



### TO STUDY USE OF SENSORY-NEURO MARKETING STRATEGY ON CONSUMER BUYING BEHAVIOUR TOWARDS ECO-FRIENDLY ORGANIC GREEN PRODUCTS

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Article Received on 28/02/2017

Article Revised on 21/03/2017

Article Accepted on 10/04/2017

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#### ABSTRACT

The issue of the effects of Neuro-Marketing for companies and society is important since it is assumed that there is potential to discover implicit and automatic processes which determine the decision making process, and that it will reveal secret information about consumer behavior which was not obtainable by the traditional marketing methods (Hubert, and Kenning, 2008; Tusche, Bode, and Haynes, 2010; Ariely, and Berns, 2010; Senior, and Lee, 2008). Although there are also critical arguments against neuromarketings' intervention into the privacy of customers, it is expected that with this method, more effective customer segmentation can be carried out, which in turn leads to improved marketing of products by considering individual product and brand preferences as well as consumer behavior in general (Venkatraman, Clithero, Fitzsimons, and Huettel, 2012). The traditional term —marketing can be defined as an activity which tries to bring together products and people by understanding and analyzing human behavior which is relevant to the trade market (Ariely, and Berns, 2010; Lee et al., 2007). Although Madan (2010) argues that the activity of marketing is purely commercial and focused on sales, we take the underlying definition of Ariely and Berns (2010) as the basis, stating that marketing on the one hand deals with the presentation of products focusing on consumer needs, and on the other hand influencing the decision making process of the customer. It tries to understand all ongoing and economically relevant processes in the brain (Braeutigam, 2005).

**KEYWORDS:** Neuro-Sensory Marketing, Green, Ecological Marketing, Environment Sustainability, Sensory Appeal, Textile and FMCG Sector.

## INTRODUCTION

Eser et al. (2011) indicate that Neuro-Marketing uses state-of-the-art resources in brain scanning to understand the consumer buying process. Schneider and Woolgar (2012) claim that Neuro-Marketing is the newest medium used by marketing researchers to understand consumer behaviour. In fact, understanding consumer behaviour is the recurrent purpose found in the literature reviewed. The second major important contribution of Neuro-Marketing studies is to understand how consumers make choices during the purchase process. Lee et al. (2007) claim that Neuro-Marketing has become a popular technology to establish the probability and non-probability of purchasing decisions. Neuro-Marketing has also been identified as a way of shaping companies' marketing strategies (Eser et al., 2011). The combination of both research techniques will ensure more valuable insights into consumers' preferences and the purchase process (Hubert and Kenning, 2008). The sense of sight is probably the most developed and prominent human sense (Hultén et al. 2009; Krishna 2012; Wright 2006). Hultén (2011) also states that sight can be regarded as the most powerful sense for discovering changes and differences in the environment, and it is also the most common sense in detecting goods or services. Of all five human senses, the sense of sight is then also the sense that had been focused on mostly by marketing practitioners (Elder et al. 2010; Hultén et al. 2009). According to Arnould et al. (2004), most past research on vision in consumer research has examined colour or more complex visual stimuli, such as words and pictures. Taste buds are grouped according to themes (salt, sour, sweet and bitter) at various locations inside the mouth. People use the tip of the tongue to taste sweet things, the back of the tongue to taste bitter things and the sides to taste bitter things, whilst salty things are tasted up front and along the surface (Arnould et al. 2004). Assael (1995) pointed out that taste can be an elusive perception.

## Contextual Review

The growing social and regulatory concerns for the environment lead an increasing number of companies to consider green issues as a major source of strategic change. In particular, this trend has major and complex implications on the marketing strategy of the products and on its product innovations. Even though it has increased eco-awareness of Indian customers during the past few decades, there are some barriers to the diffusions of more ecologically

oriented consumption and production styles. Therefore, companies are increasingly recognizing the importance of green marketing concepts and finding new ways like neuro marketing to market eco-friendly products.

Environmental sustainability is a matter which cannot be ignored, so business organizations have to recognize the competitive advantages and business opportunities to be gained from green marketing although it may cost to the organization. Consumers also have to largely aware of the usefulness of adapting to the green products. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. (Michael Jay Polonsky, 1994). Today, marketing parishioners of FMCG and Textile sector per se in India use environment friendly packaging and modify the products to minimize the environment pollution. However there is a big argument among the marketing philosophers regarding attractiveness of green product to customers in developing country like India. With this background, the researchers have made attention on attractiveness of green marketing strategies in India. The Main objective of the study is, to evaluate consumer attitudes and perception regarding eco-friendly FMCG and Textile products and to know how much the neuro-marketing could help the marketers in promoting sales and increasing revenues by using harmless to environment eco-label(CSR).

### **Ecological Sustainability**

Term 'green' is indicative of purity. Green means pure in quality and fair or just in dealing. For example, green advertising means advertising without adverse impact on society. Green message means matured and neutral facts, free from exaggeration or ambiguity. Green marketing is highly debated topic for lay people to highly professional groups.

Concept of green marketing concerns with protection of ecological environment. Modern marketing has created a lot of problems. Growth in marketing activities resulted into rapid economic growth, mass production with the use of advanced technology, comfortable and luxurious life, style, severe competition, use of unhealthy marketing tactics and techniques to attract customers, exaggeration in advertising, liberalization and globalization, creation of multinational companies, retailing and distribution by giant MNCs, etc., created many problems.

Departmental stores, specialty stores, and shopping malls are flooded with useful as well as useless products. These all factors have threatened welfare of people and ecological balance

as well. Particularly, giant factories have become the source of different pollutions. Production, consumption and disposal of many products affect environment adversely.

Excessive pollution has provoked the Nature and the Nature starts behaving in unnatural ways (in form of global warming v/s global cooling, heavy rains v/s draught, and other natural calamities like frequent earthquakes and tsunami, cyclones, epidemics, and so forth). Economic growth via production and consumption threatens peaceful life of human being on the earth. Green marketing is an attempt to protect consumer welfare and environment (the nature) through production, consumption, and disposal of eco-friendly products.

### **Ecological Green marketing concerns with three aspects**

- Promotion of production and consummation of pure/quality products,
- Fair and just dealing with customers and society, and
- Protection of ecological balance.

Thus, green marketing is a marketing philosophy that promotes production and selling of pure (eco-friendly) products with protection of ecological balance. Green marketing involves multiple activities. Green Marketing encourages production of pure products by pure technology, conservation of energy, preservation of environment, minimum use of natural resources, and more use of natural foods instead of processed foods. Efforts of people, social organizations, firms, and governments in this regard can be said as green marketing efforts. Green marketing raises the voice against production, consumption, and/or disposal of such products that anyway harm consumers, the society, and the environment. It is necessary that businesspersons and users should refrain from harmful products.

### **Impact of Organic Environmental Marketing**

Green marketing affects positively the health of people and the ecological environment. People are aware of pure products and pure methods of producing, using, and disposing the products. It encourages integrated efforts for purity in production and consumption as well.

### **Following are the main impact of environment-friendly marketing**

- a. Awareness (Recall and Recognition) of ecologically safe goods is on the rise.
- b. Consumers are insisting upon pure products – edible items, fruits, and vegetables based on organic farming.
- c. The number of people seeking vegetarian food is on rise.

d. Reducing use of plastics and plastic-based products is primary concern.

The increasing levels of pollutants in water, air or land is making more customers conscientious towards saving our ecological cycle.

1. Increased consumption of herbal products instead of chemical based products.
2. Recommending use of leaves instead of plastic pieces; jute and cloth bags instead of plastic carrying bags.
3. Increasing use of bio-fertilizers (made of agro-wastes and wormy-composed) instead of chemical fertilizers (i.e. organic farming), and minimum use of pesticides.
4. Worldwide efforts to recycle wastes of consumer and industrial products.
5. Increased use of herbal medicines, natural therapy, and Yoga.
6. Strict provisions to protect forests, flora and fauna, protection of the rivers, lakes and seas from pollutions.
7. Global restrictions on production and use of harmful weapons, atomic tests, etc. Various organizations of several countries have formulated provisions for protecting ecological balance.
8. More emphasis on social and environmental accountability of producers and marketers.
9. Imposing strict norms for pollution control. Consideration of pollution control efforts and eco-technology in awarding IS), ISO 9000, or ISO 14000 certificates and other awards.
10. Declaration of 5<sup>th</sup> June as the World Environment Day.
11. Strict legal provisions for restricting duplication or adulteration.
12. Establishing several national and international agencies to monitor efforts and activities of business firms in relation pollution control and production of eco-friendly products.

### **FMCG Industry**

The fast moving consumer goods (FMCG) segment is the fourth largest sector in the Indian economy. The market size of FMCG in India is estimated to grow from US\$ 30 billion in 2011 to US\$ 74 billion in 2018. Food products are the leading segment, accounting for 43 per cent of the overall market. Personal care (22 per cent) and fabric care (12 per cent) come next in terms of market share. Growing awareness, easier access, and changing lifestyles have been the key growth drivers for the sector (Shailja, 2016).

Growing awareness, easier access, and changing lifestyles have been the key growth drivers for the consumer market. The Government of India's policies and regulatory frameworks such

as relaxation of license rules and approval of 51 per cent foreign direct investment (FDI) in multi-brand and 100 per cent in single-brand retail are some of the major growth drivers for the consumer market.

FMCG goods are popularly known as consumer packaged goods. Items in this category include all consumables (other than groceries/pulses) people buy at regular intervals. The Fast Moving Consumer Goods (FMCG) Industry in India include segments like cosmetics, toiletries, glassware, batteries, bulbs, pharmaceuticals, packaged food products, white goods, house care products, plastic goods, consumer non-durables, etc. The FMCG market is highly concentrated in the urban areas as the rise in the income of the middle-income group is one of the major factors for the growth of the Indian FMCG market.

The penetration in the rural areas in India is not high as yet and the opportunity of growth in these areas is huge by means of enhanced penetration in to the rural market and conducting awareness programs in these areas. The scopes for the growth of the FMCG industry are high as the per capita consumption of the FMCG products in India is low in comparison to the other developed countries. The manufacturing of the FMCG goods is concentrated in the western and southern belt of the country. There are other pockets of FMCG manufacturing hubs. FMCG items are meant for daily or frequent consumption and have a high return.

According to the study conducted by AC Nielsen, 62 of the top 100 brands are owned by MNCs, and the balance by Indian companies. Fifteen companies own these 62 brands, and 27 of these are owned by Hindustan UniLever.

### **FMCG Brands Selected for studying the impact of environment-ecology marketing on the perception of Consumers.**

The top ten India FMCG brands taken for the study are:

1. Hindustan Unilever Ltd.
2. ITC (Indian Tobacco Company)
3. Nestlé India
4. GCMMF (AMUL)
5. Dabur India
6. Asian Paints (India)
7. Cadbury India

8. Britannia Industries
9. Procter and Gamble Hygiene and Health Care
10. Marico Industries

### **Analysis of FMCG Sector**

#### **Strengths**

- Low operational costs.
- Presence of established distribution networks in both urban and rural areas.
- Presence of well-known brands in FMCG sector.
- Favourable governmental Policy: Indian Government has passed the policies aimed at attaining international competitiveness through lifting of the quantitative restrictions, reducing excise duties, 100 per cent export oriented units can be set up by government approval and use of foreign brand names etc.
- Foreign Direct Investment (FDI): Automatic investment approval up to 100 per cent foreign equity or 100 percent for NRI and Overseas Corporate Bodies investment is allowed for most of the food processing sector except malted food, alcoholic beverages and those reserved for small scale industries (SSI).

#### **Opportunities**

- Untapped rural market, changing life style.
- Rising income levels, i.e. increase in purchasing power of consumers.
- Large domestic market with more population of median age 25.
- High consumer goods spending.
- India is the largest milk producer in the world, yet only around 15 per cent of the milk is processed. The organized liquid milk business is in its infancy and also has large long-term growth potential. Even investment opportunities exist in value-added products like desserts, puddings etc.
- Only about 10-12 per cent of output is processed and consumed in packaged form, thus highlighting the huge potential. • India is under penetrated in many FMCG categories as shown in below diagram. With rise in per capita incomes and awareness, the growth potential is huge.
- Lower price and smaller packs are also likely to drive potential up trading for major FMCG products.



**Weakness**

- Lower scope of investing in technology and achieving economies of scale, especially in small sectors
- Low exports levels
- "Me-too" products, which illegally mimic the labels of the established brands. These products narrow the scope of FMCG products in rural and semi-urban market.

**Threats**

- Removal of import restrictions resulting in replacing of domestic brands• Tax and regulatory structure
- Rural demand is cyclical in nature and also depends upon monsoon.

**Textile Industry**

India is the second largest producer of textiles and garments in the world. The Indian textiles and apparel industry is expected to grow to a size of US\$ 223 billion by 2021, according to a report by Techno Pak Advisors. This industry accounts for almost 24% of the world's spindle capacity and 8% of global rotor capacity. Abundant availability of raw materials such as cotton, wool, silk and jute as well as skilled workforce have made the country a sourcing hub.

The textiles industry has made a major contribution to the national economy in terms of direct and indirect employment generation and net foreign exchange earnings. The sector contributes about 14 per cent to industrial production, 4 per cent to the gross domestic product (GDP), and 27 per cent to the country's foreign exchange inflows. It provides direct employment to over 45 million people. The textiles sector is the second largest provider of employment after agriculture. Thus, growth and all round development of this industry has a direct bearing on the improvement of the India's economy.

**Growth**

The Indian textiles industry is set for strong growth, buoyed by strong domestic consumption as well as export demand. The most significant change in the Indian textiles industry has been the advent of man-made fibres (MMF). India has successfully placed its innovative range of MMF textiles in almost all the countries across the globe. MMF production recorded an increase of 10 per cent and filament yarn production grew by 6 per cent in the month of February 2014. MMF production increased by about 4 per cent during the period April 2013–February 2014.



Cotton yarn production increased by about 10 per cent during February 2014 and by about 10 per cent during April 2013–February 2014. Blended and 100 per cent non-cotton yarn production increased by 6 per cent during February 2014 and by 8 per cent during the period April 2013–February 2014.

Cloth production by mill sector registered a growth of 9 per cent in the month of February 2014 and of 6 per cent during April 2013–February 2014.

Cloth production by power loom and hosiery increased by 2 per cent and 9 per cent, respectively, during February 2014. The total cloth production grew by 4 per cent during February 2014 and by 3 per cent during the period April 2013–February 2014.

Textiles exports stood at US\$ 28.53 billion during April 2013–January 2014 as compared to US\$ 24.90 billion during the corresponding period of the previous year, registering a growth of 14.58 per cent. Garment exports from India is expected to touch US\$ 60 billion over the next three years, with the help of government support, said Dr A Sakthivel, Chairman, Apparel Export Promotion Council (AEPC).

The textiles sector has witnessed a spurt in investment during the last five years. The industry (including dyed and printed) attracted foreign direct investment (FDI) worth Rs 6,710.94crore (US\$ 1.11 billion) during April 2000 to February 2014.

### **Analysis of Textile Sector**

#### **Strength**

- Raw material base: India has high self-sufficiency for raw material particularly natural fibres. India's cotton crop is the third largest in the world. Indian textile Industry produces and handles all types of fibres.
- Labour: Cheap labour and strong entrepreneurial skills have always been the backbone of the Indian Apparel and textile Industry.
- Flexibility: The small size of manufacturing which is predominant in the apparel industry allows for greater flexibility to service smaller and specialized orders.
- Rich Heritage: The cultural diversity and rich heritage of the country offers good inspiration base for designers.
- Domestic Market: Natural demand drivers including rising income levels, increasing urbanization and growth of the purchasing population drive domestic demand.

**Weakness**

- More dependence on cotton: Due to over specialization in cotton, the bulk of the international market is missed out, synthetic products in India are expensive and fabric required for items like swimsuit, sky-wear and industrial apparel is relatively unavailable.
- Spinning Sector: Spinning sector lacks modernization and there is a need of introducing new technology.
- Weaving Sector: India has relatively less number of shuttle-less loom.
- Fabric Processing: Processing is the weakest link in the Indian textile value chain, adversely affecting its ability to compete in exports.
- Poor Infrastructure: High power costs and long export lead times are eroding India's export competitiveness across the textile chain.
- Low Labour Productivity: Productivity levels for manufacturing various apparel items are far lower in India in comparison with its competitors.

**Opportunities**

- Growing Industry: World textile trade would continue to grow at a rate of 3-4% to reach \$200-210 billion by 2010.
- Market access through bilateral negotiation: The trade is growing between regional trade blocs due to bilateral agreements between participating countries.
- Integration of Information technology: 'Supply Chain Management' and 'Information Technology' has a crucial role in apparel manufacturing. Availability of EDI (Electronic Data Interchange) makes communication fast, easy, transparent and reduces duplication.
- Opportunity in High Value Item: India has the opportunity to increase its UVR's (Unit Value Realization) through moving up the value chain by producing value added products and by producing more and more technologically superior products.

**Threats**

- Decreasing Fashion Cycle: There has been an increase in seasons per year which has resulted in shortening of the fashion cycle.
- Formation of Trading Blocks: Formation of trading blocs like NAFTA, SAPTA, etc.; has resulted in a change in the world trade scenario. Existence of bilateral agreements would result in significant disadvantage for Indian exports.
- Phasing out of Quotas: India will have to open its protected domestic market for foreign players thus domestic market will suffer.

### Neuro-sensory Marketing

As humans we are sentient beings, but the exact role of the senses in how we perceive the world has remained something of a mystery up to now. However, in recent years, scientists have started to understand the way the five senses interact with one another in the brain to influence our perception of everything from the food on our plate to the environments in which we live and work.

Sensory marketing or Neuro Marketing engages the consumer's senses with the purpose of conditioning their shopping decisions. The right situation can trigger a wide range of emotions that can lead the shopper to choose a brand over another. Studies show that multi-sensory shopping experiences – where two or more senses receive stimulation at the same time – cause the shoppers to stay longer in the stores, buy more products, and develop a stronger engagement with brands.

The concept is fundamentally based on the usage of combination of one or more of the five sense organs.

Sight or vision is the capability of the eyes to focus and detect images of visible light and generate electrical nerve impulses for varying colours, hues, and brightness. Visual perception is how the brain processes these impulses: recognising, differentiating and interpreting visual stimuli through comparison with experiences made earlier in life.

Smell or olfaction is our ability to detect scent – chemical, odour molecules in the air. Our olfactory system begins in our nose which has hundreds of olfactory receptors. Odour molecules possess a variety of features and, thus, excite specific receptors more or less strongly. This combination of excitement is interpreted by the brain to perceive the 'smell'.

How olfactory information is coded in the brain to allow for proper perception is still being researched and the process is not completely understood, however, what is known is that the chemical nature of the odorant is particularly important, as there may be a chemotropic map in the brain.

Taste, or gustation, refers to the capability to detect the taste of substances such as food, certain minerals, and poisons, etc. The sense of taste is often confused with the "sense" of flavour, which is a combination of taste and smell perception. Humans receive tastes through

sensory organs called taste buds concentrated on the upper surface of the tongue. There are five basic tastes: sweet, bitter, sour, salty and umami.

Hearing, or audition, is the ability to perceive sound by detecting vibrations, changes in the pressure of the surrounding medium through time, through an organ such as the ear. As with sight, auditory processing relies on how the brain interprets, recognises and differentiates sound stimuli.

Touch, or somatosensory, is a perception resulting from activation of neural receptors, generally in the skin including hair follicles and a variety of pressure receptors respond to variations in pressure (firm, brushing, sustained, etc.).

Today more than ever, it seems that everyone assumes that the determining factor for effectively and successfully reaching the customer depends on how we manage sensory perceptions that the brand or product will cause in people. Which means that when a customer comes in contact with the product, the perceptual machine begins to operate.

In the last years, brands have been working hard to develop distinctive sounds both for their products and their packages. For instance, McDonald's use numerous tactics to sell their products - for this example, the way they sell their fries. During the rush hours of the day - lunch time for example - the company put adverts out that are specifically aimed at those driving a car. One advert for fries features a sound that you could describe as something like a deep fat fryer and the voice over even announces that the smell of fries being cooked will be transferred to your car. By thinking of the sound of the fries cooking and our mental representation of the smell of fries, we are prompted to go and buy some. In this case, we can hardly say the advertising is subliminal yet, the company thinks that subtlety should not be wasted on its customers. Another example Have you ever noticed that when you walk into a Nike Store you immediately go for the most expensive shoes? Well, you will know understand why.

Essentially, Nike Stores use a mixed flower scent to direct you towards the more expensive shoe designs inside. Studies show that you are willing to spend more on their shoes if they are diffusing flowery scents in the store. Also, the shops are light and often have white walls with black decorations or images in neutral colors, which makes you relaxed enough to make you pay for their shoes.

It is a well-known fact that memory and smells are tied closely together - a scent can really bring back memories and invoke emotions. Nowadays, companies know this all too well and make use of scents and sounds to jolt your brain into liking or enjoying their product.

Therefore marketer wish to successfully sell product they make sure to pair either store or the actual product with a specific scent - if you feel at home in a store, you are more likely to buy. The deterioration of the environment led to the adoption and the development of consciousness of consumers' attitude towards eco-friendly products in order to preserve the planet (Luck et al., 2009, p. 2). They therefore, deem it expedient to take measures towards protecting the environment which has become their personal attitude towards eco-friendly foods (Solomon, 2010, p. 209). Consumers patronize the products and their aims are to make sure the contribution is supporting sustainable environment and contribution the guiding of the climate change (Hartmann and Apaolaza-Ibáñez, 2006, p. 676). However, it has become global struggling to achieve the purpose of the environmental protection so companies are using various means to persuade the consumers' segments who are environmentally conscious to change their attitudes from the conventional products towards green products and also satisfy their needs (Kumar, 2011, p. 59). Some of the previous researchers have emphasized on the four concepts on the "demographics, green lifestyle (Solomon at al 2010, p. 401) green attitudes and green behavioral intentions in the context of the low involvement product category" (Florenthal and Arling, 2011, p.35). There are very few studies about the consumer behavior concerning the environment in Indian scenario. Furthermore, previous findings concerning consumers' attitudes towards eco-friendly products are conflicting e.g. some studies found that consumers think conventional products have high quality compared to eco-friendly ones but in other studies results show the opposite (Vernekar and Wadhwa, 2011, p.67).

In some studies we can find that consumers are willing to pay more for green products and in other studies it is not the case or the extra price has to be low (De Pelsmacker et al., 2009; Pirani and Secondi, 2011; Purohit, 2011; Vernekar et al., 2011). These finding led us to make up our own opinion about this subject: consumers' attitudes toward green products and purchase behavior by use neuromarketing techniques. Finally even if previous studies were made as well in industrialized countries as developing ones, we found almost negligible studies about use of neuromarketing techniques for marketing Green FMCG and Textile Products.

## METHODS

### Research Outline

This research is divided into five arenas. The first arena is reserved for the introduction of study background, Green Marketing, Neuro Marketing and FMCG and Textile Sector. This is just to give a snapshot of the subject matter and premise of the study. Arena 2 presents an in-depth discussion and literature review on the Green Products Marketing and Neuro-marketing. Arena 3 is designed to present research methodology. This is to illustrate the research questions and the hypotheses. In addition, the arena illustrates how the data will be collected, what sampling techniques and statistical methods will be used. Arena 4 evaluates the empirical results by analyzing the findings of the individual research questions and hypothesis taking into consideration the various objectives. Subsequently, Arena 5 presents the finding by discussing the research questions and implications of the results along with conclusion. Lastly, Arena 6 presents the limitations of the study along with the directions for the future research.

### Objectives and Hypothesis

- To study the extent of purchase of Eco-friendly/green products by use of Neuro-Marketing Methods
- To explore the other factors affecting the purchase of Eco-friendly/green products.
- To identify possible differences in terms of inviting attention, creating Interest, infusing desire and promoting purchase action among the consumers of conventional marketing and neuro-marketing method.

### Design

Exploratory research was conducted to develop initial insights and to provide direction for any further research needed (Malhotra 1999; Parasuraman 1991). A review of literature on Eco-friendly/green products and Neuro-Marketing in FMCG and Textile Sector was undertaken in order to define the comprehensive scope of the study and ensuring its objectivity. *Descriptive research* was conducted next. The decision to choose a survey method may be based on a number of factors, which include sampling, type of population, question form, question content, response rate, costs, and duration of data collection (Aaker et al. 2010).

### 2.4 Reliability and validity of Questionnaire

- Pre testing of the questionnaire
- Pilot test (40 users)

For this research, labeled Likert scales were appropriate to measure responses. The target population for this study was defined as individuals purchasing green products in NCR region at the time the survey was conducted. To establish the sample frame, a list of consumers was obtained from education (Students), government and corporate institutions and home users of the four major regions, Noida, Delhi, Ghaziabad and Faridabad. Stratified Random sampling was used as this research sought to generalize the results obtained as much as possible (Kassim 2011). As a general rule, at least 300 cases is deemed comfortable, 500 as very good and 1000 as excellent (Comrey and Lee 1992; Tabachnick and Fidell 2001), thus it was decided to target a total of 500 respondents from the four regions mentioned above.

### Research Ethics

All participants were made aware of research intentions and design by an introduction. Findings have been treated with the utmost confidentiality. No source, whether individual or organization was correlated with specific findings or comment attributed without the express permission of the originator or organization.

### Analysis and Interpretation

**Table 4.1: Respondent Profile.**

Table 4.1 Respondent Profile					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Gender</b>					
Valid	Male	196	48.5	48.5	48.5
	Female	208	51.5	51.5	100
<b>Age</b>					
Valid	18-25	102	25.24	25.24	25.24
	25-35	87	21.53	21.53	46.77
	35-45	117	28.96	28.96	75.73
	>45	98	24.27	24.27	100
<b>Personal income</b>					
Valid	Dependent				
	< 5 lacs	87	21.53	21.53	21.53
	5-10 lacs	127	31.45	31.45	52.98
	10-15 lacs	108	26.73	26.73	79.71
	>15Lacs	82	20.29	20.29	100
<b>Occupation</b>					
Valid	Student	85	21.03	21.03	
	Homemaker	86	21.28	21.28	
	Service	99	24.5	24.5	
	Business	134	33.16	33.16	
Total		404	404		



Out of 404 respondents, when asked about main reasons for not purchasing the eco-friendly products, the maximum responses (302) went towards the reason that ‘They are expensive’ followed by 267 respondents sighting the reason as ‘Less shelf life’. Another important funding for reasons for non-purchase is lack of standardization in environment- friendly products. Other important reasons being ‘Less variedly’ ‘Claim not trustworthy’ and ‘Inferior quality as compared to the chemical counterpart’ with 243, 208 and 170 respondents answering respectively.

**Table 4.2: Reasons for Not Purchasing.**

<b>Table 4.2 Reason for Not Purchasing</b>			
<b>Reasons</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
They are expensive	202	102	404
Claim is not trust worthy	208	196	404
Inferior quality as compared to chemical counter part	170	234	404
Less variety	243	161	404
Non standardisation of products	108	296	404
Less shelf Life	267	137	404

The non-purchase of the environmentally sustainable and biodegradable products over the chemical harmful counterparts:

**Table 4.3: Store Preference for Purchasing Green Textile Products.**

<b>Table 4.3 Store preference –Textile</b>			
<b>Store</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Khadi Gram Udyog</b>	305	99	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Fab India</b>	176	228	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Mother Earth</b>	23	381	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Anokhi</b>	45	359	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Cottage Emporium</b>	98	306	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>State Emporiums</b>	13	391	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Siyaram’s</b>	154	250	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Fibre2Fashion</b>	10	394	404
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Good Earth</b>	65	339	404
Which particular store you like to purchase Environmental	13	391	404

friendly Textile Products from?- <b>Grassroots by Anita Dongre</b>			
Which particular store you like to purchase Environmental friendly Textile Products from?- <b>Any other</b>	23	381	404
Valid N (listwise)	404		

**Table: 4.4 Store Preference for Purchasing Green FMCG Products.**

<b>Table 4.4 Store preference –FMCG</b>			
<b>Store</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Khadi Gram Udyog</b>	303	101	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Fab India</b>	109	295	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Body Shop</b>	98	306	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Patanjali</b>	209	195	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Cottage Emporiums</b>	56	348	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>State Emporium</b>	43	361	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Organic India</b>	89	315	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Natures</b>	87	317	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Himalaya</b>	56	348	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Eco India</b>	12	392	404
Which particular store you like to purchase Environmental friendly FMCG Products from?- <b>Good Earth</b>	44	360	404

The table 4.4 depicts the extent of knowledge and awareness about ‘Green’ ‘Herbal’ ‘Eco’ environmentally sustainable products in the textile and FMCG sectors. In order to measure the level of awareness, interest and knowledge, the researches recorded the responses of 404 respondents on ten major aspects (In the form on statements) and calculated the mean score of each of the ten statements level of the respondents.

**Table 4.5: Eco-Product Knowledge Descriptive Statistics.**

<b>Table 4.5: Eco-Product Knowledge Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Environmental friendly Products are the ones which- Produced by natural resources	404	1	5	4.654	0.4881
Environmental friendly Products are the ones which- Help in conserving natural resources	404	1	5	4.234	0.3625
Environmental friendly Products are the ones which- Complete production chain is controlled from an environmental perspective	404	1	5	2.376	0.478
Environmental friendly Products are the ones which- Are manufactured using green technology that caused no environmental hazards	404	1	5	3.865	0.5009
Environmental friendly Products are the ones which- Are recyclable, reusable and bio-degradable	404	1	5	2.926	0.4964
Environmental friendly Products are the ones which- Have herbal and natural ingredients	404	1	5	4.655	0.396
Environmental friendly Products are the ones which- Are non-toxic, minimize carbon emission and contain recyclable ingredients	404	1	5	3.465	0.5024
Environmental friendly Products are the ones which- Do not harm or pollute the environment	404	1	5	2.098	0.4964
Environmental friendly Products are the ones which- Are not tested on animals	404	1	5	1.332	0.396
Environmental friendly Products are the ones which- Have eco-friendly packaging	404	1	5	1.654	0.4233
Valid N (listwise)	404				

**Table 4.6: Extent of Purchase of Environment Friendly FMCG Products.**

<b>Table 4.6: Textile Purchase</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
How often do you purchase following Environmental friendly Products?- suite/ kurta	404	1	5	2.7692	1.15943
How often do you purchase following Environmental friendly Products?- napkins	404	1	5	2.4231	1.42578
How often do you purchase following Environmental friendly Products?- lowers	404	1	5	2.3846	1.21725
How often do you purchase following Environmental friendly Products?- dining mats/napkins	404	1	5	2.3846	1.3388
How often do you purchase following Environmental friendly Products?- stoles	404	1	5	2.1538	1.35653
How often do you purchase following Environmental friendly Products?- floor mats	404	1	5	2.1538	1.3276
How often do you purchase following Environmental friendly Products?- bedsheets/ beddings	404	1	5	2.0769	1.21233
How often do you purchase following Environmental friendly Products?- scarfs	404	1	5	2.0769	1.54977
How often do you purchase following Environmental friendly Products?- saree	404	1	4	2.0385	1.23007
How often do you purchase following Environmental friendly Products?- curtains	404	1	5	1.9231	1.21233
How often do you purchase following Environmental friendly Products?- towels	404	1	5	1.8846	1.28704
How often do you purchase following Environmental friendly Products?- upholstery	404	1	4	1.8462	1.13864
How often do you purchase following Environmental friendly Products?- kitchen cloths	404	1	5	1.7692	1.22459
How often do you purchase following Environmental friendly Products?-tablecloths	404	1	5	1.5769	1.0492
Valid N (listwise)	404				

**Table: 4.7:** To identify the various factors having impact on the green products purchase decision the factor analysis was conducted. The following section presents the results of the same. The commonalities table shows that  $h^2$  values for each statement are greater than .5, hence it further shows that the sample is appropriate for factor analysis and there is significant commonality among the various statements.

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
I think green process of production respects the environmental health	404	1	5	3.7692	1.34548
I think that the green product does not carry harmful ingredients like wisectiade/ pesticide/ plastic/non-biodegradable or non-recyclable input materials	404	1	5	3.8077	1.21541
I think that environment friendly products may cause quite less harm our environment as compared to its chemically laded counterpart	404	2	5	4.4231	0.84408
I believe that with advent of latest technologies, use of eco-friendly products will increase and improve the efficiency in reduce-recycle reuse chain to support greener environment.	404	1	5	3.5385	1.37186
The seal of quality organizations will further support and increase purchase of Eco- for greener environment.	404	2	5	4.4615	0.84673
I think that it is ethical on my part if I support the green products because they have (i) well defined origin (ii) are natural and safe foe consumption and in disposal.	404	2	5	3.9231	0.87791
There is respect for our mother nature in doing so.	404	3	5	4.1154	0.93796
My ethics, Values, norms and culture motivates me to stretch a little to be ethical toward the environment I live in.	404	3	5	4.0769	0.67827
I am interested purchasing eco whose by product are used for renewable initiative	404	1	5	2.9615	1.26125
the purchase of green product is for the reason that I want to do may bit for our environment.	404	2	5	3.4231	1.15492
I wish to purchase environment friendly nature product that do not harm the environment and society.	404	2	5	3.8077	0.83697

I can purchase the green product if the packaging and labeling information provided is sufficing my clearly doubts.	404	1	5	3.6154	1.11745
I am in favor of the green product that any stages have used the sustainability process from renewable success.	404	1	5	3.3077	1.14126
Quality of green product is Good.	404	1	5	3.0385	1.09654
Natural ingredients as claimed	404	1	5	3.2692	1.35267
Keeps promise of being safe for consumption	404	1	5	3.1923	1.27772
Does not harm health	404	1	5	4	0.92432
Perceived as good value for money preposition even if is priced little higher	404	1	5	4	1.14908
Advantage outweigh the disadvantage so can pay more for sake of owes and society	404	1	5	3.3462	0.9631
I take conscious decision of buying the greener attentive product for the sake of my duty towards the environment.	404	2	5	3.5385	0.6374
I help others by persuading them to be environmentally cautious citizens.	404	2	5	2.9231	1.0766
I believe that my simple/Small action can cause big impact towards the eco-system balance.	404	1	5	3	1.27713
I am inspired by the other who works toward having a automatable society	404	1	5	3.3462	1.00261
I believe in the individual empowerment necessary for it.	404	2	5	3.7308	0.86159
In unrelieved to buy environmentally safe products for my personal happiness and satisfaction.	404	1	5	3.9615	0.85812
It improves my quality of wellbeing in life.	404	2	5	3.5	0.89225
It gives a trek message to my peer group	404	1	5	2.8846	1.0174
It symbolizes the culture and values I possess	404	2	5	3.5	1.31459
It shone my deep rootedness to cultural/historical roots.	404	1	5	2.5385	1.39988
It gives me more acceptances in my primary/Secondary /treasury groups	404	1	5	2.6538	1.525
I feel pride in explaining eh pros of eco-product, its information and how I am doing my contribution to society at larger	404	1	5	3.0385	1.23007
I respect the wish of my other us my social group.	404	1	5	3.1538	1.06825
I support the decisions taken during purchase by any peer-group/Family	404	1	5	3.7308	0.94746

The problem of depleting natural resources can be resolved by my message to society for green.	404	2	5	3.3846	0.92755
I am worried about the state of affairs in an environment and what holds in the future	404	1	5	3.8077	1.08007
I think my initiative can lessen the severely abused/upset evtal balance	404	2	5	3.3462	1.0773
Humans must live in harmony with the eco-systems/nature in order to survive.	404	1	5	3.6923	0.99588
I make special effort to reduce the use of paper non-xcylable product to pass on this message to the society.	404	1	5	3.5385	1.08765
I don't mind spending on eco/green product if it convinces me on consistency and trustworthiness of brand being herbal	404	1	5	3.1923	1.08007
I can represent my socio-economic status before my poual groups by purchasing green	404	1	5	3.5769	1.18807
I am competent to pay more	404	1	5	2.7308	1.02617
It is my moral obligation to pay more for environment	404	1	5	2.5385	1.01372
My culture/ Value makes me pay more for environment	404	1	5	2.3077	1.41474
I am status conscious	404	1	5	2.1538	1.3276
I can catalyze sustainable environment by paying and enchase to the engagement and involvement and Encouragement in working as a catalyst to enable green product advantage ones non-green and hence wi	404	1	5	2.7308	1.2325
Trustworthiness of marketer's proofs of being eco-friendly	404	2	5	3.3846	1.08214
Price as major factor in slow growth of sales of green products.	404	1	5	3.9615	1.19808
Transparency of organization using green marketing concept since long.	404	2	5	3.8462	0.77296
Employees/Customer feel that routine can be affected by implementing green concept.	404	2	5	4	0.92432
It is difficult for all companies to adapt to green initiatives compliantly	404	1	5	3.8846	0.97848
Transparency n contents of the product labeled green.	404	1	5	3.8846	1.19308
Valid N (list-wise)	404				



**Table 4.9: KMO and Barlett's Test indicates the suitability of the data for factor analysis. As we can observe, that the value of KMO test is 0.944 which indeed is greater than 0.50.**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.944
Bartlett's Test of Sphericity	Approx. Chi-Square	15448.604
	df	1225
	Sig.	0

**Table 4.10: Factor Analysis.**

<b>Commonalities</b>		
	<b>Initial</b>	<b>Extraction</b>
I think green process of production respects the environmental health	1	0.93
I think that the green product does not carry harmful ingredients like wisectiade/ pesticide/ plastic/non-biodegradable or non-recyclable input materials	1	0.845
I think that environment friendly products may cause quite less harm our environment as compared to its chemically laded counterpart	1	0.756
I believe that with advent of latest technologies, use of eco-friendly products will increase and improve the efficiency in reduce-recycle reuse chain to support greener environment.	1	0.895
The seal of quality organizations will further support and increase purchase of Eco- for greener environment.	1	0.655
I think that it is ethical on my part if I support the green products because they have (i) well defined origin (ii) are natural and safe foe consumption and in disposal.	1	0.742
There is respect for our mother nature in doing so.	1	0.68
My ethics, Values, norms and culture motivates me to stretch a little to be ethical toward the environment I live in.	1	0.871
I am interested purchasing eco whose by product are used for renewable initiative	1	0.824
the purchase of green product is for the reason that I want to do may bit for our environment.	1	0.892
I wish to purchase environment friendly nature product that do not harm the environment and society.	1	0.92
I can purchase the green product if the packaging and labeling information provided is sufficing my clearly doubts.	1	0.772
I am in favor of the green product that any stages have used the sustainability process from renewable success.	1	0.747
Quality of green product is Good.	1	0.833
Natural ingredients as claimed	1	0.901
Keeps promise of being safe for consumption	1	0.865

Does not harm health	1	0.941
Perceived as good value for money proposition even if is priced little higher	1	0.931
Advantage outweigh the disadvantage so can pay more for sake of owes and society	1	0.698
I take conscious decision of buying the greener attentive product for the sake of my duty towards the environment.	1	0.717
I help others by persuading them to be environmentally cautious citizens.	1	0.907
I believe that my simple/Small action can cause big impact towards the eco-system balance.	1	0.891
I am inspired by the other who works toward having a automatable society	1	0.897
I believe in the individual empowerment necessary for it.	1	0.862
In unrelieved to buy environmentally safe products for my personal happiness and satisfaction.	1	0.829
It improves my quality of wellbeing in life.	1	0.77
It gives a trek message to my peer group	1	0.916
It symbolizes the culture and values I possess	1	0.873
It shone my deep rootedness to cultural/historical roots.	1	0.921
It gives me more acceptances in my primary/Secondary /treasury groups	1	0.916
I feel pride in explaining eh pros of eco-product, its information and how I am doing my contribution to society at larger	1	0.827
I respect the wish of my other us my social group.	1	0.841
I support the decisions taken during purchase by any peer-group/Family	1	0.804
The problem of depleting natural resources can be resolved by my message to society for green.	1	0.658
I am worried about the state of affairs in an environment and what holds in the future	1	0.743
I think my initiative can lessen the severely abused/upset evtal balance	1	0.885
Humans must live in harmony with the eco-systems/nature in order to survive.	1	0.913
I make special effort to reduce the use of paper non-xcylable product to pass on this message to the society.	1	0.75
I don't mind spending on eco/green product if it convinces me on consistency and trustworthiness of brand being herbal	1	0.801
I can represent my socio-economic status before my poual groups by purchasing green	1	0.795
I am competent to pay more	1	0.827
It is my moral obligation to pay more for environment	1	0.558
My culture/ Value makes me pay more for environment	1	0.703
I am status conscious	1	0.591

I can catalyze sustainable environment by paying and enchase to the engagement and involvement and Encouragement in working as a catalyst to enable green product advantage ones non-green and hence wi	1	0.602
Trustworthiness of marketer's proofs of being eco-friendly	1	0.752
Price as major factor in slow growth of sales of green products.	1	0.78
Transparency of organization using green marketing concept since long.	1	0.831
Employees/Customer feel that routine can be affected by implementing green concept.	1	0.826
It is difficult for all companies to adapt to green initiatives compliantly	1	0.734
Transparency n contents of the product labeled green.	1	0.816
<b>Extraction Method: Principal Component Analysis.</b>		

The commonalities table shows that  $h^2$  values for each statement are greater than .5, hence it further shows that the sample is appropriate for factor analysis and there is significant commonality among the various statements.

**Table 4.10: Rotated Component Matrix.**

Rotated Component Matrix	Component				
	1	2	3	4	5
I think that the green product does not carry harmful ingredients like wisectiade/ pesticide/ plastic/non-biodegradable or non-recyclable input materials	-0.644				
I think that it is ethical on my part if I support the green products because they have (i) well defined origin (ii) are natural and safe foe consumption and in disposal.	0.804				
There is respect for our mother nature in doing so.	0.761				
Natural ingredients as claimed	0.544				
The purchase of green product is for the reason that I want to do may bit for our environment.	0.914				
I help others by persuading them to be environmentally cautious citizens.	0.805				
I believe in the individual empowerment necessary for it.	0.808				
It symbolizes the culture and values I possess	0.878				
It shone my deep rootedness to cultural/historical roots.	0.839				
It gives me more acceptances in my primary/Secondary /treasury groups	0.856				
I think my initiative can lessen the severely abused/upset evtal balance	0.777				

Employees/Customer feel that routine can be affected by implementing green concept.	0.511				
My culture/ Value makes me pay more for environment	0.687				
I am status conscious	0.554				
I can catalyze sustainable environment by paying and enchase to the engagement and involvement and Encouragement in working as a catalyst to enable green product advantage ones non-green		0.684			
It is my moral obligation to pay more for environment		0.531			
I feel pride in explaining eh pros of eco-product, its information and how I am doing my contribution to society at larger		0.869			
I respect the wish of my other us my social group.		0.899			
It gives a trek message to my peer group		0.629			
Quality of green product is Good.		0.874			
Keeps promise of being safe for consumption		0.897			
I think green process of production respects the environmental health		0.923			
I believe that with advent of latest technologies, use of eco-friendly products will increase and improve the efficiency in reduce-recycle reuse chain to support greener environment.		0.869			
I am interested purchasing eco whose by product are used for renewable initiative		0.818			
I wish to purchase environment friendly nature product that do not harm the environment and society.		0.672			
I believe that my simple/Small action can cause big impact towards the eco-system balance.		0.533			
I am inspired by the other who works toward having a automatable society		0.716			
I am worried about the stale of affairs in an environment and what holds in the future		0.508			
I don't mind spending on eco/green product if it convinces me on consistency and trustworthiness of brand being herbal		0.838			
Price as major factor in slow growth of sales of green products.		0.575			
Transparency n contents of the product labeled green.		0.648			
Perceived as good value for money preposition even if is priced little higher			0.878		
Advantage outweigh the disadvantage so can pay more for sake of owes and society			0.654		
I take conscious decision of buying the greener attentive product for the sake of my duty towards the environment.			0.723		

It improves my quality of wellbeing in life.			0.639		
I support the decisions taken during purchase by any peer-group/Family			0.725		
The problem of depleting natural resources can be resolved by my message to society for green.			0.638		
Humans must live in harmony with the eco-systems/nature in order to survive.			0.851		
I make special effort to reduce the use of paper non-recyclable product to pass on this message to the society.			0.761		
I can represent my socio-economic status before my social groups by purchasing green			0.856		
Trustworthiness of marketer's proofs of being eco-friendly			0.808		
Transparency of organization using green marketing concept since long.			0.887		
It is difficult for all companies to adapt to green initiatives compliantly			0.648		
I am in favor of the green product that any stages have used the sustainability process from renewable success.					
Does not harm health					
I am competent to pay more					
I think that environment friendly products may cause quite less harm our environment as compared to its chemically laded counterpart					
The seal of quality organizations will further support and increase purchase of Eco- for greener environment.					
My ethics, Values, norms and culture motivates me to stretch a little to be ethical toward the environment I live in.					
I can purchase the green product if the packaging and labeling information provided is sufficing my clearly doubts.					
In unrelieved to buy environmentally safe products for my personal happiness and satisfaction.					
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 17 iterations.					

Based on the rotated component matrix, grouped several statements together in order to make it easier to analyze the content. To find out the extent of impact of identified factors on the purchase of Eco-friendly/green products the multiple regression conducted.

**Table 4.11: Regression Analysis.**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.923 <sup>a</sup>	0.853	0.849	0.48632		
<b>a. Predictors: (Constant), Factor1, Factor2, Factor3, Factor4, Factor5</b>						
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	180.545	4	60.182	254.459	.000 <sup>b</sup>
	Residual	31.219	399	0.237		
	Total	211.765	403			
<b>a. Dependent Variable: Purchase of Green Products.</b>						

The multiple regression model with all five predictors produced  $R^2 = .853$ , which shows that there is 85% of impact of independent variables on dependent variables.

## DISCUSSION

Neuro-Marketing has a positive impact on the purchase behaviour of customers towards the Eco-green and environmentally sustainable products. It can be further deduced that price, had been the most significant reason for non-purchase towards organic apparels or FMCG, while lack of standardization of green products is another reason because of which green products are over powered by their non- green competitive products. In developing country like India, price sensitivity is more and yet majority from the 404 respondents, were in agreement with the various questions answered to test their knowledge and understanding about what they perceive to be having in a product which is labeled 'Green' or eco-friendly or causing minimum or no hazard to the environment and to mother nature. Thus, the above-mentioned value depicted from the tests states that the data is reliable and the sample size is adequate in order to conduct factor analysis. From the table of total variance explained above, one can analyze the percentage of component responsible for the change in variance. Here we can notice that component 1 accounts for 22.593%, component 2 for 21.980%, component 3 for 19.043%, component 4 for 08.728%, and component 5 for 08.115% of the variance. These are the five main components found out in the research. Multiple Regression analyses examined the relationship between purchase of green products and various potential predictors. There is 85% of impact of independent variables on dependent variables. Overall, the issue of the effects of Neuro-Marketing for companies and society is important since it is assumed that there is potential to discover implicit and automatic processes which determine the decision making process, and that it will reveal secret information about consumer behavior which was not obtainable by the traditional marketing methods.

### Limitations and Implications

The issue of the effects of neuromarketing for companies and society is important since it is assumed that there is potential to discover implicit and automatic processes which determine the decision making process, and that it will reveal secret information about consumer behavior which was not obtainable by the traditional marketing methods (Hubert, and Kenning, 2008; Tusche, Bode, and Haynes, 2010; Ariely, and Berns, 2010; Senior, and Lee, 2008). Although there are also critical arguments against neuromarketing's intervention into the privacy of customers, it is expected that with this method, more effective customer segmentation can be carried out, which in turn leads to improved marketing of products by considering individual product and brand preferences as well as consumer behavior in general (Venkatraman, Clithero, Fitzsimons, and Huettel, 2012). The issue of the effects of neuromarketing for companies and society is important since it is assumed that there is potential to discover implicit and automatic processes which determine the decision making process, and that it will reveal secret information about consumer behavior which was not obtainable by the traditional marketing methods (Hubert, and Kenning, 2008; Tusche, Bode, and Haynes, 2010; Ariely, and Berns, 2010; Senior, and Lee, 2008). Although there are also critical arguments against neuromarketing's intervention into the privacy of customers, it is expected that with this method, more effective customer segmentation can be carried out, which in turn leads to improved marketing of products by considering individual product and brand preferences as well as consumer behavior in general (Venkatraman, Clithero, Fitzsimons, and Huettel, 2012).

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