

## Understanding of green marketing : a study to Determine the tendencies of hospital doctors towards using green products

Salah khouildat  
Tamanrasset university centre

Mourad Zaid  
University of Alger 3

### المخلص:

تحاول الدراسة إيجاد العلاقة بين مفاهيم التسويق الأخضر و السلوك الشرائي للمنتجات الخضراء من خلال استخدام عينة ممثلة تتكون من 60 طبيب بمستشفى محمد بوضياف ورقلة - الجزائر، واستخدم الباحث البرنامج الإحصائي spss الإصدار 19، وتوصلت الدراسة إلى أن العمر، الجنس، و نوع الأطباء والرواتب تؤثر على القرار الشرائي للأطباء بمستشفى ورقلة .  
الكلمات المفتاحية: التسويق الأخضر، المزيج التسويقي الأخضر، المنتجات الإيكولوجية، السلوك الشرائي الأخضر.

### ABSTRACT :

*this study tries to find the relation between the green marketing conception and the behaviours towards green products using a representative sample, which is composed of 60 doctors work at Mohamed Boudiaf hospital of ouargla-Algeria. the researcher used Statistical Package for Social Science Software (SPSS) version 19, The results of this study indicated that Age, gender, types of doctors and incomes have significant influences on green purchase behaviour of doctors at hispital of ouargla.*

**Keywords:** Green marketing, Green mix marketing, , Eco products, Green consumers Behaviour

## **Introduction :**

The international community faces today hard environmental challenges; environmental degradation, pollution and uncontrolled use of natural resource, which create an increasing pressure on the long-term environment sustainability and human existence. The previous causes led researchers to establish a new approach called as “green marketing”, which became a major issue for business companies for the purpose of incorporating environmental thinking into their business strategies and daily operations. Thereby, green marketing has helped marketing companies in applying social responsibility.( 1).

The term “Green Marketing” came into prominence in the late 1980s and early 1990s, it was first discussed much earlier. The American Marketing Association (AMA) held the first workshop on "Ecological Marketing" in 1975. The proceedings of this workshop resulted in one of the first books on green marketing entitled "Ecological Marketing", (2) AMA referred to “Ecological Marketing”. Green or Environmental marketing consists all of all activities designed to generate and facilitate any exchange intended to satisfy human needs or wants occurs with minimal determinable impact on the natural environment. Green Marketing influenced the consumer, who has become more aware of negative effects of infriendly products like global warming, organic solid wastes, and pollution..... etc.( 3) green marketing importance is submitted as a result of organizations' interest in environment. They realized that the key success factor for insuring their survival is balancing between organization benefits, consumer interest and society values.

## **LITERATURE REVIEW :**

This part presents the essential concepts needed for the construction of theoretical framework, it clarifies the terminologies of green marketing, green mix marketing, and greenwashing, as well as linking these concepts to relevant theory.

### **1. Green marketing :**

According to the American Marketing Association (AMA), green marketing is the marketing of products that are presumed to be environmental safe. Thus, green marketing incorporates a broad range of activities, including product modification, changes to production process, packaging changes, as well as modifying advertising (4), Pride and Ferrell (1993), believes that green marketing also alternative marketing known as the marketing environment and sustainable Marketing, referred to the efforts of the organization to design, promotion, price and distribution of products, which are not will harm to the environment. (5 ), Jacquelyn Ottman, (author of Green Marketing:

Opportunity for Innovation) pointed out the green marketing from an organizational standpoint, environmental considerations should be integrated into all aspects of marketing; new product development and communications and all points in between. (6), According to Business Dictionary, the definition of green marketing is promotional exercises intended at taking benefits of shaping consumer behavior towards a brand. These adjustments are progressively being affected by a company's practices and policies that influence the characteristic of the environment and indicate the standard of its concern for the community.( 7) A. Prakash, (2002) defines the green marketing as the strategies to promote products by employing environmental claims either about their attributes or about the systems, policies and processes of the firms that manufacture or sell them.( 8)

In addition to the definitions above, green marketing has four stages, In the first stage, green products are manufactured for green consumers. Alternative fuel cars and environment-friendly products etc. are examples of green products. This stage is called green targeting. In the second stage, green strategies are developed. For example, environmental precautions are taken such as reducing waste and increasing energy productivity etc. In the third stage, the manufacturing of non-green, not-so-eco-friendly products are discontinued and in their place, only green products are manufactured. In the fourth stage, it is not sufficient to be only green or environmentalist. In this stage, businesses incorporate social responsibility awareness in every sense of the word. Businesses' green marketing awareness develops depending on the business culture and environmental factors.

## **2. WHY DO COMPANIES USE GREEN MARKETING ?**

According to Polonsky's research on green marketing, there are several reasons for Enterprises to increase their exploitation of green marketing: (9)

- Company management perceives environmental marketing to be an opportunity that can be used to achieve their objectives.
- company management believes they have a moral obligation to be more socially responsible.
- Governments are forcing companies to be more responsible.
- Competitors' environmental activities pressure companies to change their environmental marketing activities.
- Cost factors associated with waste disposal or reductions in material use forces companies to modify their behaviour.

## **3. GREEN MARKETING MIX**

The 4 Ps are proposed by McCarthy in 1960, but Booms&binter had improved the 4Ps to 7Ps in 1981, afterwards, sharma also states that product, price, place and promotion cannot fit the green context and people, process and physical evidence had becoming to more important, Green marketing mix has been composed of for key elements: green product, green price, green pomotion and green place.

**3.1.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. (10) (11)

**3.2. 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.

**3.3. Green promotion :** According to Polonsky (1997), green promotion helps consumers to overcome the “greatest environmental hazard”, that is, the lack of environmental information. To lessen the gap on environmental information through promotion.

**3.4. Green place :** Green place is about managing logistics to cut down on transportation emissions, thereby in effect aiming at reducing the carbon footprint.

#### **4.GREEN PRODUCTS AND ITS CHARACTERISTICS**

According to Vidushi Bhatnagar and Ms. Himani Grewal, 2012, The products those are manufactured through green technology and that caused no environmental hazards are called green products, Promotion of green technology and green products is necessary for conservation of natural resources and sustainable development. We can be describe green products by following measures: (12)

- Products those are originally grown,
- Products those are recyclable,
- reusable and biodegradable,
- Products with natural ingredients,
- Products containing recycled contents, non-toxic chemical,
- Products contents under approved chemical,
- Products that do not harm or pollute the environment,
- Products that will not be tested on animals,
- Products that have eco-friendly packaging i.e. reusable, refillable containers etc.

#### **5. GREEN CONSUMERS' BEHAVIOUR**

Pro-environmental behavior can be defined as the action of an individual or group that contributes to the sustainable use of natural resources (13), It can be classified into green purchase behavior, Green purchase behavior refers to purchasing and consuming products that have minimal impacts on the environment (14), In the context of green buying behavior, Chan (2001) defines green purchase as a specific kind of ecofriendly behaviour that consumers perform to express their concern to environment. Since the consumer intention has been used as a proxy for actual behaviour ( 15), There are different terms used interchangeably with green purchase behavior, such as pro-environmental purchase behavior, and environmentally responsible purchase behavior, (16) (17 )

### **RESEARCH METHODOLOGY**

#### **1. Data source:**

Primary data was collected through survey for this study, in The survey, doctors were asked to answer two important section, section A with regards to the personal data ( sex, age, education level, income, occupation) section B contains 5 main questions on understanding about green marketing, understanding about green marketing , Green products replacing Conventional products ( goods and services), Price willing to pay for a Green products, knowledg about green products, the future Consideration to buy a Green products

#### **2. Sampling:**

The study targeted 60 doctors of Ouargla hospital as a sample using a questionnaire as a tool of data gathering and collection.

#### **3.Data Analysis:**

In order to achieve the study objective, the statistical tool has been used to analyze the data.

#### **4.Objectives:**

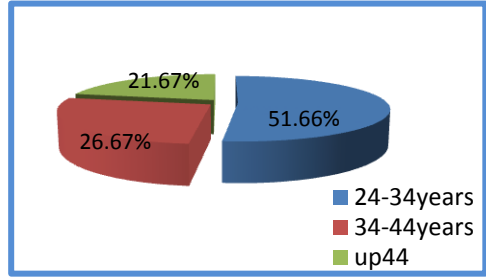
The study purpose is to discover tendencies of hospital doctors towards green products and to understand the importance given to green characteristics of products while purchase process.

#### **5. Profiles of Respondents (the doctors):**

##### **5.1. Age of doctors**

**Understanding of green marketing : a study to  
Determine the tendencies of hospital doctors towards  
using green products**

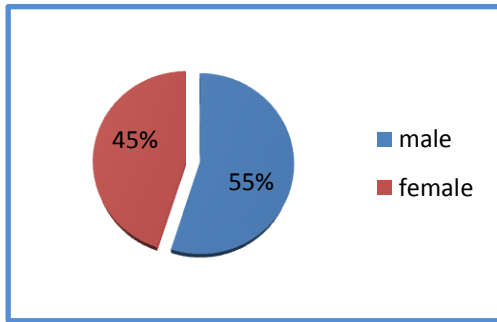
Level	Number	%
24-34	31	51.66
34-44	16	26.67
Up 44	13	21.67



The sample includes three groups from age perspective; 31 doctors aged from 24 to 34 years, 16 respondents aged between 34 and 44 years and 13 respondents more than 44 years age

**5.2. Gender of doctors**

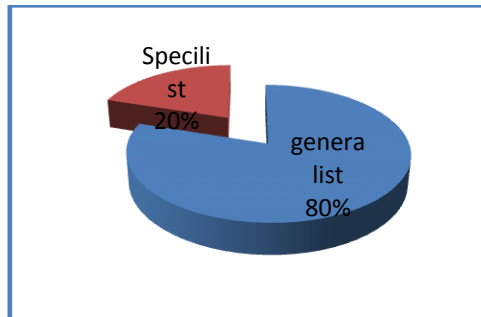
Sex	Number	%
Male	33	55%
Female	27	45%



Concerning the gender, the majority of surveyed doctors are males (33) males, while the 27 other doctors are females.

**5.3. types of doctors**

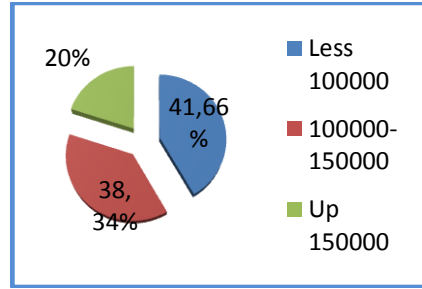
Types	Number	%
Generalist	48	80%
Specialist	12	20%



Out of the doctors surveyed 48 were generalist doctors, 12 respondents were specialist doctors.

#### 5.4. Income of the doctors

Level	number	%
Less 100000	25	41.66
100000-150000	23	38.34
Up 150000	12	20



There were 22 doctors have an income less than 100000 DZ, 18 doctors have an income of 100000- 150000 DZ, 12 doctors have an income exceeds 150000 DZ.

### **RESULTS AND DISCUSSIONS**

#### **1. age of doctors and understanding about Green marketing**

The study tests the correlation between age and the understanding of green marketing to determine the relationship between the two parameters.

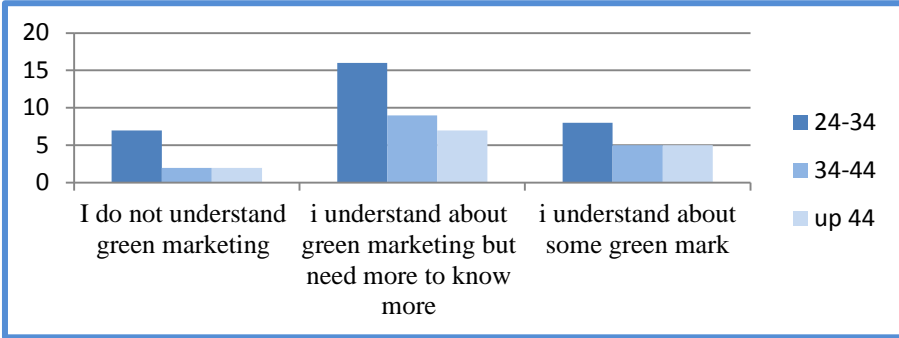
#### **Hypothesis:**

H0: The distribution of understandings about green marketing is same across all categories of Age.

H1: The distribution of understandings about green marketing is not same across all categories of Age

The distribution of understandings about Green marketing is same across all categories of Age.	Independent Samples <b>Kruskal-Wallis Test</b>	.548	<b>Retain the null hypothesis</b>
--	---	------	-----------------------------------

**Understanding of green marketing : a study to  
Determine the tendencies of hospital doctors towards  
using green products**



We accept the null hypothesis that the distribution of understandings about green marketing is same across all categories of Age. It is highest in the category of more information required for the purchase of the green products.

**2. Age of doctors and Green products replacing Conventional products ( goods and services).**

The study tests the correlation between age and green products replacing Conventional products ( goods and services), to determine the relationship between the two parameters.

**Hypothesis:**

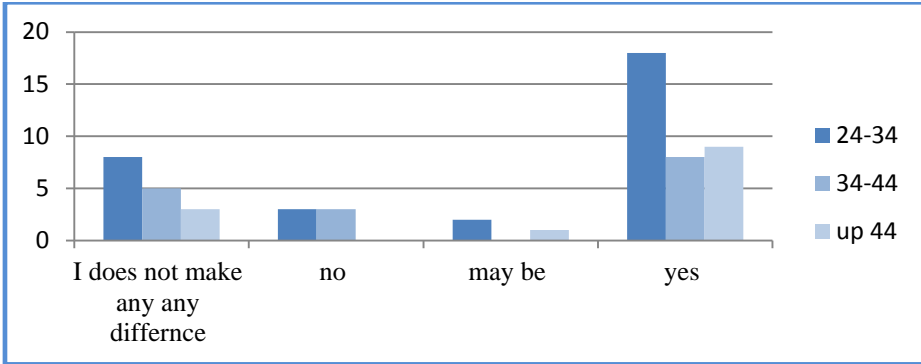
**H0:** The distribution of green products replacing Conventional products ( goods and services), is same across all categories of Age.

**H1:** The distribution of green products replacing Conventional products ( goods and services), is not same across all categories of Age.

The distribution of Green products replacing Conventional products ( goods and services), is same across all categories of Age.	Independent Samples <b>Kruskal-Wallis Test</b>	.14	<b>Reject the null hypothesis</b>
---	---	-----	-----------------------------------



**Understanding of green marketing : a study to  
Determine the tendencies of hospital doctors towards  
using green products**



We reject the null hypothesis and state that the distribution of Green products replacing Conventional products ( goods and services), is not same across all categories of Age. It is highest in the Age group of 24 – 34 Years. Also the highest number of doctors Agreed that Green products would eventually replace conventional products.

**3. Gender of the doctors and Price willing to pay for a Green products.**

The study tests the correlation between Gender and Price willing to pay for a Green products, to determine the relationship between the two parameters.

**Hypothesis:**

**Ho:** The distribution of price willing to pay is same across all males and females surveyed.

**H1:** The distribution of price willing to pay is not same across all males and females surveyed.

The Distribution of Price Willing to pay is the same for both males and females	Independent Samples Mann-Whitney U Test	.853	<b>Retain the null hypothesis</b>
---	---	------	-----------------------------------

We accept the null hypothesis that the distribution of price willing to pay is same for males and females.

#### 4. types of the doctors and knowldg about green products

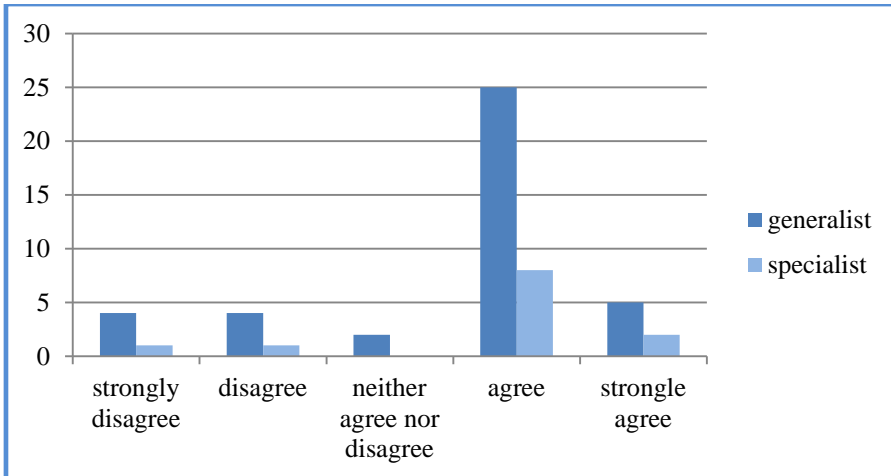
The study tests the correlation between the doctors types and Understanding about green products, to determine the relationship between the two parameters.

#### Hypothesis:

**Ho:** The distribution of knowldg about Green products is same across generalist and specialist

**H1:** The distribution of Understanding about Green products is not same across generalist and specialist

The Distribution of understanding green products is the same across both males and females	Independent Samples <b>Mann-Whitney U Test</b>	.239	<b>Retain the null hypothesis</b>
--	---	------	-----------------------------------



We accept the null hypothesis, but the significance is low. Overall generalist have a better knowledge about green products

### **5. Income of the doctors and the future Consideration to buy a Green products.**

The study tests the correlation between income and consideration to buy a Green products, to determine the relationship between the two parameters.

#### **Hypothesis:**

**Ho:** The distribution of the future consideration to buy an environmental friendly products is same across all categories of income.

**H1:** The distribution of the future consideration to buy an environmental friendly products is not same across all categories of income.

The distribution of the future consideration to buy an environmental friendly products is same across all categories of Income	Independent – Samples <b>Kruskal - Wallis Test</b>	.976	<b>Retain the null hypothesis</b>
--	---	------	-----------------------------------

We accept the null hypothesis that the distribution of the future consideration to buy an environmental friendly products is same across all categories of Income. Thus as income increases the acceptance of is higher.

### **6. Income of the doctors and Willingness to pay for a Green products**

The study tests the correlation between income and willingness to pay for a Green products, to determine the relationship between the two parameters.

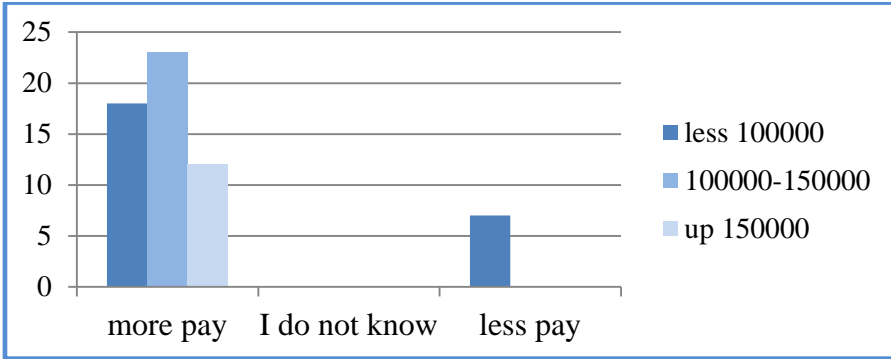
#### **Hypothesis:**

**Ho:** The distribution of willingness to pay for a Green products is same across all categories of income.

**H1:** The distribution of willingness to pay for a Green products is not same across all categories of income.

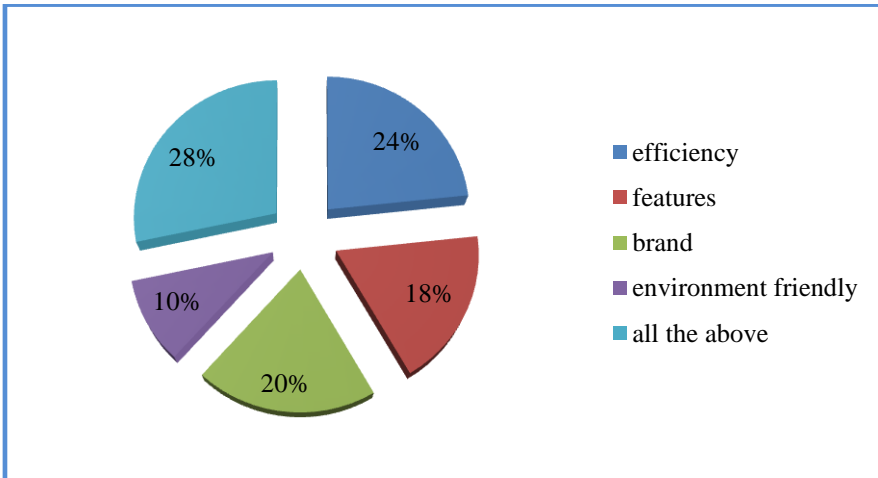
**Understanding of green marketing : a study to  
Determine the tendencies of hospital doctors towards  
using green products**

The distribution of willingness to pay for a Green products is same across all categories of income	Independent – Samples <b>Kruskal - Wallis Test</b>	.957	<b>Retain the null hypothesis</b>
---	---	------	-----------------------------------



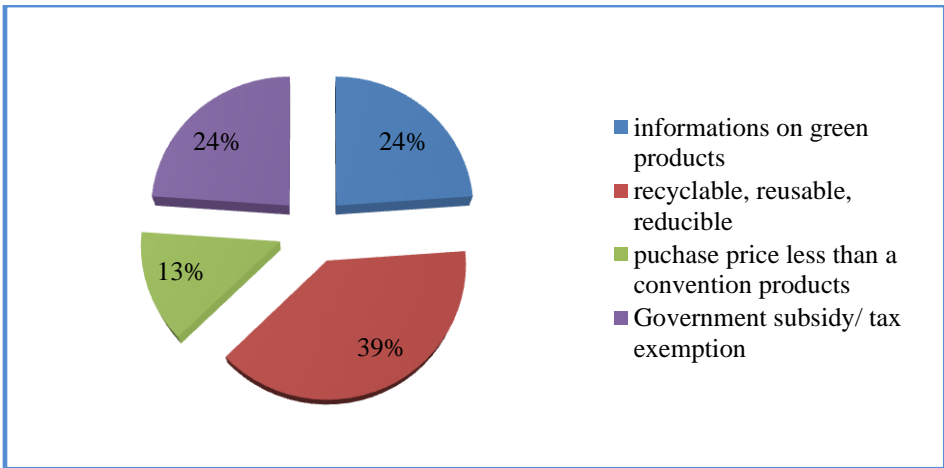
We accept the null hypothesis that the distribution of price willing to pay for a Green Car is not same across all categories of Annual Income.

**7. Factors considered during purchasing a Green products**



A total of 60 doctors were surveyed for the Consumer perception towards Green products. Out of the doctors surveyed 28% of the doctors said they considered all the mentioned factors while purchasing a green products, 24% doctors said Efficiency, 28% doctors said brand was an important factor while making the decision to purchase a green products, 18% said the features were important and 10% of the doctors said the products being Environment Friendly was an important factor.

#### 8. Motivators to purchase a green products.



A total of 60 doctors were surveyed for the Consumer perception towards Green products. Out of the doctors surveyed 39% of the doctors said they considered recyclable, reusable, reducible as a motivator to purchase a green products, 24% doctors said Information on Green products, 24% doctors said Government subsidy/ tax exemption is a motivator to purchase a green products, 13% said purchase price less than a convention products is important for green products is a motivator.

#### CONCLUSION

The analysis was done keeping parameters like Age, Gender, doctors types, and Income.

- **Concerning the age of the doctors ;** it was observed that age plays important role in the understanding of Green products, Most of doctors understand about Green products but

they need more information to make purchase decision. Furthermore, most of them agree that green products would eventually replace conventional products.

- **Concerning the gender of the doctors :** The parameter of price willing to pay for a Green product was assessed against the sex of the doctors, It was observed that most of the doctors irrespective of their sex were ready to pay for green products, Also a number of doctors were unwilling to pay a high price.

- **Concerning the types of the doctors :** The parameter of types of doctors were assessed against the understanding of green products of an individual. The knowledge about green products was higher for generalist doctors than specialist.

- **Concerning the income of the doctors :** The parameter of income of the doctors was assessed against future consideration to buy a Green product. When the income increased the level of buying green products was higher.

The parameter of income of the doctors was assessed against price willing to pay for a Green Car. Maximum respondents irrespective of their income of doctors prefer to pay for green products.

## **References :**

- 1- Rakesh Kumar, 2013, Green Marketing - A Brief Reference to Indian, Asian Journal of Multidisciplinary Studies, Issue 4, Volume1, November, P 191.
- 2- Polonsky, Michael Jay, 1994, An Introduction To Green Marketing, Electronic Green Journal, 1(2), University of Newcastle, P 2, Available online at: [www.escholarship.org/uc/item/49n325b7](http://www.escholarship.org/uc/item/49n325b7).
- 3- Aftab Alam et al, 2012, Green Marketing in Saudi Arabia Rising Challenges and Opportunities, for better future, Journal of American Science , 8(11), P 144, Available online at: <http://www.jofamericanscience.org>.
- 4- Rashad Yazdanifard1, Igbazua Erdoo Mercy, 2011, The impact of Green Marketing on Customer satisfaction and Environmental Safety, International Conference on Computer Communication and Management vol.5, P 1.
- 5- Sushil Kumar, 2014, Green Marketing: Need of an Era, International Journal of Management and Social Sciences Research (IJMSSR), Volume 3, No. 9, September, p 78.
- 6- Aditya maheshwari, 2011, gunjan malhotra, green marketing: a study on indian youth, international journal of management and strategy (ijms) 2011, vol. No.ii, issue 3, july-dec, P 2 , available online at : [www.facultyjournal.com/](http://www.facultyjournal.com/).

- 7- Yazdanifard Rashad & Wong FuiYeng, 2015, Green Marketing: A Study of Consumers' Buying Behavior in Relation to Green Products, Global Journal of Management and Business Research: E Marketing, Volume 15 Issue 5 Version 1.0, P 17.
- 8- Aseem Prakash, 2002, Green marketing, public policy and managerial strategies, Business Strategy and the Environment", Bus. Strat. Env. 11, 285–297.
- 9- Polonsky, Michael Jay, op, cit., P 3.
- 10- Tareq N. Hashem, Nahla A. Al-Rifai, 2011, The influence of applying green marketing mix by chemical industries companies in three Arab States in West Asia on consumer's mental image, International Journal of Business and Social Science, Vol. 2 No. 3, Special Issue – January, p 39.
- 11- Sara, Madhumitha , 2013, Green Marketing – Case studies of companies implementing towards Green Revolution , AMET International Journal of Management , P3.
- 12- Vidushi Bhatnagar and Ms. Himani Grewal, 2012, An Environmental Protection Tool: Green Marketing & Its Effect on Consumer (Buying) Behaviour, International Journal of Emerging Research in Management & Technology, December, P 20.
- 13- Halpenny, E.H. 2006, Examining the relationship of place attachment with pro-environmental intentions. Proceedings of the 2006 Northeastern Recreation Research Symposium.
- 14- Booi-Chen Tan and , Teck-Chai Lau, 2011, Green Purchase Behavior: Examining the Influence of Green Environmental Attitude, Perceived Consumer Effectiveness and Specific Green Purchase Attitude, Australian Journal of Basic and Applied Sciences, 5(8), p 560.
- 15- Ooi Jen Mei et al, 2012, The Antecedents of Green Purchase Intention among Malaysian Consumers, , International Conference on Economics, Business Innovation, vol 38, p 40.
- 16- Soutar, G.N., B. Ramaseshan, and C.M. Molster, 1994, Determinants of pro-environmental consumer purchase behavior: Some Australian evidence in Asia Pacific Advances in Consumer Research Volume 1, eds. Joseph A. Cote and Siew Meng Leong, Provo, UT : Association for Consumer Research, pp 28-35
- 17- Tilikidou, I., 2007, The effects of knowledge and attitudes upon Greeks' pro-environmental purchasing behavior. Corporate Social Responsibility and Environmental Management, 14(3), pp 121-134.