which puts great pressure on the already weak economy. Based on the fact that De marketing is a marketing process, but in the opposite direction, and its wise use will reduce the demand for the product temporarily or permanently, and based on previous studies that the researcher has reviewed, the research problem can be summarized in the following main question: What is the impact of De marketing on the purchasing decision of consumers of single-use plastic bags in Hama Governorate?

The following sub-questions branch out from this question:

- 1) What is the impact of the De product as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate?
- 2) What is the impact of the De Pricing as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate?
- 3) What is the impact of the De Distribution as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate?
- 4) What is the impact of the De Promotion as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate?

#### 5. Research Objectives

The research aimed to determine the impact of De marketing on the purchasing decision of consumers of single-use plastic bags in Hama

Governorate through:

- 1) Determining the impact of the De product as one of the elements of the De marketing mix on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.
- 2) Determining the impact of the De Pricing as one of the elements of the De marketing mix on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.
- 3) Determining the impact of the De Distribution as one of the elements of the De marketing mix on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.
- 4) Determining the impact of the De Promotion as one of the elements of the De marketing mix on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.

## **6. Research Importance**

The theoretical importance of the research is highlighted by the scientific enrichment it may add and by providing a theoretical framework for the research variables (reverse marketing, consumer purchasing decision), and indicating the concepts of reverse marketing and purchasing decision and their variables and identifying their nature.

The research derives its practical importance, from the importance of De marketing and the necessity of rationalizing consumer decisions to purchase single–use plastic bags, due to the great importance of this in protecting the environment from pollution, protecting the public health of citizens, as well as protecting foreign currency from leakage abroad to import the materials needed to produce these bags.

## **7. Research Hypotheses**

The main hypothesis of the research is:

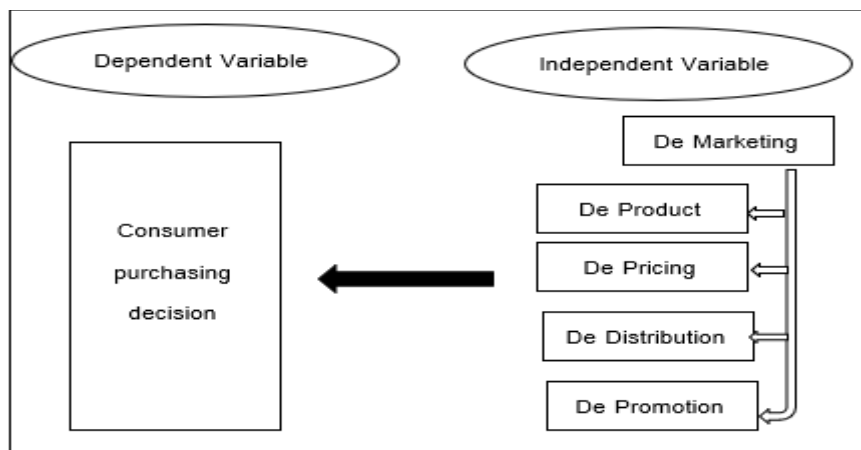
There is no statistically significant impact of De marketing on the purchasing decision of consumers of single–use plastic bags in Hama Governorate.

Emerge from it the following sub-hypotheses:

- 1) There is no statistically significant impact of the De product as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 2) There is no statistically significant impact of the De Pricing as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 3) There is no statistically significant impact of the De Distribution as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 4) There is no statistically significant impact of the De Promotion as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

## 8. Research Variables and Model

The research variables can be represented as follows:



**Figure (1): Research Variables and Model**

## 9. Research Community and Sample

**Research community:** The research community is represented by all consumers of single-sided plastic bags in Hama Governorate. Research

**Sample:** The researcher indicates that the research community is very large



and is constantly increasing; therefore, the random error law of the ratio was relied upon to determine the size of the research sample as follows (Zikmund and Babin, 2012):

$$n = \frac{Z^2 pq}{E^2} = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} \approx 384$$

The standard value of Z corresponding to the 5% significance level is equal to 1.96 and the value of pq is maximum when p=q=0.5. At the 5% accuracy level, the required sample size is 384, which represents the minimum required items that represent the population. After the sample size was determined, a convenient sample of consumers of single-use plastic bags in Hama Governorate selected.

## 10. Study Limitation

### Spatial Limitation

The study conducted within the administrative boundaries of Hama Governorate, in the Syrian Arab Republic, and within its stores and markets.

### Temporal Limitation:

The study conducted during the period between June 2024 and October 2024.

## 11. Theoretical framework of the research

### 11.1 De Marketing

De marketing has continued to draw the attention of academicians and practitioners globally over the past few years. It is interesting to note that De marketing is as old as marketing itself, yet its application and scope have grown from the past two decades only. Kotler and Levy, (1971) has defined de marketing as “that aspect of marketing which deals with discouraging customers in general or a certain class of customers in particular on a temporary or permanent basis” (Lawrence and Mekoth, 2023).

De marketing is expressed as the efforts of reducing demand on a certain product for reasons varying between insufficiency of production to meet

demand, or harmfulness of the product to health or fear of its effects on degrading the economy (Afify, 2024).

#### 11.1.1 De Marketing Strategies

The term De marketing goes back to (Kotler and Levy, 1971) who considered De marketing as one of the types of strategies, and described four strategies as follows (Sahli and Siagh, 2022; Al-Khazraje, 2024):

**General De marketing:** used to adapt to the shortage of supply and thus discourage excess customer demand.

**Selective De marketing:** used to support the segmentation strategy, helping to leave unwanted market segments in order to maintain loyal customers.

**Virtual De marketing:** used to indicate the scarcity of products, creating a perception of the specific supply with the aim of increasing actual demand (artificial scarcity in order to stimulate consumer appetite).

**Unintended De marketing:** when the organization takes measures aimed at increasing demand, but it faces reasons that may lead to a decrease in demand.

#### 11.1.2 De Marketing Mix

The elements of De marketing can be summarized as follows (Salman, 2022; AbdulMotelab et al., 2024):

**De product:** is the one that focuses marketing efforts on reducing the quantity of its sales, by narrowing the production line, reducing the level of services, especially after-sales services.

**De price:** is one of the most flexible elements of the marketing mix, and the De price strategy depends on increasing prices in a way that is not commensurate with the benefits achieved from the product, not giving discounts.

**De promotion:** by stopping promotional campaigns, promoting alternative products, and focusing on promotional activities that urge consumers to rationalize consumption.

**De distribution:** represents the movement of goods and services from the source of production to places where demand occurs. De distribution works to limit the distribution of the product in order to reduce its supply and make the consumer make a great effort to obtain it.

### **11.1.3 Reasons for using De marketing**

Organizations use De marketing for various reasons, the most important of which are (Al-Amouri, 2019; Saleh, 2024):

- 1) The company's inability to provide large quantities of the product to meet the increasing demand.
- 2) Rationalizing the consumption of some high-priced products that are a burden on the national economy.
- 3) Reducing demand for types of products that are harmful to human health or the environment.
- 4) The company's management's desire for the company to have a role in social responsibility.

## **11.2 Consumer Purchasing Decision**

The purchasing decision-making process is an activity carried out by the consumer. It is a continuous process that usually begins from the time the consumer feels the need for the product and desires to buy it, until the purchase is made (Mustafa, 2024). Therefore, the consumer's purchasing decision is represented by choosing an action from several available alternatives (Biercewicz and Włodarczyk 2024), and (Al-Mansour, 2008) defines it as the result of a rational trial to reach a fair and logical price, balanced consumer spending, and the full satisfaction of needs.

purchasing decisions are a main part of consumer behavior that leads to purchasing products or services. In making a purchasing decision, consumers cannot be separated from the factors that influence and motivate consumers to make purchases (Sudirjo et al., 2024).

### **11.2.1 Factors affecting the consumer's purchasing decision**

The consumer's purchasing decision does not come out of nowhere, but rather stems from several variables and factors internal to the individual and others external that make him accept taking steps that lead him to adopt a specific purchasing behavior towards a specific product (Rafiki et al., 2024).

Researchers agree (Ata, 2024; Fletcher and Gbadamosi, 2024) that the most prominent internal factors affecting the purchasing decision are: motives, perception, direction, memory, and personal factors. As for the most prominent external factors that affect the purchasing decision, they are: cultural and civilizational factors, social factors, reference groups, family, and opinion leaders.

### **11.2.2 Stages of consumer purchasing decision**

The majority of researchers in the field of consumer behavior and purchasing decision-making agree that an individual's purchase of the product he needs goes through several stages as follows:

The purchasing process begins when the consumer realizes that he has an unsatisfied need or desire (feeling of need). After the consumer knows the need he wants to satisfy, he begins to collect information about the products that help him make the appropriate decision (search for information). In order for the consumer to make the purchasing decision and be convinced of the product, he compares the available alternatives that he has concluded from the information that has been collected (evaluating the available alternatives). At the end of the above, the consumer decides whether to buy or not (purchase decision).

The purchasing process does not end here, as the consumer seeks to ensure that the choice he made was correct or not (post-purchase behavior) (Abdul Hamid and Ahmes, 2024; The Hebaida, 2024).

From the above, it is clear that the purchasing decision-making process is not an easy process due to the successive activities associated with this

process that do not depend only on the event and guesswork on the part of the decision-maker, but are based on scientific foundations and studies about the problem, the data and information related to it, and the internal and external influences in order to reach the most appropriate decision.

### **11.3 Plastic Bags**

In our modern society, single-use plastic bags have become an integral part of our daily lives. As their consumption increases, they are becoming a growing environmental crisis, with billions ending up in landfills, oceans and seas every year (Hassan, 2024).

Plastic is a Greek word meaning something that can be molded. Plastic is a chain of molecules that are linked together and are known as a polymer. Plastic bags are made of high-density polyethylene (Mahdi, 2024).

According to the United Nations, two-thirds of the plastic materials produced annually are short-lived products that turn into waste in a short time, noting that less than 10% of plastic waste is subject to recycling (Ghanem and Younis, 2024).

Environmental experts warn that the danger of plastic materials is getting out of control, as the plastic problem has become overwhelming, and the dangerous and very small particles are present in the soil, the air we breathe, and the water. The danger of plastic lies in the fact that it contains chemicals that take a very long time to decompose (Ellis et al., 2005).

## **12. Study tool**

The researcher designed a questionnaire to collect the primary data needed for the research. Its design was based on the scales used in previous research, in line with the current research topic and its theoretical framework. A five-point Likert scale was used to measure the meaning of the phrases used in the questionnaire, as follows: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

The researcher distributed 500 questionnaires to a facilitated sample of consumers of single-use plastic bags in Hama Governorate. 420 responses were retrieved, of which 385 were accepted. The researcher analyzed the data using the statistical analysis program (SPSS 28)

### 13. Statistical test using SPSS

#### 13.1 Stability

The results of the questionnaire were re-coded to SPSS version 28 and analyzed according to Alfa Cronbach coefficient. To determine whether the value of the parameter is acceptable to the requirements of search, the paragraphs of the questionnaire must be consistent with values equal to or greater than 0.6 (Sekaran, 2010). Table (1) shows the value of the Stability coefficient.

#### 13.2 Reliability

After the literary review of the studies related to the research variables (De Marketing & consumer purchasing decision), the series of other studies on De Marketing, and field interviews, the researcher consulted academic experts in marketing and management at Al-Wataniya Private University. Based on their directives, phrases in the questionnaire were formulated and modified to achieve the suitability required to measure the research variables.

**Table (1): Stability coefficient of the questionnaire**

Item Names	N of Items	Alfa Cronbach Value
De Product	7	.080
De Pricing	6	.077
De Distribution	5	.084
De Promotion	5	0.81
consumer purchasing decision	10	.086
All questionnaire axes	33	0.88

noted from Table (1) that the values of the alpha-Cronbach reliability factor for the questionnaire more than 0.60, and ranging from (0.77–0.88), which

is a high stability rate acceptable for the purpose of conducting the study (Ghadeer, 2012).

### 13.4 Hypothesis Testing:

#### 13.4.1 Testing the First Sub-Hypothesis

There is no statistically significant impact of the De product as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

To test this hypothesis, the researcher used linear regression analysis and the results were as follows:

**Table (2) Correlation coefficient and determination coefficient to test the first sub-hypothesis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.784 <sup>a</sup>	.614	.302	.35712
a. Predictors: (Constant), De Product				

**Table (3) Analysis of variance to test the first sub-hypothesis**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	2.524	1	2.524	22.649	.000 <sup>b</sup>
	Residual	10.377	383	.135		
	Total	12.901	384			
a. Dependent Variable consumer's purchasing decision						
b. Predictors: (Constant), De Product						

We note from Table (2) that the correlation coefficient reached (0.784), which indicates a direct and acceptable correlation between the first independent variable (De product) and the dependent variable (consumer's purchasing decision), and the coefficient of determination reached (0.614), which indicates that (61%) of the changes in the dependent variable are due to the changes in the independent variable. This means that there is a statistically

significant correlation between the De product and the purchasing decision of consumers of single-use plastic bags.

We note from Table (3) that the significance probability value (Sig = 0.00) is smaller than the significance level (0.05), and accordingly we reject the null hypothesis and accept the alternative hypothesis: There is statistically significant impact of the De product as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

#### 13.4.2 Testing the Second Sub-Hypothesis

There is no statistically significant impact of the De Pricing as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

To test this hypothesis, the researcher used linear regression analysis and the results were as follows:

**Table (4) Correlation coefficient and determination coefficient to test the second sub-hypothesis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756 <sup>a</sup>	.572	.287	.33649
a. Predictors: (Constant), De Pricing				

**Table (5) Analysis of variance to test the second sub-hypothesis.**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	2.279	1	2.279	19.361	.000 <sup>b</sup>
	Residual	10.622	383	.117		
	Total	12.901	384			
a. Dependent Variable consumer's purchasing decision						
b. Predictors: (Constant), De Pricing						

We note from Table (4) that the correlation coefficient reached (0.756), which indicates a direct and acceptable correlation between the first independent



variable (De Pricing) and the dependent variable (consumer's purchasing decision), and the coefficient of determination reached (0.572), which indicates that (57%) of the changes in the dependent variable are due to the changes in the independent variable. This means that there is a statistically significant correlation between the De Pricing and the purchasing decision of consumers of single-use plastic bags.

We note from Table (5) that the significance probability value (Sig = 0.00) is smaller than the significance level (0.05), and accordingly we reject the null hypothesis and accept the alternative hypothesis: There is statistically significant impact of the De Pricing as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

### 13.4.3 Testing the Third Sub-Hypothesis

There is no statistically significant impact of the De Distribution as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

To test this hypothesis, the researcher used linear regression analysis and the results were as follows:

**Table (6) Correlation coefficient and determination coefficient to test the Third sub-hypothesis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764 <sup>a</sup>	.584	.287	.34027
a. Predictors: (Constant), De Distribution				

**Table (7) Analysis of variance to test the Third sub-hypothesis.**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	2.427	1	2.427	20.617	.000 <sup>b</sup>
	Residual	10.474	383	.128		

Total	12.901	384			
a. Dependent Variable consumer's purchasing decision					
b. Predictors: (Constant), De Distribution					

We note from Table (6) that the correlation coefficient reached (0.764), which indicates a direct and acceptable correlation between the first independent variable (De Distribution) and the dependent variable (consumer's purchasing decision), and the coefficient of determination reached (0.584), which indicates that (58%) of the changes in the dependent variable are due to the changes in the independent variable. This means that there is a statistically significant correlation between the De Distribution and the purchasing decision of consumers of single-use plastic bags.

We note from Table (7) that the significance probability value (Sig = 0.00) is smaller than the significance level (0.05), and accordingly we reject the null hypothesis and accept the alternative hypothesis: There is statistically significant impact of the De Distribution as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

#### 13.4.4 Testing the Fourth Sub-Hypothesis

There is no statistically significant impact of the De Promotion as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

To test this hypothesis, the researcher used linear regression analysis and the results were as follows:

**Table (8) Correlation coefficient and determination coefficient to test the Fourth sub-hypothesis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.826 <sup>a</sup>	.682	.656	.56482
a. Predictors: (Constant), De promotion				

**Table (9) Analysis of variance to test the Fourth sub-hypothesis.**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	3.419	1	3.419	31.647	.000 <sup>b</sup>
	Residual	9.482	383	.160		
	Total	12.901	384			
a. Dependent Variable: consumer's purchasing decision						
b. Predictors: (Constant), De promotion						

We note from Table (8) that the correlation coefficient reached (0.826), which indicates a direct and acceptable correlation between the first independent variable (De Promotion) and the dependent variable (consumer's purchasing decision), and the coefficient of determination reached (0.682), which indicates that (68%) of the changes in the dependent variable are due to the changes in the independent variable. This means that there is a statistically significant correlation between the De Promotion and the purchasing decision of consumers of single-use plastic bags.

We note from Table (9) that the significance probability value (Sig = 0.00) is smaller than the significance level (0.05), and accordingly we reject the null hypothesis and accept the alternative hypothesis: There is statistically significant impact of the De Promotion as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

#### **13.4.5 Testing the main hypothesis**

H<sub>0</sub>: There is no statistically significant impact of De marketing on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

To test this hypothesis, the researcher conducted a multiple regression analysis of the effect of all elements of the De marketing mix combined on the purchasing decision of consumers of single-use plastic bags. The results were as follows:

**Table (10) Results of the multiple regression analysis**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	DF1	DF2	Sig.F Change
1	.776	.602	.599	.617	.602	25.901	1	383	.000

We note from Table (10) that the value of the correlation coefficient is (0.776), which means that the relationship is direct and acceptable between all elements of the De marketing mix combined and the purchasing decision of consumers of single-use plastic bags. The value of the coefficient of determination was (0.602), which indicates that (60%) of the changes in the dependent variable (the consumer's purchasing decision) are due to changes in the independent variable (all elements of the De marketing mix combined). Table (10) also shows that the value of the coefficient of variation was (25.901) at the probability value (Sig = 0.05), which is smaller than the significance level ( $\alpha = 0.05$ ), which means that the correlation is significant, and therefore we reject the main hypothesis and accept the alternative hypothesis: there is a statistically significant impact of De marketing on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

#### 14. Results and discussion

The study reached the following Results:

- 1) The problem of Plastic waste is considered extremely important by the majority of respondents (more than 71%).
- 2) Nearly 60% of respondents believe that Plastic waste conservation efforts can reduce the amount of single-use plastic bags they use.
- 3) Women are more likely to give up plastic bags in favor of paper bags than men.

- 4) There is statistically significant impact of the De product as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 5) There is statistically significant impact of the De Pricing as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 6) There is statistically significant impact of the De Distribution as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 7) There is statistically significant impact of the De Promotion as one of the elements of the De marketing mix on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.
- 8) There is statistically significant impact of the De Marketing on the purchasing decision of consumers of single-use plastic bags in Hama Governorate.

## **15. Conclusion**

This study concluded that there is an impact of De marketing on consumers' decision to purchase single-use plastic bags, and that the use of intensive promotional campaigns in this area will have the greatest impact in reducing the consumption of this product. This study confirms that De marketing policies are not followed same in all Syrian regions and markets, as each region has its own cultural characteristics and consumer behavior, by ensuring the use of De marketing to reduce the use of plastic bags within an integrated social, cultural and economic strategy.

## References

- [1] Rafiki, S. Hidayat, M. Nasution, “An extensive effect of religiosity on the purchasing decisions of halal products”, PSU Research Review, vol. 8, No. 3, pp. 898–919, 2024.
- [2] A. fify, “Customer Perception of De-Marketing Domestic Water Consumption in Egypt”, The Scientific Journal of Business and Finance, vol. 44, No. 1, pp. 136–180, 2024.
- [3] A. Mustafa, “The impact of Facebook ads on consumers’ purchasing decisions: an analytical study in light of previous studies”, 662–706, 2024.
- [4] A. Ghanem, E. Younis, “The impact of customer-participated production on achieving innovation priority, applied to plastic shopping bag factories in Dahaklia Governorate” Raya International Journal of Business Sciences, vol. 3, No. 9, pp. 274–302, 2024.
- [5] B. Abdul Hamid, B. Ahmed, “The effect of electronic marketing on the consumer's purchasing decision. A survey study on a sample of Ali Express website users”, Master's thesis, University of Biskra, Algeria, 2024.
- [6] B. GHADEER, “The Basic Approach To Analyzing Data Using IBM SPSS 20 Statistics, The Mechanism Of Using The Program In Conducting Scientific Research Through Examples”. Syria, Part one, 1<sup>nd</sup>.ed, p 290, 2012.
- [7] B. GHADEER, “The Basic Approach To Analyzing Data Using IBM SPSS 20 Statistics, The Mechanism Of Using The Program In Conducting Scientific Research Through Examples” Syria, Part Two, 1<sup>nd</sup>.ed, p284, 2012.
- [8] Ellis, S. Kantner, S. Saab, A. & Watson, M. "Plastic grocery bags: The ecological footprint", BC Vipirg, 1–19, 2005.
- [9] F. Sudirjo, C. Paramita, I. Yani, M. E. Utami, “The Influence of Business Location and Word of Mouth on Purchasing Decisions”, Reslaj:

Religion Education Social Laa Roiba Journal, vol. 6, No. 3, pp. 2369–2377, 2024.

- [10] H. AbdulMotelab, N. Eid, H. El-Akhras, “The Impact of De-Marketing on Sustainable Tourism Development (An Applied Study on the Ras Muhammad Reserve in South Sinai)”, Journal of Association Arab Universities for Tourism and Hospitality (JAAUTH), vol. 26, No. 2, pp. 158–178, 2024.
- [11] H. Al-Mansour, “Brand image and consumer loyalty”, Algerian Journal of Economics and Management, vol. 22, No. 3, 2008.
- [12] J. Lawrence, N. Mekoth, “De marketing for sustainability: A review and future research agenda”, international journal of Consumer Studies. 2023.
- [13] J. Lopes, M. Pinho, S. Gomes, “From green hype to green habits: Understanding the factors that influence young consumers' green purchasing decisions”, Business Strategy and the Environment, Vol. 33, No. 3, 2024.
- [14] K. Biercevic, K. Włodarczyk, “CONSUMER EMOTIONS, PURCHASING DECISIONS, SHOPPING TIME, AND PATHS IN VIRTUAL REALITY”, Human Technology Journal, vol. 20, No. 2, pp. 399–415, 2024.
- [15] K. Fletcher, A. Gbadamosi, “Examining social media live stream’s influence on the consumer decision-making: a thematic analysis”, Electronic Commerce Research Journal, vol. 24, pp. 2175–2205, 2024.
- [16] K. Sahli, A. Siagh, “The Role of De marketing to rationalize electricity consumption for the residential sector .A case study of a sample to residents of Ouargla – Algeria”, Algerian Institutions Performance Journal, vol. 11, No. 1, 2022.
- [17] R. Al-Amouri, “The role of De marketing strategies in rationalizing electricity consumption, applied to the General Electricity Company, Al-

- Zawiya City, Libya”, Journal of Human and Society Studies, vol. 7, pp. 1–30, 2019.
- [18] M. Saleh, “The effect of De-marketing on the use of single-use plastic bags by shoppers – a field study in the governorates of Upper Egypt”, Scientific Journal of Financial and Commercial Studies and Research, vol. 5, No. 1, pp. 758–800, 2024.
- [19] M. Mahdi, “The risks of plastic pollution and its effect on the environment. A case study of the city of Derna after the flood” Almanara Scientific Journal, No. 6, pp. 13–47, 2024.
- [20] M. Al-khazraje , “Using De marketing to Reduce Consumer Addiction and Shift Towards a Green Consumer: An exploratory study of the opinions of a sample of soft drink consumers”, Tikrit Journal administrative and economics sciences, vol. 20, No. 66, pp. 1–20, 2024.
- [21] N. The Hebaida, “Using graphic design elements for social media advertisements and their relationship to the Kuwaiti consumer’s purchasing decision-making”, Journal of Faculty of Arts Research, pp. 1–23, 2024.
- [22] O. Hassan, “The Reuse of Plastic Bags Waste in Visual Arts”, Heritage & Design Journal, vol. 4, No. 1, pp. 278–295, 2024.
- [23] P. Kotler, S. Levy, “De Marketing: how to reduce the demand”, the New York Times, 1974.
- [24] P. Kotler, S. Levy, “De Marketing? Yes De Marketing” Harvard Bus Rev, pp. 74–80, 1971.
- [25] W. ZIKMUND, B. BABIN, “Essentials of Marketing Research”, United States of America: Cengage Learning, p 357, 2012.