# The influence of applying green marketing mix by chemical industries companies in three Arab States in West Asia on consumer's mental image

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## Abstract

*The purpose this study aims at investigating the influence of applying green marketing elements mix (product, pricing, distribution and promotion) by chemical industries companies in three countries in West Asia on consumer's mental image. As well as, to find out if there are differences in applying green marketing mix elements by chemical industries companies on consumer's mental image according to country, gender, age ,educational level and income.The design of this research is descriptive and quantitative in nature. The study population consisted of citizens in three Arab States in West Asia (Jordan, Kuwait and Syria) that represent three different types of economies; free economy, free economy depends mainly on oil and socialist economy respectively. A convenience sample of (450) customers was chosen (150 from each country). Statistical analysis reveled that there applying green marketing mix elements by chemical industries companies in all countries on the consumer's mental image is significant. We found that applying green marketing mix elements by the chemical industries companies in three countries on consumer's mental image is significant ($p < 0.05$) according to country, gender and age only.*

**Implications**: *Chemical industries companies have to improve their products and develop them to be environmentally friendly products, also there is a bad need to raise public awareness of green marketing importance in chemical industries companies. Besides, companies should work on establishing a special department of environmental complaints that may be caused by chemical industries companies to do address them.*

**Key words:** Green marketing mix, chemical industries, mental image, green product

## Introduction:

The green marketing concept emerged as a result of organizations' interest of environment. They realized that their survival and continuity lie in coordination between interest of the organization and benefit of consumer and society. Realization of this consistency between these three interests indicates to organizations' awareness with the importance of applying green marketing that helps them to survive and continue on the long run. The organization responsibility towards society tends to create better social environment which benefits the organization in the long run, because successful organization needs stable environment.In spite of increasing interest of green marketing concept and its implication in western countries and researches interest and thoughts that serve this fields, this concept did not find sufficient concern in Arab countries, where some organizations did not play a serious role to solve environmental problems properly.

Green marketing supplies products that respond to the needs of the targeted consumers as well as environment requirements. Therefore, this study aims at knowing the influence of applying green marketing mix elements (product, pricing, distribution and promotion) by chemical industries companies in three Arab States in West Asia on consumer's mental image.Nowadays organizations face large challenges; the most prominent is realization a competitive advantage that distinguishes them from their competitors. Therefore, study's statement is represented by the extent of chemical industries companies' commitment in three Arab States in West Asia toward applying green marketing concept with its four elements: product, pricing, distribution and promoting and its impact on consumer's mental image about it, which can be expressed through the following questions:

1- What is the influence of applying green marketing mix elements (product, pricing, distribution and promotion) by chemical industries companies in three Arab States in West Asia on consumer's mental image?

2- Are there differences in effect of applying green marketing mix elements (product, pricing, distribution and promotion) by chemical industries companies in three Arab States in West Asia on consumer's mental image according to country, gender, age, educational level, and income?

Organizations currently face many challenges, the most prominent ones are those related to environment, therefore, it became very important to be concerned with these challenges in the form that display environmental role of those organizations in front of customers, and to increase and improve their competitive advantage in the targeted market.Therefore, study significance lies in handling one of most prominent subjects in marketing field (green marketing) and its influence on marketing elements mix on the consumer's mental image.The study is conducted in chemical industries sector. The objective of this research is to find the influence of applying green marketing elements mix by chemical industries companies on the consumer's mental image and to determine if there are differences in effect of applying green marketing mix elements. Also, to enrich the library with field studies and assisting the researchers to deepen knowledge of green marketing in Middle East countries.

## Literature Review:
### Green marketing

Green marketing is identified as any marketing activity, related to a certain organization, aims at creating negative influence or removing negative influence for a certain product on environment (Stanton et al, 1997). Kotler and Keller (2006) identified green marketing as the movement which is directed towards organizations production of products responsible environmentally. The customers' choices products are based on a mix of characteristics that distinguish the product that satisfy their needs based on the dimension of value, cost and satisfaction (Kotler, 1997).The product features include either main features that provide basic benefits required by customers or secondary or marginal features that provide complementary elements and important benefits in order to provide value added and advantage (Zikmund and d'Amico, 1993, Fuller, 1999). It is difficult to find an industry that does not harm the environment 100%. But there are some products that can be called "environment friendly", if these products aim at limiting the environmental negative effects (Hindle etal, 1993, Pujari and Wright, 1996). This can be achieved either through technology quality used in manufacturing or through raw materials quality used in manufacturing or through concentration on reducing production environmental pollution.

Manaktola & Jauhari, (2007), indicated in their study regarding the factors that influence customers trends and behaviors towards practices applied Indian entertainment industry in that customers prefer dealing with hotels that are environment concerned. Johri and Sahasaknontri (1998) study argued that big companies in Thailand adopt green marketing philosophy in an honest manner after they succeeded in increasing environmental awareness between customers in Thailand and positive trends towards green products. Straughan & Robert, (1999) study reported that psychological variables were more important than demographic variables with regard to market division within green marketing concept, where psychological dimension was more appropriate to increase environmental awareness and consumption trends which are committed environmentally. Also, Kufman, (1999) emphasized the importance of environmental issues in business world in USA,  that green marketing is a marketing opportunity for businesses more than it is an environmental necessity, where customers trends towards green goods are positive. Guraˇu, & Ranchhod, (2005), compared between six British companies and six Romanian companies with regard to presentation of environment friendly products. They found that the Romanian companies concentrate in presenting their products on asking for help of foreign mediators, in the contrast British companies which their trade marks and concentrate on distribution of their products.This study is concentrated on four green marketing elements (product, pricing, distribution and promotion).

### Elements of the green marketing mix (Al-Bakry, 2007):

1- **The green products:** Green products are products that respond to environment needs and requirements. As the customer's needs are necessary to improve and develop products, the customer needs in an environment more safe and healthy are also important and should be considered.

2- **The green pricing:** The green pricing refers to the price specified in the light of company's policies with regard to environmental consideration imposed by rules and company instructions or its initiatives in this regard.

3- **The green distribution:** This is related to distribution gates use that deal with green products, which are appropriate for consumers, in terms of facilitating their delivery, and to secure cycling procedures conducting within environmental conditions and requirements.

4- **The green promotion:** This refers to providing real information about the products in a way that does not hurt the materialistic and moral consumers' interests.

**Mental image**

It is argued that corporate image is what comes to mind when travelers hear the name of a place, a hotel or a restaurant (Nguyen, 2006). Customers tend to deal with organizations that have images consistent with their own self images (Schiffman & Kanuk, 1997, p.171). Also, it is defined as the way the public perceives the company or its products (Kotler & Keller., 2006). It is related to business name, architecture, variety of products/services, tradition, ideology, and to the impression of quality communicated by each person interacting with the organization's clients (Nguyen, 2006). Also the product image contains different associations including product's physical properties and attributes as well as the benefits and feelings that come from product consumption (Blackwell et al. , 2001) .Meanwhile,  Corporate image may be considered as ''a function of the accumulation of purchasing/consumption experience over time'' (Andreassen and Lindestad, 1998, p. 84)

According to the previous theoretical framework we suggested the following hypothesis to be tested :

**Study's hypotheses:**

**The first main hypothesis:**

Ho:  there is no statistical influence at (0.05) level of applying green marketing mix elements (product, price, distribution and promotion) by chemical industries companies in three Arab States in West Asia on consumer's mental image.

The following sub hypotheses are derived from the first main hypothesis

**The first sub hypothesis:**

Ho: there is no statistical influence at (0.05) level of applying green marketing mix element (product) by chemical industries companies in three Arab States in West Asia on the consumer's mental image**.**

**The second sub hypothesis:**

Ho:  there is no statistical influence at (0.05) level of applying green marketing mix element (price) by chemical industries companies in three Arab States in West Asia on the consumer's mental image.

**The third sub hypothesis:**

Ho:  there is no statistical influence at (0.05) level of applying the green marketing mix element (distribution) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image.

**The fourth sub hypothesis:**

Ho:  there is no statistical influence at (0.05) level of applying green marketing mix element (promotion) by chemical industries companies in three Arab States in West Asia on the consumer's mental image.

**The second main hypothesis**

Ho: there are no statistical differences at (0.05) level in the influence of applying green marketing mix elements (product, pricing, distribution and promotion) by chemical industries companies in three Arab States in West Asia on the consumer's mental image according to (country, gender, age ,educational level and income)

**Study's Methodology**

The design of this research is descriptive and quantitative in nature.

The primary data was self administrated questionnaire which was designed and distributed to the study's sample .The questionnair consisted of (21) statements as follows: the first set consisted of (15) statements represent elements of green marketing. For this purpose some measurements related to the green marketing fields, used by others such as (Johri & Sahasakmontri, 1998) by which they measured the dimensions of the green marketing. The second set included (7) statements represent the realization of the consumer's mental image.The research depended mainly on indicators identified by (Porter, M.E, 1998), such as Likert criterion which is consisted of five degrees using a scale from one to five, where one mean strongly disagree and five mean strongly agree. The Secondary data was collected from various resources such as: books, journals newspapers, and the internet. The main advantage of secondary data is saving time and money since it is much less expensive to use secondary data than to collect the same.

## Data Analysis

The study population consisted of citizens from Jordan, Kuwait and Syria. A convenience sample of (450) customers was chosen (150 from each country). The researchers had chosen these three countries because they represent three different types of economies which are: (free economy, free economy depends mainly on petrol and Socialist economy) respectively. All statistical analyses were conducted using SPSS version 15 for windows. Gathered data was coded and analyzed through using descriptive statistics. Multiple regressions was used to test first hypothesis and simple regression was used to test the rest of sub- hypothesis (1-4), as well as using ANOVA to test the fifth sub- hypothesis. The questionnaire has been evaluated by panel of instructors from Jordanian, Syrian and Kuwaiti universities. Their remarks and comments were taken into consideration. Also, factor analysis was used to further testing the validity of the questionnaire and the results show that the questionnaire is valid. Cronbanch Alpha was used to test the reliability of the scale and α was (0.944) for questionnaire which is good because it is more than accepted percent (0.60). Also α was (0.887) for the product scale, (0.693) for price scale, (0.819) for distribution scale, (0.917) for promotion scale, and (0.897) for mental image scale. These values also are good because they are greater than accepted percent (0.60) (Malhotra, 2004, p.268)

### Characteristics of the Sample:

The sample distribution according to the demographic variables was as follows: with respect to sex the majority of the three samples are males and the rest are females. Also, most of the subjects are between (25-30 years) in Syria and Kuwait but they are between (36-40) years in Jordan. Moreover, most respondents have an income less than 1000$ in Jordan and Syria meanwhile it is more than 2000$ in Kuwait. As for educational levels, most of the three samples have Bachelor degree. (see tables A.1-A.4 in the appendix)

### Analysis Discussions

Means and Standard Deviations were used to describe attitudes towards green marketing elements, the results in Table (A.5) indicated that there are positive attitudes, because means of all statements are more than the virtual mean (3), except statement no. (6). Also, a quick review of the analysis reveals clearly that Jordanian sample has the highest positive attitudes toward Green marketing elements (product and price) meanwhile, Syrian sample has the highest positive attitudes toward Green marketing (distribution and promotion) With respect  to attitudes toward Customers' mental image the results in table (A.6) indicated positive attitudes toward all statements because means are more than the virtual mean (3), except statement (1) moreover the results reveals clearly that Jordanian sample has the highest positive attitudes toward customers' mental image, then Syrian sample and finally Kuwaiti sample.

### Hypothesis Testing:

Multiple regression test were used to test the study first main hypotheses, the test results shows in table (A.7) with respect to the first main hypothesis that (calculated F = 10.822) is significant at (0.01) level. This means that the null hypothesis Ho is rejected and accepts the alternative one $H_o$. So that there is a statistical influence at (0.05) level of applying green marketing mix elements (product, price, distribution and promotion) by chemical industries companies in three Arab States in West Asia on consumer's mental image. This impact is high because Pearson Correlation is 70.3%. Also, by using stepwise regression, promotion element has the highest effect on customers' image then product, distribution (place) and finally price. From the  first main hypothesis, other four sub hypothesis were derived and tested by using t-tests, the results indicated with respect to the first sub hypothesis that (calculated t = 13.239) is significant at (0.01) level. This means that there is a statistical influence at (0.05) level of applying green marketing mix element (product) by chemical industries companies in three Arab States in West Asia on consumer's mental image. This impact is moderate because Pearson Correlation is 53%.

With regards to the second sub hypothesis, results also indicate that (calculated t = 11.093) is significant at (0.01) level. So that there is a statistical influence at (0.05) level of applying green marketing mix element (price) by chemical industries companies in three Arab States in West Asia on the consumer's mental image. This impact is moderate because Pearson Correlation is 46.4%.As for the third sub hypothesis the results indicate that (calculated t = 17.243) is significant at (0.01) level. So that there is a statistical influence at (0.05) level of applying green marketing mix element (distribution) by chemical industries companies in three Arab States in West Asia on consumer's mental image. This impact is high because Pearson Correlation is 63.2%.
Finally, with respect to the fourth hypothesis the results also reveal that (calculated t = 18.48) is significant at (0.01) level. So that there is a statistical influence at (0.05) level of applying green marketing mix element (promotion) by the chemical industries companies in three Arab States in West Asia on consumer's mental image. This impact is high because Pearson Correlation is 65.8%.

With respect to the second main hypothesis ANOVA was used to test this hypothesis. Table (A.8) shows that calculated F values are significant at (0.05) level, for the variables (country, gender and age). So that there are statistical differences at (0.05) level in the effect of applying the green marketing mix elements (product, pricing, distribution and promotion) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image according to country, gender and age only.By using Scheffe test, it was found that these differences tend to increase toward Jordanian sample, females and age (36-40) years old, which means that the effect of applying the green marketing mix elements (product, pricing, distribution and promotion) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image will increase for these criteria.

## *Conclusions*

Based on the above mentioned analysis the following results are concluded:

1) There are positive attitudes toward Green marketing mix elements, except question 6 (the company is keen to specify low prices for its chemical products) which has negative attitudes from the Kuwaiti sample.
2) Jordanian sample has the highest positive attitudes toward Green (product and price) elements meanwhile, Syrian sample has the highest positive attitudes toward Green (distribution and promotion ) elements
3) There are positive attitudes toward customers' mental image, except question 1 (I have the full information about the chemical products companies participation in the field of green marketing.) which has negative attitudes from the Kuwaiti sample
4) Jordanian sample has the highest positive attitudes toward customers' mental image, then Syrian sample and finally Kuwaiti sample.
5) There is a statistical influence at (0.05) level of applying the green marketing mix elements (product, price, distribution and promotion) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image. This impact is high because Pearson Correlation is 70.3%.
6) The promotion element has the highest effect on customers' image then product , distribution (place) and finally price
7) There is a statistical influence at (0.05) level of applying the green marketing mix element (product) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image. And this impact is moderate because Pearson Correlation is 53%.
8) There is a statistical influence at (0.05) level of applying the green marketing mix element (price) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image. This impact is moderate because Pearson Correlation is 46.4%.
9) There is a statistical influence at (0.05) level of applying the green marketing mix element (distribution) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image. This impact is high because Pearson Correlation is 63.2%.
10) There is a statistical influence at (0.05) level of applying the green marketing mix element (promotion) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image. This impact is high because Pearson Correlation is 65.8%.
11) There are  statistical differences at (0.05) level in the effect of applying the green marketing mix elements (product, pricing, distribution and promotion) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image according to country, gender and age only.
12) The effect of applying the green marketing mix elements (product, pricing, distribution and promotion) by the chemical industries companies in three Arab States in West Asia on the consumer's mental image will increase for these criteria (Jordanian sample, females and age (36-40) years old).

## *Recommendations*

1. Chemical industries companies have to improve their products and develop them to be friendly products to environment.
2. The need to raise public awareness of the importance of green marketing in chemical industries companies.
3. Work on establishing a special department of environmental complaints that may be caused by chemical industries companies to do address them.
4. Chemical industries companies should determine low prices on chemical products in the State of Kuwait.

5. Promotional campaigns should be conducted to highlight the role of Chemical industries companies in the application of green marketing in order to serve the surrounding community.
6. More studies in this field will provide more information about obstacles and limitations faced by Chemical industries companies to increase their level of applying green marketing strategies.

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**Appendix:**

Table (A.1): Sex characteristic distribution of the sample

**sex * country Crosstabulation**

| | | | country | | | Total |
|---|---|---|---|---|---|---|
| | | | syria | kuwait | jordan | |
| sex | male | Count | 82 | 84 | 95 | 261 |
| | | % within country | 54.7% | 56.0% | 63.3% | 58.0% |
| | female | Count | 68 | 66 | 55 | 189 |
| | | % within country | 45.3% | 44.0% | 36.7% | 42.0% |
| Total | | Count | 150 | 150 | 150 | 450 |
| | | % within country | 100.0% | 100.0% | 100.0% | 100.0% |

Table (A.2): Age characteristic distribution of the sample

**age * country Crosstabulation**

| | | | country | | | Total |
|---|---|---|---|---|---|---|
| | | | syria | kuwait | jordan | |
| age | less than 25 years | Count | 8 | 23 | 19 | 50 |
| | | % within country | 5.3% | 15.3% | 12.7% | 11.1% |
| | 25-30 years | Count | 63 | 30 | 18 | 111 |
| | | % within country | 42.0% | 20.0% | 12.0% | 24.7% |
| | 31-35 years | Count | 11 | 17 | 25 | 53 |
| | | % within country | 7.3% | 11.3% | 16.7% | 11.8% |
| | 36-40 years | Count | 25 | 17 | 39 | 81 |
| | | % within country | 16.7% | 11.3% | 26.0% | 18.0% |
| | 41-45 years | Count | 15 | 10 | 27 | 52 |
| | | % within country | 10.0% | 6.7% | 18.0% | 11.6% |
| | 46-50 years | Count | 15 | 22 | 15 | 52 |
| | | % within country | 10.0% | 14.7% | 10.0% | 11.6% |
| | above 50 years | Count | 13 | 31 | 7 | 51 |
| | | % within country | 8.7% | 20.7% | 4.7% | 11.3% |
| Total | | Count | 150 | 150 | 150 | 450 |
| | | % within country | 100.0% | 100.0% | 100.0% | 100.0% |

Table (A.3): Educational level characteristic of the sample

**educational level * country Crosstabulation**

| | | | country | | | Total |
|---|---|---|---|---|---|---|
| | | | syria | kuwait | jordan | |
| educational level | less than secondary | Count | 5 | 12 | 2 | 19 |
| | | % within country | 3.3% | 8.0% | 1.3% | 4.2% |
| | secondary | Count | 9 | 14 | 4 | 27 |
| | | % within country | 6.0% | 9.3% | 2.7% | 6.0% |
| | deploma | Count | 33 | 25 | 14 | 72 |
| | | % within country | 22.0% | 16.7% | 9.3% | 16.0% |
| | Bachelor | Count | 87 | 91 | 98 | 276 |
| | | % within country | 58.0% | 60.7% | 65.3% | 61.3% |
| | master | Count | 9 | 3 | 20 | 32 |
| | | % within country | 6.0% | 2.0% | 13.3% | 7.1% |
| | PHD | Count | 7 | 5 | 12 | 24 |
| | | % within country | 4.7% | 3.3% | 8.0% | 5.3% |
| Total | | Count | 150 | 150 | 150 | 450 |
| | | % within country | 100.0% | 100.0% | 100.0% | 100.0% |

Table (A.4): Income characteristic of the sample

**income * country Crosstabulation**

| | | | country | | | Total |
|---|---|---|---|---|---|---|
| | | | syria | kuwait | jordan | |
| income | less than 1000$ | Count | 135 | 45 | 99 | 279 |
| | | % within country | 90.0% | 30.0% | 66.0% | 62.0% |
| | 1000-1500$ | Count | 15 | 31 | 40 | 86 |
| | | % within country | 10.0% | 20.7% | 26.7% | 19.1% |
| | 1501-2000$ | Count | 0 | 24 | 8 | 32 |
| | | % within country | .0% | 16.0% | 5.3% | 7.1% |
| | above 2000$ | Count | 0 | 50 | 3 | 53 |
| | | % within country | .0% | 33.3% | 2.0% | 11.8% |
| Total | | Count | 150 | 150 | 150 | 450 |
| | | % within country | 100.0% | 100.0% | 100.0% | 100.0% |

Table (A.5): Attitudes toward green marketing mix elements

| Questionnaire | Syria | Kuwait | Jordan |
|---|---|---|---|
| | **Mean (STD. DIV.)** | | |
| **The Product** | **3.88 (0.71)** | **3.47(1.02)** | **3.99(0.97)** |
| 1- Make products free of strong toxicity materials. | 3.95 (0.74) | 3.77(1.22) | 3.80(1.25) |
| 2- Make Products refills do not cause damage to the environment. | 3.86(0.86) | 3.63(1.31) | 4.10(1.14) |
| 3- There effective control on the chemical Product that are Produced by the company. | 3.86(0.85) | 3.35(1.36) | 3.90(1.11) |
| 4- The Company Concentrates on Producing the chemical products carry the Least percentage of the adverse reflections on the human beings. | 3.91(0.76) | 3.33(1.29) | 3.90(1.11) |
| 5- The company contribute, in producing chemical products with little gas emissions. | 3.80(0.87) | 3.25(1.33) | 4.27(0.97) |
| **The price** | **3.54 (0.80)** | **3.09(0.81)** | **3.69(1.13)** |
| 6- The company is keen to specify low prices for its chemical Products. | 3.64(1.00) | 2.79(1.27) | 3.77(1.15) |
| 7- Price of the chemical Products Proportionate with their quality. | 3.66(0.99) | 3.10(1.21) | 3.70(1.27) |
| 8- It is noted that the company raises the prices of its chemical products which have harmful negative usage that happens as a result of misusage. | 3.31(1.14) | 3.39(1.34) | 3.60(1.20) |
| **The Distribution** | **3.96(0.63)** | **3.49(0.95)** | **3.69(1.22)** |
| 9- The products that are friendly to the environment are sold at distinguished agents. | 3.93(0.77) | 3.55(1.20) | 3.80(1.14) |
| 10- The company is keen to deal with agents friendly to the environment. | 3.95(0.70) | 3.48(1.18) | 3.50(1.55) |
| 11- The company controls its distributors to prevent us age the chemicals that harm the environment. | 4.01(0.74) | 3.45(1.23) | 3.77(1.34) |
| **The Promotion** | **3.99(0.51)** | **3.50(0.97)** | **3.77(1.32)** |
| 12- Some companies Contribute in supporting the environmental centers. | 3.93(0.65) | 3.49(1.09) | 3.97(1.28) |
| 13- The chemical Products companies devote a special day for the environment. | 4.01(0.61) | 3.51(1.04) | 3.93(1.34) |
| 14- The chemical Products companies support holding. Seminars and conferences related to the environment. | 4.03(0.60) | 3.43(1.18) | 3.63(1.50) |
| 15- Employees of the chemical products companies direct the customers to hour they can use the products in a way does not harm the environment. | 3.98(0.68) | 3.55(1.25) | 3.53(1.48) |

Table (A.6): Attitudes toward Customers' mental image

| Questionnaire | Syria | Kuwait | Jordan |
|---|---|---|---|
| | Mean (STD. DIV.) | | |
| 1- I have the full information about the chemical Products companies Participation in the field of green marketing. | 3.55 (0.89) | 2.97(0.98) | 4.20(1.08) |
| 2- I feel with the desire to continue with the company that carries out green marketing. | 3.71(0.75) | 3.88(1.12) | 3.93(1.19) |
| 3- I feel with trust in the chemical Products companies that carry out green marketing. | 3.68(0.88) | 3.67(1.13) | 3.93(1.16) |
| 4- The company that I buy its chemical products participates effectively in green marketing. | 3.69(0.94) | 3.25(0.98) | 3.93(1.24) |
| 5- I believe that the company that I deal with is successful in the field of the chemical products. | 3.73(0.90) | 3.38(1.01) | 3.97(1.23) |
| 6- The company which I share with escorts developed methods in chemical products. | 3.75(0.84) | 3.31(1.00) | 4.13(1.18) |
| 7- I focus on green marketing fields which the company follows when taking the decision to share with it. | 3.71(0.97) | 3.47(1.13) | 4.23(1.03) |
| **Mental Image** | **3.69(0.70)** | **3.42(0.67)** | **4.05(1.02)** |

Table (A.7): Test of hypothesis (1)

| Hypothesis | F calculated | *p*- value | r |
|---|---|---|---|
| First main hypothesis | 108.822 | 000 | 0.703 |
| | t calculated | *p*- value | r |
| First sub hypothesis | 13.239 | 000 | 0.53 |
| Second sub hypothesis | 11.093 | 000 | 0.464 |
| Third sub hypothesis | 17.243 | 000 | 0.632 |
| Forth sub hypothesis | 18.48 | 000 | 0.658 |

Table (A.8): Test of hypothesis (2)

| variable | F calculated | *p*- value | Result |
|---|---|---|---|
| *Country* | 4.95 | 000 | There are differences |
| *Gender* | 2.179 | 000 | There are differences |
| *Age* | 2.504 | 000 | There are differences |
| *Educational Level* | 0.787 | 0.897 | There are no differences |
| *Income* | 0.993 | 0.502 | There are no differences |