

# VILNIUS UNIVERSITY BUSINESS SCHOOL

# DIGITAL MARKETING STUDY PROGRAMME

# **Tuaha Chaudhry**

# **MASTER'S THESIS**

VIZUALINIŲ	SENSORINIŲ	RINKODAROS	IMPACT OF VISUAL SENSORY MARKETING		
ELEMENTŲ	POVEIKIS	VARTOTOJŲ	ELEMENTS ON CONSUMERS' ONLINE PURCHASE INTENTIONS FOR ECO BEAUTY		
KETINIMAMS PIRKTI EKOLOGIŠKUS GROŽIO					
PRODUKTUS I	NTERNETU				

Master's degree student\_\_\_\_\_

Supervisor: Prof. Indre Razbadauskaite

Date of submission of Master Thesis: 2024-01-03

## SUMMARY

# IMPACT OF VISUAL SENSORY MARKETING ELEMENTS ON CONSUMERS' ONLINE PURCHASE INTENTIONS FOR ECO BEAUTY PRODUCTS

Tuaha Chaudhry

Master's Thesis

Digital Marketing Master's Programme

## Faculty of Business School, Vilnius University

Academic supervisor – Prof. Indre Razbadauskaite

#### Vilnius, 2024

Master thesis consists of 82 pages, 8 tables, 7 figures and 140 references.

Within the use of sensory digital marketing in the modern times, the visual sensory marketing elements hold immense importance for both the brands and the customers. Usually, it is implied over the digital platforms including the company's websites and or social media official channels and pages. With the innovation in physical store set ups and digital market places its usage has also become a common factor. Its purpose is to enhance customers buying behavior and influence their intentions to purchase the offerings of the brands. Due to all of these reasoning the brands are heavily relying on the Visual Sensory Marketing Elements to influence the consumer behavior and their purchasing intentions.

The study begins with understanding what is meant by digital sensory marketing and the reasons for its increased usage. Then the focus of study shifts towards understanding what is meant by vision and visual marketing and identifying the underlying reasons for the increased usage of visual sensory marketing by the brands. With this relation of the visual sensory marketing elements with consumers purchase intention of eco beauty products is analyzed. It is also studied the reason for the increased demand of the eco beauty products in the current times. The aim of this study is to understand the position of visual sensory marketing within the spectrum of digital sensory marketing and how does elements of visual sensory marketing impacting the purchase intentions of online consumers' eco beauty products.

In order to achieve the goals of this study, data was collected using the questionnaire techniques. There were total 17 questions pertaining to the independent, mediator and dependent variables and 7 questions related to demographics of the respondent. And for making meaningful interpretation out of the collected data two software were being use: IBM SPSS and Smart PLS3. Structural Equation Modeling (SEM), Confirmatory Factor Analysis (CFA), Path Analysis was the tests conducted and Cronbach's alpha is used to measure the reliability of the questions.

This research developed direct relationships between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products. Moreover this research also studied the impact of three mediators' i.e. Social Media Marketing, Content Marketing, and Influencer Marketing. These direct relations have been studied before but no previous studies have conducted research by using the mediators employed by this research. It is known beforehand and the research has reaffirmed that we are living in technological advanced era and literature shows the transition of markets from physical spaces to digital spaces. Hence, Visual Sensory Marketing Elements aids the brands to attract the customers and influences their intentions to make purchase of the items.

## SANTRAUKA

# Vizualinių sensorinių rinkodaros elementų poveikis vartotojų ketinimams pirkti ekologiškus grožio produktus internetu

Tuaha Chaudhry

Magistro baigiamasis darbas Skaitmeninės

rinkodaros magistrantūros programa Verslo

Mokyklos fakultetas, Vilniaus Universitetas

Akademinis darbo vadovas Prof. Indre

Razbadauskaite

Vilnius, 2024 m

Baigiamąjį darbą sudaro 82 puslapiai, 8 lentelės, 7 paveikslai ir 140 literatūros šaltinių.

Šiais laikais naudojant sensorinę skaitmeninę rinkodarą, vizualinės sensorinės rinkodaros elementai turi didžiulę reikšmę tiek prekių ženklams, tiek klientams. Paprastai tai numanoma per skaitmenines platformas, įskaitant įmonės svetaines ir (arba) oficialius socialinės žiniasklaidos kanalus ir puslapius. Atsiradus naujovėms fizinėse parduotuvėse ir skaitmeninėse rinkose, jos naudojimas taip pat tapo įprastu veiksniu. Jos tikslas – pagerinti klientų pirkimo elgseną ir daryti įtaką jų ketinimams įsigyti prekių ženklų pasiūlymus. Dėl visų šių samprotavimų prekės ženklai labai pasikliauja vaizdiniais sensoriniais rinkodaros elementais, darydami įtaką vartotojų elgesiui ir jų pirkimo ketinimams.

Tyrimas pradedamas nuo supratimo, ką reiškia skaitmeninė jutiminė rinkodara,

ir priežastys, dėl kurių ji dažniau naudojama. Tada tyrimo dėmesys nukreipiamas į supratimą, ką reiškia vizija ir vizualinė rinkodara, ir nustatyti pagrindines priežastis, kodėl prekės ženklai dažniau naudoja vizualinę jutiminę rinkodarą. Su šiuo vizualinio sensorinio marketingo elementų ryšys su vartotojų ketinimais pirkti ekologiškus grožio produktus analizuojamas. Taip pat tiriama, kodėl šiais laikais išaugo ekologiškų grožio produktų paklausa. Šio tyrimo tikslas – suprasti vizualinės jutiminės rinkodaros padėtį skaitmeninės sensorinės rinkodaros spektre ir kaip vizualinės jutiminės rinkodaros elementai skatina ekologišką pasitenkinimą ir daro įtaką internetinių vartotojų ekologiškų grožio produktų pirkimo ketinimams.

Siekiant šio tyrimo tikslų, duomenys buvo renkami anketine technika. Iš viso buvo pateikta 17 klausimų dėl nepriklausomų, tarpininkų ir priklausomų kintamųjų bei 7 klausimai, susiję su respondento demografija. O norint prasmingai interpretuoti surinktus duomenis, buvo naudojamos dvi programinės įrangos: IBM SPSS ir Smart PLS3. Buvo atlikti struktūrinių lygčių modeliavimo (SEM), patvirtinamųjų faktorių analizės (CFA), kelio analizės testai, o Cronbacho alfa naudojama klausimų patikimumui matuoti.

Šis tyrimas sukūrė tiesioginį ryšį tarp vizualinės sensorinės rinkodaros elementų ir ketinimo pirkti ekologiškus grožio produktus. Be to, šiame tyrime taip pat buvo tiriamas trijų tarpininkų, ty socialinės žiniasklaidos rinkodaros, turinio rinkodaros ir įtakojančios rinkodaros, poveikis. Šie tiesioginiai ryšiai buvo tiriami anksčiau, tačiau ankstesniuose tyrimuose nebuvo atliktas tyrimas naudojant šiame tyrime naudojamus tarpininkus. Tai žinoma iš anksto, o tyrimai dar kartą patvirtino, kad gyvename technologijų pažangioje eroje, o literatūra rodo rinkų perėjimą iš fizinių erdvių į skaitmenines erdves. Taigi "Visual Sensory Marketing Elements" padeda prekių ženklams pritraukti klientus ir daro įtaką jų ketinimams pirkti prekes.

## Contents

Tuaha ChaudhryMASTER'S THESIS	1
SUMMARY	2
IMPACT OF VISUAL SENSORY MARKETING ELEMENTS ON CONSUMERS' ONLINE PURCHASE	
INTENTIONS FOR ECO BEAUTY PRODUCTS	
SANTRAUKA	4
Vizualinių sensorinių rinkodaros elementų poveikis vartotojų ketinimams pirkti ekologiškus grožio produktus internetu	
Background	9
Introduction	9
Study Problem	14
Aim of Study	14
Objectives of Study	14
Methods applied in Study	15
1. Emergence of Eco Beauty Products and Consumers' Intention to Buy these Beauty Product	ts 15
1.1. Understanding of Eco Beauty Products	15
1.2. Analysis of factors influencing the purchase of Eco Beauty Products	17
2. Role of Visual Sensory Marketing Elements towards Consumers Intention to Purchase Eco	)
Beauty Products	23
2.1. Analysis of Visual Sensory Marketing	23
2.2. Antecedents of Visual Sensory Marketing Elements acting as Mediators: Social Media	
Marketing, Content Marketing, Influencer Marketing	
2.2.1. Social Media Marketing	
2.2.2. Content Marketing	27
2.2.3. Influencer Marketing	27
2.3. Outcomes of Visual Sensory Marketing on Consumers Purchase Intention of Eco Beauty Products: Purchase intention	29
2.3.1. Purchase Intention	29
2.4. Applications of Visual Sensory Marketing	31
3. IMPACT OF Visual Sensory Marketing Elements on Consumers Purchase Intention of Ec	0
Beauty Products Research Methodology	33
3.1. Theoretical Framework	33
3.2. Research Approach	34

3.3. Quantitative Research Overview	
3.4. Partial Least Square Structural Equation Modeling	
3.5. Quantitative Research Design	35
3.5.1. Web Based Surveys	
3.6. Sampling Frame	35
3.7. Sampling Method and Respondent Firm Profile	35
3.8. Construct Measurement and Questionnaire Development	
3.9. Sample Size Determination	
3.10. Research Hypothesis	
3.11. Techniques	
3.12. Data Analysis	
3.13. Data Interpretation	
4. Visual Sensory Marketing Elements and Impact on Consumers' Intention to	• •
Products: Analysis of Gathered Data and Findings	
4.1 Demographics	
Table.1 Sample Profile	
4.2. Reliability analysis	
Table.2 (a) Overall Cronbach's	
Table.2 (b) Individual Cronbach's	43
4.3. Measurement Model	43
4.3.1. Factor Loadings	43
4.3.2. Convergent Validity	44
4.3.3. Construct Reliability	44
Table.3 (a) Confirmatory Factor Analysis	44
4.3.4. Model Fitness Indices	44
Table.3 (b) Model Fitness Indices	45
4.4. Structural Equation Modeling (Path Analysis) and Hypothesis Testing	45
4.4.1. Hypothesis Testing	45
Table.4 (a) Path Analysis and Hypothesis Testing (Independent Variable)	46
5. Visual Sensory Marketing Elements and Impact on Consumers' Intention to Products: Discussion of the Results	
5.1. Research Overview	

5.2.	Discussion of the Descriptive Results	49
5.3.	Discussion of the Hypothesis Results	50
6. V	visual Sensory Marketing Elements and Impact on Consumers' Intenti	on to Buy Eco Beauty
Produ	icts: Conclusion	52
6.1	Summary of the Findings	52
6.2.	Contribution of the Research	54
6.3	Implications of the Research Findings	54
6.4	Limitations of the Research	55
6.5	Directions of the Future Research	56
Refer	ences	57
Арреі	ndix A – Questionnaires	76
Appe	ndix B Tables	78
Tab	le.1 Sample Profile	78
Tab	ole.2 (a) Overall Cronbach's	78
Tab	le.2 (b) Individual Cronbach's	78
Tab	ole.3 (a) Confirmatory Factor Analysis	79
Tab	ole.3 (b) Model Fitness Indices	79
Tab	ele.4 (a) Path Analysis and Hypothesis Testing (Independent Variable)	79
Tab	le.4 (b) Path Analysis and Hypothesis Testing (Mediator Variable)	80

## Background

Changing global conditions have made the 21st century a technologically advanced era in which every other person has access to one or other forms of digital communication. Research tells us that internet usage among adults has exceeded 80%, with social media users being more than 2 billion around the world, and as time goes on, the number grows (Ziyadin, Doszhan, Borodin, Omarova, & Ilyas, 2019). Rather than reading newspapers or billboards, consumers spend a majority of their time on the World Wide Web, and various social media platforms have entirely altered their buying behaviour (Rafiq & Javeid, 2018). Be it a mobile phone application, internet or social media, people have been so grasped by these technological advancements that these are part of their everyday life (Ziyadin, Doszhan, Borodin, Omarova, & Ilyas, 2019).

Keeping up with the trend, marketers have reduced their dependence on traditional forms of advertisement and, instead, rely more on various social media platforms (Rafiq & Javeid, 2018). This has proved to be highly rewarding and allows marketers to target huge clientele easily and conveniently as it facilitates two-way interactive communication. The excessive use of social media has led firms worldwide to use social media as a mechanism to make contributions to their sales and profit (Rafiq & Javeid, 2018). They have incorporated its use in their firm's strategies, specifically in marketing their products via various digital marketing platforms. It has a robust influencing power and greatly assists effective communication with customers (Ziyadin, Doszhan, Borodin, Omarova, & Ilyas, 2019).

In lieu of this companies are increasingly making use of sensory marketing. Sensory marketing is a method of triggering the emotions of individuals and altering their behaviors (Tek & Engin, 2008). In this regard when customers are exposed to any stimuli, they are seen receiving information in the form of following senses that includes seeing, hearing, smelling, touching and tasting. For instance, the consumers are exposed to light brightness, voice loudness, fabric softness, coffee taste and or detergent's smell at market space, all of these have either a positive or negative impact on the feelings, attitude, behavior of the customers and have the tendency to call for an action by them.

## Introduction

It is present in the literature that sight has been widely used within the horizons of marketing but with the broadening of every spectrum of life other senses have also been inculcated into digital sensory. It was the 1950s, when for the first time importance of sight was being discovered in the shape of advertisements, colors, and product design. Here example of a popular brand Coca Cola could be give, many marketers' states that color and design of the Coca Cola bottle resembles with the body of a woman. Later on, for branding purposes the brands started using music in advertisements and in stores to enhance the consumers' experience. In current times, almost all stores are seen playing music in the background. It was during the 1970s, that for the first time technique of blind test was being used and thus sense of taste was incorporated into sensory marketing literature. Valentie and Riviere (2008) said that the last technique to be used and incorporated into the concept of sensory marketing was of sense of smell; it ruled out that it is the smell in atmosphere of store which is intentionally created to influence the purchasing decisions. It was regarded as an effort to design purchasing atmosphere in order to improve purchasing probability and creating emotional impact in the minds of the consumers. While talking about the sensory associations, Kotler (2006) ruled out that sight can be associated with colors, brightness, arrangements of product or stores, and design of the product; hearing sense can be attached with tone and loudness of the sound; the sense of smell can be associate with artificial or natural fragrances while the sense of touch can be associated softness, smoothness and temperature. Hereby, while discussing the sensory marketing Kotler (2006) defined the concept of sensory marketing as a type of marketing that has the tendency to influence the consumers perceptions, judgments and behaviors through these different factors which impacts the consumers senses.

Sight can be classified as a function of the brain where information absorbed by the retina in eye is transformed into an image. It allows human sensory systems such as memory to connect and interpret the received information. Along with other senses such as hearing, sight creates relationships with other external factors which relate the individual to products and calls for actions from these recipients of information (Nenkov et al., 2019). The most sold sense could be referred to as sight. And this is the reason that has called for the rise of visual merchandising. With reference to this it could be affirmed that 90% of the information received by human brain is in visual form and with this it could be said that visual characteristics holds major chunk as a reason behind the final sales., Santos (2013), highlighted that 80% of consumers recognize a brand from its color and the 85% of purchase decisions amongst consumers is triggered by the color of the brand.

According to Randhir et al. (2016) within the scope of marketing led by senses stimulation, visual marketing is being used as a tool to represent the sense of sight. In the literature, it has been mentioned that the strategies of visual sensory marketing focuses and emphasizes the meaning of sensory expressions, some of which includes the themes, graphics, light, color and the spatial arrangements. Together these factors are seen creating synergy and being involved in creating and evaluating the brand identity. Pajnok and Plevova (2015) out of these sensory expressions resultantly defined two main aspects that were color and light. In visual sensory marketing, the marketers are seen paying more attention to these two identified aspects. Both these aspects have distinguishing functions. For example, it is classified as an effort to trigger the consumers' interest, optimization of chances of the product purchase, or achieving the compliance between the offered and consumers' expectations.

The awareness of colors amongst consumers is the result of subliminal perception created in their minds. Before humans can actually realize that what exactly they are looking at the human mind creates color associations and constructs its own opinions regarding the objects. Hence it could be said that colors plays an important part in forming the consumers' perception (Pajnok and Plevova, 2015). According to Dannhoferova (2012) image perceived based on the exposure to color does not necessarily is relevant to reality. It is not just the quality of vision that has influenced this exposure but the individuals' personal experiences have also influenced it. And that perception of color varies from person to person and it changes throughout the individuals' life. Lastly, it could be outlined that colors have some symbolic connotations as well pertaining to socio cultural factors, which are deemed to be there forever along with certain expectations.

Hulten, Browenus and Dijk (2009) while defining the role of the colors in marketing states that properly chosen colors have the tendency to positively enhance the identity of the company or brand. These colors can evoke positive feelings amongst the consumers, making it easier for the customers to recall and recognize a brand by just looking at its color. While giving the example of the brands which have used color as a source of identity Nagy (2012) talks about the Financial Times how since 1893 it has considered color as an integral part of its brand identity and has used it to differentiate itself from its competitors. Another example of the brands

using color to differentiate is of Google which makes use of different colors like rainbow in its logo. However, the branding team intentionally has erupted the order of the rainbow color by green colored letter l which is interpreted in a way that company not only follow prescribed rules but brings in the element of innovation.

Perception which is not made just from the color in general and vision in its broader sense but from other senses but the color could influence these other perceptions as well. It is because there are linkages been made by the consumers between colors and specific scents, and any differences or interruptions in these relationships create confusions for example vanilla is expected to be of white color, just imagine the combination of vanilla with blue-green color (Bocek et al., 2009). Another example is being given of attaching the colors to the sounds. It has been discovered through the researches and been mentioned in the studies that certain degree of illumination of atmospheric colors can partially reduce the present unpleasant sound frequencies. Henceforth, in a place where the sounds being used are noisy or where sharp tones are being played, it is always suggested to make use of darker colors or vice versa, in atmospheres with lower sound frequencies it is suggested to make use of lighter colors. Similarly, a connection between the color and other senses could also be found out. For instance it is being suggested that color could be seen making the consumers perceptions about the weight, area or volume of the product or consumers individual tastes could be seen corresponding to different colors. In visual sensation, another important factor is the intensity of light. According to Pajonk and Plevova (2011) the purpose of usage of lights in the store is to complete the idea of customers orientation, sufficiency levels of light contrast and brightness aims to facilitate the feelings of gratitude towards customers. Moreover, light should contribute to the creation of pleasant environment that will have a positive impact on the cognitive process of customers. Its role is to increase the attractiveness of the displayed products and draw attention of customers towards them. As per Palfiova (2015) light in stores could be divided into two main categories: basic and accent, and further defined the tasks of both. The role of basic lighting is mainly to achieve the required light in the room while giving full consideration to safety and hygiene factors. On the other hand, accent lighting is to meet specific requirements of the store, and is influenced by the type and nature of the exhibited goods. A great amount of emphasis is also placed on the angle of illumination, intensity and color shade of light.

Batema (2011) outlines the process of seeing. In doing so he explains that the human eye is the critical part of seeing. The different elements of the eye are discussed including the lens,

retina, and cornea and how visual from the eye is carried to brain by optic nerve. Hence, as a human our dependence over eye and sight is great as it not only posturizes our daily routine but also keeps us going throughout the day from waking up till going back to sleep. Hereby, it is the religious duty of the creative team to design the branding and marketing strategies in a way that appeals to consumers and attracts them to buy a product or service.

As sight plays a very significant part in the lives of humans, similarly it is attributed for having a prominent position and is in fact regarded as the most powerful tool of marketing. More than 80% of advertising and marketing communications are sight oriented (Jayakrishnan, 2013). As highlighted by Hulten (2013), it is pertinent for the marketing teams to act vigilantly when it comes designing marketing campaigns and branding initiatives including designing of logos, colors to be used etc.

The literature reveals that several studies have been conducted till date that reveals that human sight is the most evolved spectrum when it comes to digital sensory marketing. Sight is a fundamental trait of every living being and is deemed to be easiest of all senses. When someone says that he can see that means that he understands, and this makes it imperative that for human seeing is equal to understanding (Hetch and Reiner, 2009; Ifeanyichukwu and Peter, 2018; Kumar, 2014).

It was during the 1950s the importance of sight was discovered in the form of color, product design and advertisements shown to consumers. This means sight has been commonly used marketing tool from past to present. For example, the design of Coca Cola bottle depicts women body (Valentie and Riviere, 2008). According to Aitamer and Zhou (2011), visuality of store and its layout serves four functions: this includes getting attention of customer, creating impression in customers mind, offering wellbeing to customers, and lastly providing visual value to a customer that is a balance between to what a customer is exposed to and what customer perceived of that exposure.

Liegeosis and Rivera (2015) believe that color, light, brightness, and other elements of product designs acts as stimuli and trigger the sense of sight. This sense of sight is responsible for receiving 80% of the external information; and this information in turn impacts the cognitive behavior and intent to purchase a product of the customer.

Benett (2013) has defined visual sensory marketing as a process of engaging the audience by making use of images, videos, and other visually attractive content in order to appeal to the target audiences. In the wake of social media growth this demands for the application of visually attractive and engaging content to call for action from the existing customers or to attain new customers to make purchases. This not only applies with just coming up with visual content but also requires thorough planning of content, aligning of the content throughout different mediums, and then monitoring for any room for improvement. All in all, for its smooth functionality it is important to understand the online behavior of the customers and then execute the visual social media strategy. The realm of social media can be gauged from the fact that every year billions of images are being shared daily throughout the globe. Then on YouTube there exist billions of users who watch hundreds of millions of videos per hour on you tube. The list continues to grow on each social media platform that includes face book, Instagram, snapchat etc. Beck (2015) highlighted that a time will come when social media content would only be video based, and the views would be increasing at increasing rate.

## **Study Problem**

How Visual Sensory Marketing Elements impacts Consumers' Online Purchase Intentions for Eco Beauty Products.

## Aim of Study

The aim of this study is to understand the position of visual sensory marketing within the spectrum of digital sensory marketing and how does elements of visual sensory marketing impacts the purchase intentions of online consumers for eco beauty products.

## **Objectives of Study**

- 1. Understanding of what is meant by eco beauty products and analysis of factors leading to consumers' intent to buy eco beauty products.
- 2. Analysis of reasons for the increased usage of sensory digital marketing and how visual sensory marketing elements impact the consumers' intent to buy eco beauty products.

- 3. To examine how consumers intent to buy beauty products are influenced by visual sensory marketing elements and understanding the role of mediators as well.
- 4. To create a methodology and assess impact on the dependent variable of elements of visual sensory marketing elements.
- 5. Conduct research on online purchase for beauty products, including evaluation and effects on purchase intention.
- 6. To summarize research findings and make recommendations on the use of visual sensory marketing elements of sensory marketing on consumers when it comes to purchase of eco beauty products.

## Methods applied in Study

The following methods have been applied:

- Scientific literature analysis.
- Responses through close ended questionnaires were collected.
- Statistical Data Analysis.
- Conclusion.

## 1. Emergence of Eco Beauty Products and Consumers' Intention to Buy these Beauty Products

## **1.1.Understanding of Eco Beauty Products**

Having identified what is digital sensory marketing and the role of visual sensory in it and after understanding how it influences the purchase intention of consumers, It is pertinent to configure what are eco beauty products and how visual sensory factors impacts the purchase intention of consumers of these products.

There exists a great deal of evidence in literature which shows that consumer's interest towards sustainable products is growing now days. Within the same capacity it is pertinent to note that beauty products designed using natural ingredients are continually increasing in the market and have become a trend among consumers who are inclined towards healthier lifestyle. The manufacturers of beauty products have to consider the effects of their product at two levels: one on the end consumers themselves and the other on the environment surrounding those consumers. For instance, consumers of beauty products perceive the products to be of greater quality and will buy those products whose identity and personality resonates with their own identity and personality. Hereby, consumers would be interested in consuming those products which would have the least chemicals involved in their manufacturing and which would act as more natural in nature. Moving on, besides the concerns of personal image's resonation with brands image what the consumers now days are interested in is environmental protection. The consumer of the modern era has become more aware and sensitive of environment and tends to consume those beauty products which are environment friendly. This means while using eco beauty products the consumers are assuming that these products have been produced with the least use of chemicals making them more natural in nature, their production have not harmed the environment and their usage will also not exploit the natural processes of environment.

Studies reveals that where on one end technological progress has led to rapid economic development and brought ease in the lives of humans at the same time it has posed some serious threats to environment that includes air pollution, global warming and ultimately causing climate change. These issues are not only deteriorating the environmental fabric of the world but then putting a burden on the socio-economic progress of the world. Hence, the issue has called for the collective attention of all the stakeholders. As a result of which during the past few years the consumers have become aware of the problem and conscious enough to call for businesses to act in a way which is environmentally sustainable in its approach. These people are demanding for the higher value and for them the definition of the value is paying more and more attention towards the environment; hence they are involved in environmental protection activities, attitudes and knowledge and expect the same from the businesses. As a result of this consciousness amongst the consumers, they have realized that their buying behavior has the tendency to impact the environment. So, the consumers are changing their lifestyles in a way that

they start using sustainable products which then impacts the business activities (Kong et al., 2014). Ottoman et al, (2006) defines green products as those products or services which either protect or improve the environment by saving energy or resources and eliminating the waste and usage of harmful substances as inputs. Unlike the traditional products these are the products which are easy to dispose of, can be reused or recycled; the processing of which produces least waste. These are the products which not only pose the least threat to the environment but also upgrades and improves the living standards of the public (Dangelico and Pontrandolfo,2010).

## **1.2.** Analysis of factors influencing the purchase of Eco Beauty Products

The psychological concept of Theory of Planned Behavior (TPB) provides sufficient ground for studying consumer's green purchase behavior and their intentions to buy eco beauty products. The new variables that comprehensively affect these behavioral intentions will enhance the explanatory power of the TPB model. A portion of literature is full of discussion regarding consumers sustainable purchase intention in a direct relation with antecedents of cognitive behavior. Cognitive factors refer to those factors which are unique and individual in their essence amongst consumers. These are related to all considerations about which an individual pays attention towards, or it is how an individual thinks. These factors make consumers perception of green products, and in return this perception impacts green purchase intention of customers.

Chen and Chang (2012) defines the concept of green perceived value as consumers overall appraisal gained value. This gained value is the difference between for what the consumers paid and what they expected off from a product or service. And the driving force for this gained value includes the consumers' environmental preferences, sustainability expectations and green needs. In general, this perceived value to customers could be defined as their assessment of overall net benefits from the consumed product or service. Kim et al. (2012) states that perceived value is not the difference between the expected and actual appraisal or net differences but it also includes the consumers perceived benefits and obtained utility from using the product or service and the time and money that they have invested to make that consumption. Hence, it could be said that the consumers are driven by the notion of value. The perceived value is a concept that is directly related to value perception of a product, so if it is achieved then it can lead to a positive word of mouth and as a result of which consumers purchase intentions gets increased. With this it could be said that perceived value is pertinent for the brands marketing performance as it provides the basis for consumers buying intentions through providing

consumers perceived value (Zhuang et al., 2010). Those consumers concerned with the environment will buy green products for their environmental benefits (Yaacob and Zakaria, 2011). As an important intermediate state variable in the process of consumer purchase, perceived value can serve as a signal of consumer judgment and a key antecedent of purchase intention (Mahesh, 2013). Tan and Goh (2018) contend that the higher the perceived value of green products, the stronger the consumers purchase intention.

The consumers' judgment of the environmental excellence of a product or brand is referred to as green perceived quality (Chen and Chang, 2013). Since green perceived quality reflects consumers' feelings of the relative advantage of a particular product or service; it becomes a prerequisite for satisfaction and behavioral intentions. Zeithaml (1988) in its research results concluded that perceived quality can be described as a consumer's judgment of the overall advantages provided by a product over its alternatives or substitutes. Nekmahmud and Fekete-Farkas (2020) says that perceived quality is a significant factor that impacts the purchasing decisions of consumers. Wang et al. (2020) incorporated the perceived quality into TPB model as a new element and analyzed its impacts on the green purchase intentions of the Chinese customers in food industry. And, Wu and Chen (2014) identified that there exists a significant positive relationship between the Green perceived quality and consumers intentions to buy green products.

Perceived risk which is classified as a subjective prediction of the loss which is being not liked by the consumers and they are seen aiming to minimize it. It could be defined as expected or actual negative environmental consequences that are associated or occur as a result of purchase behavior (Chen and Chang, 2012). Due to possibility of standard errors in the available information about a product, service or the entire brand it becomes difficult for the consumers to fully understand the reality of the green products before making an actual purchase, so the underlying risk perception is always there of purchasing that green product or service. The consumers may not opt for a particular brand or buy its offerings in the situations when they perceive that risk associated with buying its products is really high. Hereby, consumers perceived risk for green products is negatively associated to green purchase intentions. As a result of this green perceived risk has been found to be negatively impacting the green purchase behavior and intentions to buy it. Contrarily, as the green perceived risk starts to decrease the consumers green purchase intentions starts increasing (Tarabieh, 2020). Ajzen (1991) identified that perceived behavioral control refers to an individual's judgments of his abilities to perform a specific required behavior in the given circumstances. The perceptual behavioral control which has become an important part of the TPB model, could be defined as the perception of the difficulty of performing a specific behavior, that is the extent to which the individual feels the execution or non-execution of the behavior under objectification or accountability which is under ones voluntary control (Azjen, 2006). Thus, it is the degree of control that one perceives over the performance of the individual behavior. While confronted by external factors; during the process of making purchase decisions, those consumers who are regarded to have a higher perceived behavioral control are perceived that they have more resources and opportunities available with them. There exists evidence in the literature that those consumers who have the capacity to control the prevailing uncontrollable factors then they are more likely to purchase the green products (Xu et al., 2020). Wang X et al (2019) conducted studies in the developing countries and studied the factors influencing the purchase intentions of consumers: they identified that perceived behavioral control has a significant impact on the purchase intentions of people in Tanzanian but not in Kenya.

Perceived consumer effectiveness which is a subjective perception of the role of one's own efforts is defined as a degree to which consumers thinks that their individual actions contributes and aids in solving the problems (Ellen et al., 1991). Tan (2011) suggested that perceived consumer effectiveness involves consumers' believes that they themselves can contribute to solutions of environmental degradation and can reduce the negative environmental impacts. In understanding the consumer behavior, the perceived consumer effectiveness has gained a greater consideration. In the literature, the perceived consumer effectiveness has been regarded by the researchers as an important factor while understanding the consumers environmentally sustainable purchasing behavior (Dagher and Itani, 2014; Benda-Prokeinova et al., 2017). Likewise, according to Sharma and Dayal (2017) outlined that perceived consumer effectiveness has a significant positive impact on green purchase intentions of consumers. Sharma and Foropon (2019) has found this factor to be directly related to consumers attitude towards green products and to be significant predictor of consumers purchase intentions.

The knowledge of environment is the environment knowledge, it includes the key relationships that results in the environmental impacts, environmental responsibility of the individual that leads to sustainable development (Fryxell and Lo, 2003). Regarding the environmental knowledge in the literature, the researcher usually makes use of different

concepts to predict individual green behavior: literal or general environmental knowledge, as well as subjective or objective environmental knowledge (Lee, 2017). Person's perception of one's own understanding of common environmental issues also comes in environmental knowledge. There exists a great deal of evidence in the literature that as customers gathers more knowledge about environmental issues and their implications, their attention and intention both towards purchasing green products increases. Wang et al. (2014) states that there exists a positive significant relationship between the environmental knowledge and customers intention to buy environmentally sustainable product. Ahmad and Thyagaraj (2015) regards consumers environmental knowledge as an identifiable predictor and positive influencer of green purchase intention (Choi and Johnson, 2019).

It's not the individual characteristics of consumers' behavior that influences their intentions to buy the green products but exists the social factors as well which has the tendancy to influence their intentions to buy green products. These social factors affect the individual traits and perceptions in number of ways. This includes social pressure from other people and collectivist ideas. Hence, in this research the focus of the study has been mainly on the impact on the green purchase intentions from two forces: subjective norms and the other is collectivism.

The presence of social pressure felt by the individuals on either to indulge in or refrain from a prospective behavior is referred to as subjective norms (Ajzen, 1991). Within the process of decision making, the individuals are usually seen being influenced by the people around them. This includes an influence by the society mainly in two ways: firstly is the society impacting the behavior of the individuals; secondly is the behavior of individuals is being influenced on the fact that how their peer group or social or reference group will treat them after they gets involved in specific roles or engage in specific activities. The previous studies provides the reasoning for the people complying with subjective norms and in doing so it is being outlined that people are afraid of social pressure from primary referents, or because their referents provides them with the guidance on appropriate or beneficial behaviors in society. Bong Ko and Jin (2017) conducted a study and as a sample took female college students in China and United States and concluded that in both the countries subjective norms has a significant positive influence on the green purchase intentions of consumers. It is being said that consumers engage in green purchase because they are aware of the fact that 'important others' recognizes their green purchase behavior. For example, if consumers become aware of the fact that their 'important other' thought organic skincare products are good then their intentions to purchase those products increases.

Laroche et al. (2001) identified that another important value that affects the decision making and consumption behavior of individuals is collectivism. For the individuals, rather than individual values, needs and desires what matters more is and what is more important is group interests. In general, people from individualistic cultures tend to be independent and selforiented whereas those from collectivistic cultures are more interdependent and group oriented. Collectivism puts focus on the interdependence, group harmony, family security, group oriented collective objectives, collaboration and cooperation. People believing in collectivism prioritize collective interests over individual interests and are ready to sacrifice their individual interests over the collective interests (Zhao and Chen, 2008). Many kinds of social behaviors are found to be influenced by collectivism. Collectivist people are found to be paying more attention towards environmental issues and how their actions will influence the society and environment, this makes them more environment friendly persons; making it highly likely for them to buy green products (Kim, 2011). Collective efficacy beliefs are likely to have greater impact on green purchase intentions as compared to self-efficacy, hence considering collectivism the proponent of green purchase means that it will result in large scale improvement in social well-being. In its study, Lee (2017) stated that collectivism as an ideology had a significant influence on the green purchase intention of consumers at Chinese restaurants. Henceforth, the notion of collectivism has a significant impact on consumers green purchase intentions.

Due to the heterogeneous nature of consumers, there exists number of differences in their purchase intentions for the green products. Even though, the explanatory power of TPB model has been improved by the addition of personality constructs (Rhodes et al., 2002), still there exists few studies on the relationship between personality traits and sustainable behaviors (Dezdar, 2017)

The degree of concern over environmental problems, and indication of efforts to solve those problems is referred to as environmental concern (Dunlap and Jones, 2002). Relating to green marketing, environmental concern can be referred as a key environmental factor for analyzing their personal characteristics. Those consumers are likely to maintain a healthy and green lifestyle that pay more attention towards environmental problems and holds a positive attitude towards green products (Paul et al., 2016). It can be said that consumers' consideration and attention towards the environment impacts their purchase behavior especially when it comes to buying of green products. Nekmahmud and Fekete-Farks (2020) says that young consumers holds great regard for the environmental issues and purchase for green products I higher amongst them, impacting their decisions. While investigating the direct and indirect influences of environmental concerns on the consumer behavior and concluded there exists a positive relationship between them and that it had a significant impact on consumers attitude and likeliness for green energy products and brands.

It is obvious that there exists perceived transaction risk in the process of buying commodities, hence, in order to minimize this transaction risk, as per the marketers trust is considered to be available common mechanism. It achieves so by increasing expectations of positive outcomes and certainty of how the trustees will behave. Chen (2010) expresses that trust develops from the credibility, benevolence, ability to function in the environment of the consumers willingness to rely on an object based on beliefs or expectations. As compared to traditional products and their consumption, more trust is required by the consumers when making purchase of the green products. And with this the green trust becomes an important detriment of consumers green purchase. It is found that many consumers lacks the understanding of the green products, which increases the importance of element of trust in their purchase intentions. And in its study, Tarabieh (2020) identified a significant positive relationship between the green purchase and green buying intentions.

Ajzen (1991) stated attitude as one of the core concepts amongst TPB model and defined attitude as a positive or negative evaluation or appraisal of an object. Consumers' perception aout the product or service could be revealed from their attitude towards the product. A great amount of work has been done in the past to identify the relationship between the attitude of the consumers and their intentions to buy a product or from a brand and it has been established that attitude is an inseparable element of consumers purchase process and that it can be used as mediator to measure their purchase intentions. Hence, a positive attitude has always a positive impact on the consumers purchase intentions (Arli et al., 2018). Wang et al. (2016) stated that in studies where intentions were to identify relationship between green products and environmental behaviors, there many scholars have found that a positive attitude has the tendency to positively influence the green purchase intentions. Moreover, Chen and Tuang (2014) and Teng et al., (2015) ruled out that there exists a significant positive relationship

between the positive attitude and consumer purchase intention when it comes to green hotels and as per Wang X et al. (2019) when it comes to organic food.

## 2. Role of Visual Sensory Marketing Elements towards Consumers Intention to Purchase Eco Beauty Products

## 2.1. Analysis of Visual Sensory Marketing

The sense of sight has collectively been distinguished as the main sense concerning discernment. The feeling of sight and its significance in the discernment cycle have been widely concentrated on in promoting research. This is the reason (Krishna, 2012), one of the main tangibles promoting specialists, sight was scarcely referenced in its latest audit of the subject since it was viewed as excessively investigated. Subsequently, making another commitment about the feeling of sight and tactile promoting seems troublesome. In any case, we accept that a few issues have been disregarded in past surveys and have critical ramifications, from an administrative stance, yet in addition for the eventual fate of our general public overall. Many elements of an item can be seen by the sense of sight, either inherent or extraneous, however shopper decisions accept them in general. Moreover, the chance of utilizing this information to work on our general public and, hence, have a more feasible future from a social, financial, and ecological stance, as per the most recent promoting patterns, will be made sense of. The significance of sight in sensory advertising will be characterized first, and afterward the creators will zero in on item credits apparent by sight, like tone, shape, size, or generally appearance. A considerable lot of these traits are broadly utilized as showcasing instruments inconsequential to the item, however to advancement or show at the retail location, and will considered too. (Brugarolas and Martínez, 2017)To decide the most charming sight promoting highlights, a review was finished to decide the effect of sight showcasing components on purchaser purchasing conduct. Sight promoting affects customer buying conduct when it draws in, connects with, and persuades the purchaser to make a buy. (Mubarak & Musthapha Mufeeth, 2020) Color is characterized as "the component of workmanship created while light striking an item is reflected back to the eye." (Esaak, 2012) According to, variety has three attributes: shade, power, and worth. Conceal alludes to the name of the variety, for example, blue, power alludes to the splendor of a variety, for example, "imperial" blue, and worth alludes to the murkiness or delicacy of a variety, like light blue or dull blue. (Bell & Ternus, 2012) Sensory showcasing is the use of sensations and discernments to the field of advertising, explicitly to buyer insight, cognizance, feeling, learning, inclination, decision, or assessment. The noticeable has the best

effect on us. One of the main review components in showcasing is sight sense. It is basic in the acknowledgment and memory of pictures, promoting, bundling, items, images, brands, logos, area, etc. They have all been treated extremely in a serious way to impact purchaser view of items. (Nell and Corinne, 2017).

Visual stimuli are among the most prominent sensory cues in marketing. The visual appeal of a product, including its color, design, and overall aesthetics, can significantly impact consumer choices (Smith, 2017). Consumers rely on visual information to make informed decisions, and effective use of visual elements can lead to more accurate color and design choices, ultimately influencing purchase behavior.

Vision is the dominant sense in humans (Gallace et al., 2012). In fact, it has been estimated that 80% of stimuli are received visually in online environments (Hutmacher, 2019). The attractive design of websites consists of easily-understandable web browsing and the attractive use of color, font/typeface size, and photographs on the website (Cachero-Martínez and Vazquez Casielles, 2021). The effect of Facebook advertising positively associated with purchase intention (Jermsittiparsert, 2019). Some studies indicate that the quality of visual display refers to the website quality, colors, the aesthetics of the product display, and visual appeal (Liu et al., 2013; Bressolles et al., 2014; Kimiagari and Malafe, 2021). When shopping for clothes online, the color and shape of the displayed items can capture people's attention (Mo et al., 2021). Retailers provide e-customized information for clothing, such as information about the textiles, colors, sizes, patterns and sewing technology involved. According to Moshagen and Thielsch (2010), the aesthetic quality of websites can be measured by the four interrelated facets of simplicity, diversity, colorfulness, and craftsmanship. So, for example, consumers have been shown to pay more visual attention to light-rather than dark-colored products when listening to high-frequency sounds (Hagtvedt and Brasel, 2016; Yang et al., 2022). The given color value (darkness or lightness) also influences consumers' visual perception on the products' weight and density (Hagtvedt, 2014). In particular, both color matching and the products' exterior design can influence consumers' customization experiences (Li and Liu, 2020). The visual aesthetics (formality, appeal) of websites directly impacts customer satisfaction and purchase behavior (e.g., Wang et al., 2011). Those factors are essential when it comes to attracting the consumers' attention. The usefulness and information of the website influences the consumers' attitude toward it and their purchase intent (Hausman and Siekpe, 2009). Supported by the stimulusorganism-response model, Li et al. (2022) suggest that consumers' impulsive purchase intentions

are positively affected by their visual perception on apparel attributes and fashion information in e-customization. Color provokes consumers' physiological and emotional responses, as warm colors are associated with cheerful moods (Roschk et al., 2017). The effects of the visual, navigational, and informational characteristics of website design on consumers' perceptions when shopping online may help to arouse and maintain the attraction of websites (Hasan, 2016). This current study will investigate whether visual perception influences purchase intent, arousal, and dominance. Since displayed clothing items, fashion information, and perceived visual aesthetic of the website are likely to affect consumers purchase behavior (Wang et al., 2011; Mo et al., 2021; Li et al., 2022).

Vision is something that we must learn is argued by many researchers (Hulten et al., 2005). It is being suggested that learning because of vision starts at a very early age, to mention, when a new born baby looks at the world upside down because it actually takes a long time for the brain to absorb the image and make meaningful information out of it. As up to 80% of the information is obtained through vision, hence it could be regarded as the strongest amongst the other senses of human body (Dani and Pabalkar, 2013). It is being said that connection between the brain and eyes is very fast. For visually identifying any object standing their field of vision, the humans just need 45 ms. Within the marketing of the senses, visual marketing is used to represent the sight. Randhir et al. (2016) state that visual marketing strategies focus on the meaning of sensory expressions such as color, light, theme, graphics, but also spatial arrangement. Together, they participate in the creation and evaluation of the identity of the brand. From these sensory expressions, Pajonk and Plevova (2015) subsequently define two primary aspects, namely color and light. Marketers pay increased attention to this aspect in visual marketing. Both aspects perform several functions. It is, for example, an effort to arouse the customer's interest, optimize the conditions of purchase, or achieve compliance between the offer and consumer expectations. In the professional literature, we also encounter the statement that the perception of colors is given by the prehistoric period of harvesting and hunting when women needed to distinguish the shades of ripe and unripe berries. At present, human beings follow certain established codes and thus stop at red, green means safety, yellow and black mean risk. Everyday activities are based on color signals (Vysekalova and Mikes, 2009).

## 2.2.Antecedents of Visual Sensory Marketing Elements acting as Mediators: Social Media Marketing, Content Marketing, Influencer Marketing

#### 2.2.1. Social Media Marketing

According to Wang, Yu, Wei (2012) transference of information via social media channels influences the consumers purchasing intentions by asking the consumers to resemble their peers and increasing their willingness to buy a particular product or service (Li, Lee and Lien, 2012). Mangold and Faulds (2009) while talking about the influences of the social media marketing on the consumers states that it alters their attitudes, perceptions and purchasing decisions at different stages of buying behavior. This is so because now social media is being perceived credible and regarded as useful trustworthy by the consumers (Rauniar, Rawski, Yang and Johnson, 2014). Lin and Kim (2016) highlights that perceived usefulness of sponsored advertising on Facebook is negatively affected by intrusiveness and privacy concerns; hence, it should be used carefully. While Camilleri (2019) says that social media was found to be a critical success factor to promote responsible entrepreneurship like Corporate Social Responsibility by SMEs for different stakeholders. Saplacon and Marton (2019) identified that consumers social media activities positively impacts pro-environmental behaviors such as reducing, recycling and reusing waste materials. Social networks sustain, encourage, and disseminate the norm of environmental behavior (Lee, 2018). The trust of consumers for green brands through frequent and positive experiences is being published on social media (Kang and Hur, 2012). Bedard and Tolmie (2018) highlighted that social media marketing and usage by the consumers has a significant positive influence on green purchase intention and on consumers green buying behavior (Biswas, 2016). Murwaningtyas et al. (2020) found that the reliability, expertise, and attractiveness of celebrities have a positive impact on consumers' advertising attitudes and intentions to purchase organic cosmetics through Instagram.

Mangold and Faulds (2009) states that now a days social media plays a critical role in shaping and modifying the consumers opinions, influencing attitudes and their purchasing intentions as well. Hereby, social media's impact on the consumers green behavior and purchase intention has been viewed and studied by various researchers, including in the cosmetic industry as well. Social networking sites can be used to promote environmentally sustainable behavior (Lee, 2018) and similarly, presence of celebrities on these social networking sites can shape the consumers attitudes towards the consumption eco beauty products (Murwaningtyas et al., 2020). Denegri-Knott (2006) highlights the important aspect that social media has become an important

way of communication and a channel for creating content, sharing ideas and a space for expressing information and opinions. Singh and Sonnenburg (2012) says that communication between the consumers and brands has been revolutionized with the intervention of social media channels, this implies to the users of green products as well; now the consumers can have more interactive experience because of communication done through social networks. Consumers are seen using social media sites primarily for obtaining information regarding the eco beauty products (Heinonen, 2011). Relating to the cosmetic industry and its sales being influenced by the social media marketing a research conducted (Statista, n.d.) identified that in the cosmetic industry the social media channels has became an important communication platforms. According to this global study conducted in 2019, 37% of the consumers discovered online beauty brands by seeing ads in social media, 33% by following recommendations and comments in social media, 22% rely on posts from expert bloggers, 22% follow the brands' social media.

## 2.2.2. Content Marketing

As per Pulizzi (2016) the content marketing could be defined as a mechanism to create and distribute value in the process of attracting, winning, engaging a targeted audience with the aim of profits generation. It is achieved through a continuous interaction and exposure of consumers with the brands through engaging and relevant content about the brands, according to the consumption stage of the consumer. The aim of the content marketing is to generate consumers trust and credibility of the brand and to facilitate the consumer leanings. Rez (2017) outlines that content should be at the core of digital marketing strategy because it has the tendency to influence the purchase intention of consumers, attracting potential customers and building brand authority. Resultantly, if the content in consumers buying journey illuminates the fact that are related to environmental concerns and positive information regarding the attributes and usage of green products there are greater chances of consumers being influenced and their intentions to buy those green products increasing (Costa, da Costa, Maciel, Aguiar and Wanderley, 2021). As per Douglas and Isherwood (1979) there is a positive significant relationship between the content marketing and intentions to buy green products.

## 2.2.3. Influencer Marketing

Lou and Xie (2021) identified that in the modern times influencer marketing flourishing and is getting a boom and popularity and is acting as a significant tool for the marketers and brands to reach their target audience effectively. Nadanyiova, Gajanova and Majerova (2020) described influencer marketing as a form of marketing communication that makes usage of personality based on its knowledge, popularity amongst the masses, reputation (extent of influence has on the masses), level of trust or admiration that majority hold for him; intends to persuade the masses of the benefits of the consumption of the particular product or service. Hence, it could be classified as a strategy of digital marketing that intends to develop a relationship between the brands, digital content producers in order to influence the targeted audience to convert them into potential consumers, strengthening relationship with existing consumers, and also increasing the purchasing intentions of current and potential customers (Gouveia, 2020).

Moreover, Leung, Gu and Palmatier (2022) ought influencer marketing as strategy that allows the brands to select and incentivize the selected influencers and asks them to use and engage their followers through their own exclusive resources and platforms to promote the brand and its offerings in a hope to improve the performance of corporate actions with the targeted audience. This means that brands use of influencers to promote their products creates a feeling of trust and recognition amongst those who follows those influencers. And with this it could be said that influencers acts as a linkage or connection between the brands and a specific targeted audience and creates and increases the brand awareness as well (Farrell, Campbell and Sands, 2022).

As per Panopoulos, et al. (2023) influencers are perceived to be the enablers of social change, they acts as a models for promoting the healthy lifestyles, hence, they are at the forefront of the dissemination of themes on sustainability. So the influencers' holds pertinent position when it comes to the dissemination of importance related to green products amongst the targeted audience. It is because they hold significant public image which enables them to persuade their followers to make use of green products. There is a significant positive relationship between the credibility of an influencer and consumers purchase intentions (Shravya. 2022). Pop, et al. (2020) stated that celebrity and influencers endorsements should be considered as a tool to create awareness and attitudes towards the consumption of green products. In their study, Jalali and Khalid (2021) concluded that photographic content by Instagram influencers and green word of mouth (GWOM) affect followers' green attitudes and consumption intentions.

## 2.3.Outcomes of Visual Sensory Marketing on Consumers Purchase Intention of Eco Beauty Products: Purchase intention

## 2.3.1. Purchase Intention

The term purchase intention means the tendency or probable desire to buy a particular product or service he is considering (Hair et al., 2016). According to Park and Kim (2016) since the consumer behavior is continuously influenced by their purchase intention it is very much crucial to understand their buying intentions for a product or service.

Arslan and Zaman (2014) says that purchase intention could be classified as a possibility that consumers will buy a product or service in the near future. It could be further classified as positive or negative purchase intention. A positive purchase intention increases the likelihood of a consumer buying a product and negative purchase intention restrains or shows less chances of a consumer buying a commodity. Low tendency of negative purchase intention and increase in positive purchase intention means an increase in the probability of purchase. It is being suggested that marketers can also use purchase intention as an important measurement tool for analyzing consumer behavior. It is so because when a positive purchase intention exists that results in a positive brand commitment which reinforces consumers to get an actual purchase action (Wu et al., 2011).

At the same time Diallo (2012) states that purchase intention does not always include the buying behavior as it is just limited to having just intentions of buying a product or service. It is being argued that cognitive factors can influence the buying intentions of the consumers towards a product or service (Das, 2014). According to Granot et al., (2010) the buying intentions of female consumers differs from that of male consumers and are hugely influenced by emotions, service, and experience; hence all three factors must be considered by marketers to influence the purchase intentions of female buyers positively. There exists a great deal of studies that reveals a positive relationship between the purchase intentions of the consumers and green products; which means if the product or service has something to offer for betterment of the environment then consumers will have positive intentions for that brand or product (Tarkiainen & Sundqvist, 2005; Kim & Chung, 2011; Van Loo et al., 2013). According to Van Loo et al., (2013) there just does not exist a positive relationship between the two variables but also the chance of repurchase gets higher.

In the literature, evidence of struggle of different researchers could be found that have struggled to highlight the relationship between the theoretical and practical notion of consumer's purchase intention that is classified more than a perspective and as a biform, Chen (2013) studied purchase intention of green products in two different socio-political ideologies; collectivistic society (China) and individualistic society (America). The results depicted two major concerns: firstly, the lack of concerns of individualist society for the sustainable consumption and environment and the second a close relationship between purchase intention and environmental knowledge, attitudes, environment, and social concerns in collectivistic society.

The work of Dangelico and Pujari (2010) highlights that rise in the consumer's consciousness and demand for green products has forced the businesses to pay attention to the issue of environment protection and has encouraged them to market green products. Resultantly, green products have not only become a way of social progress but also a way of commercial development in today's world. This means that due to sustainable development becoming a trend the companies are now motivated to pay attention to the environmental crisis. There are multiple advantages associated with businesses offering green products for all the stakeholders. Firstly, the employees are provided with a safe environment to work at because the transformation of businesses into green approach eliminates toxic and harmful substances from operations; secondly, as the companies are now involved in achieving the green economies it leads to integrated approach as all the stakeholders are working for the same subject within a state. The changes in consumers' preferences for green products and the urgent actions needed to solve environmental problems are driving companies to seek solutions to such problems. Therefore, many companies have begun to implement green production and marketing strategies to meet customer preferences to achieve long-term business profits (Dangelico and Vocalelli, 2017; Sana, 2020). Having said that the demand for green products is increasing at an increasing rate and that businesses are also inclined to tap on this growing opportunity, still the degree of market development for green products is insufficient. Young et al., (2010) identified in its study that about 30% of the participants of the research showed their inclinations towards the betterment of the environment for which they are ready to translate their motives into actions by purchasing green products. But Rex and Baumann (2007) say that purchase of green products remains very low. And Pinto de Moura et al., (2012) states that expansion of consumers buying the green products is majorly dependent on the consumers buying behavior, which is a complex concept as it is made of varying factors. It is being stated that consumers opting for the buying of the green

products is their manifestation of green behavior; hence studying the green behavior of consumers is of great deal for the companies when it comes to devise strategies to understand the green purchase intentions of consumers.

Concluding, consumers' attention and consideration for the environment and green products affects their buying intentions. Cherrier et al., (2011) says that to boost the consumption of sustainable products the marketers need to pay attention to consumer buying habits and to factors that influence their buying decisions. As per the available literature in the form of previous studies, there are many researchers who have worked to understand the factors that have affected the green purchase intentions of the consumers (Gila and Jacob, 2018; Sun and Wang, 2019; Hashim et al., 2020; Wang et al., 2020). Lam et al. (2016) based his studies on an object of light weight plastic bottle and stated that there existed a significant positive relationship between the product's green perceived value and consumer's purchase intention. Similarly, the green trust has found to be influencing the consumer's purchase intentions of green products (Konuk et al., 2015), and (Bong Ko and Jin, 2017) stated that subjective norms also influences the green purchase intention of consumers. Furthermore, Sreen et al. (2018) was of a view that consumer's attitudes towards green purchase can influence their purchase intentions and buying behaviors as well.

## 2.4. Applications of Visual Sensory Marketing

Vision is the most dominant sense in marketing among all senses as it is evident to create first impression of a brand. 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 (Hulten, 2011). It is the most prominent sense among all the senses as it provides maximum information about brands. Our eyes contain huge number of receptors and visual cues on brands deliver us treasure of information. Packaging of the product plays a vital role in the development of brand image and communicating value to customers. It addresses the inclusive needs of customers by providing rich information through verbal and visual elements. Banachenhou, Guerrich & Moussaoui (2018) found in their 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, color, 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 colors. Colors have power to speak about the personality of brands. Besides increasing visual appearance of a brand, colors provide information about the price, quality and nature of a product e.g. green color is associated with nature; green color products are perceived to be organic/herbal products (Sliburyte & Skeryte, 2014). Different colors are associated with specific meanings that may vary across cultures i.e. In western countries, white color 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 colors with respect to gender, age and beliefs of prospects. The addition of environmental cues (green color and eco label) on product packaging of products clearly categorizes the environmental and chemical products. Green color has a long history in the packaging of ecological products but (Pancer, McShane & Noseworthy, 2015) found in their study that green color alone does not make consumers intention to purchase products by considering them ecological. Use of green colored packaging along with eco-labels increase the credibility of sustainable products that elevate consumers purchase intention. When products appear beautifully in ad with a match between handedness and object orientation, it enhances the mental simulation to interact with a product which results in purchase intention (Krishna et al., 2016). According to theory of planned behavior, consumers purchasing intention gets enhanced when consumers perceive more behavioral control. Consumers feel difficulty to choose, use and buy organic products when they perceive low behavioral control. Consumers inability to differentiate organic food labels with a conventional food labels increase the difficulty in identifying organic food, thus decrease their intention to purchase organic foods (Chen, 2007).

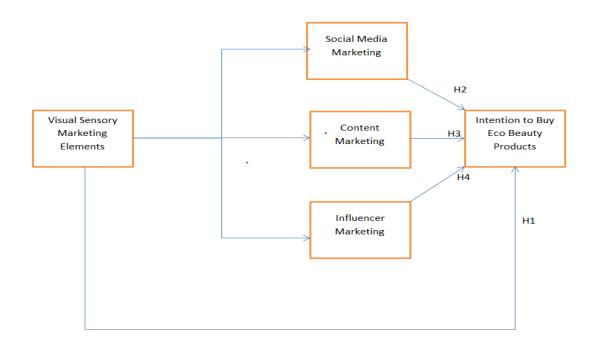
## 3. IMPACT OF Visual Sensory Marketing Elements on Consumers Purchase Intention of Eco Beauty Products Research Methodology

This section of the research talks about the methodology employed in order to gather data and the techniques used to analyze that data. Research methodology explains the entire path taken by the researcher in order to draw a valid conclusion. It starts from the point where the researchers identify a problem and come up with the objectives and ends at a conclusion drawn from the research. The aim of this section is to make sure that the results drawn are valid and reliable.

## **3.1. Theoretical Framework**

Figure 3.1 shows the theoretical framework used for this research. The independent variables were Visual Sensory Marketing Elements, mediator variables were Social Media Marketing, Content Marketing, Influencer Marketing and dependent variable was Intention to Buy Green Beauty Products.

## **Figure 3.1. Theoretical Framework**



## **3.2. Research Approach**

A deductive reasoning approach has been used for this research. From the existing literature present the researchers were able to formulate hypothesis and once the hypothesis were made, research strategy was employed in order to test the hypothesis. Moreover, this research also analyzed the relations between the constructs built.

#### **3.3. Quantitative Research Overview**

Cross sectional survey design has been used for this research study. This method analyzes the data collected at a given time interval from a sample population. Confirmatory Factor Analysis (CFA) was used to analyze the measurement model of this study or in other words to verify the factor structure of the observed variables whereas; Path Analysis was used to project the structural model. Partial least square (PLS) based on Structural Conditioning Model (SEM) was used as an estimation technique, and this was used to study the ways through which the coefficients were drawn among the hidden constructs.

#### 3.4. Partial Least Square Structural Equation Modeling

Partial Least Square based Structural Equation Modeling was used for this research. This was due to the reason that this technique studies all the direct and indirect relations and the various connections the dependent and independent variables have with each other. This research

studied the relations between the dependent variable that was "Intention to Buy Eco Beauty Products", mediators were "Social Media Marketing, Content Marketing, Influencer Marketing", and the independent variables was "Visual Sensory Marketing Elements".

## 3.5. Quantitative Research Design

For this research, primary data was collected from the population. Primary data includes direct responses in form of online questionnaires which were then further utilized. Online questionnaire approach was utilized to increase the response rate.

#### 3.5.1. Web Based Surveys

The survey was made on Google docs online, which was floated to the sample population through e-mails and WhatsApp messages. The online survey was sent to the people living in Pakistan and the Lithuania so that the researchers can get to know the viewpoints of different kind of demographic groups and their perception about their intention to buy eco beauty products. Electronic questionnaires were used as it is easy to quantify data using Google documents.

#### **3.6.** Sampling Frame

The sampling frame for this research consisted mainly of individuals who have expressed interest or have actually bought beauty products through online platforms; involved in discussions related to eco beauty products via social media platforms like YouTube, Facebook, Instagram,; and or the individuals involved in reviewing of eco beauty products at websites such as Ulta, Sephora etc.

#### 3.7. Sampling Method and Respondent Firm Profile

The sample was collected through online questionnaires. The time frame for this research was from May 2023 to December 2023. The total population for this research consisted of all the people who have expressed interest or bought eco beauty products. Total of 270 responses were collected through Google forms and all the responses were accepted for the analysis purposes. The respondent profile showed diversity as need for eco beauty products is growing and more people are now becoming interested in buying such products.

The audience of this research includes the males and females living both and particular those who love to discover and use eco beauty products. The gender of the audience was deliberately opened to all because cosmetic industry now is seen the choice of all the genders.

Convenience sampling is used to collect gather which is a non-probability sampling method. This technique is best suited for conveniently available pool of respondents which means they are easy to reach and collect data from. It is the most commonly used technique and in this case it is used since it is economical, easy and prompt.

#### **3.8.** Construct Measurement and Questionnaire Development

Secondary data resources such as journal articles were used to gather data. Valid measured for all the variables were also gathered from past literature. The dependent variable was "Intention to Buy Green Beauty Products, mediators were "Social Media Marketing, Content Marketing, Influencer Marketing," and the independent variables was "Visual Sensory Marketing Elements". The questionnaire was made from the articles which were used to write down the literature review.

Sr.	Construct	Items	Sources	Scale
Number				
1	Visual Sensory Marketing	3	Longo et al. (2008),	Measured on 5 point
			Witmer et al. (2005)	Likert Scale
2	Social Media Marketing	4	Gunawan, D.D. and	Measured on 5 point
			Huarng,KH. (2015)	Likert Scale
3	Content Marketing	4	Costa et al. (2021)	Measured on 5 point
				Likert Scale
4	Influencer Marketing	2	Pop et al. (2020)	Measured on 5 point
				Likert Scale
6	Intention to Buy Green	4	Yim et al. (2017)	Measured on 5 point
	Beauty Products			Likert Scale
	Total Items	17		
	Demographic Questions	5		

**Table 3.1 Operational Definitions** 

#### **3.9. Sample Size Determination**

The target population included those who were interested in eco beauty products, exploring new beauty products that are sustainable. People belonging to middle and upper class were targeted, who had a minimum household income of USD 200 and had bought or are

interested in buying in eco beauty products. A total of 270 respondents responded to the questionnaire.

#### **3.10. Research Hypothesis**

H1:"There is a significant positive relationship between Visual Sensory Marketing Elements and Intention to Buy Green Beauty."

H2:"The presence of Visual Sensory Marketing Elements, mediated by Social Media Marketing, positively influences Intention to Buy Green Beauty Products."

H3:"The presence of Visual Sensory Marketing Elements, mediated by Content Marketing, positively influences Intention to Buy Green Beauty Products."

H4:"The presence of Visual Sensory Marketing Elements, mediated by Influencer Marketing, positively influences Intention to Buy Green Beauty Products."

#### 3.11. Techniques

Structural Equation Modeling (SEM) has been used in this research in order to incorporate quantitative data and it shows causal relationships between variables. SEM can be viewed as a combination of path and factor analysis. Confirmatory Factor Analysis (CFA) is used to determine the relationship between observed variables and their underlying latent constructs. Whereas, path analysis is used to evaluate causal models by determining the relationships between dependent variable and two or more independent variables. Moreover, Cronbach's alpha is used to measure the reliability of the questions. It is used for Likert questions in a questionnaire and determines the reliability of the scale used.

#### **3.12. Data Analysis**

Smart PLS3, IBM SPSS are used in this research. SPSS is a data management tool and is used to analyze and produce characteristic patterns between different variables. Cronbach's alpha and regression were also conducted using this software. Smart PLS3 was used for SEM and path analysis.

#### **3.13. Data Interpretation**

After gathering data and using different techniques on them, it is then going to be analyzed with the help of graphs and charts. Data will be interpreted from those charts in order to find out the results of the research.

### 4. Visual Sensory Marketing Elements and Impact on Consumers' Intention to Buy Eco Beauty Products: Analysis of Gathered Data and Findings

The result of this research consists of analysis of data which is done in two steps. In the first step, to calculate the reliability of the construct we examined Cronbach's alpha which were calculated from IBM SPSS 20 software and examine the measurement model we did Confirmatory Factor Analysis (CFA). We did CFA by first checking for the individual reliability of the items which is known as factor loadings, and then we calculated and analyzed AVE, followed by internal consistency. The second stage includes testing of the proposed hypothesis for which Path analyses was used. In order to check for the mediator relationships, mediation analysis was also conducted using the Smart PLS software.

#### **4.1 Demographics**

For this research we were able to gather data from 270 respondents, all the responses were accepted and used for analysis. Out of these 270 respondents 54.9% were females and 44% were males whereas the remaining 1.1% denied disclosing this characteristic of them. 67% of the respondents lied in the age bracket of 18-25 years, 18.1% to 26-35 years age group, 5.5% to 36-45 years and 9.2% to above 45 years age group. Educational detail of the respondents showed us that out of all the respondents 2.22% have only attended High School, 13.33% were Under Graduate, 45.92% have Graduate Degree, and 38.51% have Post Graduate Degree. Majority of respondents have Graduate Degrees. The detailed analysis of the household monthly income

showed us that 37% of the respondents have monthly income up to \$150, 48% have monthly income lying in the range of \$151-\$250 and 15% have monthly income of more than \$250. The detailed analyses of the frequency of the respondents who have bought any eco beauty product is 235 which makes them 87.0% of the total population and 35 respondents who make up 13.0% of the population is aware of the eco beauty products but have not consumed them. Analyzing the status of consumption, it could be seen that out of all the respondents 35.1% of them have consumed the eco beauty products only once so far whereas 64.9% of the respondents are frequent consumers of eco beauty products. This data is shown below with the help of figures and in "Table.1 Sample Profile".

Demographics	Categories	Number	Percent
Gender	Female	150	54.9%
	Male	120	44%
	Prefer Not to Say	3	1.1%
Education	High School	6	2.22%
	Under Graduate	36	13.33%
	Graduate	124	45.92%
	Post Graduate	104	38.51%
Household Monthly Income	Up to \$150	100	37%
	Between \$151-\$250	130	48%
	More than \$250	40	15%
Age (Years)	18-25	181	67.0%
	26-35	49	18.1%
	36-45	15	5.5%
	Above 45	25	9.2%
Consumed Eco Beauty Products	Yes	235	87.0%
	No	35	13.0%
Status of Consumption	One Timer	95	35.1%
	Frequent Buyer	175	64.9%

Table.1 Sc	ımple	Pro	file
------------	-------	-----	------

Figure 4.1.1.Demographics (Gender)

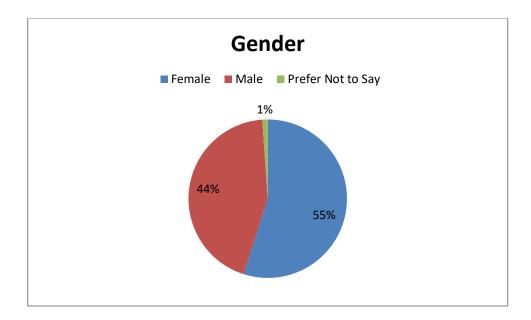


Figure 4.1.2.Demographics (Education)

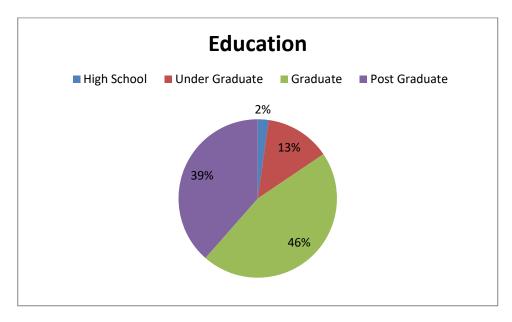


Figure 4.1.3.Demographics (Household Monthly Income)

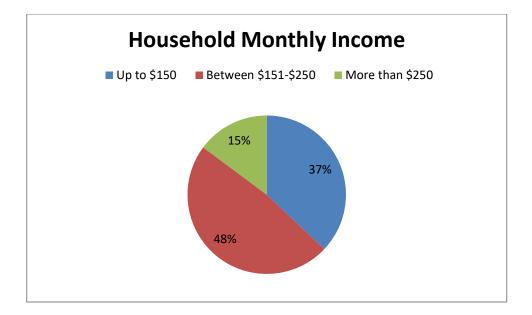


Figure 4.1.4.Demographics (Age)

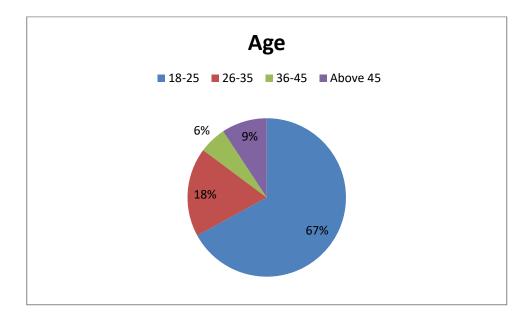


Figure 4.1.5.Demographics (Consumed Eco Beauty Products)

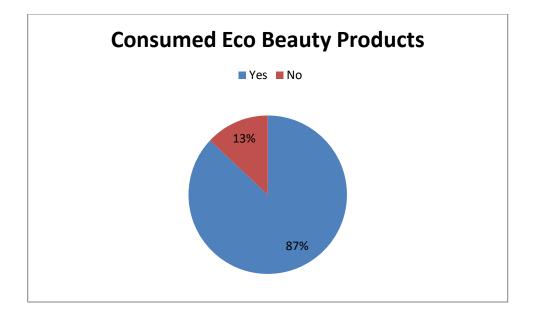
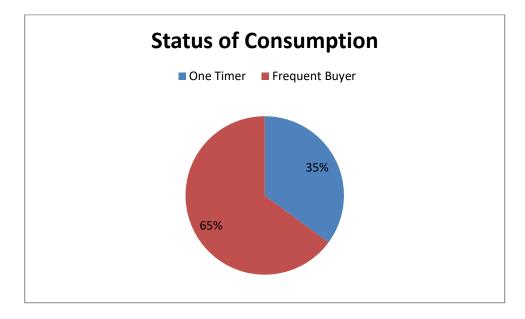


Figure 4.1.6.Demographics (Status of Consumption)



#### 4.2. Reliability analysis

Cronbach's alpha, developed by Lee Cronbach, was calculated which tells us the scale reliability. It tells us how closely related a set of items are as a group. A Cronbach's alpha value above 0.8 indicates good reliability, a value between 0.6 and 0.8 indicates acceptable reliability and a value below 0.6 indicates unacceptable reliability (Dempsey et al., 2014; Wanger, Bezuidenhout, & Roos, 2014). The overall value of Cronbach's alpha was 0.933 (as showed in the Table 2(a) attached in the appendix below) which indicated that our overall reliability is good. The individual scores of the Cronbach's alpha lied between 0.715 which was for Content Marketing and 0.893 which was for Social Media Marketing. Hence, according to Wanger, Bezuidenhout and Roos (2014) our research had acceptable reliability. The values of the Cronbach's alpha are shown in table 2(a) and 2(b) below:

Dependent variable	Independent variables	No. of items	Cronbach's Alpha
Social Media Marketing Content Marketing Influencer Marketing Intention to Buy Green Beauty Products	Visual Sensory Marketing Elements	17	0.933

Table.2 (a) Overall Cronbach's

#### Table.2 (b) Individual Cronbach's

Variable	No. of items	Cronbach's Alpha
Visual Sensory Marketing	3	0.760
Elements		
Social Media Marketing	4	0.893
Content Marketing	4	0.715
Influencer Marketing	2	0.745
Intention to Buy Green Beauty	4	0.772
Products		

#### 4.3. Measurement Model

#### 4.3.1. Factor Loadings

Factor loadings explain the correlations between the observed variables. As shown in Table 3(a) attached in the appendix b, the factor loadings of our variables range from 0.52 for Visual Sensory Marketing Elements to 0.842 for Intentions to Buy Eco Beauty products. Hence

it can be seen that all the factor loadings are above the benchmark of 0.5 which was suggested by Gerbing and Anderson (1988) so they are accepted.

#### 4.3.2. Convergent Validity

As shown in table 3(a) attached below in the Appendix B section, the Convergent Validity AVE for our variables ranges from 0.434 for Visual Sensory Marketing to 0.604 for Social Media Marketing. According to Fornell & Larcker (1981) the values of AVE should be greater than 0.5, but if the value of AVE is greater than 0.4 with CR value above 0.6 than it can still be accepted. Hence, all our AVE values are lying in the benchmark range so they are accepted.

#### **4.3.3.** Construct Reliability

The last column in table 3(a) attached in the Appendix B below, shows the values of Construct Reliability for our variables. The range of these construct reliability is from 0.712 for Content Marketing to 0.896 for Intention to Buy Eco Beauty Products. According to Bagozzi and Yi (1988) the benchmark for value of construct reliability is 0.7. Hence, as shown above we can see that all our values lie in the benchmark range.

Variable	Factor Loading	AVE	Construct Reliability
Visual Sensory			v
Marketing			
Elements	0.763,0.732,0.52	0.434	0.789
Social Media			
Marketing	0.728,0.824,0.714,0.758	0.604	0.753
Content			
Marketing	0.701,0.675,0.641, 0.687	0.453	0.712
Influencer			
Marketing	0.761,0.78	0.594	0.745
Intention to Buy			
Green Beauty			
Products	0.695,0.842,0.817,0.795	0.59	0.896

 Table.3 (a) Confirmatory Factor Analysis

#### **4.3.4. Model Fitness Indices**

Model Fitness Indices is used to measure the overall goodness-of-fit of the used model in research to the observed data. This provides quantitative measures that help to evaluate how well the model fits the data and whether the model accurately represents the underlying relationships between the variables. According to Anderson and Gerbing, (1988); Bagozzi and Yi, (1988);

Byrne, (2010) the benchmark for CMIN/DF is that it should be less than or equal to 3, for AGFI it should be greater than or equal to 8, GFI should be greater than or equal to 9, NFI should be greater than or equal to 9, CFI should also be greater than or equal to 9. Comparing the results of this research with the benchmark we can see that our CMIN/DF, AGFI and CFI as shown in table 3(b) attached in the appendix b below, lies in the benchmark range hence they are significant. Moreover, according to Chen, Yu, & Batnasan, (2014) the acceptable range for GFI, NFI and TLI is that it should lie between 0.85-0.90. As shown in the table the values for this research's GFI, NFI and TLI lies in between the acceptable range hence we can say that this model is significant. All the model fitness indices were accepted.

Index	Default model
CMIN/DF	2.243
AGFI	0.825
GFI	0.868
NFI	0.854
TLI	0.894
CFI	0.912

Table.3 (b) Model Fitness Indices

#### 4.4. Structural Equation Modeling (Path Analysis) and Hypothesis Testing

SEM Path Analysis was conducted in two stages in order to check for the acceptance of the hypothesis. In the first stage we conducted Path analysis to test the relations between independent and dependent variables whereas in the second stage we added our mediators to check their mediating effects. For stage one analysis our independent variable was Visual Sensory Marketing Elements whereas our dependent variable was Intention to Buy Eco Beauty Products. For stage two analyses we added Social Media Marketing, Content Marketing, Influencer Marketing as mediators.

#### 4.4.1. Hypothesis Testing

# H1:"There is a significant positive relationship between Visual Sensory Marketing Elements and Intention to Buy Green Beauty."

The table 4.12 indicates us that the direct path from Visual Sensory Marketing to Intention to Buy Eco Beauty Products has a standard deviation of 0.103, t value of 2.906 and p value of 0.004. These values verify that there is a significant positive relationship between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products, therefore **H1 is accepted.** 

	Original	Sample	Stand	Т	Р	
	Sample (O)	Mean (M)	ard	Statistics	Values	
			Devia	( O/STD		
			tion	EV )		
			(STD			
			EV)			
Visual Sensory Marketing	0.27	0.269	0.093	2.906	0.004	
Elements -> Intention to Buy Eco						
Beauty Products						

Table.4 (a) Path Analysis and Hypothesis Testing (Independent Variable)

# H2:"The presence of Visual Sensory Marketing Elements, mediated by Social Media Marketing, positively influences Intention to Buy Green Beauty Products."

The table 4.13 indicates us that the path from Visual Sensory Marketing Elements to Intention to Buy Eco Beauty Products through mediation by Social Media Marketing has a standard deviation of 0.031, t value of 1.595 and p value of 0.111. These values verify that there is a significant positive relationship between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products through complimentary mediation by Social Media Marketing. Complementary mediation means that both indirect and direct effects are significant, from the table 4.13 we can see that all three p values are less than 0.05; hence we conclude that **H2 is accepted.** 

	Original	Sample	Stand	Т	Р
	Sample (O)	Mean (M)	ard	Statistics	Values
			Devia		
			tion (STD EV)	( O/STD EV )	
Visual Sensory Marketing Elements - > Social Media Marketing-> Intention to Buy Eco Beauty Products	0.173	0.174	0.041	4.247	0

# H3:"The presence of Visual Sensory Marketing Elements, mediated by Content Marketing, positively influences Intention to Buy Green Beauty Products."

The table 4.13 indicates us that the path from Visual Sensory Marketing Elements to Intention to Buy Eco Beauty Products through mediation by Content Marketing has a standard deviation of 0.021, t value of 1.643 and p value of 0.101. P value is greater than 0.05 hence we can say that there is no significant relationship between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products through Content Marketing, hence **H3 is rejected.** 

# H4:"The presence of Visual Sensory Marketing Elements, mediated by Influencer Marketing, positively influences Intention to Buy Green Beauty Products."

The table 4.13 indicates us that the path from Visual Sensory Marketing Elements to Intention to Buy Eco Beauty Products through mediation by Influencer Marketing has a standard deviation of 0.021, t value of 1.643 and p value of 0.101. P value is greater than 0.05 hence we can say that there is no significant relationship between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products through destination image, hence **H4 is rejected**.

### 5. Visual Sensory Marketing Elements and Impact on Consumers' Intention to Buy Eco Beauty Products: Discussion of the Results

#### **5.1. Research Overview**

In marketing, the consumer purchase intentions holds immense importance for the marketers and it provides the foundation for brands to develop effective branding strategies. These intentions are influenced by number of factors, one of which visual marketing stimuli. Visual stimuli are among the most prominent sensory cues in marketing. The visual appeal of a product, including its color, design, and overall aesthetics, can significantly impact consumer choices (Smith, 2017). Consumers rely on visual information to make informed decisions, and effective use of visual elements can lead to more accurate color and design choices, ultimately influencing purchase behavior.

The main purpose of this study was to identify the impact of the visual sensory marketing elements on the consumers purchase intention of eco beauty products. In this regard it not just studied the direct relationship between the two but also studied the role of mediating factors as well such as social media marketing, influencer marketing, content marketing. The respondents of this research were from Lithuania and Pakistan.

A number of researches have been done to study the impacts of the Visual Sensory Marketing on the purchase intentions of consumers, but no direct study has been done to to study the impact of it on the purchase intention for eco beauty products. Similarly, regarding the relationship between independent and dependent variables these mediator variables are also special in its usage.

In order to reach to desired results a very comprehensive literature study was conducted which is explained in the first chapter of this research. The literature review gives us an overview of all the previous researches conducted as well as it highlights the research gaps which this research intends to fill. Moreover the literature review also highlights that all the previous researches have been conducted by taking the same variables individually, so this research tried to combine these variables under one umbrella.

Theoretical Framework used for this research was developed using previous researchers carried out. Independent variable Visual Sensory Marketing was taken from Longo et al. (2008) and Witmer et al. (2005), the dependent variable Intention to Buy Eco Beauty Products was taken from Yim et al. (2017). And the mediator variables namely Social Media Marketing,

Content Marketing, and Influencer Marketing were taken from Gunawan, D.D. and Huarng,K.-H. (2015), Costa et al. (2021), Pop et al. (2020) respectively.

Table for the constructs shows us the variables and their creators. It also shows their operational definitions. For this research one independent variable, three mediator variables and one dependent variable was used. The sampling frame was diverse mainly people who have consumed the eco beauty products or intend to consume them in near future. The sample consisted of 270 responses.

Descriptive analysis was done using the graphs and charts developed through Google Docs whereas Structural Equation Modeling was done using Smart PLS software. We first conducted Confirmatory Factor Analysis, than we conducted Path Analysis in two stages, in the first stage we took dependent and independent variables whereas in the second stage we took mediators along with the independent and dependent variables. CFA was done in order to check for the reliability and validity of the scales used. Even though already developed and tested scales were used but in order to check for their reliability and validity we conducted CFA.

#### **5.2.** Discussion of the Descriptive Results

A total of 270 responses were gathered. Descriptive analysis helps the researchers to better understand the frequency of the data. Demographic variables such as gender, education level, household monthly income, age, whether or not the beauty products been consumed by the respondent and frequency of usage of beauty products were analyzed.

Descriptive analysis showed us that 54.9% were females and 44% were males whereas the remaining 1.1% denied disclosing this characteristic of them. 67% of the respondents lied in the age bracket of 18-25 years, 18.1% to 26-35 years age group, 5.5% to 36-45 years and 9.2% to above 45 years age group. Educational detail of the respondents showed us that out of all the respondents 2.22% have only attended High School, 13.33% were Under Graduate, 45.92% have Graduate Degree, and 38.51% have Post Graduate Degree. Majority of respondents have Graduate Degrees. The detailed analysis of the household monthly income showed us that 37% of the respondents have monthly income up to \$150, 48% have monthly income lying in the range of \$151-\$250 and 15% have monthly income of more than \$250. The detailed analysis of the frequency of the respondents who have bought any eco beauty product is 235 which makes them 87.0% of the total population and 35 respondents who make up 13.0% of the population is aware of the eco beauty products but have not consumed them. Analyzing the status of

consumption, it could be seen that out of all the respondents 35.1% of them have consumed the eco beauty products only once so far whereas 64.9% of the respondents are frequent consumers of eco beauty products.

#### **5.3.** Discussion of the Hypothesis Results

This section highlights the results of this research along with some interesting insights gathered from the research. The research was conducted in order find the impact of Visual Sensory Marketing Elements on the consumers Intention to Buy Eco Beauty Products with Social Media Marketing, Content Marketing and Influencer Marketing acting as mediator variables.

# H1: "There is a significant relationship between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products."

This hypothesis was accepted; therefore we got to know that Visual Sensory Marketing has a significant positive impact on consumers Intention to Buy Eco Beauty Products. The literature provides evidences which indicate that consumers encounter several problems in identifying and purchasing the eco beauty products. The idea of usage of Visual Sensory Marketing Elements by marketers is found to be very helpful for consumers as it boosts their confidence in the process of buying. These visual elements not only uncover the competitive traits of products to consumers but also results in the maximization of their intentions to buy them (Talavera and Chambers, 2017). It has been suggested by Martinus and Anggraini (2018) that the useage of visual sensory cues by brands is a substantial marketing idea of communicating a message to consumers that encourages them to make purchase of available sustainable beauty products. Hereby, this highlights the responsibility of the marketers to devise such marketing strategies that are innovative in their approach to provide information about the green product by making use of visual marketing stimulations and are action oriented. Henceforth, Hypothesis 1 is accepted.

### H2:"Visual Sensory Marketing Elements has an impact on Intention to Buy Green Beauty Products through Social Media Marketing."

As discussed already under the analysis of Hypothesis 1, that there is a positive significant relationship between the Visual Sensory Marketing Elements and the consumers

Intention to Buy Eco Beauty Products. However, the relationship remains the same even after adding a mediator variable that is Social Media Marketing. This means that Social Media Marketing influenced by or with the presence of Visual Sensory Marketing stimuli has a positive impact on the Intention to Buy Eco Beauty Products. Kusumasondjaja and Tjiptono (2019) suggested that visual sensory marketing is rooted in consumer senses and has the tendency to influence the consumer perceptions, judgments and their behavior. Hung et al. (2017) stated that visual sensory exposure is triggers the first phase of consumer decision making. In social media marketing, marketers must incorporate visual sensory marketing elements into their social platforms, because consumers cannot stimulate products directly (Petit et al., 2019). At the same time, consumers are seen using social media sites primarily for obtaining information regarding the eco beauty products (Heinonen, 2011). Hence, H2 was accepted, as this relationship is significant.

# H3:"Visual Sensory Marketing Elements has an impact on Intention to Buy Green Beauty Products through Content Marketing."

The direct relation between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products is significant and positive but when we add in the mediator "Content Marketing" than this path is not accepted. This shows us that Content Marketing does not mediate the relation between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products. As per Douglas and Isherwood (1979) there is a positive significant relationship between the content marketing and intentions to buy green products. But when this variable of Content Marketing is used as a mediator then that relationship is not accepted. With this, H3 is rejected.

# H4:"Visual Sensory Marketing Elements has an impact on Intention to Buy Green Beauty Products through Influencer Marketing."

Similarly, when we add in the mediator "Influencer Marketing" in between the Visual Sensory Marketing Elements and the Intention to Buy Eco Beauty Products; then this relation become insignificant. This means that Influencer Marketing influenced by Visual Sensory Marketing Elements does not have an impact on the Intention to Buy Eco Beauty Products. Whereas, if we talk about the individuality of the variable Influencer marketing than as per Panopoulos, et al. (2023) influencers are perceived to be the enablers of social change, they acts as a model for promoting the healthy lifestyles, hence, they are at the forefront of the dissemination of themes on sustainability. So the influencers' holds pertinent position when it comes to the dissemination of importance related to green products amongst the targeted audience. Hence it is concluded that this is the case of direct only non-mediation which means that there is a significant direct effect but indirect effect is non-significant due to which H4 is rejected.

 6. Visual Sensory Marketing Elements and Impact on Consumers' Intention to Buy Eco Beauty Products: Conclusion
 6.1. Summary of the Findings This research established 4 main hypotheses out of which 2 were accepted and 2 were rejected. The first hypothesis established positive and significant relationship between Visual Sensory Marketing Elements and Intention to Buy Eco Beauty Products. People in the modern times have become much more aware of the impact of their consumption of the products including beauty products on the environment, hence, they are more inclined to make use of those products whose formation, consumption, and disposal has a least or no negative impact on the environment. Along with this we are living in technological advanced era and literature shows the transition of markets from physical spaces to digital spaces. Hence, Visual Sensory Marketing Elements aids the brands to attract the customers and influences their intentions to make purchase of the items.

Social Media Marketing has gained a lot of popularity especially amongst the Generation Z. these social media networking sites has provided the marketers and brands to communicate with the customers and market their offerings. Brands can now make use of different channels such as Facebook, Instagram, Snapchat, Tiktok etc. to market and advertise their offerings. On the other side the consumers who are exposed to these advertised are hugely influenced by the visual content, including the exposure to the stimuli such as color, logo and other associated visual to the brand identity and their perceptions are made about the product and brand. These all stimuli influences the consumer pre and post buying behaviors and holds tendency to call for intentions to buy a particular products. In this research as well, the Social Media Marketing has been seen as playing the role of a mediator between the Visual Sensory Marketing and the Intention to Buy Eco Products.

Content Marketing and Influencer Marketing has been previously used by the researchers as variables and their impact on the Intention to Buy Eco Products have also been studied. In the previous researchers these have been treated as individual independent variables. And their impact has been found to be significant. But in this research they have been regarded as a mediator variable in the relationship between the Visual Sensory Marketing Elements and the Intention to Buy Eco Products. However, their role as mediator has not been found to be significant as a result, of which the entire hypothesis became insignificant, hence, both the variables i.e. "Visual Sensory Marketing Elements has an impact on Intention to Buy Green Beauty Products through Content Marketing, and "Visual Sensory Marketing Elements has an impact on Intention to Buy Green Beauty Products through Influencer Marketing has been rejected.

#### 6.2. Contribution of the Research

This research developed direct relationships between independent and dependent variables. Moreover this research also studied the impact of three mediators' i.e. Social Media Marketing, Content Marketing, and Influencer Marketing. These direct relations have been studied before but no previous studies have conducted research by using the mediators employed by this research. Moreover a number of researches have been conducted by taking Western world population into consideration but no previous research has taken both the Western and Eastern countries sample hence this is also another unique factor of this research as it uses Pakistani and Lithuanian population as a sample for this research. Furthermore, demand and consumption of eco beauty products is overall an important topic to be researched on for both academic and business perspectives.

#### 6.3. Implications of the Research Findings

Studies reveals that where on one end technological progress has led to rapid economic development and brought ease in the lives of humans at the same time it has posed some serious threats to environment that includes air pollution, global warming and ultimately causing climate change. These issues are not only deteriorating the environmental fabric of the world but then putting a burden on the socio-economic progress of the world. Hence, the issue has called for the collective attention of all the stakeholders. As a result of which during the past few years the consumers have become aware of the problem and conscious enough to call for businesses to act in a way which is environmentally sustainable in its approach. These people are demanding for the higher value and for them the definition of the value is that paying more and more attention towards the environment; hence they are involved in environmental protection activities, attitudes and knowledge and expect the same from the businesses. As a result of this consciousness amongst the consumers, they have realized that their buying behavior has the tendency to impact the environment. So, the consumers are changing their lifestyles in a way that they start using sustainable products which then impacts the business activities. And when we talk about sustainable products we also mean the eco beauty products.

This research highlights that Visual Sensory Marketing Elements have a significant and positive impact on consumers Intention to Buy Eco Beauty Products, hence beauty brands should use visual sensory marketing tools to market the eco beauty products. Social Media Marketing has been found to be playing crucial role in modifying the consumer behavior and influencing their intentions to buy eco beauty products. Hence, the brands should use the social media channels as platform or space for attracting, engaging and encouraging the consumers to make intent to buy an eco-beauty product while being exposed to visual sensory marketing stimuli.

Moreover, the beauty brands should try to become market oriented in their approach. This means that they should make products by keeping in mind the requirements of the market that is going green. And in order to enhance the buying experience of the consumers and call for intention to make purchase they should actively make use of the visual sensory marketing because of its popularity and acceptance amongst the consumers. Making usage of visual sensory marketing elements can help brand to connect with the targeted audience in an effective and, accepted, trusted and credible way adding in to the positive repute of the brand.

For brands in the green beauty industry, understanding the implications of visual sensory marketing elements on the intention to buy through social media marketing is crucial. By strategically incorporating visually appealing elements into their social media content, brands can effectively influence consumer behavior and drive sales. It is important for brands to focus on creating visually captivating content that showcases the vibrant colors, attractive packaging, and captivating imagery of their green beauty products. This will not only capture the attention of potential customers but also convey the brand's commitment to sustainability and eco-friendliness. By leveraging the power of visual cues, brands can create a positive impression and enhance the overall aesthetic appeal of their products, ultimately increasing the likelihood of consumers developing a favorable intention to purchase. Therefore, brands should prioritize investing in visually appealing social media marketing strategies to effectively promote and sell their green beauty products.

#### **6.4.Limitations of the Research**

There existed multiple factors which acted as the limitations while conducting the research work. Firstly, the research was conducted while being in Lithuania, this means that results could be interpreted in consideration of this region only and may not be generalized to

other parts of the world, exception to the responses gathered from the home country of the researcher which is Pakistan. With this it could be said that results could be generalized to Lithuania and (Lahore) Pakistan in particular. This means that the sample size wasn't that diverse due to which the data might have been biased towards a general population of an area. Due to limited span of time only one factor within the digital marketing sensory have been studied; otherwise, if all the five factors (such as audio, touch, smell, touch) had been studied then the results would have been more holistic and applicable to a greater extent. The research only focuses on the impacts of video led digital sensory marketing on purchase intention of consumers for eco beauty products while there exists wide range of products that fall in the classification of eco products. The research was conducted when there was other academic material that needed to be completed so the attention of the researcher got divided while doing this research work. Finally, due to the time and budgetary constraints the data was gathered through Google Docs/ Digital Questionnaires. This means that other methods would have been employed such as face to face interviews and focus groups which would have bought in more diversity in the data gathered.

#### **6.5. Directions of the Future Research**

Future researchers can remove the limitations of this research by having a diverse range of data gathered from various cities of Pakistan and Lithuania. Moreover, this study does not focus on the role of visual sensory marketing elements on the attitude or satisfaction level of the consumers. Future researchers can focus on this aspect as well and should study the influence of other sensory marketing factors on the purchase intention of consumers for eco beauty products.

Furthermore in mediating variables consequents of visual sensory marketing elements could be used such as storytelling through visuals, visual content optimization, user generated content and their impact on purchase intention of consumers for eco products could be measured and studied.

### References

Ahmad, A. N. E. E. S., & Thyagaraj, K. S. (2015). Consumer's intention to purchase green brands: The roles of environmental concern, environmental knowledge and self expressive benefits. Current World Environment, 10(3), 879-889. https://pdfs.semanticscholar.org/765b/f4446ee54266629bd7b7144be7d66c0106a1.pdf

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.

https://www.sciencedirect.com/science/article/pii/074959789190020T

Ajzen, I. (2006). Behavioral interventions based on the theory of planned behavior. <u>https://people.umass.edu/aizen/pdf/tpb.intervention.pdf</u>

Alam, M. N., Ogiemwonyi, O., Alshareef, R., Alsolamy, M., Mat, N., & Azizan, N. A. (2023). Do social media influence altruistic and egoistic motivation and green purchase intention towards green products? An experimental investigation. Cleaner Engineering and Technology, 15, 100669.

https://www.sciencedirect.com/science/article/pii/S2666790823000745

AlghzawI, M., Alghizzawi, M., & Tarabieh, S. M. Z. A. (2020). Consumer impulsive buying behavior of services sector in Jordan. *JournalNX-A Multidisciplinary Peer Reviewed Journal*, 6(7), 227-237.

https://www.academia.edu/download/64044103/20151510-services-sector-in-jordan.pdf

Al-Haddad, S., Awad, A., Albate, D., Almashhadani, I., & Dirani, W. (2020). FACTORS AFFECTING GREEN COSMETICS PURCHASE INTENTION. *Journal of Management Information & Decision Sciences*, 23(4).

https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawl er&jrnl=15247252&AN=146403607&h=sae8Ev1xSdGF2ko43u0%2BPqkKiGrFXMQmitgXR5c Co9phTEqK1s6A9n9X0OI321iOJw7Y%2BCamcjeFebCTzJb89w%3D%3D&crl=c

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411. <u>https://psycnet.apa.org/record/1989-14190-001</u>

Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. *International journal of consumer studies*, *42*(4), 389-401. https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12432

Arslan, M., Iftikhar, M., & Zaman, R. (2014). Effect of service quality dimensions on customer satisfaction: A comparative analysis of Pakistan Telecom sector. *Revista de Management Comparat International*, *15*(4), 440.

https://www.ceeol.com/search/article-detail?id=731012

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*, 74-94. https://link.springer.com/article/10.1007/bf02723327

Beck, U. (2015). Emancipatory catastrophism: What does it mean to climate change and risk society?. *Current sociology*, *63*(1), 75-88. https://journals.sagepub.com/doi/abs/10.1177/0011392114559951

Bedard, S. A. N., & Tolmie, C. R. (2018). Millennials' green consumption behaviour: Exploring the role of social media. *Corporate Social Responsibility and Environmental Management*, 25(6), 1388-1396.
https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.1654

Benda-Prokeinová, R., Dobeš, K., Mura, L., & Buleca, J. (2017). Engel' s approach as a tool for estimating consumer behaviour.

https://dspace5.zcu.cz/handle/11025/26265

Bonanno, A., Barra, M., Basilone, G., Genovese, S., Rumolo, P., Goncharov, S., ... & Mazzola, S. (2016). Environmental processes driving anchovy and sardine distribution in a highly variable environment: the role of the coastal structure and riverine input. *Fisheries oceanography*, *25*(5), 471-490.

https://onlinelibrary.wiley.com/doi/abs/10.1111/fog.12166

Bong Ko, S., & Jin, B. (2017). Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management: An International Journal*, *21*(1), 70-87. https://www.emerald.com/insight/content/doi/10.1108/JFMM-07-2014-0057/full/html

Bong Ko, S., & Jin, B. (2017). Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management: An International Journal*, *21*(1), 70-87. https://www.emerald.com/insight/content/doi/10.1108/JFMM-07-2014-0057/full/html

Brekke, K. A., & Howarth, R. B. (2006). DOUGLAS AND ISHERWOOD (1979, p3). *The Earthscan Reader in Sustainable Consumption*, 249.

Brugarolas, M., & Martínez-Carrasco, L. (2017). The sense of sight. In *Sensory and aroma marketing* (pp. 141-150). Wageningen Academic Publishers. https://www.wageningenacademic.com/doi/abs/10.3920/978-90-8686-841-4\_3

Bryson, D., Atwal, G., & Hultén, P. (2013). Towards the conceptualisation of the antecedents of extreme negative affect towards luxury brands. *Qualitative Market Research: An International Journal*, *16*(4), 393-405.

https://www.emerald.com/insight/content/doi/10.1108/QMR-06-2013-0043/full/html

Byrne, B. M., & Van de Vijver, F. J. (2010). Testing for measurement and structural equivalence in large-scale cross-cultural studies: Addressing the issue of nonequivalence. *International journal of testing*, *10*(2), 107-132.

https://www.tandfonline.com/doi/abs/10.1080/15305051003637306

Cachero-Martínez, S., & Vázquez-Casielles, R. (2021). Building consumer loyalty through eshopping experiences: The mediating role of emotions. *Journal of Retailing and Consumer Services*, *60*, 102481.

https://www.sciencedirect.com/science/article/pii/S0969698921000473

Camilleri, A. R., Larrick, R. P., Hossain, S., & Patino-Echeverri, D. (2019). Consumers underestimate the emissions associated with food but are aided by labels. *Nature Climate Change*, *9*(1), 53-58.

https://www.nature.com/articles/s41558-018-0354-z

Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural equation modeling: a multidisciplinary journal*, *14*(3), 464-504. https://www.tandfonline.com/doi/abs/10.1080/10705510701301834

Chen, K. C. J., Yu, Y. W., & Batnasan, J. (2014). Services Innovation Impact to Customer Satisfaction and Customer Value Enhancement in Airport (Çev. Ümmühan Demir). *Department of Business Administration, Asia University: Taiwan*. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3001666

Chen, M. F., & Tung, P. J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International journal of hospitality* 

management, 36, 221-230.

https://www.sciencedirect.com/science/article/pii/S0278431913001266

Chen, Y. S., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, *50*(3), 502-520. https://www.emerald.com/insight/content/doi/10.1108/00251741211216250/full/html

Cherrier, H., Black, I. R., & Lee, M. (2011). Intentional non-consumption for sustainability: Consumer resistance and/or anti-consumption?. *European Journal of Marketing*, *45*(11/12), 1757-1767.

https://www.emerald.com/insight/content/doi/10.1108/03090561111167397/full/html

Choi, D., & Johnson, K. K. (2019). Influences of environmental and hedonic motivations on intention to purchase green products: An extension of the theory of planned behavior. *Sustainable Production and Consumption*, *18*, 145-155. https://www.sciencedirect.com/science/article/pii/S2352550918303038

Corrado, C., Hulten, C., & Sichel, D. (2005). Measuring capital and technology: an expanded framework. In *Measuring capital in the new economy* (pp. 11-46). University of Chicago Press. https://www.nber.org/system/files/chapters/c0202/c0202.pdf

Costa, C. S. R., da Costa, M. F., Maciel, R. G., Aguiar, E. C., & Wanderley, L. O. (2021). Consumer antecedents towards green product purchase intentions. *Journal of Cleaner Production*, *313*, 127964.

https://www.sciencedirect.com/science/article/pii/S095965262102182X

Dagher, G. K., & Itani, O. (2014). Factors influencing green purchasing behaviour: Empirical evidence from the Lebanese consumers. *Journal of Consumer Behaviour*, *13*(3), 188-195. https://onlinelibrary.wiley.com/doi/abs/10.1002/cb.1482

Dangelico, R. M., & Pontrandolfo, P. (2010). From green product definitions and classifications to the Green Option Matrix. *Journal of cleaner production*, *18*(16-17), 1608-1628. <u>https://www.sciencedirect.com/science/article/pii/S0959652610002659</u> Dangelico, R. M., & Pujari, D. (2010). Mainstreaming green product innovation: Why and how companies integrate environmental sustainability. *Journal of business ethics*, *95*, 471-486. <u>https://link.springer.com/article/10.1007/s10551-010-0434-0</u>

Dani, V., & Vanishree, M. (2013). Branding through Sensory Marketing KEYWORDS. *Management*, 2(11). https://www.researchgate.net/profile/VinitDani/publication/314891590\_Branding\_through\_Sens

ory\_Marketing/links/5ce37175299bf14d95abb6cf/Branding-through-Sensory-Marketing.pdf

de Moura, A. P., Cunha, L. M., Castro-Cunha, M., & Lima, R. C. (2012). A comparative evaluation of women's perceptions and importance of sustainability in fish consumption: An exploratory study among light consumers with different education levels. *Management of Environmental Quality: An International Journal*, 23(4), 451-461. https://www.emerald.com/insight/content/doi/10.1108/14777831211232263/full/html?journalCo de=meq&fullSc=1&utm\_source=TrendMD&utm\_medium=cpc&utm\_campaign=Management\_of Environmental\_Quality\_TrendMD\_0&WT.mc\_id=Emerald\_TrendMD\_0

Denegri-Knott, J., Zwick, D., & Schroeder, J. E. (2006). Mapping consumer power: an integrative framework for marketing and consumer research. *European Journal of Marketing*, *40*(9/10), 950-971.

https://www.emerald.com/insight/content/doi/10.1108/03090560610680952/full/html

Dezdar, S. (2017). Green information technology adoption: Influencing factors and extension of theory of planned behavior. *Social Responsibility Journal*, *13*(2), 292-306. <u>https://www.emerald.com/insight/content/doi/10.1108/SRJ-05-2016-0064/full/html</u>

Diallo, M. F. (2012). Effects of store image and store brand price-image on store brand purchase intention: Application to an emerging market. *Journal of Retailing and Consumer Services*, *19*(3), 360-367.

https://www.sciencedirect.com/science/article/pii/S0969698912000331

Ellen, P. S., Wiener, J. L., & Cobb-Walgren, C. (1991). The role of perceived consumer effectiveness in motivating environmentally conscious behaviors. *Journal of public policy & marketing*, *10*(2), 102-117.

https://journals.sagepub.com/doi/abs/10.1177/074391569101000206

Erenkol, A. D., & Merve, A. K. (2015). Sensory marketing. *Journal of Administrative Sciences and Policy Studies*, *3*(1), 1-26. http://jaspsnet.com/journals/jasps/Vol\_3\_No\_1\_June\_2015/1.pdf

Erenkol, A. D., & Merve, A. K. (2015). Sensory marketing. *Journal of Administrative Sciences and Policy Studies*, *3*(1), 1-26. <u>http://jaspsnet.com/journals/jasps/Vol\_3\_No\_1\_June\_2015/1.pdf</u>

<u>map://juspshet.com/journuis/jusps///or\_5\_tto\_1\_sune\_2015/1.pur</u>

Farrell, J. R., Campbell, C., & Sands, S. (2022). What drives consumers to engage with influencers?: Segmenting consumer response to influencers: Insights for managing social-media relationships. *Journal of Advertising Research*, *62*(1), 35-48. https://www.journalofadvertisingresearch.com/content/62/1/35.abstract

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39-50. <u>https://journals.sagepub.com/doi/abs/10.1177/002224378101800104</u>

Fryxell, G. E., & Lo, C. W. (2003). The influence of environmental knowledge and values on managerial behaviours on behalf of the environment: An empirical examination of managers in China. *Journal of business ethics*, *46*, 45-69. https://link.springer.com/article/10.1023/a:1024773012398

Gallace, A., Ngo, M. K., Sulaitis, J., & Spence, C. (2012). Multisensory presence in virtual reality: possibilities & limitations. In *Multiple sensorial media advances and applications: New developments in MulSeMedia* (pp. 1-38). IGI Global.

https://www.igi-global.com/chapter/multisensory-presence-virtual-reality/55937

Gu, W., Wu, Z., Bo, R., Liu, W., Zhou, G., Chen, W., & Wu, Z. (2014). Modeling, planning and optimal energy management of combined cooling, heating and power microgrid: A review. *International Journal of Electrical Power & Energy Systems*, *54*, 26-37. https://www.sciencedirect.com/science/article/pii/S0142061513002883

Gunawan, D. D., & Huarng, K. H. (2015). Viral effects of social network and media on consumers' purchase intention. *Journal of Business Research*, *68*(11), 2237-2241. https://www.sciencedirect.com/science/article/pii/S0148296315002325 Gustavo Jr, J. U., Trento, L. R., de Souza, M., Pereira, G. M., de Sousa Jabbour, A. B. L., Ndubisi, N. O., ... & Zvirtes, L. (2021). Green marketing in supermarkets: Conventional and digitized marketing alternatives to reduce waste. *Journal of cleaner production*, *296*, 126531. https://www.sciencedirect.com/science/article/pii/S0959652621007514

Hagtvedt, H., & Patrick, V. M. (2014). Consumer response to overstyling: Balancing aesthetics and functionality in product design. *Psychology & Marketing*, *31*(7), 518-525. https://onlinelibrary.wiley.com/doi/abs/10.1002/mar.20713

Hair, Jr, J. F., Sarstedt, M., Matthews, L. M., & Ringle, C. M. (2016). Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I–method. *European business review*, 28(1), 63-76.

https://www.emerald.com/insight/content/doi/10.1108/EBR-09-2015-0094/full/html

Hartmann, P., & Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of business Research*, 65(9), 1254-1263.

https://www.sciencedirect.com/science/article/pii/S0148296311004012

Haseeb, M., Hussain, H. I., Ślusarczyk, B., & Jermsittiparsert, K. (2019). Industry 4.0: A solution towards technology challenges of sustainable business performance. *Social Sciences*, 8(5), 154.

https://www.mdpi.com/2071-1050/11/14/3811

Hashem, M., Rez, M. F. A., Fouad, H., Elsarnagawy, T., Elsharawy, M. A., Umar, A., ... & Ansari, S. G. (2017). Influence of titanium oxide nanoparticles on the physical and thermomechanical behavior of poly methyl methacrylate (PMMA): a denture base resin. *Science of Advanced Materials*, *9*(6), 938-944.

https://www.ingentaconnect.com/contentone/asp/sam/2017/00000009/00000006/art00013

Hausman, A. V., & Siekpe, J. S. (2009). The effect of web interface features on consumer online purchase intentions. *Journal of business research*, *62*(1), 5-13. <u>https://www.sciencedirect.com/science/article/pii/S0148296308000210</u> Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of consumer behaviour*, *10*(6), 356-364. <u>https://onlinelibrary.wiley.com/doi/abs/10.1002/cb.376</u>

Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of consumer behaviour*, *10*(6), 356-364. <u>https://onlinelibrary.wiley.com/doi/abs/10.1002/cb.376</u>

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., ... & Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The lancet*, *395*(10223), 497-506.

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext?ref=https://codemonkey.link

Huang, Y., Yang, L., & Liu, M. (2022). How to display products available in multiple color saturation: Fit between saturation and position. *Psychology & Marketing*, *39*(4), 809-819. https://onlinelibrary.wiley.com/doi/abs/10.1002/mar.21622

Hutmacher, F. (2019). Why is there so much more research on vision than on any other sensory modality?. *Frontiers in psychology*, *10*, 2246.

https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02246/full?trk=public\_post\_commenttext

Ifeanyichukwu, C., & Peter, A. (2018). The role of sensory marketing in achieving customer patronage in fast food restaurants in Awka. *Ifeanyichukwu, C., &Peter, A.(2018). The Role of Sensory Marketing in Achieving Customer Patronagein FastFood Restaurants in Awka. International Research Journal Of Management, IT & Social Sciences, 5(2), 155-163.* https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3203861

Irshad, M., Amjad, S., & Janjua, S. Y. (2015). Impact of Loyalty Programs on Customers' Loyalty: A Case Study of Shoes and Handbags Retail Outlets of Pakistan. *Pakistan Journal of Psychological Research*, *30*(1).

https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=f43f9415acd83304ad5ceda7b a5e5994d840cd30 Jalali, S. S., & Khalid, H. B. (2021). The influence of Instagram influencers' activity on green consumption behavior. *Business Management and Strategy*, *12*(1), 78-90. <u>https://www.academia.edu/download/71236768/14149.pdf</u>

Kang, S., & Hur, W. M. (2012). Investigating the antecedents of green brand equity: a sustainable development perspective. *Corporate Social Responsibility and Environmental Management*, *19*(5), 306-316.

https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.281

Kemp, K. C., Seema, H., Saleh, M., Le, N. H., Mahesh, K., Chandra, V., & Kim, K. S. (2013).
Environmental applications using graphene composites: water remediation and gas adsorption. *Nanoscale*, *5*(8), 3149-3171.
<u>https://pubs.rsc.org/en/content/articlehtml/2013/nr/c3nr33708a</u>

Kennedy, F. B., & Adhikari, A. M. S. S. (2023). Antecedents affecting consumers' green purchase intention towards green products. *American Journal of Interdisciplinary Research and Innovation*, *1*(3), 47-52.

https://journals.e-palli.com/home/index.php/ajiri/article/view/1044

Kim, H. Y., & Chung, J. E. (2011). Consumer purchase intention for organic personal care products. *Journal of consumer Marketing*, 28(1), 40-47. https://www.emerald.com/insight/content/doi/10.1108/07363761111101930/full/html?fullSc=1

Kim, S. M., Kang, S. W., Kwon, O. N., Chung, D., & Pan, C. H. (2012). Fucoxanthin as a major carotenoid in Isochrysis aff. galbana: Characterization of extraction for commercial application. *Journal of the Korean Society for Applied Biological Chemistry*, *55*, 477-483. https://link.springer.com/article/10.1007/s13765-012-2108-3

Kimiagari, S., & Malafe, N. S. A. (2021). The role of cognitive and affective responses in the relationship between internal and external stimuli on online impulse buying behavior. *Journal of Retailing and Consumer Services*, *61*, 102567.

https://www.sciencedirect.com/science/article/pii/S0969698921001338

Konuk, F. A., Rahman, S. U., & Salo, J. (2015). Antecedents of green behavioral intentions: a cross-country study of Turkey, Finland and Pakistan. *International journal of consumer* 

studies, 39(6), 586-596.

https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12209

Koronaki, E., Vlachvei, A., & Panopoulos, A. (2023). Managing the online customer experience and subsequent consumer responses across the customer journey: A Review and Future Research Agenda. *Electronic Commerce Research and Applications*, 101242. https://www.sciencedirect.com/science/article/pii/S1567422323000078

Kotler, P., Pfoertsch, W., & Michi, I. (2006). *B2B brand management* (Vol. 357). Berlin: Springer.

https://link.springer.com/book/10.1007/978-3-540-44729-0

Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of consumer psychology*, *22*(3), 332-351. <u>https://www.sciencedirect.com/science/article/pii/S1057740811000830</u>

Kusumasondjaja, S., & Tjiptono, F. (2019). Endorsement and visual complexity in food advertising on Instagram. *Internet Research*, *29*(4), 659-687. https://www.emerald.com/insight/content/doi/10.1108/IntR-11-2017-0459/full/html

LAPÁČEK, J., & DANNHOFEROVÁ, J. (2012). ECDL: průvodce přípravou na testy. <u>https://srh.bmj.com/content/36/2/105.short</u>

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of consumer marketing*, *18*(6), 503-520. <u>https://www.emerald.com/insight/content/doi/10.1108/EUM000000006155/full/html?fullSc=1</u> <u>&utm\_source=TrendMD&utm\_medium=cpc&utm\_campaign=Journal\_of\_Economic\_Studies\_T\_rendMD\_0&WT.mc\_id=Emerald\_TrendMD\_0</u>

Leung, F. F., Gu, F. F., & Palmatier, R. W. (2022). Online influencer marketing. *Journal of the Academy of Marketing Science*, 1-26. https://link.springer.com/article/10.1007/s11747-021-00829-4

Li, Y. M., Lee, Y. L., & Lien, N. J. (2012). Online social advertising via influential endorsers. *International Journal of Electronic Commerce*, 119-153. https://www.jstor.org/stable/23106405 Lin, C. A., & Kim, T. (2016). Predicting user response to sponsored advertising on social media via the technology acceptance model. *Computers in human behavior*, *64*, 710-718. <u>https://www.sciencedirect.com/science/article/pii/S0747563216305179</u>

Longo, M. R., Schüür, F., Kammers, M. P., Tsakiris, M., & Haggard, P. (2009). Self awareness and the body image. *Acta psychologica*, *132*(2), 166-172. <u>https://www.sciencedirect.com/science/article/pii/S0001691809000195</u>

Lou, C., & Xie, Q. (2021). Something social, something entertaining? How digital content marketing augments consumer experience and brand loyalty. *International Journal of Advertising*, *40*(3), 376-402.

https://www.tandfonline.com/doi/abs/10.1080/02650487.2020.1788311

Lu, C., Krishna, R., Bernstein, M., & Fei-Fei, L. (2016). Visual relationship detection with language priors. In *Computer Vision–ECCV 2016: 14th European Conference, Amsterdam, The Netherlands, October 11–14, 2016, Proceedings, Part I 14* (pp. 852-869). Springer International Publishing.

https://link.springer.com/chapter/10.1007/978-3-319-46448-0\_51

MacMahon, H., Naidich, D. P., Goo, J. M., Lee, K. S., Leung, A. N., Mayo, J. R., ... & Bankier, A. A. (2017). Guidelines for management of incidental pulmonary nodules detected on CT images: from the Fleischner Society 2017. *Radiology*, 284(1), 228-243. https://pubs.rsna.org/doi/abs/10.1148/radiol.2017161659

Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons*, *52*(4), 357-365. https://www.sciencedirect.com/science/article/pii/S0007681309000329

Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons*, *52*(4), 357-365. https://www.sciencedirect.com/science/article/pii/S0007681309000329

Martinus, H., & Anggraini, L. (2018). The effect of sales promotion in social media on the students: Purchase intention of face cleaner water product. *Humaniora*, *9*(1), 15-22. <u>https://journal.binus.ac.id/index.php/Humaniora/article/view/4101</u> Mikolov, T., Chen, K., Corrado, G., & Dean, J. (2013). Efficient estimation of word representations in vector space. *arXiv preprint arXiv:1301.3781*. <u>https://arxiv.org/abs/1301.3781</u>

Mizell, L., Benett, S., Bowman, B., & Morin, L. (2013). Different ways of seeing: Teaching in an anti-racist school. In *Freedom's Plow* (pp. 27-46). Routledge. https://api.taylorfrancis.com/content/chapters/edit/download?identifierName=doi&identifierValu e=10.4324/9781315021454-4&type=chapterpdf

Moshagen, M., & Thielsch, M. T. (2010). Facets of visual aesthetics. *International journal of human-computer studies*, 68(10), 689-709. https://www.sciencedirect.com/science/article/pii/S1071581910000777

Mubarak, K., & Mufeeth, M. (2020). Impact of visual merchandising of clothing stores on

impulse buying behavior.

http://192.248.66.13/handle/123456789/5412

Nadanyiova, M., Gajanova, L., & Majerova, J. (2020). Green marketing as a part of the socially responsible brand's communication from the aspect of generational stratification. *Sustainability*, *12*(17), 7118. https://www.mdpi.com/2071-1050/12/17/7118

Nekmahmud, M., & Fekete-Farkas, M. (2020). Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. *Sustainability*, *12*(19), 7880.

https://www.mdpi.com/2071-1050/12/19/7880

Nekmahmud, M., & Fekete-Farkas, M. (2020). Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. *Sustainability*, *12*(19), 7880. https://www.mdpi.com/2071-1050/12/19/7880

Nell, E. C. (2017). The impact of sensory environments on consumer buying behaviour: A study of visual displays and sight atmospherics. *Journal of Business and Retail Management Research*, *11*(2).

https://www.jbrmr.com/cdn/article\_file/i-26\_c-264.pdf

Nobbs, K., Foong, K. M., & Baker, J. (2015). An exploration of fashion visual merchandising and its role as a brand positioning device. *Journal of Global Fashion Marketing*, *6*(1), 4-19. <u>https://www.tandfonline.com/doi/abs/10.1080/20932685.2014.971491</u>

Oliver, S. J., Bock, J., Altieri, B., Amblard, A., Arumugam, V., Aussel, H., ... & Zemcov, M. (2012). The Herschel multi-tiered extragalactic survey: HerMES. *Monthly Notices of the Royal Astronomical Society*, *424*(3), 1614-1635.

https://academic.oup.com/mnras/article-abstract/424/3/1614/975619

Pajonk, P., & Plevová, K. (2015). Perception marketing–senses in sales promotion. *Studia commercialia Bratislavensia: scientific journal of Faculty of Commerce, University of Economics in Bratislava*, 8(29), 83-91.

https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-a09b83b7-f4ef-4928-89d8a64389eea41a

Pajonk, P., & Plevová, K. (2015). Perception marketing–senses in sales promotion. *Studia commercialia Bratislavensia: scientific journal of Faculty of Commerce, University of Economics in Bratislava*, 8(29), 83-91.

Palfiova, M., Holubcikova, D., Bobakova, A., Madarasova Geckova, J. P., van Dijk, S. A., & Reijneveld. (2015). Are early sexual experiences more prevalent among adolescents with learning disabilities? Michaela Palfiova. The European Journal of Public Health, 25(suppl\_3), ckv175-180.

https://academic.oup.com/eurpub/article- abstract/25/suppl\_3/ckv175.180/2578633

Pancer, E., McShane, L., & Noseworthy, T. J. (2017). Isolated environmental cues and product efficacy penalties: The color green and eco-labels. *Journal of Business Ethics*, *143*, 159-177. https://link.springer.com/article/10.1007/s10551-015-2764-4

Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, *29*, 123-134. https://www.sciencedirect.com/science/article/pii/S0969698915301181

Pollak, F., Markovic, P., Vachal, J., & Vavrek, R. (2022). Analysis of e- Consumer Behavior during the COVID-19 pandemic. Intelligent Processing Practices and Tools for E-Commerce

Data, Information, and Knowledge, 95-114.

https://link.springer.com/chapter/10.1007/978-3-030-78303-7\_6

Pollák, F., Soviar, J., & Vavrek, R. (2021). Sensory Marketing. *Communication Management*, 1-20.

https://books.google.com/books?hl=en&lr=&id=drdaEAAAQBAJ&oi=fnd&pg=PA21&dq=Hult en,+Browenus+and+Dijk+(2009&ots=A10zzBuAG1&sig=06iVdc8OogOWlf5IRdhpx8nKd24

Rafiq, M. Y., & Javeid, U. (2018). Impact of gender difference on online shopping attitude of university students. *SSRN Electron. J.* 

https://www.academia.edu/download/56434225/Gender\_Difference\_Online\_Shopping.pdf

Randhir, R., Latasha, K., Tooraiven, P., & Monishan, B. (2016). Analyzing the impact of sensory marketing on consumers: A case study of KFC. *Journal of US-China Public Administration*, *13*(4), 278-292.

http://www.davidpublisher.com/public/uploads/contribute/57c79ce84f401.pdf

Randhir, R., Latasha, K., Tooraiven, P., & Monishan, B. (2016). Analyzing the impact of sensory marketing on consumers: A case study of KFC. *Journal of US-China Public Administration*, *13*(4), 278-292.

http://www.davidpublisher.com/public/uploads/contribute/57c79ce84f401.pdf

Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of enterprise information management*, *27*(1), 6-30.

https://www.emerald.com/insight/content/doi/10.1108/JEIM-04-2012-0011/full/html

Rex, E., & Baumann, H. (2007). Beyond ecolabels: what green marketing can learn from conventional marketing. *Journal of cleaner production*, *15*(6), 567-576. <u>https://www.sciencedirect.com/science/article/pii/S095965260600179X</u>

Rhodes, T. (2002). The 'risk environment': a framework for understanding and reducing drugrelated harm. *International journal of drug policy*, *13*(2), 85-94. <u>https://www.sciencedirect.com/science/article/pii/S0955395902000075</u> Riesz, F., & Nagy, B. S. (2012). *Functional analysis*. Courier Corporation. <u>https://books.google.com/books?hl=en&lr=&id=JCfEAgAAQBAJ&oi=fnd&pg=PP1&dq=Nagy</u> +(2012)+&ots=mYOKwi1apX&sig=SWLDvaECCADuNReFZB6yLz2sqz8

Roschk, H., Loureiro, S. M. C., & Breitsohl, J. (2017). Calibrating 30 years of experimental research: a meta-analysis of the atmospheric effects of music, scent, and color. *Journal of retailing*, *93*(2), 228-240.

https://www.sciencedirect.com/science/article/pii/S0022435916300458

Sakhawat, M. (2019). *Sensory marketing in organic cosmetic industry of Pakistan: Viewing the mediating role of green attitude* (Doctoral dissertation, Doctoral dissertation). Capital University).

https://thesis.cust.edu.pk/UploadedFiles/(Main%20File)%20after%20correction.pdf

Santos, J. M. (2013). 2013. *Diversidad de aves en cultivares de Santa María Yahuiche, Sierra Madre de Oaxaca, México. Mexicana de Ciencias Agrícolas, 4*(6). <u>https://repositoriocdim.esap.edu.co/bitstream/handle/123456789/8593/27520-1.pdf?sequence=1</u>

Shanafelt, T. D., Dyrbye, L. N., Sinsky, C., Hasan, O., Satele, D., Sloan, J., & West, C. P. (2016, July). Relationship between clerical burden and characteristics of the electronic environment with physician burnout and professional satisfaction. In *Mayo Clinic Proceedings* (Vol. 91, No. 7, pp. 836-848). Elsevier.

https://www.sciencedirect.com/science/article/pii/S0025619616302154

Sharma, A., & Foropon, C. (2019). Green product attributes and green purchase behavior: A theory of planned behavior perspective with implications for circular economy. *Management Decision*, *57*(4), 1018-1042.

https://www.emerald.com/insight/content/doi/10.1108/MD-10-2018-1092/full/html

Shravya, S. (2022). Impact Of Influencer Marketing On Consumer Purchase Intention Towards Sustainable Apparels. *Journal of Positive School Psychology*, *6*(11), 329-344. http://mail.journalppw.com/index.php/jpsp/article/view/13946

Singh, S., & Sonnenburg, S. (2012). Brand performances in social media. *Journal of interactive marketing*, 26(4), 189-197.

https://journals.sagepub.com/doi/abs/10.1016/j.intmar.2012.04.001

Sliburyte, L., & Skeryte, I. (2014). What we know about consumers' color perception. *Procedia-Social and Behavioral Sciences*, *156*, 468-472. https://www.sciencedirect.com/science/article/pii/S1877042814060431

Smith, E. A. (2017). *Evolutionary ecology and human behavior*. Routledge. http://www.des.ucdavis.edu/Faculty/richerson/Smith%20and%20Winterhalder.pdf

Spence, C. (2012). Managing sensory expectations concerning products and brands: Capitalizing on the potential of sound and shape symbolism. *Journal of Consumer Psychology*, 22(1), 37-54. https://www.sciencedirect.com/science/article/pii/S1057740811000994

Sreen, N., Purbey, S., & Sadarangani, P. (2018). Impact of culture, behavior and gender on green purchase intention. *Journal of retailing and consumer services*, *41*, 177-189. <u>https://www.sciencedirect.com/science/article/pii/S0969698917304071</u>

Steffen, A. (2017). Second-hand consumption as a lifestyle choice. In *International conference on consumer research (iccr)* (pp. 189-207). DEU. https://www.ssoar.info/ssoar/handle/document/56919

Talavera, M., & Chambers IV, E. (2017). Using sensory sciences help products succeed. *British Food Journal*, *119*(10), 2130-2144.

https://www.emerald.com/insight/content/doi/10.1108/BFJ-10-2016-0486/full/html

Teng, C. C., & Wang, Y. M. (2015). Decisional factors driving organic food consumption: Generation of consumer purchase intentions. *British Food Journal*, *117*(3), 1066-1081. <u>https://www.emerald.com/insight/content/doi/10.1108/BFJ-12-2013-0361/full/html</u>

Turban, E., Outland, J., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2018). *Electronic commerce 2018: a managerial and social networks perspective* (Vol. 2017). Cham: Springer. <u>https://link.springer.com/book/10.1007/978-3-319-58715-8?ref=https://githubhelp.com</u>

Vanhonacker, F., Van Loo, E. J., Gellynck, X., & Verbeke, W. (2013). Flemish consumer attitudes towards more sustainable food choices. *Appetite*, 62, 7-16. https://www.sciencedirect.com/science/article/pii/S0195666312004461

Viciana-Abad, R., Reyes-Lecuona, A., Rosa-Pujazón, A., & Pérez-Lorenzo, J. M. (2014). The influence of different sensory cues as selection feedback and co-location in presence and task

performance. *Multimedia tools and applications*, 68, 623-639. <u>https://link.springer.com/article/10.3758/s13414-017-1382-x</u>

Vysekalová, J., & Mikeš, J. (2009). Image and corporate identity. 1. pub. <u>https://books.google.com/books?hl=en&lr=&id=GB2Lm0XSEdYC&oi=fnd&pg=PA66&dq=rel</u> <u>ated:fUo4DNvgVf4J:scholar.google.com/&ots=mREqq0SQCb&sig=XeEKnRsQFxm-</u> BcJMX4NyLQ- Um0

Wagner, J. D., Bezuidenhout, M. C., & Roos, J. H. (2015). Communication satisfaction of professional nurses working in public hospitals. *Journal of nursing management*, *23*(8), 974-982. <u>https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.12243</u>

Wang, J., Al-Ouran, R., Hu, Y., Kim, S. Y., Wan, Y. W., Wangler, M. F., ... & Sinsheimer, J. S. (2017). MARRVEL: integration of human and model organism genetic resources to facilitate functional annotation of the human genome. *The American Journal of Human Genetics*, *100*(6), 843-853.

https://www.cell.com/ajhg/pdf/S0002-9297(17)30154-4.pdf

Wang, T., Lin, J., Chen, Z., Megharaj, M., & Naidu, R. (2014). Green synthesized iron nanoparticles by green tea and eucalyptus leaves extracts used for removal of nitrate in aqueous solution. *Journal of cleaner production*, *83*, 413-419.

https://www.sciencedirect.com/science/article/pii/S0959652614006969

Wang, X. D., & Wolfbeis, O. S. (2019). Fiber-optic chemical sensors and biosensors (2015–2019). *Analytical chemistry*, 92(1), 397-430. https://pubs.acs.org/doi/full/10.1021/acs.analchem.9b04708

Winterich, K. P., Nenkov, G. Y., & Gonzales, G. E. (2019). Knowing what it makes: How product transformation salience increases recycling. *Journal of Marketing*, *83*(4), 21-37. https://journals.sagepub.com/doi/abs/10.1177/0022242919842167

Witmer, B. G., Jerome, C. J., & Singer, M. J. (2005). The factor structure of the presence questionnaire. *Presence: Teleoperators & Virtual Environments*, *14*(3), 298-312. <u>https://direct.mit.edu/pvar/article-abstract/14/3/298/18566</u> Yaacob, M. R., & Zakaria, A. (2011). Customers' awareness, perception and future prospects of green products in Pahang, Malaysia. *The Journal of Commerce*, *3*(2), 1. https://www.academia.edu/download/87235790/joc\_3\_2\_01\_10.pdf

Yim, M. Y. C., Chu, S. C., & Sauer, P. L. (2017). Is augmented reality technology an effective tool for e-commerce? An interactivity and vividness perspective. *Journal of interactive marketing*, *39*(1), 89-103.

https://journals.sagepub.com/doi/abs/10.1016/j.intmar.2017.04.001

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, *52*(3), 2-22. https://journals.sagepub.com/doi/abs/10.1177/002224298805200302

Zhou, Q., & Aitamer, G. (2011). Motives and Guidance for the Use of Sensory Marketing in Retailing: The Case of Nature & Découvertes. <u>https://www.diva-portal.org/smash/record.jsf?pid=diva2:428415</u>

Zhuang, Z., Kim, K. H., & Singh, J. P. (2010, June). Improving energy efficiency of location sensing on smartphones. In *Proceedings of the 8th international conference on Mobile systems, applications, and services* (pp. 315-330). https://dl.acm.org/doi/abs/10.1145/1814433.1814464

Ziyadin, S., Doszhan, R., Borodin, A., Omarova, A., & Ilyas, A. (2019). The role of social media marketing in consumer behaviour. In *E3S Web of Conferences* (Vol. 135, p. 04022). EDP Sciences.

https://www.e3s-conferences.org/articles/e3sconf/pdf/2019/61/e3sconf\_itese18\_04022.pdf

Ziyadin, S., Doszhan, R., Borodin, A., Omarova, A., & Ilyas, A. (2019). The role of social media marketing in consumer behaviour. In *E3S Web of Conferences* (Vol. 135, p. 04022). EDP Sciences.

https://www.e3sconferences.org/articles/e3sconf/abs/2019/61/e3sconf\_itese18\_04022/e3sconf\_it ese18\_04022.htm

# Appendix A – Questionnaires

### Demographics

Gender	Male or Female Or Prefer Not to Say
Education Level	High School
	Undergraduate
	Graduate
	Post Graduate
Household Monthly Income	Up to \$150
	\$151-\$250
	More Than \$250
Age	18-25
	26-35
	36-45
	Above 45
Consumed Eco Beauty Products	Yes or No
Status	Used Once or Repeater

#### Variables

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Visual Sensory Marketing	Disagree				Agree
The online shopping platforms are visually attractive					
(nice looking) to me.					
The products are presented in visually attractive					
way in online and offline markets.					
I like the fact that because of visual sensory					
marketing I can view the product from various					
angles while shopping.					
Social Media Marketing					
My engagement on social media influences my					
green cosmetic purchase.					
I use social media to search information about green					
cosmetic products.					
Contents about green cosmetics on social media are					
trustworthy.					
Contents about green cosmetics on social media are					
believable.					
Content Marketing					
When I need information about green cosmetics, I					
look for the content of socially responsible brands					
on social networks.					
The green cosmetics brands' content is valuable and					
informative regarding the environmental aspect.					
The green cosmetics brands' content explains the					

benefits of using and buying them.			
The green cosmetics brands' content on social			
networks impacts my intention to purchase green			
cosmetics.			
Influencer Marketing			
When I need information about green cosmetics, I			
look for the opinion of influencers on social			
networks.			
The opinion of influencers on social networks			
impacts my intention to purchase green cosmetics.			
Intention to Buy Eco Beauty Products			
I usually prefer to purchase cosmetic products with			
reusable packaging. (e.g. reusable glass bottle for			
cream and cleanser products).			
If I have to buy cosmetic products, I always purchase			
cosmetic products with no chemical ingredients.			
I try to purchase cosmetic products with free			
chemical even though they are more expensive.			
I am willing to buy green cosmetics because they are			
beneficial to my health.			

# **Appendix B Tables**

Demographics	Categories	Number	Percent
Gender	Female	150	54.9%
	Male	120	44%
	Prefer Not to Say	3	1.1%
Education	High School	6	2.22%
	Under Graduate	36	13.33%
	Graduate	124	45.92%
	Post Graduate	104	38.51%
Household Monthly Income	Up to \$150	100	37%
	Between \$151-\$250	130	48%
	More than \$250	40	15%
Age (Years)	18-25	181	67.0%
	26-35	49	18.1%
	36-45	15	5.5%
	Above 45	25	9.2%
Consumed Eco Beauty Products	Yes	235	87.0%
	No	35	13.0%
Status of Consumption	One Timer	95	35.1%
	Frequent Buyer	175	64.9%

# Table.2 (a) Overall Cronbach's

Dependent variable	Independent variables	No. of items	Cronbach's Alpha
Social Media Marketing Content Marketing Influencer Marketing Intention to Buy Green Beauty Products	Visual Sensory Marketing Elements	17	0.933

## Table.2 (b) Individual Cronbach's

Variable	No. of items	Cronbach's Alpha
Visual Sensory Marketing Elements	3	0.760
Social Media Marketing	4	0.893
Content Marketing	4	0.715
Influencer Marketing	2	0.745
Intention to Buy Green Beauty	4	0.772
Products		

Variable	Factor Loading	AVE	Construct Reliability
Visual Sensory			
Marketing			
Elements	0.763,0.732,0.52	0.434	0.789
Social Media			
Marketing	0.728,0.824,0.714,0.758	0.604	0.753
Content Marketing	0.701,0.675,0.641, 0.687	0.453	0.712
Influencer			
Marketing	0.761,0.78	0.594	0.745
Intention to Buy			
Green Beauty			
Products	0.695,0.842,0.817,0.795	0.59	0.896

Table.3 (a) Confirmatory Factor Analysis

# Table.3 (b) Model Fitness Indices

Index	Default model
CMIN/DF	2.243
AGFI	0.825
GFI	0.868
NFI	0.854
TLI	0.894
CFI	0.912

	Original	Sample	Stand	Т	Р
	Sample (O)	Mean (M)	ard	Statistics	Values
			Devia	( O/STD	
			tion	EV )	
			(STD		
			EV)		
Visual Sensory Marketing	0.27	0.269	0.093	2.906	0.004
Elements -> Intention to Buy Eco					
Beauty Products					

	Original	Sample	Stand	Т	Р
	Sample (O)	Mean (M)	ard	Statistics	Values
			Devia		
			tion (STD EV)	( O/STD EV )	
Visual Sensory Marketing Elements - > Social Media Marketing-> Intention to Buy Eco Beauty Products	0.173	0.174	0.041	4.247	0
Visual Sensory Marketing Elements - > Content Marketing-> Intention to Buy Eco Beauty Products	0.05	0.05	0.031	1.595	0.111
Visual Sensory Marketing Elements - > Influencer Marketing-> Intention to Buy Eco Beauty Products		0.038	0.021	1.643	0.101

# Table.4 (b) Path Analysis and Hypothesis Testing (Mediator Variable)