

# Impact of Sensory Marketing on Green Purchase Intention: Viewing the Mediating Role of Green Attitude in the Cosmetic Industry

M. Sakhawat\*

*AIMS Education Systems, Islamabad, Pakistan*

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**Abstract.** *Purpose* – The demand of green beauty products is increasing in Asian countries due to intense environmental problems associated with the purchase of makeup. However, the factors to determine green purchase intention of natural beauty brands is still under discussion. This study aims to bridge the gap by examining the impact of sensory marketing on green purchase intention of green beauty brands via a mediating role of green attitude. The Theory of planned behaviour was used to explore the dimensions of green purchase intention for green beauty product brands. *Methodology* - This study was cross-sectional and was conducted by self-administered closed ended questionnaires. In total 370 questionnaires were distributed, out of which 282 usable responses were used in the analysis with a response rate of 76%. The data was collected from female university students of Rawalpindi and Islamabad by using purposive sampling technique. The correlation among variables and regression analysis were applied to analyse data. *Findings* - The findings of the study indicate that sensory marketing has a significant positive impact on green purchase intention of natural beauty products. The study supports the mediating role of green attitude for the relationship between sensory marketing and green purchase intention. The results did not support the moderating impact of openness to experience on the relationship between sensory marketing and green purchase intention. Environmental consciousness is found to have no moderating impact on the green attitude-green purchase intention relationship. *Value/Originality* – The study gives valuable insight to address the problems associated with the marketing of green products in developing countries. The study is significant as it explores the novel factors that are rarely discussed in the previous studies to investigate green purchase intention of consumers for green beauty brands. Another contribution of the study is to familiarise marketers of developing countries with an inexpensive tool to market eco-friendly cosmetic brands, keeping in view consumers' needs and demands. *Implications* - The study has implications to theory and extends the body of knowledge in luxurious and natural beauty products. The research overcomes the ambiguities associated with green cosmetic industry and supports the development of organic cosmetic industry in the emerging and less developing countries. Moreover, the study directs green products manufacturers and marketers to market organic products through innovative marketing strategies. The study suggests marketers to target their audience by keeping in mind their attitudes, cultural differences, geographical conditions, and sensory attributes that influence their purchasing intentions.

**Key words:** Sensory Marketing, Green attitude, Openness to experience, Environmental Consciousness, Green Purchase Intention

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\*Corresponding author.

Email: misbah\_sakhawat@yahoo.com

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## 1 Introduction

Over the past few decades, human activities are changing the environment on a global scale. Rapid industrialization and urbanization have depleted the natural resources and contaminated the natural environment with pollution at dangerous level (Boztepe, 2012). Environmental degradation has become a great threat globally to human health and public welfare (Rahardjo et al., 2020). Adverse climate changes and environmental problems incite consumers' attention towards their consumption behaviour and their relationship with environment (Chuang and Chiu, 2018). Therefore, consumers are getting serious towards their environmental attitudes and demand for various products (Huang and Sarigöllu, 2008).

The concept of green consumption has emerged in the late 1960s Kim and Ko (2012) but since the last two decades, consumers' environmental ethics have been advanced. Therefore, Joshi and Rahman (2015) emphasised on sustainable purchasing to reduce environmental problems. However, the level of consumer awareness varies with respect to development status of a country and their cultural differences (Ko and Jin, 2017).

The rising concerns about the environment has resulted in the development of a new segment i.e. the green consumers. Green consumer is defined as the consumer who avoids products that may cause danger to their health, damage environment during production, use or disposal and produce unnecessary waste (Ali et al., 2011; Do Paco and Raposo, 2009; Raposo et al., 2008).

Numerous motivational factors are discussed in the previous studies that drive consumers to make organic purchasing. Consumers tend to purchase green products for selfish reasons such as better taste, good health and superior quality. In a survey conducted by Ritter et al. (2015) to evaluate the green consumption of Brazilian consumers, information and knowledge, environmental attitude, social context and environmental consciousness are the profound elements that drive consumers to purchase green products. Research on consumers' research in India recognizes social norms, social recognition and peer group cohesiveness to be the strongest influencing factors in purchasing sustainable products (Biswas and Roy, 2015).

Keeping in view the necessity of environmental preservation, many organizations are under intense pressure to advance their activities and invest in novel ideas that overcome the environmental destruction and its impact on society (Borges et al., 2019). Many businesses have adopted green marketing to overcome the pressure of stakeholders, to enhance the value of green products, to get a competitive advantage and to maintain the distinctive brand image (Moravcikova et al., 2017). However, it is difficult to maintain the credibility of brands through green marketing as marketers are facing challenges to relate green messages with new brands through green marketing (Ali and Ahmad, 2016). Consumers mistrust the green claims of green brands and therefore green marketing strategies are less attractive for companies to satisfy consumers and fulfil their desired objectives (Peattie and Crane, 2005).

Implicit information and vague claims about green products have intensified the confusion among consumers and it has made the green brands suspicious in the minds of consumers. Lack of understanding of the product attributes and claims refrain the target consumers to make a buying decision (Bhate and Lawler, 1997). Due to green washing (false advertising claims) consumers do not trust the claims and messages of green products (Alsmadi, 2007). Thus, marketers of green products should understand the difference that selling green products is different from non-green products due to new product attributes, customers' expectations, new government

and international regulations.

Literature on ecological buying, green consciousness and green purchasing behaviour in the Asian context is limited as compared to their counterparts in western countries (Khare, 2015; Lee et al., 2009; Lee, 2008; Yadav and Pathak, 2017). The determinants influencing green purchase intention in one country are not generalizable in other countries due to the difference in culture, attitudes, behaviour, demographics, geographical and socioeconomic conditions of each country (Ali et al., 2011; Mei et al., 2012; Morel and Kwakye, 2012; Rahbar and Wahid, 2011; Wilson et al., 2017). There is little research available on green buying behaviour of consumers in emerging and less developing economies (Ali et al., 2011; Carrete et al., 2012; Paul et al., 2016).

Green products are getting popularity in the cosmetic industry and are widely used to overcome the hazardous impact of consumption and production of chemical products on environment (Wilson et al., 2017). There is an emerging market of green cosmetics that invites cosmetic players around the globe to grab the opportunity of going green to serve the ecological needs of society (Pudaruth et al., 2015). Ecological Cosmetics also known as organic, natural or green cosmetics are the cosmetics prepared from natural ingredients, free of preservatives and animal testing (Rybowska, 2014). For example, "The Body Shop" being a pioneer of organic cosmetic brands, promotes its products as environmentally safe products with organic ingredients and claim of animal free testing (Borges et al., 2019).

Due to severe health and environmental problems associated with conventional cosmetics, the trend of using natural cosmetics is increasing all over the world Matic' et al. (2018) but the factors to determine green makeup purchase intention are still understudied (Ma et al., 2018). Consumers are becoming aware of benefits of green cosmetic products therefore the demand for natural cosmetic products is also increasing among Asian women (Ahmad et al., 2015; Johri and Sahasakmontri, 1998; Pervin et al., 2014). Studies reveal that despite the growing demand of green products, research on investigating consumers' attitude and shopping behaviour of natural beauty care products is scarce (Ahmad et al., 2015; Matic' et al., 2018). Liobikienė and Bernatoniene (2017) emphasised researchers' attention towards this category to reduce the imbalance between growing use of green beauty products and limited research available on green beauty products. Thus, there is a need to investigate the factors that influence consumer decisions for natural beauty products (Liobikienė and Bernatoniene, 2017; Pudaruth et al., 2015).

Sensory marketing is one of the promising marketing tools used by marketers to stand out among their competitors. As the name suggests sensory marketing deals with the five human senses (touch, smell, look, sound and taste). Sensory marketing offers tangible future experience to consumers that may emotionally attach them with brands for the life time (Ifeanyichukwu and Peter, 2018). Sensory marketing incorporates the needs of customers with the features of brand, thus creates a brand concept that may lead their intention to purchase a brand (Hinestroza and James, 2014). Despite the effectiveness of senses in the business context, little research is available on sensory marketing (Moreira et al., 2017). Use of sensory inputs in the formation of consumers' attitude and decision-making process has gained little attention by the researchers and marketers. Thus, researchers and marketers need to use multi-sensory marketing to stimulate consumers' emotional connection with natural products (Ghazali et al., 2017).

The aim of this study is to enrich marketing literature by viewing the impact of sensory marketing on green purchase intention in cosmetic industry. Liobikienė and Bernatoniene (2017); Yadav and Pathak (2017) suggested researchers and marketers to consider marketing of different categories of green products to reduce the negative impact of products on environment and to achieve sustainable consumption. Firms must consider different strategies to motivate consumers to buy green products in ways that best help them in achieving their marketing goals

(Lu et al., 2013). Second, to investigate the mediating role of green attitude in the relationship between sensory marketing and green purchase intention. In the past studies, green attitude is found to be the most influencing factor in predicting green purchase intention. Third, to view the moderating role of openness to experience in the relationship between sensory marketing and green attitude. Forth, to examine the moderating impact of green consciousness between green attitude and green purchase intention.

The study is significant and adds to the literature in many ways. First, the study gives insight to address the problems associated with the marketing of green products in a developing country like Pakistan. Consumers' preference for eco-friendly sustainable products make it indispensable for policy makers to understand the demand of green products and give insight to suppliers of products to expand their market share in the emerging markets of sustainable products (Biswas and Roy, 2015). Second, the study attempts to provide the balance between growing use of green makeup and limited research available in this category by introducing nascent variables that are rarely discussed in the past. Liobikienė and Bernatienė (2017), suggests future researchers to consider new categories of green products and discover the factors that influence the purchase of green products as the factors to influence the purchase of one category of green products vary from another category of green products. Third, our study addresses the demand of inexpensive marketing tool (sensory marketing) in developing countries as the methods to promote green products are different from developed countries. The advancement of environmental responsibility among large population of emerging economies has made it crucial for organizations to provide low-priced green products as a substitute of non-green products (Carrete et al., 2012). Fourth, the theory of planned behaviour was used to answer the research questions and fulfil the objectives of our research. This study proposes a new framework to investigate the factors that best explain consumers' purchase intention of green cosmetics. Fifth, our study also contributes to the literature by examining the moderating impact of personality traits (i.e. openness to experience and green consciousness) in determining green attitude and green purchase intention.

## 2 Literature Review

### 2.1 Theory of Planned Behaviour

TPB is widely used model to predict the green purchasing intention (Chan and Lau, 2002; Fauzi and Hashim, 2015; Ghazali et al., 2017; Kim and Ko, 2012). TPB proposes that a person's attitudes, subjective norms, and perceived behavioural control are the components that carry out intentions which ultimately lead to behaviour (Ajzen, 1991). Attitudes are the evaluative statement about someone, something, events, objects and phenomena based on multidimensional attributes such as individual personality, skills, experience, interest, involvement and knowledge (Ajzen, 2001; Ajzen and Fishbein, 2000). There are three components of attitude; cognitive, affective, and behavioural. Knez and Thorsson (2006), reported attitude (personal factor) as schemata which consists of knowledge structures, experiences and expectations stored in the long-term memory that may contribute to stimulate behavioural, affective and cognitive consequences.

In this study sensory marketing is the cognitive part of attitude based on individual experiences and previous knowledge. Along with this cognitive aspect of attitude, consumer personality in the form of openness to experience is under discussion. When a consumer has cognition about certain aspects of the market then interaction of these cognition with consumer personal-

ity will develop green attitude of the consumer. Green attitude in the present study is affective and behavioural part of the consumer attitude because green attitude is directed at environment with the behavioural intentions to bring a significant change in the environment.

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Attitudes are invisible part of personality (Ajzen, 2001; Ajzen and Fishbein, 2000). Attitudes leads to intentions, but the role of personality cannot be ignored in deciding a behavioural intention. According to theory of planned behaviour, perceived behavioural control (personality) can strongly influence purchase intention of consumers. Similar results are verified by different studies (Kim and Ko, 2012; Wilson et al., 2018). Though attitudes are the part of personality, but personality traits have strong impact on both attitudes and behaviours.

Green attitude of consumers will lead to purchase intentions, but these purchase intentions will vary from consumer to consumer due to individual differences. As TPB states that personality moderates the relationship between attitude and behavioural intentions. Consumer personality in the form of environmental consciousness will affect the relationship between green attitude and green purchase intentions. Kim and Ko (2012) reported that perceived behaviour control has moderating relationship between consumers' attitude towards organic personal care products and their purchasing intention towards such organic products. Therefore, environmental consciousness being a part of personality is a right variable to act as a moderator between green attitude and green purchase intention of green cosmetic products. Climate changes and severe environmental problems have made it necessary for policy makers to promote environmental consciousness among people (Johri and Sahasakmontri, 1998).

In line with the theory, green attitude leads to consumer purchase intentions of green product. Conclusively, sensory marketing interacts with openness to experience (personality of consumer) to shape consumers' affective and behavioural attitudinal components that results in green consumer attitude and such attitude leads to purchase intentions. Personality is found to be a significant factor that predicts consumer ethical beliefs. These ethical beliefs are the ethical attitudes of consumers that significantly influence consumers' intention to buy green products (Lu et al., 2013). Consumer personality in the form of environmental consciousness will affect the relationship between green attitude and green purchase intention. Green purchase intention varies as a function of personal values. Therefore, marketers are suggested to adapt their marketing appeals and communication efforts as per the values of target market. Consumers are better able to respond to ecological buying when consumers can link their choices of green products with the well-being of society (Wilson et al., 2017). The present study aims to fill this gap by introducing sensory marketing in promoting green cosmetic products. This is how the findings may be able to respond to the ecological needs of society.

## 2.2 Green Purchase Intention

Green products are gaining popularity in the present era due to increased environmental needs and strict international environmental regulations Alniacik and Yilmaz (2012); Chen (2008); Chen and Chang (2012); Tseng and Hung (2013) because they offer substitutes that are

environmentally friendly (Moser, 2015). Green products are considered to be environmentally friendly, organic in nature, free of chemicals, safe and healthy to use. However, the definition of green products, their benefits to their health and contribution towards environment are still mystery for most consumers (Cervellon and Carey, 2011). Green products are defined as the products produced with the concern to the physical environment i.e. land, water and air (Shrum et al., 1995). Green products are perceived to satisfy personal and social needs of consumers, personal needs through functional benefits and social needs through environmental benefits as they expect more from green products than conventional products (Alshali et al., 2021).

Taking in consideration the increasing environmental concern among consumers and adverse impacts of environmental problems on living organisms, organizations are compelled to take ecological management measures to make their contribution towards safe environment (Safari et al., 2018). It is indispensable for organizations to behave ecologically to satisfy the needs of current and potential customers, retain them and increase consumers' trust over them (Leonidou et al., 2010). Besides this, one of the major reasons of lower consumption of green products is that they are not immediately recognized by the consumers This is the dilemma of green products that often they are marketed without green benefits therefore consumers remain unaware of their value (Ottman et al., 2006). This gives insight towards marketers' responsibility to devise such marketing activities that may provide rich information to consumers about product and position them on top in the minds of consumers (Martinus and Anggraini, 2018). Consumers will continue purchasing green products as long as the benefits of green consumption are clearly identified and communicated to them (Kim and Ko, 2012). In the case of natural products, exchange of information between marketers and consumers is highly important in bringing the quality products (Ritter et al., 2015).

However, consumers' desire for green products cannot be satisfied only by environmental benefits, they need a bundle of benefits in one product with both green and non-green benefits (Ottman et al., 2006). (Fauzi and Hashim, 2015) found that consumers buy cosmetics and skin care products based upon their internal factors like health benefits as well as their external factors like environmental benefits, therefore marketers are suggested to use the combination of internal and external signals in marketing ecological beauty products. Eco-labels exhibit the environmental attributes of products, direct the consumers' demand for environmentally friendly products and make them distinct from conventional products. These environmental cues grab the attention of consumers in the first glance, make it easy for consumers to sense the environmentally friendly products and fuel their green purchasing intentions. Textual information educates the audience about brand attributes and green visuals generate the positive perception of brand, trigger their emotional association with brand and show positive attitude towards brand than those without green visuals (Muralidharan and Xue, 2015). Green consumers assess the reliability of green products by looking into products' packaging, logo, and labelling of product ingredients. In a survey conducted by (Prakash and Pathak, 2017) on young consumers of India, they found that consumers' positive attitude towards ecological packaging lead their intention towards green product purchasing.

According to theory of planned behaviour, intentions are the principal factor towards purchasing behaviour. Purchase intention is the willingness of persons to put an effort to perform a behaviour (Ajzen, 1991). Chen and Chang (2012) referred purchase intention as a substantial element in predicting consumer's purchase behaviour. Therefore, purchase intention is an important concept to comprehend by the marketers to devise marketing strategies. "Purchase intention is a combination of consumer's interest in buying a product and the possibility of buying". Rashid (2009) defined Green purchase intention as "the probability and willingness

of a person to give preference to products having eco-friendly features over other traditional products in their purchase considerations”.

The addition of product display with pleasant environmental fragrance enhances the consumers’ approach towards product. It shows significantly positive impact on attitude toward the product, purchase intention of consumers, estimated price of the product and the willingness to pay more for a product. More accessible, olfactory, and visual cues will be, consumers will show more favourable attitude, spend more time in store and make prompt purchasing decisions. Consumers with high level of tactile needs do not rely solely on visual or hearing cues. The tactile inputs give consumers the accessibility and liberty to touch the product, thus fulfil their need of evaluating the product quality directly and raises consumers’ confidence indirectly (Citrin et al., 2003). In studying the impact of tactile inputs in making product evaluations, women are found to be more sensitive in making product evaluations based upon their tactile needs than men (Citrin et al., 2003). In studying the consumer reactions to sustainable packaging Magnier and Schoormans (2015) observed that visual and verbal design elements of packaging must be congruent to lead consumers for an effective attitude and purchase intention of sustainable products. In a survey conducted by Prakash and Pathak (2017) on young consumers of India, they found that consumers’ positive attitude towards ecological packaging lead their intention towards green product purchasing.

### 2.3 Sensory Marketing

Lindstrom (2005), states that our understanding of the world is based upon our senses that make our memories and emotionally connect us with brands. “The senses are our connection with the outside world, through which we can build a store of memories to help us predict and control our future”. In the world where brands rule, traditional marketing being a marketing of features and benefits no longer exists as it focuses on selling a product as a commodity (Schmitt, 2000). Consumers need persuasive communication to improve their expectations about the attributes of brand, these expectations will boost their attitudes and encourage their intentions towards buying.

Sensory marketing is an effective promotional tool that stimulate the human senses and have significant impact on brand image, recall of advertisement and consumer behaviour. Sensory marketing offers an ideal background in creating an impressive brand image as customers form their perception about brands by experiencing the brand through all five sensory dimensions (Căruntu and Dițoiu, 2014).“ Sensory marketing is the use of marketing stimuli in the form of sensory information which aims at affecting customer perceptions and behaviours in a positive manner to obtain the marketing goals” (Nghiem-Phú, 2017). Hinestroza and James (2014) defined sensory marketing as “marketing that engages the consumers’ senses and affects their perception, judgement and behaviour” (p.333). Sensory marketing adds value to the brands by building a synergy between brands and customers that best incorporate their needs and generates a higher consumption (Hinestroza and James, 2014).

### 2.4 Sight

Extensive research is available on the sense of sight as it is considered to be one of the most powerful dimensions of sensory marketing that perceive the distinguish characteristics of goods and services (Hultén, 2011). It addresses the inclusive needs of customers by providing rich information through verbal and visual elements. It was found in a study that verbal and visual

elements of packaging have positive impact on consumers' intention to buy. Verbal elements include name, logo, slogan and country of origin etc. whereas, visual elements include size, shape, colour, graphics and material of packaging. Shape of the product packaging also has the ability to modify the response of customers towards product (Spence, 2012). Sensory marketing made it possible to communicate the value of brands to customers without uttering a word by using an inexpensive tool of colours. Besides increasing visual appearance of a brand, colours provide information about the price, quality and nature of a product e.g. green colour is associated with nature, green colour products are perceived to be organic/herbal products.

Pancer et al. (2017) found in their study that green colour alone does not make consumers' intention to purchase products by considering them ecological. Use of green coloured packaging along with eco-labels increase the credibility of environmental friendly products that elevate consumers' purchase intention. Different colours are associated with specific meanings that may vary across cultures i.e. In western countries, white colour is most commonly used for wedding dresses while, in few Asian countries (Pakistan, India and Bangladesh), white is associated with mourning. While designing the products, it is equally important to consider the psychology of colours with respect to gender, age and beliefs of prospects (Citrin et al., 2003).

## 2.5 Hearing

Hearing is the remarkable sense that connect us with the world. It is the first sense to develop in the womb. The sense of audition and vision are two main modes of communication. Sounds are all around us and can be heard everywhere, marketers communicate with customers through sounds. Mass media are immensely using visual and auditory channels to reach their customers. Auditory cues act as an efficient tool to satisfy the needs of consumers and to direct their positive associations towards product. Firms deliberately use unique sound expressions such as background music, jingles, voice, slogans, and tunes to engage customers, seeking an opportunity to create a signature sound for their brand (Hultén, 2011).

Sound symbolism is used by the marketers to create sensory expectations in the minds of consumers. Name of a brand influence their perception about product and hence their liking for a product, therefore, name of a brand must be congruent with its physical and functional attributes (Spence, 2012). Besides sound symbolism, it's an ideal practice by marketers to provide a brand a unique identity by using phonetic symbolism (word fluency, combination of consonants and vowels, use of alliterations) while deciding a name and slogan of a brand (Graakjær and Bonde, 2018). Sound of a product convey subtle information about the product quality, texture, freshness, temperature, and safety. For instance, mascara's shutting with a crisp click sound ensures that the liquid mascara would not get dry and a sound of whoosh from a nozzle spray signals its quality and texture. Sound that an object/product emits reveal the information about its physical characteristics e.g., sound of the horn informs you about the size and personality of the car (Fauzi and Hashim, 2015).

Spence (2012) demonstrated change in the perceived pleasantness and forcefulness of an aerosol spray just by altering the nature of sound (reducing or decreasing the frequency level), without disturbing the visual and tactile properties of an aerosol spray. Moreover, the bottle opening and pouring sounds of beverages are rich source of information for consumers (e.g. temperature, freshness, carbonation and viscosity of drink). These sounds can be modified into signature opening and pouring sounds to make it a sound that may convey consumer benefits, thus giving them an opportunity to choose a right brand to address their needs (Spence, 2012). Similarly, the opening and closing sounds of cosmetics products can ensure the quality and



safety of using organic cosmetics. Therefore, marketers should emphasize on creating signature auditory cues of green cosmetics that must approve their claim of providing environmental friendly products. Thus, leading consumers' intention towards purchasing green cosmetics.

## 2.6 Smell

Scientific research is evident that human beings can distinguish between 4000 olfactory stimuli therefore smell is used as a marketing tool to increase the willingness of Pleasant smell is an important part of beauty as it speaks about the human personality. In combination with visual and tactile properties, smell is the most significant sense often associated with cleaning and personal care products (Schifferstein, 2006). Cosmetics as a symbol of beauty create their allure through pleasant smell and packaging. Cosmetic manufacturers use scents as an important component of cosmetics as it differentiates natural products with artificial products. Rose, Jasmine, Lavender, lemon, mint, and coconut are few natural scents used by green cosmetics manufacturers. Consumers believe natural products to have mild fragrance and generally, they associate artificial scents with chemical products that may cause serious skin allergies. Low quality products are associated with strong scents whereas mild fragrance in cosmetics feel natural (Citrin et al., 2003).

Scents are used to communicate the message companies want to deliver to their prospects. The difference in messages from both visual and olfactory cues may mislead consumers about the product and imprints a negative impression in their minds (Joshi and Rahman, 2015). Consumer responses to sensory attributes vary from person to person, depending upon their gender, age, personality traits and culture. Generation X is found to be more sensitive to touch than generation Y whereas Generation Y is more significant to sense of smell (Liégeois and Rivera, 2011). This sense of smell imprints a strong image in the minds of customers and contribute in recognition and recall of a brand (Hultén, 2011). Among the auspicious characteristics of cosmetics brands, the most promising attribute is their pleasant smell. In the study of luxury brands, Hennigs et al. (2013) found that all luxury brands including cosmetics carry fragrance as the smell of a brand arouse the emotions of familiarity. The success or failure of a cosmetic products is significantly dependent upon its fragrance.

## 2.7 Touch

Touch is an important element that communicates the value of a product and triggers customers' intention to purchase a product. Tactile interaction with a brand gives a sense of satisfaction to buyer as it determines the product features such as texture and weight of a product. This tactile interaction with a brand gives a clear advantage to a brand over its competitors. Touch is an uncertainty-reducing device that brings comfort and give people a sense of security (Van Horen and Mussweiler, 2014).

When consumers physically touch the product, they get a notion about its features. Haptically motivated consumers feel less confident if they are being deprived to touch products before purchasing because they consider haptic information more important to evaluate products (Peck and Childers, 2003). Tactile communication incites the distinct emotions of people and spread warmth and trust (Kraus et al., 2010). The visual and olfactory cues persuade consumers to touch the product, increased touching time increased their chances of buying the product.

According to Peck and Childers (2003), touch increases individual's confidence and offers an opportunity to experience a pleasurable sensory attribute of product, however there are in-

dividual differences in Need for Touch (NFT). Women appreciate to buy cosmetics that invites them to touch before buying as it guides them about the product features, texture and product quality. Touch is an incredible tool for consumers to evaluate a product based on its properties that increase their tendency to purchase a brand (Klatzky and Peck, 2012). Touching increases persuasion and ultimately sales of product whether the touch is congruent with the marketing message or not Peck and Childers (2003) because it helps in increasing perceived ownership of buyers (Peck and Childers, 2003).

## 2.8 Taste

Taste is a part of sensory mechanism that is being associated through mouth organs. There are taste buds in the mouth that helps a person in experiencing different flavours i.e. sweet, salty, sour and bitter. The sense of taste is a combination of other senses, touch (tactile), smell (olfaction), and vision. Use of multiple senses to promote a taste of product generate strong sensory thoughts among consumers, thus results in higher taste perception as compared to a product promoted with taste sense alone.

Smell is closely associated to taste; the sense of olfaction performs dual roles of exploring the objects both externally and inside the body. This smell-taste association is evident through a common observation that people often lose their taste when nose is blocked. When smell is separated from taste, taste suffers an eighty percent loss (Lindstrom, 2005). Most flavours have both taste and smell components, these flavours are used by food and cosmetic industries. In Pakistani culture, women love to wear lipstick which starts at the early age of their lives for many women. Lipsticks with natural fruit flavours (strawberry, peach, honey, lemon, coconut, raspberry, orange, vanilla) are popular among customers. The purpose of providing tasty fragrances to lipstick is to give customers a pleasant taste sensation. The sense of taste is getting popularity in the cosmetic industry as the gustatory cues are used by cosmetic industries to appeal the sense of taste for products that are not intended to be tasted. For instance, RevAyur, oriflame and Mac are few popular brands offering flavoured cosmetics. Considering the significance of natural ingredients and taste, few cosmetic brands have launched edible cosmetic products e.g. Urban decay sparkling lickable powder, bloom cosmetics lip gloss, radiant love butter lotion etc. These edible cosmetics are designed to entertain customers with the divine taste that are not harmful for health.

It has been proposed that consumers' choice of a product is based on expectations, beliefs, attitude and intentions. The sensory attributes of a product communicate the value of a product and support consumers in making their attitudes, thus improve their intentions to purchase a product. Thus, we can assume that:

*H<sub>1</sub>: Sensory marketing has significant positive impact on green purchase intention.*

## 2.9 Green Attitude

Attitudes are assumed to be formed as a result of people's evaluative judgements controlled by cognitive and affective processes (Ajzen, 2001). Studies report that attitude not only acts as a determinant of green purchase intention, but it also act as a mediator in relationship between other factors and green purchase intention. Attitude is a fundamental factor in predicting purchase intention directly as supported by the theory of planned behaviour and indirectly through mediation as supported by (Ko and Jin, 2017). Alwitt and Pitts (1996) supports the idea

that environmental attitude influence consumers' intention of buying environmentally sensitive products, that influence may be direct or indirect.

Consumers' positive attitude towards organic products is associated with their concern about health, environmental protection, animal welfare, ethical values, political values, cultural values and religion. More they are believed to have such values, positive attitude towards organic products increases which subsequently increase consumers' intent to purchase organic products. [Chen \(2008\)](#); [Leonidou et al. \(2010\)](#). The increasing number of consumers with environmental concern influence consumers' attitude which subsequently lead their intention towards purchasing green products. However, Cultural differences, pollution level or environmental richness evoke green attitude. People living in different cultures and countries may perceive the world and environment differently due to difference in their environmental attitudes. It has been found significant positive influence of environmental attitude on green purchase intention of young Thai consumers. Environmental attitude is found to be an important determinant in predicting green purchase intention of Malaysian consumers ([Liobikienė and Bernatoniene, 2017](#)).

Green attitude can be defined as "an individual's tendency to evaluate the natural environment with some degree of favour or disfavour". Consumers' perceived effectiveness of environmental protection help them to promote the positive attitude towards green products which led their intention to purchase eco-friendly products ([Vermeir and Verbeke, 2006](#)). Therefore, marketers and social organizations should emphasize environmental protection and healthy lifestyle in the promotional campaigns of green products ([Khare, 2015](#)). Consumer's belief and values influence their attitude, marketers hit their beliefs through one or multiple senses, which lead them towards buying intention. People's priority over environmental protection and economic growth is based upon the degree to which environmental attitude has developed among them over time. [Liobikienė and Bernatoniene \(2017\)](#) reported that green attitude is established among individuals based upon their concern for environmental problems and methods to protect the environment.

While investigating the consumers' intention to buy organic skin and hair care products [Kim and Ko \(2012\)](#) found in their study that consumers' attitude towards organic buying intention increases with increase in their perceived behavioural control. Environmental attitude is found to have a significant positive relationship with green makeup purchase intention ([Bhate and Lawler, 1997](#)). Consumers' positive attitude towards green cosmetic products is based on three factors, i.e. packaging of green cosmetic products, their display in the cosmetic store, prices and recommendations of green cosmetic products.

[Sang et al. \(2016\)](#) found that people with high environmental attitude can perceive natural sounds strongly. It plays a significant role in creating positive perception regarding nature-oriented sounds. Thus, the results support the idea that consumers' green attitude can act as a mediating variable in exciting consumers' green purchasing intention. [Ghazali et al. \(2017\)](#) suggests that multi-sensory marketing with hedonic characteristics such as music, smell, texture, and visual aspects can increase consumers' desire for pleasure and excitement. Therefore, marketers are advised to add sensory appeals with hedonic values to have a strongest influence on attitudes which will stimulate the consumers' emotional connection with organic personal care products. Thus, we assume that:

*H<sub>2</sub>: Green attitude mediates the relationship between sensory marketing and green purchase intention.*

## 2.10 Openness to Experience

According to Big five model of personality traits, personality comprises of five components namely, openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism. Openness to experience is one of the Big Five Models which is related to active imagination, aesthetic, feelings, ideas, action and value. Individuals having this trait are more open towards new ideas and they remain curious about new things and experiences. Open individuals are open to change, they accept change and explore novel ideas to solve problems (Baer and Oldham, 2006). "Openness refers to a continuum of individual differences in processing experience and that the majority of people are intermediate in Openness" (McCrae and Costa Jr, 1997). Young generation is pro-active as they are more open towards innovative ideas and ready to test new products. "Openness is associated with cognitive processes like implicit learning that are involved in the detection of correlational patterns in sensory experience".

Personality traits have been used in the past studies as significant factor in predicting the ecological behaviour of consumers. It is claimed that the use of beauty care products reflects the type of personality of users. While investigating the associations between personality and environmental engagement. Milfont and Sibley (2012) found that Agreeableness, Conscientiousness, and Open to experience are the personality traits strongly linked with environmental engagement. Ghazali et al. (2017) observed that consumers make choice of personal care products based upon their interest and personal factors rather than peer pressure and influence of social groups.

People's attitudes are formed by different kinds of beliefs that are accessible in memory to make evaluative judgements and corresponding decisions (Ajzen, 1991). The combination of personal and contextual factors results in the high or low accessibility of different kinds of beliefs that may guide them to take behavioural decisions (Ajzen, 1991). Factors to determine green attitude are unexplored, personality traits can be potential drivers to inquire environmental attitude (Leonidou et al., 2010). Studies notify changes in environmental attitude among consumers due to difference in individual characteristics, culture, environmental education, environmental problems and level of income. Consumers' attitude to organic products vary according to personality traits of individuals depending upon their interests, beliefs and values. Open consumers have fearless attitude and are considered to have a strong behavioural control. Consumers with higher degree of openness to experience are more curious to try new cosmetics as they are prone to accept new ideas and challenges.

TPB is the theory of attitude and personality. In the present study sensory marketing is the cognitive part of attitude based on individual experiences and previous knowledge. Sensory marketing being a cognitive aspect of attitude and consumer personality in the form of openness to experience can develop green attitude of the consumer. Marketers of green cosmetics can provoke consumers' perceptions, feelings, and aesthetic ideas by using senses as a centre of marketing to build their attitudes towards organic cosmetics. Thus, we can assume that:

*H<sub>3</sub>: Openness to experience moderates the relationship between sensory marketing and green attitude.*

## 2.11 Environmental Consciousness

Some level of environmental concern was always existed since man is living on earth, but it has gained special attention with the understanding of environmental issues and the level of environmental awareness by the people. Increased awareness of environmental problems and concern about the better society change the attitudes of people towards ecological conscious life which inclined them to purchase ecologically packaged products (Schwepker Jr and Cornwell,

1991). Alsmadi (2007) defined environmental consciousness as a sense of ecological responsibility to protect the environment and preserve the natural resources. Kim and Ko (2012) states in their study that green consciousness is part of consumers' belief and values. These values contribute towards formation of individual's environmental attitude that provide him/her guidelines for future actions. Literature proves that environmental consciousness is a driving factor to increase the purchase of green beauty products (Kim and Ko, 2012). Environmental consciousness and environmental knowledge are the indicators that influence society to implement green practices for environmental protection. Environmental consciousness is one of the promising factors to engage customers towards green purchase intention. In evaluating the purchase intention of organic personal care products, the study proves that environmental consciousness positively influence consumers' attitude toward buying organic personal care products which results in their intention to purchase organic personal care products (Kim and Ko, 2012).

Consumers' perceived environmental responsibility plays an important role in exciting consumers' attitude and intentions towards buying eco-friendly products. In studying the impact of health and environmental consciousness on consumers' attitude to purchase green beauty products. Kim and Ko (2012) findings unveil the fact that consumers' environmental consciousness strongly influences the purchasing frequency of green beauty products than consumers' health consciousness. Consumers' decision to purchase green products is based on their knowledge about environmental protection, eco-labelling, eco-certification of products, environmental and economic benefits of products synergize with their commitment of environmental protection that increase their conscious to purchase green products.

However, the factors to operationalize green consciousness vary from country to country depending upon the level of pollution, environmental regulation, environmental awareness, and availability of green products (Schlegelmilch et al., 1996). Therefore, marketers and policy makers should learn to understand the level of consumers' environmental consciousness in the developing countries to devise the marketing strategies accordingly (Schlegelmilch et al., 1996).

According to TPB, personality moderates the relationship between attitude and purchase intention. Environmental consciousness being an aspect of perceived behavioural control is found to be have a significant impact on purchase intention of organic shampoo. Consumers who want to be recognized as environmental consciousness prefer to involve in actual purchase of green products (Rahbar and Wahid, 2011). Thus, we can assume that:

*H<sub>4</sub>: Green consciousness moderates the relationship between green attitude and green purchase intention.*

## 2.12 Research Model

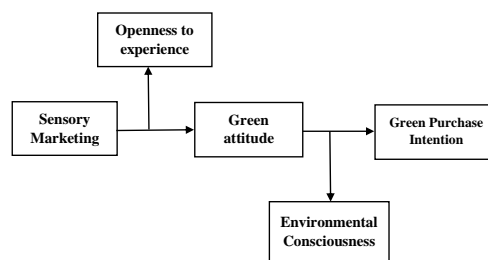


Figure 1: Research Model

## 3 Methodology

### 3.1 Sample and Data Collection

Data were collected by distributing questionnaires to female consumers who have purchased and used organic cosmetics from organic cosmetics stores like Body Shop, Saeed Ghani, D-Watson and Shaheen Chemist etc. This study has focused only on female green cosmetic consumers to find the significant results as the female consumers are the most considerable and dominant in purchasing and consuming cosmetic products than men (Pudaruth et al., 2015). To have variance in the data, data was collected from female students of different universities located in Islamabad and Rawalpindi. We decided to target the university students because they are sociable and knowledgeable group of society. Lee et al. (2009) state that targeting this group is effective as young generation is pro-active and likes to try new and innovative products. Moreover, their knowledge of natural beauty products provides an opportunity or challenge to marketers of green products to focus on this segment. The target location was Rawalpindi and Islamabad as people living in Rawalpindi and Islamabad represent population of the whole country with respect to diverse cultures, socioeconomic, and demographic characteristics. Therefore, the sample was justifiable to be a subset/representative of entire population of country. Another reason to target students was their high education level. Less educated consumers of organic cosmetics were unable to respond well as the questionnaire was in English and it was hard for them to understand it effectively.

The method of distribution was through both visits of educational institutions and online through social media. The purpose of study was explained to respondents through a cover letter. It was insured to participants that the sole purpose of their participation was to help the study to reveal the truths behind the purchasing intention of green cosmetics. Strict confidentiality of responses was assured to them, it was made clear to them that their participation was voluntary, and their responses will be held strictly anonymous. A screening question was added in the questionnaire to cater the true respondents for this study who have ever purchased and used green cosmetic products. Only female individuals who had prior experience of purchasing and using organic cosmetics were said to continue responding this survey.

To fulfil the aim of study, survey was conducted by using a purposive sampling technique. Nonprobability sampling design, though not generalizable but offer convenience and timely information. Purposive sampling is used when there is a purpose to fulfil and the sample is selected keeping in mind the characteristics of informants that can best serve that purpose excluding those who do not have the relevant characteristics. We distributed 370 questionnaires among the respondents. Out of 370 questionnaires, 287 questionnaires were received. Five questionnaires were incomplete, so they were not considered to generate the results. After the elimination of incomplete responses, 282 usable responses were used to generate the findings of the study. Thus, the sample size of the study was 282 having a response rate of 76%. The sample size was appropriate because suggested that "a minimum of five subjects per variable is required for factor analysis. A sample of 100 subjects is acceptable, but sample size of 200+ are preferable".

Demographics include age, education and income level of respondents. The demographics of the study show that majority of the respondents were young with average ages from 21-25 years. This group constituted 70.21% of the participants. Age group of 26-30 years constitute 20.56% of the participants. 5.7% of participants belong to age group of 31-35 years and the participants having age above 36 constitute 1.1% of the participants.

The majority of participants were undergraduate, and they constitute 44.3% of the participants. About 35.5% of participants were graduate and 18.1% of participants had education up to post graduation level.

The income level of majority (43.3%) of participants was above Rs.60000. 11.3% of participants were having an average income level of (Rs20, 000-30,000). About 14.5% of participants had an average income level of (Rs31, 000-40, 000). The participants who were having an average income level of (Rs41, 000-50, 000) constitute of 7.8% of participants and 20.9% of participants constituted an average income level of (Rs51, 000-60, 000). Six participants didn't report their demographics.

## 3.2 Ethical Protocol

Participants of the study were insured that

- Their Participation is completely voluntary.
- Their information will be kept confidential.
- Anonymity will be observed, and data will be used for academic purpose only.
- They are free to withdraw and discontinue participation at any time.

## 3.3 Measurement Instrument

### 3.3.1 Sensory Marketing

Scale of sensory marketing was adapted from eight items. One sample item was "Organic Cosmetics are visually attractive products". Cronbach's alpha reliability of this scale was 0.61 which is slightly lower than ideal scenario.

### 3.3.2 Green Attitude

Green attitude for all participants was measured by adopting twenty one items scale. One sample item was "I like making an effort to contribute to a better environment". Cronbach's alpha reliability of this scale was 0.69 which is near to 0.7.

### 3.3.3 Openness to Experience

Openness to experience was measured by adopting a ten items scale, developed by [John et al. \(1999\)](#). One sample item was "I get excited by new ideas". Cronbach's alpha reliability of this scale was 0.79.

### 3.3.4 Green/Environmental Consciousness

Green Consciousness for all participants was measured by adopting a scale which has eight items. One sample item was "I am usually informed about environmental issues". Cronbach's alpha reliability of this scale was 0.77.

### 3.3.5 Green Purchase Intention

Green Purchase Intention of all participants was measured by using a three items scale. One sample item was “Overall, I am glad to purchase this product because it is environmental friendly”. Cronbach’s alpha reliability of this scale was 0.74. All the variables of this study were measured by using a five-point Likert scale where 1=SD-Strongly Disagree, 2=D-Disagree, 3=N-Neutral, 4= A-Agree, 5=SA-Strongly agree.

Original English language questionnaire was used, and it was made sure that all respondents are qualified enough to understand and respond in English.

Table 3.1: Instrument Sources

Variable	Items
Sensory Marketing (IV)	8
Green attitude (Med)	21
Green Purchase Intention (DV)	3
Openness to experience (Mod)	10
Green Consciousness (Mod)	8

### 3.3.6 Control Variables

To identify control variables One-way ANOVA test was conducted. Age, gender and income were used as control variables due to their possible impact on green purchase intention. The results obtained from One-way ANOVA are mentioned in the Table 2. One by one we checked each demographic (age, qualification and income) with the dependent variable (Green purchase Intention). Results indicated that there was insignificant change in green purchase intention due to age, education and income so there is no need to control demographics. Similarly, there was no significant difference found in mean values of green attitude due to age, qualification and income.

Table 3.2: One-way ANOVA

Sources of Variation	GA	GPI
Age	1.63	.181 .351 .789
Education	.763	.467 .084 .920
Income	.418	.796 1.77 .135

*GA=Green attitude, GPI=Green Purchase Intention*



## 4 Results

### 4.1 Reliability Analysis

Reliability of each variable was calculated separately. Reliability analysis of the data was conducted to know the internal consistency of scale across multiple times with the intended variables. Table 3 shows the reliability (Cronbach alpha) for all measures.

Table 4.1: Reliability of Scale Analysis

Serial No.	Variables	Reliability
1	Sensory Marketing	0.61
2	Openness to experience	0.79
3	Green consciousness	0.77
4	Green attitude	0.69
5	Green Purchase Intention	0.74

The standard value of Cronbach alpha is 0.70. In this study the Cronbach's alpha reliability of sensory marketing was 0.61 which is slightly lower than the ideal scenario. However, this reliability is acceptable because the reliability values from 0.5 to 0.75 is generally accepted exhibiting a moderately reliable scale (Hinton et al., 2004). Green attitude has the internal consistency reliability value of 0.69 which is near to standard value. Cronbach's alpha reliability of openness to experience, green consciousness and green purchase intention are 0.79, 0.77 and 0.74 respectively that are above standard value of 0.7. It confirms the internal consistency of scale, so the scale of the study is reliable to proceed ahead for other analysis.

### 4.2 Descriptive Statistics

Table 4.2: Descriptive Statistics

Variables	N	Min	Max	Mean	SD
Sensory Marketing	282	1.00	5.00	3.65	.568
Openness to experience	282	1.00	4.50	2.09	.548
Green Consciousness	282	1.38	5.00	3.72	.606
Green attitude	282	2.10	4.43	3.57	.329
Green Purchase Intention	282	1.33	5.00	3.85	.684

The above table represents the descriptive statistics for the observed variables. These include mean, standard deviation, minimum and maximum values for each variable. The minimum value of sensory marketing is 1 and maximum value is 5. Mean of sensory marketing is 3.65 and standard deviation (possible variation) is 0.568. The minimum value of openness to experience

is 1 and it has maximum value of 4.50. Mean value of openness to experience is 2.09 and the value of standard deviation is 0.548. Green consciousness has a minimum value of 1.38 and maximum value of 5. It has a mean value of 3.72 and standard deviation is 0.606. The minimum value of green attitude is 2.10 and it has a maximum value of 4.43. Mean value of green attitude is 3.57 and it has a standard deviation of 0.329. Green purchase intention has a minimum value of 1.33 and a maximum value of 5.00. Mean value of green purchase intention is 3.85 and it has standard deviation of 0.684.

### 4.3 Correlation Analysis

The below table represents the correlation coefficients(r) for the observed variables.

Table 4.3: Correlation analysis

Sr. No.	Variables	1	2	3	4	5
1.	Sensory Marketing	1				
2.	Openness to experience	-3.70**	1			
3.	Green consciousness	.504**	-.504**	1		
4.	Green attitude	.425**	-.412**	.400**	1	
5.	Green purchase Intention	.459**	-.500**	.636**	.312**	1

*N=282, \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$*

Pearson Correlation calculates the association between two variables. Correlation coefficients (r) have standardized values between -1 and +1. The magnitude of value shows the degree of association whereas positive and negative sign confirms the direct or inverse relationship between variables. The correlation coefficients (r) near 1 predicts strong correlation whereas the value close to -1 shows the inverse relationship between variables. Results indicate that there is a significant negative relationship exists between sensory marketing and openness to experience ( $r = -0.370, p < 0.01$ ). There is a positive correlation exists between sensory marketing and green consciousness ( $r = 0.504, p < 0.01$ ). There is a positive significant relationship exists between sensory marketing and green attitude ( $r = 0.425, p < 0.01$ ) which supports our second hypothesis of the study. Sensory marketing is found to have a significant positive association with green purchasing intention ( $r = 0.405, p < 0.01$ ) that provides initial support for first hypothesis of this study. Openness to experience is found to have negative relationship with green consciousness ( $r = -0.504, p < 0.01$ ). It holds a significant negative relationship with green attitude ( $r = -0.412, p < 0.01$ ) which does not support our third hypothesis. Openness to experience confirms the negative relationship with green purchase intention ( $r = -0.500, p < 0.01$ ). Green consciousness is found to have significant positive relationship with green attitude ( $r = 0.400, p < 0.01$ ) which provides initial support for fourth hypothesis. It also indicates the significant positive relationship with green purchase intention ( $r = 0.636, p < 0.01$ ). Furthermore, green attitude shows significant positive correlation with green purchasing intention ( $r = 0.312, p < 0.01$ ). Thus, it provides initial support for second hypothesis.

#### 4.4 Regression Analysis

Regression analysis predict the impact of independent variable (predictor variable) on dependent variable (outcome variable). It also calculates the percentage variation in dependent variable due to independent variable, so we can predict that to what extent an independent variable can bring change in dependent variable. Table 6 presents the regression analysis for hypothesis 1 of this study.

Table 4.4: Regression Analysis

Predictor	Green Purchase Intention (GPI)				
	$\beta$	R	R <sup>2</sup>	t	P
Sensory Marketing (SM)	0.45	0.45	0.21	8.64	0.00

$N=282$ , \*\*\* $p<0.001$ , \*\* $p<0.01$ , \* $p<0.05$

Results of regression analysis indicate that there exists a positive relationship between sensory marketing and green purchase intention. The value of R shows correlation between two variables which is 0.459. R<sup>2</sup> is the coefficient of determination that exhibits the percentage variation in dependent variable (Green purchase intention) due to independent variable (Sensory Marketing). Here the value of R<sup>2</sup> is 0.21 which shows the 21 percent variation in green purchase intention due to sensory marketing. Thus, it reflects the goodness of fit of model. Here the value of  $\beta$  is 0.45 which shows that one unit change in sensory marketing leads to 45% change in green purchase intention. The value of  $p = 0.00$  which is less than 0.05, thus it exhibits the significant relationship between variables. The value of  $t = 8.64$  which is above 2, this depicts the significant relationship between variables and it indicates noticeable level of relationships between variables. Hence H<sub>1</sub> is supported by results.

#### 4.5 Mediation Analysis

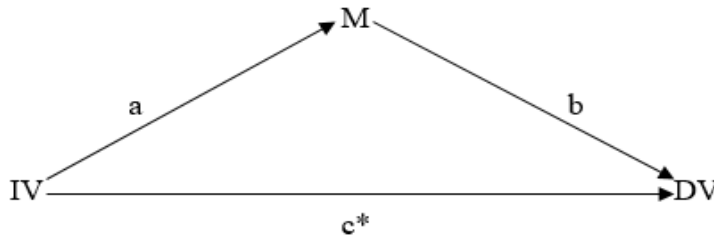
Table 4.5: Mediation Analysis

DV	Effect of IV on M (a path)		Effect of M on DV (b path)		Total effect of IV on DV (c path)		Direct effect of IV on DV (c' path)		Bootstrap results for indirect effects	
	$\beta$	t	$\beta$	t	$\beta$	t	$\beta$	t	LL 95% CI	UL 95% CI
SM	.247***	7.86	.297**	2.46	.552***	8.64	0.479***	6.84	.0010	.1445

$N=282$ , \*  $p<0.05$ , \*\*  $p<0.01$ , \*\*\*  $p<0.001$ , No. of bootstrap resample = 5000, IV = Sensory Marketing, M = Green attitude, DV = Green Purchase Intention

To test the second hypothesis H2 of the study that green attitude mediates the relationship between sensory marketing and green purchase intention, we used PROCESS macro through

SPSS. To analyze the mediation, we need to establish three effects i.e. total effect, direct effect and indirect effect as shown below in the model.



**4.5.1 Total Effect**

The total effect shows the impact of independent variable (Sensory Marketing) on dependent variable (Green Purchase Intention). The value of  $\beta = 0.552$  which shows that one unit change in sensory marketing brings 55% change in green purchase intention. The value of  $p = 0.00$  which is  $p < 0.05$ , shows significant relationship between variables. The lower limit of bootstrap is 0.426 and upper limit of bootstrap is 0.678 which shows significant value as zero does not fall between them. Thus, our first hypothesis is confirmed by the results.

**4.5.2 Direct Effect**

Direct effect shows the effect of independent variable (Sensory marketing) on dependent variable (green purchase intention) when mediating variable is present there. The value of  $\beta = 0.47$  which shows that one unit change in sensory marketing brings 47% change in green purchase intention. The value of  $p = 0.00$  ( $p < 0.05$ ) which shows significant relationship between variables. The lower limit of bootstrap is 0.34 and upper limit of bootstrap is 0.61 which shows significant value as zero does not fall between them. Thus, the results are significant.

**4.5.3 Indirect Effect**

The indirect effect demonstrates the mediating effect of green attitude on the relationship between sensory marketing and green attitude. The bootstrap values give us idea that whether the mediating relationship is significant or insignificant. The lower limit of bootstrap is 0.00 and upper limit of bootstrap is 0.14 which shows significant value as zero does not fall between them. Thus, the results are significant and supports our second hypothesis.

**4.6 Moderation Analysis**

To test our third hypothesis moderating impact of openness to experience between sensory marketing and green attitude, PROCESS macro was used through SPSS.

The results of analysis show that ( $p = -.1029$ ) which does not meet the significant value criteria. This shows that openness to experience have insignificant impact on the relationship between sensory marketing and green attitude. In addition to this, the lower limit of bootstrap value is  $-.1029$  and the upper limit of bootstrap value is  $.0735$  having zero value between them. These values predict that there is insignificant moderating effect on the observed relationship.

Table 4.6: Moderation Analysis

	<b>B</b>	<b>se</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
<b>Constant</b>	2.8955	.3933	.0000	2.1213	3.6698
<b>OTE</b>	-.1587	.1623	.3290	-.4783	.1608
<b>SM</b>	.2943	.1044	.0052	.0888	.4998

*OTE (Openness to experience), SM (Sensory Marketing)*  
*Note. Interactions: int\_1OTE\*SM*

Thus, we can say that moderation does not establish here so our third hypothesis is not approved.

Table 4.7: Moderation Analysis

	$\beta$	<b>se</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
<b>Constant</b>	.6202	1.1969	.6048	-1.7360	2.9765
<b>GC</b>	.7203	.3227	.0264	.0850	1.3555
<b>GA</b>	.2110	.3511	.5484	-.4802	.9021
<b>Int.1</b>	-.0143	.0919	.8761	-.1953	.1666

*GC (Green Consciousness), GA (Green attitude)*  
*Note. Interactions: int-1 GC\*GA*

The results of analysis show that ( $p = 0.8761$ ) which is greater than significant value. This shows that green consciousness has insignificant impact on the relationship between green attitude and green purchase intention. In addition to this, the lower limit of bootstrap value is  $-.1953$  and the upper limit of bootstrap value is  $.1666$  having zero value between them. These values predict that there is insignificant moderating effect on the observed relationship. So, we can say that moderation does not establish here thus, forth hypothesis is not approved.

The results of the study show that the value of  $p$  is  $0.876$  which is greater than significant value. Hence findings do not support our hypothesis 4 as it shows the insignificant moderating impact of green consciousness on the relationship between environmental consciousness and green purchase intention. It was reported environmental consciousness to be a main predictor that influence the purchase intention of natural beauty products. Environmental consciousness among consumers is based upon their individual attitude, lifestyle and ecological needs. The findings of the study did not support the results of previous findings as government, policy makers, consumers and organic industry are not flourished in this part of world as compared to western countries. Consumers feel it to be a responsibility of government, lack of investment and high tax on organic cosmetics did not establish consumers concern and willingness to purchase ecological cosmetics in Pakistan. Moreover, our local organic manufacturers are not advanced enough to reach consumers and change their lifestyles through innovative marketing appeals. The observed relationship did not establish here but it may generate different results for different target segment or in another setting.

## 5 Discussion and Conclusion

The objective of the study was to investigate the impact of sensory marketing on green purchase intention via a mediating role of green attitude. The findings of the study conclude that there exists a positive relationship between sensory marketing and green purchase intention thus our first hypothesis that sensory marketing has significant positive impact on green purchase intention is accepted. The predicted relationship is accepted by both literature and the calculated data of the study ( $\beta = 0.45$ ,  $t = 8.64$ ,  $p < 0.05$ ). Thus, we can say that sensory marketing boosts the purchasing intention of organic cosmetics in the context of Pakistan. Past studies indicate that consumers encounter several problems in identifying and purchasing green products. Use of sensory cues in marketing green products is proved to be a significant idea in boosting the confidence of consumers towards green purchasing. The sensory insights not only uncover the competitive traits of products to consumers but also results in maximizing their intent to purchase a product. This study supports the idea that use of sensory cues is a substantial marketing idea in communicating a message to consumers that encourage their intention to purchase natural beauty products. Moreover, this gives insight towards marketers' responsibility to devise their marketing activities in innovative ways to accomplish the goal of providing rich information to consumers about green products.

The findings of the study incorporate with the second hypothesis of the study which proves that green attitude mediates the relationship between sensory marketing and green purchase intention. The study confirms the results of past studies that green attitude is an important determinant in predicting green purchase intention in case of Malaysian consumers [Mei et al. \(2012\)](#) and young Thai consumers.

Environmental attitude is based upon consumers' beliefs, values, culture and past experiences. Therefore, marketers are advised to play their role in encouraging consumers to protect the environment as a responsible citizen. [Alwitt and Pitts \(1996\)](#) supports the idea that environmental attitude influence consumers' intention of buying environmentally sensitive products, that influence may be direct or indirect. Thus, our hypothesis is supported through theory and data as green attitude establishes a mediating relationship between sensory marketing and green purchase intention in the Pakistani context.

While investigating the associations between personality and environmental engagement [Milfont and Sibley \(2012\)](#) found that Agreeableness, Conscientiousness, and Open to experience are the personality traits strongly linked with environmental engagement. However, the findings of our study do not predict the same result as it was proposed in the hypothesis. Results of the study did not establish the moderating relationship between sensory marketing and green attitude. The findings mentioned in the result section show insignificant values, thus statistically moderating impact of openness to experience on the relationship between sensory marketing and green attitude is not established.

In the past studies, openness to experience is found to be a profound personality trait that motivates consumers to try new and innovative products. Consumers' attitude to organic products vary according to personality traits of individuals depending upon their interests, beliefs and values. This is due to different individual characteristics in different parts of world based upon their interest, values, culture, and demographics, social and economic conditions. However, consumers' personality trait of openness to experience may generate different results outside the Pakistani context. Lack of awareness of environmental problems and lack of consumers' trust on organic cosmetic brands are few factors that hinder the consumers to try green products. High prices of green products do not allow consumers to spend much on beauty brands.

Moreover, lack of government regulations and deficiency of organic cosmetic companies to communicate their message and market their products well to prospects also discourage consumers to take initiative.

## 6 Managerial Implications

The study has implications to theory as the conceptual model of the study is not being studied before. Researchers emphasize the use of customer centric approach to promote sustainable products with an appeal that emphasizes their contribution towards environmental protection (Chuang and Chiu, 2018). The study has introduced a nascent variable of sensory marketing to investigate the green purchasing intention of consumers. Use of senses as a cognitive part of attitude is a distinctive addition to theory in predicting green practices. It extends the body of knowledge in luxurious and greed products by investigating the invisible part of personality (green attitude).

It has implications to practice as green products' manufacturers and marketers are encouraged to increase their efforts in bringing sustainable products in the market. Marketers' common approach of marketing the green products with rational appeals is not enough Lee (2008) to achieve the desired objectives. Manufacturers of green products are facing the challenge to make their products attractive for a broader audience. Thus there is a need to add such touch points that may increase the association between consumers and beauty brands. Therefore the study provokes marketers to market organic products through innovative marketing strategies as we suggested sensory marketing in this study. They are directed to communicate their message to consumers in influential ways that comprehend their cognitive, social and ethical needs. The study suggests marketers to target their audience by keeping in mind their attitudes, cultural differences, geographical conditions, and sensory attributes that influence their purchasing intentions.

Pakistan is one of those countries where there are no regulations for cosmetic products. Use of heavy metals and hazardous chemicals in the production of cosmetics is very common. Therefore, this study gives insight to policy makers to take notice of international and local organic cosmetic manufacturers. They should invest on creating educational campaigns to increase awareness among consumers and to encourage their contribution towards environment through sustainable consumption. Moreover, the government of developing countries are encouraged to boost organic cosmetic manufacturers by decreasing the tax/duty on organic cosmetics, give grants to local organic product manufacturers and arrange the training programmes to market their products both online and offline.

The study has significant implications to boost organic industry in Pakistan and all over the world. The research overcomes the ambiguities associated with green cosmetic industry and supports the development of organic cosmetic industry in the emerging and less developing countries. The study offers an opportunity to eco-cosmetic industry to represent their true image using innovative marketing appeals and strategies.

### 6.1 Limitations and Future Directions

Besides adding knowledge to literature, the study has few limitations which could be addressed in future studies. The study is cross-sectional, so we are unable to measure the attitude and intention of consumers over time therefore, future studies should observe changes in atti-

tude and intention through longitudinal study. The data was collected from only female consumers of organic cosmetics, so the study did not contribute to find the green purchase intention of male customers. Therefore, for future studies, it is recommended to comprehend male gender for their green purchasing intention. Though we try to make the study generalizable by taking sample from students of different universities of Rawalpindi and Islamabad but still its generalizability is low. Future researchers are suggested to take a large sample from different cities and villages of Pakistan to make the results generalizable.

This study only encompasses the educated consumers of organic cosmetics living in cities. However, the large population of country is living in rural areas, their awareness about environment and sustainable products leave a question mark, thus it is a challenge and as well as opportunity for future researchers and marketers to focus on this segment.

Further, the study only examines green purchase intention of female university students. Future studies on other female segments i.e. working women, married women with kids, house wives, their environmental concerns, social and economic pressures would be effective to explore other factors that marketers need to consider while devising marketing strategies.

For future research, this model can be used in a new context (any other organic industry and setting having cultural, socioeconomic, geographic and demographic differences) to evaluate and compare the results of that setting. Furthermore, researchers are suggested to expand this research model by considering green purchase behaviour of consumers, explore the factors that lead consumers' green intention towards green purchasing behaviour.

Our study does not support the moderating impact of personality traits in predicting green attitude and green purchasing intention. To understand the individual differences of consumers in predicting green purchase intention of consumers, it is advised to expand research on personality variables and study this model by using different personality traits as moderating or mediating variables. Future studies should seek to find possible moderators and mediators to better understand the relationship between sensory marketing and green purchase intention.

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