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DIGITAL MARKETING PROGRAMME

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MASTER THESIS

<i>Veiksniai, turintys įtakos Z kartos vartotojų ketinimui pirkti ekologišką kosmetiką internetu</i>	<i>Factors affecting purchase intention of generation Z consumers for online shopping of green cosmetics</i>
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SUMMARY

FACTORS AFFECTING PURCHASE INTENTION OF GENERATION Z CONSUMERS FOR ONLINE SHOPPING OF GREEN COSMETICS

The thesis explores the factors of Generation Z consumers' purchase intentions towards buying environmentally friendly cosmetics on the internet. It investigates the role of gender, age, level of awareness, perceived value, and trust in shaping preferences of Generation Z consumers for green cosmetic products, which are available in online marketplaces.

This study combines surveys and statistical analyses, consisting of a quantitative research method which includes one survey to gain insights into the behavior and preferences of Generation Z consumers. The sample consisted of 384 people, which include 225 females, 57 males, and 102 respondents in the others' category, who showed their awareness, perceived value, trust, and cosmetic online purchasing behavior. Also, this research examines these variables by comparing responses given by male and female members and different age groups of Generation Z.

It draws attention to the disparity in the knowledge of green cosmetics among Z-generation women. The female respondents show awareness levels consistently higher than their male counterparts. It is important to note that among people who belong to Generation Z there is a higher awareness of the environment. Thus, they tend to prefer green cosmetics.

The article examines the connection between gender, perceived value, and trust towards friendly cosmetics among Gen Z consumers. It shows that factors apart from gender figure out what the products stand for and why people trust them. The age of Generation Z influences their purchasing behavior regarding green cosmetics. The intentions of Generation Z shoppers to buy cosmetics online are affected by trust in brands. The brands targeting this audience should look to build and communicate trust-based plans.

SANTRAUKA

KETINIMĄ PIRKTI VEIKSNIAI Z KARTOS VARTOTOJŲ ŽALIOSIOS KOSMETIKOS APSIPIRKIMUI INTERNETU

Baigiamajame darbe nagrinėjami Z kartos vartotojų pirkimo ketinimų veiksniai perkant aplinką tausojančią kosmetiką internetu. Ji tiria lyties, amžiaus, sąmoningumo lygis, suvokiama vertė ir pasitikėjimas formuojant Z kartos vartotojų pageidavimus žalios kosmetikos gaminiai, kuriuos galima įsigyti internetinėse prekyvietėse.

Šis tyrimas apjungia apklausas ir statistinę analizę, kurią sudaro kiekybinis tyrimas metodas, apimantis vieną apklausą, kad būtų galima suprasti kartos elgesį ir pageidavimus Z vartotojų. Imtį sudarė 384 žmonės, iš kurių 225 moterys, 57 vyrai ir 102 kitų kategorijos respondentų, kurie parodė savo sąmoningumą, suvokiama vertę, pasitikėjimą ir kosmetikos pirkimas internetu. Be to, šiame tyrime šie kintamieji nagrinėjami lyginant atsakymai, kuriuos pateikė vyrai ir moterys bei skirtingos Z kartos amžiaus grupės.

Ji atkreipia dėmesį į žinių apie žaliąją kosmetiką skirtumus tarp Z kartos moterys. Moterų respondentų sąmoningumo lygis yra nuolat aukštesnis nei jų vyrų kolegos. Svarbu pažymėti, kad tarp žmonių, priklausančių Z kartai, yra didesnis aplinkos suvokimas. Taigi jie linkę pirmenybę teikti žaliai kosmetikai.

Straipsnyje nagrinėjamas ryšys tarp lyties, suvokiamos vertės ir pasitikėjimo draugiška kosmetika tarp Z kartos vartotojų. Tai rodo, kad kiti veiksniai, išskyrus lytį, nustato, ką produktai reiškia ir kodėl žmonės jais pasitiki. Z kartos amžius turi įtakos jų žaliosios kosmetikos pirkimo elgesys. Z kartos pirkėjų ketinimai pirkti kosmetika internete yra paveikta pasitikėjimo prekių ženklais. Prekės ženklai, skirti šiai auditorijai, turėtų atkreipti dėmesį kurti ir perduoti pasitikėjimu pagrįstus planus.

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INTRODUCTION

Changing environmental, economic, and social ethics of mainstream society, global media coverage, rising incomes, and freely flowing information have brought increasing attention and concern to ethical, societal, environmental, economic, and cultural inconsideration, violations, and exploitation (Parker et al., 2023; Srisathan W. A. et al., 2023; Chin et al., 2019). Green awareness, a direct consequence of growing concern over future generations, the current environmental state, lack of civilian awareness of the risks associated, particularly in developing nations and increasingly in developed ones (Nguyen, 2020), has triggered pressure from media, social justice groups, environmental activists, and NGOs from all around the world (Ansu-Mensah P. , 2021). As a result of the exponentiating environmental consciousness, the green consumer has emerged to display his environmental commitment.

Green consumerism, also termed as green buying/purchasing behavior, is an environmental and ethical consumerism encompassing phenomenon (Sethuraman, 2023). Where environmental consumerism upholds environmental values (Tran et al., 2022), tackling environmental concerns such as carbon emissions, fossil fuels, ecological preservation, water footprint, deforestation, animal cruelty, land abuse, pesticide use, minimal plastic use, biodegradability, environmentfriendly packaging, and landfill disposals (Martins & Marto, 2023; Srisathan W. A. et al., 2023; Mhlamvu, 2021), ethical consumerism challenges health concerns, child labor, unsafe work conditions, and local population rights, ensuring fair trade agreements between value exchanging parties (Martins & Marto, 2023; Parker et al., 2023; Sethuraman, 2023).

Today, the cosmetics industry is set to reach the USD 600 billion revenue mark by the end of 2023, projecting to grow further at a compound growth rate (CAGR) of 3.8% over the next five years (Limbu & Ahamed, 2023). This market alone accounts for 40% of plastic production globally, infusing over 900 hazardous chemicals (Montes et al., 2022). Environmental complications triggered by such excessive chemical usage increases atmospheric issues and health risks such as skin and hair diseases (Kapoor et al., 2019). Furthermore, conventional cosmetics' intolerant features for several potential consumers such as allergies and skin issues from the use of synthetics, and rising education levels, media impact, and changing subjective norms are pressuring cosmetic companies into going green to sustain competition (Thwe et al., 2021).

European cosmetics and personal care companies have signed the European Green Deal, committing to eliminate their carbon footprint by 2050 (Montes et al., 2022). Residues of this

paradigm shift can also be seen in the U.S., Canada, and emerging cosmetics markets such as Vietnam. As such, green cosmetics are expected to reach USD 55 billion worldwide by 2027, pacing at a staggering 9.1% to 9.76% growth rate according to various forecasts (Montes et al., 2022).

As a means to this end stands the unproclaiming Generation Z. Also dubbed as Generation Green, Generation Z has, in the aftermath of exponentiating environmental awareness fostering interest in “new natural cosmetics brand” (Amberg & Fogarassy, 2019, p. 1), begun to exhibit increased willingness to purchase green cosmetics (Pham et al., 2021; Kapoor et al., 2019). It is becoming the primary driver of, and by extension, a major target market for green cosmetic companies (Limbu et al., 2022). Expected to have searing purchase power by 2026 (Nguyen, 2020), they are en route to becoming a force majeure challenging unsustainable practices head on.

One dimension of addressing the aforementioned environmental concern is proactive engagement in green purchase behavior (Anbuselvan & Nivasini, 2020). The last few decades have seen an exponentially increasing research on green purchase behavior, its antecedents and factors, and their degree of influence on the various generations’ assumption of green purchase/consumption behavior through all of its cognitive phases (Felix et al., 2021). Generation Z, owing to the distinguished set of social, economic, environmental, cultural, educational, and technological conditions it has inherited, possesses traits naturally congenial to overturning the inauspicious predicament posed by prevailing, unsustainable set of circumstances (Hope, 2022). As such, this study will identify and examine what determinants have thus been recognized significant to Generation Z’s purchase intention of online- bought green cosmetics before conducting an independent inquiry into the matter (Saran et al., 2023).

Problem of the research – In an environment where an online marketplace is taking shape rapidly, how should we define the drivers which will affect the intent of Generation Z (with their own unique set of values; the constantly evolving online green cosmetics market; and the blending of sustainability and shopping experience in online shopping) to buy green cosmetics?

Aim of the research – The purpose of this research is to analyze factors of online shopping for green cosmetics among Generation Z consumers.

Study objectives:

1. To delve into the extrinsic and intrinsic factors shaping the traits, motivations, and perspectives of Generation Z consumers

2. To identify, understand, and critically analyze the rapidly evolving market for green products, and specifically, green cosmetics
3. To identify, understand, and critically analyze the key aspects of green marketing mix that render a green product accessible, consumable, and competitive in the green marketplace
4. To explore the key factors of online purchase behavior with a specialized emphasis on purchase intention of green products, and specifically, green cosmetics
5. To scour the current literature on determinants of purchase intention with a specialized emphasis on Generation Z, green cosmetics, and online purchase
6. To develop a conceptual framework to adequately and effectively respond to the problem statement in this study
7. To devise a methodology that attains meaningful responses to the formulated survey questionnaires
8. To analyze and interpret the respondents' provided information
9. To evaluate the effectiveness of the conceptual framework and significance of variables tested in the hypotheses
10. To remark on the study's upsides, shortcomings, and potential for future academics to build on it, and by proxy, on the existing literature as means to widening our understanding of Generation Z consumers' purchase intention of online-bought green cosmetics

Methods applied in study – Quantitative approach involving a systematic analysis of scientific literature, and a descriptive statistical analysis based on a close-ended questionnaire.

1. DEFINING CONSUMER, MEDIUM, AND PRODUCT

1.1. Generation Z

Generation Z makes the largest consumer cohort of generations worldwide (Seyfi et al., 2023). Despite slightly varying definitions (1995-2015; 1996-2010), experts agree that Generation Z comprise individuals born between the years 1995 to 2010 (Topic & Mitchell, 2019). The reasons highlighting this temporal confine are the technological developments, socioeconomic change, and cultural transformation that have distinguished them from preceding and following generational cohorts (Djafarova & & Fouts, 2022). As such, Generation Z sits between Millennials and Generation

Alpha (Song et al., 2020). Because of the varying periods this cohort is assigned, bordering Millennials and Generation Alpha, too, must be studied to augment our understanding of Generation Z (Martins & Marto, 2023).

Generation Z consumers are characterized by their high capacity for accessing and evaluating information, often sourced through technological means, on which they overwhelmingly rely on. Exposed to an unprecedented socioeconomic shift, and from associating their identities to their online habits, be it surfing the internet, purposeful browsing, socializing, networking, or purchasing, Generation Z, owing to its need to be involved and informed and global media coverage, is hyperaware of global issues – a few cases in point: Black Lives Matter, terrorism, LGBTQI+ hate crimes, financial crashes, cancel culture, animal abuse, environmental abuse, and the likes thereof (Djafarova & & Fouts, 2022). By associating themselves to such happenings across the globe, they feel a higher degree of awareness, concern, responsibility, and drive to make things right (Martins & Marto, 2023).

This cohort differentiates itself in terms of its conscientiousness, anxiousness, mindfulness of the future, non-conformism, openness to new experiences and ideas (tendency to accept new interests, preferences, and affiliations), pro-globalization propensity, achievement orientation, emphasis on the self (self-presentation, self-identity, self-expression, self-perceivability, self-esteem, and self-efficacy), individuality, and less class-consciousness, and considers itself a vanguard of conscientious equitability – derived from competitiveness, education (Gen Z has by far the largest number of students attending university), and entrepreneurship (Djafarova & & Fouts, 2022; Genovese & Green, 2021; Topic & Mitchell, 2019; Jahanshahi & Jia, 2018). Such traits could be attributed to their ethnic diversity, multiculturalism, multiracialism, digital nativity (which, in turn, has brought about their awareness, sense of activism, and mistrust of traditional institutions), and virtual bonding (Seyfi et al., 2023; Sethuraman, 2023; Topic & Mitchell, 2019).

Digital nativity, a term coined to reflect Generation Z's tech-savviness may explain their increased complexity, nuanced outlook, multitasking, and life casting which, is defined as “the practice of sharing one's life online, has created a need among social media users to find novel products and experiences to share” (Martins & Marto, 2023, p. 9). Their exploration of individuality, ‘the self’ (Jahanshahi & Jia, 2018), and utilitarianism (convenience, time saving, efficiency) (Zeng, 2020) roots not in a higher willingness to pay for brands, unlike millennials who, according to various studies, exhibit this propensity, often irrespective of their ecological footprint, but in pragmatism,

functionality, price consciousness, cautious attitude to spending behaviors, greater desire for personalized products and experiences, and fashion and culture consciousness (Brand, 2022; Genovese & Green, 2021; Song et al., 2020; Topic & Mitchell, 2019).

Generation Z is also characterized by its shift towards green products. Despite its price sensitivity and thriftiness (largely accounted for by lower levels of income than preceding cohorts: Millennials, Generation X, Generation Y, and Baby Boomers), Generation Z has higher environmental concern and responsibility that is directed at present and future impact on the planet (U & Praseeda, 2023; Song et al., 2019). Generation Z consumers prefer sustainable products over conventional brands and, regardless of lower disposable incomes than any preceding generation, more frequently engage in sustainable purchases, and are willing to pay premium prices for these purchases (U & Praseeda, 2023; Brand, 2022; Ansu-Mensah P. , 2021). To further support Generation Z's unprecedented environmental fervor, as "47% of Gen Z in the US has stopped purchasing their favorite brand after finding the manufacturer did not produce environmentally friendly products and 45% choose brands that are eco-friendly and socially responsible" (Topic & Mitchell, 2019, p. 13).

Although some studies have pointed out towards Generation Z's inability to translate green attitudes to green purchase behavior, citing inconvenience, high costs, lower performance, lack of clear marketing and information, and insufficient role of legislator and executive as deterrents to materializing purchase behavior (Garcia-Salirrosas & Rondon-Eusebio, 2022; Ansu-Mensah P. , 2021; Noor et al., 2017), this discrepancy can be partially accounted for by Generation Z preferring quality over environmental concern (First Insight, 2021). Moreover, studies have concluded that personalized green marketing, innovative advertising formats, control over the purchase experience, and strong expectation that retailers deliver innovative products that, along with their greenness, fulfill the basic premise of consumption: functionality (Topic & Mitchell, 2019), would empower green marketers to "craft a relevant message that draws a direct connection between (Gen Z) individuals and how they relate to their brand" (Djafarova & & Fouts, 2022, p. 3). Topic & Mitchell (2019) remain hopeful that the gap between green attitude and purchase would eventually undermine as Generation Z consumers "develop further into adulthood, gaining independence and financial stability" (p. 14).

1.2. Green Marketing

Green marketing is a green firm's effort to engage in product design, price, promotion, and distribution in a manner congenial to the environment (Suki et al., 2016). Green marketing, as a

determinant of purchase intention, and with all its contextual derivations – green behavior, green branding, and the likes thereof – is a widely researched concept, both in developed and developing countries (Parker et al., 2023; Tran et al., 2022; Kapoor et al., 2019; Suki et al., 2016). As a tool, green marketing is increasingly being employed to target younger consumer segments (Brand, 2022). Lin et al. (2018) suggest that in the wake of inadequate green certifications standards and lack of strict regulations, honest Corporate social responsibility (CSR) could funnel a firm's marketing strategies through environmentally conscious lens, influencing purchase behavior. Suki et al. (2016) suggest the term green marketing awareness as a measure of green consumers' willingness and readiness to accept the green product through the firm's promotional and distribution channels, explaining that it “materialized when customers have confidence in eco-label and eco-brand which influences their green product behavior” (p. 263).

Higher green marketing spends and personalized green marketing are deemed effective in addressing the prevailing discrepancy that exists between environmental attitude and green purchase decision among Generation Z consumers (Mhlamvu, 2021; Topic & Mitchell, 2019). Malar & R (2023) argue that green marketing efforts and green product development must strike a perfect balance to not dissuade consumers who might otherwise experience unfulfillment from any gaps between brand promise and delivery.

Green marketing (GM) mix is a measure of a firm's green marketing initiatives. Ansu-Mensah (2021) defines green marketing mix as comprising “all-inclusive marketing activities of packaging, product modification, and manufacturing processes that are done in an environmentally harmless manner while meeting the needs of customers” (p. 2). GM mix involves green product, green price, green promotion, and green place (Seal & Bag, 2022). Its frequency in previous studies stems from its holistic coverage of intrinsic and extrinsic cues that are significant to green purchase behavior (Limbu & Ahamed, 2023; Genovese & Green, 2021). Intrinsic cues (inherent product attributes, its functionality, and perceived green quality of its formulation) are stronger determinants of purchase intention than extrinsic cues, reasons being their innate features that build consumers' green product beliefs (Genovese & Green, 2021). While external cues (“communicating characteristics of a product that can be altered without changing the actual product itself but can influence how consumers perceive that quality of a product” (Genovese & Green, 2021, p. 7) like branding and packaging may influence initial purchase behavior, intrinsic cues are steady and reliable evaluators of extrinsic cues' factuality and reliability and can stabilize consumers' green product beliefs and brand consideration and loyalty (Genovese & Green, 2021).

Green price, the first component of green marketing mix, has a negative relationship with green purchase intention and green consumer behavior (Abdollahbeigi & Salehi, 2018). While several studies reveal that younger females show a higher environmental concern and environmental responsibility in comparison with their male counterparts (Srisathan W. A. et al., 2023; Jahanshahi & Jia, 2018). Gomes, Lopes, and Nogueira (2023) in their descriptive statistical analysis of 927 Portuguese Generation Z green consumers, found that “men are the ones who are willing to pay more for green products” (p, 4). In a study conducted by Brand et al. (2022), design, functionality, materials, eco-labels, social labels (fair trade, etc.), country of origin, and price were deemed the most significant product attribute/information components, lack of which was found to negatively impact green purchase intention. One of Generation Z’s defining character traits is thriftiness. All things considered, Generation Z green consumers are willing to pay a premium for green products, however, their price sensitivity often results in low green engagement levels i.e., their environmental concern does not click through to actual assumption of a purchase decision. High price point is a clear deterrent to materializing green consumer purchase behavior, particularly for working class Generation Z whose overwhelming expectation of Generation Z is for businesses to provide lowcost value additions to their green product lines (Topic & Mitchell, 2019).

Concurringly, Ansu-Mensah (2021) suggest that “low prices of green products will definitely command high occurrence of purchase and that (consumers) will switch to green products when the price is the same as their preferred brands” (Ansu-Mensah P. , 2021, p. 10). Green products are toxinfree, made with environmentally friendly procedures, recyclable, biodegradable, renewable, upcyclable, animal-cruelty free, and free from ozone depletion (Srisathan W. A. et al., 2023; U & Praseeda, 2023; Seal & Bag, 2022; Chin et al., 2019).

Environmentally friendly characteristics include maximized resource efficiency, decreased water consumption and wastage, energy efficiency, minimized environmental impacts, hygienic and toxin-free manufacturing, eco-efficiency, and minimal (if not zero) carbon and plastic footprint (Srisathan W. A. et al., 2023). Green product-service quality exhibits a strongly positive relationship with green consumer behavior (Gomes et al., 2023; Tran et al., 2022; Abdollahbeigi & Salehi, 2018), to the point where Generation Z’s green purchase intention is influenced more by green product quality than environmental concern (First Insight, 2021). Quality is defined as “the perceived functionality of environmental products” (Song et al., 2020, p. 2) and comprises “clear product information, eco- labeling, product appearance, and general assurance of user friendliness” (Suki et al., 2016, p. 263). According to Tran et al. (2022), product-service quality factors play a more significant role in green purchase behavior. Notwithstanding green consumers’ often overwhelming

environmental concerns and attitude, assigning a monetary value to said concerns on any given green attribute of a product is an endeavor presumably outside the bounds of their rationale. As such, price value of eco-friendly products and other base-level contingencies reel into their subconscious assessment of green purchase intention. To elucidate this argument, Tran et al. (2022) present purchase intention as a function of customer fulfilment (green corporate intentions, customer support, on-time delivery, after-sale services, and product-service quality), price-value image (perceived product value, price satisfaction, net personal and socioenvironmental benefits, and normative price comparisons against unsustainable alternatives), and customer satisfaction. Their study, based on green fashion products in Vietnam, found that the high failure rate of green product alternatives was primarily rooted in shortcomings in product attributes and product variations which left potential green consumers inconvenienced. Their inconvenience translated into negative assessment of perceived green product value and perceived green experiential value. Both of these factors mediate green consumers' purchase intention.

The study concluded that perceived behavioral control (financial capacity, otherwise lack or unavailability of sufficient resources), perceived availability of green products, perceived customer satisfaction, and perceived product quality significantly and positive correlate to green product purchase intention of Generation Z consumers, environmental concern has a small impact on green product purchase decision, while environmental knowledge and environmental attitude did not. Their research also shed insights regarding promotion and place. Transparency (Tran et al., 2022; Sun & Xing, 2022; Song et al., 2019; Osburg et al., 2020), influencers (Al Mamun et al., 2023; Sethuraman, 2023; Pop et al., 2020), and self-esteem were found to moderately influence Generation Z's purchase intention with a recommendation that "firms should raise awareness and increase the accessibility of eco-friendly products to promote sustainable consumption" (Tran et al., 2022, p. 16). While acculturation among Generation Z proved insignificant, Tran et al. (2022) cited intertwined economic development, environmental safety, long-term personal and communal health, and weaved socioeconomic fabric of developed and developing nations as reasons for collective and competing transition to sustainability and green purchase behavior. A perceivable gap between green attitude and green behavior on account of the fact that consistency in the two elements can only be expected if behavior is left solely on the actors' free choice which, in the presence of financial resources and product alternatives, is not possible. Even so, Jahanshahi & Jia (2018) counterargue that "having sufficient environmental knowledge is a determinate factor in relation to the purchasing of green products" (p. 3).

Green promotion, the third component of green marketing mix, is any extrinsic activity that enhances perceived green value of a product. Packaging, branding (defined as “a marketing concept that facilitates consumer recognition of a company or product” (Genovese & Green, 2021, p. 8)), advertising (including celebrity endorsements, social media channels, and word of mouth), public relations, and corporate social responsibility (CSR) endeavors all fall under the scope of green promotion. Qalati et al. (2020) found promotional activities, packaging, brand image, and celebrity endorsements exhibiting a direct positive relationship to green purchase behavior. They ascribed celebrity endorsement’s appeal to value addition (emotional value and social value). Al Mamun et al. (2023) dissected celebrity endorsements’ influence on consumer attitudes towards higher purchase intention for endorsed green cosmetics and arranged it as a function of a celebrity’s credibility traits e.g., trustworthiness, personality, image, expertise, and relevance. In a similar study, conducted by Murwaningtyas et al. (2020), endorser’s trust factor, expertise, attraction, and admirability proved positively correlated to attitude and purchase intention of green cosmetics.

Brand image is any impression, conception, or sensory image that correlates the consumer’s green concerns to the brand (Genovese & Green, 2021). Thwe et al.’s (2021) review of literature recognized the importance of CSR in creating and sustaining brand image through green brand trust. Wuisan & Februadi (2022) recommend availing internet’s communication, engagement, and promotion capabilities to the full to market green products’ environmental benefits, a factor that is found to increase green attitudes toward green buying behavior. Packaging creates a strong, lasting impression on consumer consideration of the green product on offer; it is a green firm’s first point of physical contact; brand-reflective packaging “allows them to determine the quality and value of a product, which can lead to purchase intent” (Genovese & Green, 2021, p. 7). Green product must have biodegradable, recyclable, compostable, renewable, and/or up- cyclable packaging as it leads with action (Genovese & Green, 2021, p. 7). Kumudhini & Kumaran (2020) suggest that effective green promotion proactively engages consumer along values associated with ecological beauty, product safety, and pricing.

Green place is defined as an “end-to-end process that starts by procuring tenable raw materials in an eco-friendly manner and transporting finished green products to an environment- friendly marketplace effectively to reduce or eliminate the harmful effects throughout the product life cycle” (Seal & Bag, 2022, p. 68). It entails ecologically conscious manufacturing process and technology use, environment friendly go-to-market network, tech-driven information gathering, and green logistics network i.e., everything from product design phase to post-use consumer phase (Martins & Marto, 2023; Seal & Bag, 2022).

1.3. Green Cosmetics

Green cosmetics are defined as products that reduce and/or eliminate synthetics, utilize sustainable ingredients that encapsulate all dimensions of sustainability i.e., economic, ethical, social, and environmental (Martins & Marto, 2023). The most common green labels that cosmetic companies use to market their products are pure, organic, herbal, chemical-free, natural, and dermatologist tested (Utami et al., 2022; Kreitzen, 2022; Anbuselvan & Nivasini, 2020). Other labels, like no parabens, no sulphates, love beauty and planet, are also used (Malar & R, 2023). These labels are often met with ambivalence, indecisiveness, and ignorance when it comes to the meaning they denote. Martins & Marto (2023) offer some clarity in this regard. Organic, natural, and green indicate a green cosmetic's origin and agricultural practice employed for sourcing. As far as these particular labels are concerned, the products are not necessarily sustainable (Malar & R, 2023). They further offer categorizations of the various cosmetic ingredient types to familiarize with the concept of green cosmetic in its entirety: naturally derived (originally sourced from nature; may later be chemically process, but not necessarily) and nature identical (imitates a natural ingredient, despite being concocted in a lab) (Malar & R, 2023).

Martins & Marto (2023) highlight that not all “natural ingredients are sustainable and not all synthetics are non-sustainable” (p. 4). Consumer confusion due to a variety of labels, mistrust of a credibly green product because of unclear marking can prove to be a serious detriment to purchase intention (Osburg et al., 2020; Jahanshahi & Jia, 2018). To prevent any negative perceptions from building up in a consumer's subconscious, a green firm should prioritize green information accessibility, increase green brand knowledge about the range of its products, provide maximum information for consumer consideration, print clearer symbols and recycling information, add ecolabels to foster perceived green trust, transparency and authenticity, and differentiate the product from competing ones, particularly for Generation Z, in a manner that induces environmental concern (Osburg et al., 2020; Chin et al., 2019; Topic & Mitchell, 2019). Parker et al. (2023) found that “informing customers about purchasing green products has improved their desired behaviors frequency and green preferences” (p. 867). Social media, open for two-way communication that appeals to Generation Z's social values, provides a pragmatic and personalized avenue for information sharing. Stabilization of consumer attitudes and pro- environmental beliefs strengthens brand trust, brand loyalty, and triggers consumer involvement and engagement with the brand (Sun & Xing, 2022; Osburg et al., 2020).

Malar & R (2023) concurringly state that for a green cosmetic to be truly sustainable, its entire supply chain, including the logistics therein, must be sustainable, too. Because of this discrepancy, green cosmetics with such labels are often met with skepticism which leads to an “indirect effect on brand equity and purchase intention of consumers” (Kreitzen, 2022, p. 19).

Therefore, cosmetic companies must strive to address sustainability at all levels (Martins & Marto, 2023).

2. ANTECEDENTS & DETERMINANTS OF PURCHASE INTENTION – A THEORETICAL PERSPECTIVE

2.1. Purchase Intention Toward Green Products

Green purchase intention, an antecedent in itself to green purchase decision, is one of the many predictors explaining green consumers’ purchase behavior (Genovese & Green, 2021). Green purchase intention can be defined as the purchase likelihood of a green consumer in the near future (Tran et al., 2022), a green consumer’s desire to buy green products so as to fulfill their green needs (Wang et al., 2022; Garcia-Salirrosas & Rondon-Eusebio, 2022). According to Genovese & Green (2021), purchase intention is one of a series of cognitive phases a potential green consumer undergoes before ascertaining a consumption choice. Numerous studies have investigated a plethora of antecedents to green consumers’ purchase intention of green products. Several others have studied these antecedents solely in the context of green cosmetics and have predominantly derived concurring results.

Saran et al. (2023) states that “consumers’ certain level of agreement or disagreement, positive or negative thoughts, feelings, states of mind, and interests regarding the likelihood of performing green purchasing” (p. 3). Green attitude, otherwise entitled environmental attitude, ecological attitude, green product attitude, and green consumer attitude (Saran et al., 2023; Srisathan W. A. et al., 2023; Parker et al., 2023; Garcia-Salirrosas & Rondon-Eusebio, 2022; Magano et al., 2022; Shimul et al., 2022; Mhlamvu, 2021; Kumudhini & Kumaran, 2020; Song et al., 2020; Lin et al., 2018) is also defined as a state of green readiness and the sum total of opinions towards a particular environmental manner (Srisathan W. A. et al., 2023; Song et al., 2020).

Other studies have investigated environmental knowledge, environmental education, environmental awareness, environmental concern, environmental consciousness, green future estimation, green perceived quality, perceived consumer effectiveness, eco-labels, social labels, and

green certifications, green trust, green loyalty, cause-related CRM initiatives, green product attributes, green product information, direct personal benefits, pro-environmental beliefs, future green vision, perceived control over pro-environmental behavior, perceived sacrifice, cultural influence, internalized personal norms, and green customer value (comprises perceived value and green experiential value) and derived their significant and positive relationship with green purchase intention (Gomes et al., 2023; Brand, 2022; Parker et al., 2023; Limbu & Ahamed, 2023; Sethuraman, 2023; Wang et al., 2022; Seal & Bag, 2022; Ansu-Mensah P. , 2021; Mhlamvu, 2021).

Demographic factors have also been researched with respect to their effect on green purchase intention. One study found that working Generation Z consumers preferred environmentally conscious products (products that facilitate environmental, social, and economic sustainability (Brand, 2022) because of issues like littering, and air and water pollution, suggesting their lack of in-depth understanding of the range of environmental hazards (Topic & Mitchell, 2019). On the other hand, middle class Generation Z recognized inter alia global warming, species extinction, plastics in oceans, microplastics, and big retail chains' insensitivity as conventional products' shortcomings and factors for their turning green (Topic & Mitchell, 2019). Psychographic variables, however, have been described to have more explanatory power in assessing green purchase intention. Psychographic (often interchanged with psychological variables) include, but are not limited to, ecological affection (environmental information coupled with positive emotional processing), sense of despair, altruism, frugality, risk aversion, and time orientation (Ansu-Mensah P. , 2021; Zhang & Dong, 2020; Song et al., 2020; Topic & Mitchell, 2019). These variables, for their intrinsic value-nature, have a lasting guiding effect, for reasons of evolved environmental attitudes and expectations, on potential green consumers' purchase intention (Zhang & Dong, 2020).

Other studies identified novel determinants that significantly affect a green consumer's purchase intention by situating their cognitive purchase process subsequent to perceptual factors, contextual factors, corporate/brand factors, individual drivers, and prosocial drivers (Parker et al., 2023; Wang et al., 2019; Ansu-Mensah P. , 2021; Osburg et al., 2020; Zhang & Dong, 2020; Abdollahbeigi & Salehi, 2018; Chin et al., 2019; Biswas, 2016; Suki et al., 2016). Perceptual factors are individuals' environmental concepts, environmental perceptions, environmental values, and subsequent strategies to solve environmental problems (Biswas, 2016). Contextual factors stress that motivations do not equal behavior; contextual factors such as pricing, quality, and facilitative infrastructure come into play and affect a green consumers' willingness to purchase (Biswas, 2016).

Saran et al. (2023) contend that Generation Z's tendency to materialize the entire stretch of green consumer behavior relies on, among other reasons, "sentiment or mental framework" (p. 6).

Thus, as socioemotional concoction of appeals is necessitated to penetrate the emotional substrate of Generation Z's green purchase behavior. Drivers of emotional perception (an external stimulus), and by proxy, psychosocial state (Sun & Xing, 2022), of a green consumer include peer persuasion/pressure, prolonged exposure to social media (and by extension, to social media influencers), lifestyle preferences, self-presentation, self-esteem, emotional attachment to green brand, moral obligation, socioemotional and sociocultural values associated with class and status, personalized green marketing, and emotional responses triggered by hedonistic and utilitarian need fulfillment (Parker et al., 2023; Tran et al., 2022; Sun & Xing, 2022; Zhang & Dong, 2020; Osburg et al., 2020; Qalati et al., 2020; Abdollahbeigi & Salehi, 2019; Kapoor et al., 2019; Chin et al., 2019; Lin et al., 2018; Noor et al., 2017).

Individual and prosocial factors are effective determinants of green purchase intention because of their growing recognition and appreciation in personalized green marketing. Generation Z, characterized by their pragmatic approach to purchase behavior, individuality, price consciousness/sensitivity, and pursuit of social/environmental/cultural justice, is more readily won over with behavioral controls, appeal to rationality, frugality, self-identity construction, sense of altruism, holistic need fulfillment, and holistic green purchase value chambered in adopted green marketing strategies (Saran et al., 2023; Parker et al., 2023; Wang et al., 2022).

Extensive research has been conducted on the purchase intention of green cosmetics. Most researches have focused on validating for green cosmetics the findings of previous studies on the purchase intention of green products bought conventionally or online. Investigated variables were generally imported from studies focusing on green products. A few studies, however, did identify, analyze, and discuss new variables and fresh perspectives. Of them, only a few tested their hypotheses on the Generation Z consumer.

Martins & Marto (2023) emphasized the need for clearer messaging to inform consumers of the differences between green, organic, environment friendly, and sustainable cosmetics. They identified green education as a relevant and significant factor influencing purchase intention of green cosmetics. Moreover, he indicated that green marketing strategy should focus not only on environmental sustainability but on economic and social sustainability, too. Montes et al. (2022) assessed green marketing mix factors and concluded that pricing, product quality, and product benefits most significantly affected green cosmetic purchase behavior. Seal & Bag (2022) conducted a similar study, further validating green marketing mix's significant and positive relationship (except for price, which tends to have a negative relationship to purchase intention). Lin et al.'s (2018) investigation of consumer attitudes and feelings toward green cosmetics revealed neutral attitudes

toward green cosmetics, primarily because of inadequate green knowledge, confusing green standards, lack of resource traceability, higher price against lower performance, and lack of trust in cheap green cosmetics.

Mazur-Wierzbicka's (2021) review of literature recognized the lack of rigorous certification procedures, pro-social and pro-environmental CSR initiatives, digital and channel diversification, and two-way communication as major hinderances to perceived green value. Magano et al. (2022) and Wuisan & Februadi (2022) studied determinants affecting consumer attitude and purchase intention of cruelty-free cosmetics. Altruism, environmental knowledge, moral obligation, personal appearance, attitude, perceived behavioral control, and subjective norms were investigated as factors. All but perceived behavioral control and personal appearance proved significant to green purchasing behavior. These studies also discussed the importance of studying the roles of social guilt, satisfaction of the self, materialism, organic values, normative beliefs, and perceived psychosocial pressure in impacting purchase intention of organic cosmetics. Other studies, too, have researched altruistic value – one of the three value components (altruistic, biospheric, and egoistic) (Zhang & Dong, 2020) – as a determinant but have been largely inconclusive. Although Quoquab et al. (2020) found altruism significant to green purchase behavior, Jaini et al. (2020) did not. As did GarciaSalirrosas & Rondon-Eusebio (2022), Ansu- Mensah (2021), and Noor et al. (2017), Magano et al. (2022), too, concluded that Generation Z's green orientation, social responsibility, awareness, and willingness to pay more does not always translate to materialization of purchase decisions. Quoquab et al. (202) found perceived green benefits insignificant, citing most consumers' lack of rational consideration of the negative impacts of particular cosmetic product. Hedonic values were proven positively significant toward pro- environmental belief (which was also found positively significant toward green purchase intention) by Pham et al. (2021), Quoquab et al. (2020), Jaini et al. (2020), and Zeng (2020).

Of the reviewed studies on purchase intention of green cosmetics, the most examined factors affecting purchase intention of green cosmetics were attitude and subjective norm. Both attitude and subjective norm have consistently been found positively and significantly correlated to consumers' purchase intention (Al Mamun et al., 2023; Echchad & & Ghaith, 2022; A & U, 2022; Limbu & Ahamed, 2023; Shimul et al., 2021; Mhlamvu, 2021; Pop et al., 2020; Jaini et al., 2020; Quoquab et al., 2020). Of the reviewed studies, only two – Rani & Bharatwal (2022) and Noor et al. (2017) – did not find attitude significant to consumers' purchase intention of green products/cosmetics. Other variables researched and found significant in their effect on purchase intention include green brand knowledge, self-efficacy, perceived authority support, and perceived environmental concern (Limbu

et al., Predictors of green cosmetics purchase intentions among young female consumers in Vietnam, 2022), culture (Seal & Bag, 2022), environmental consciousness and green trust (Mhlamvu, 2021), brand awareness, brand loyalty, and perceived quality (Al-Haddad et al., 2020), perceived consumer effectiveness, ecolabelling and certification, and reference groups (Nguyen, 2020), environmental awareness (Amberg & & Fogarassy, 2019), materialism (Ngoc, 2021), eco-motivation and peer influence (Ganeshan & Suresh, 2016), ecological motive and consumer involvement (Shimul et al., 2022), perceived quality, CSR, brand image, and brand trust (Thwe et al., 2021), environmental concern (Echchad & & Ghaith, 2022), and time (past, present, or future) orientation (Pham et al., 2021).

Checks like getting a certification help to shape the factors that affect what Generation Z buys online from green cosmetics (Brach et al., 2018). This is important for the group's shopping intentions. Knowing how much certifications help shows businesses how they can use green product badges to look better and more reliable (Nguyen, 2020). This makes customers trust them more in the online world (Amberg & & Fogarassy, 2019). Known certificates are like signs which change how people trust products. Certificates can make trust stronger and faster, changing how much people want to buy cosmetics (Al-Haddad et al., 2020).

Differences in findings were also noted between studies. Some concluded different results on the factors examined while others owe their differences to geographic, economic, and social realities of the regions they were conducted in. Rani & Bharatwal (2022) surveyed Bhiwani, India- based female consumers of green cosmetics and did not find environmental awareness and environmental attitude significant toward purchase intention. The respondents were also not willing to pay more for green cosmetics. Lin et al. (2018) also expressed this view, explaining that willingness to pay extra for green cosmetics is contingent on the studied region's job prospects, economic climate, and education levels of the respondents. Quoquab et al.'s (2020) findings concur: they concluded that urban, middle and upper-middle class Generation Z females with a higher educational background had a greater propensity to purchase green cosmetics. Another contentious factor is gender. According to Abdollahbeigi & Salehi, gender difference is only weakly correlated to purchase intention. Contrastingly, Wang et al. (2022) and Quoquab et al. (2020) found it significant to purchase intention, with Quoquab et al.'s (2020) finding that gender acts as a moderator on valuebelief-norm variables i.e., altruistic values, biospheric values, and hedonistic values, proenvironmental beliefs, and subjective norms, four of which have consistently established strongly positive relationship with purchase intention. Gender is an important factor that affects how predictor variables relate to the desire to buy green cosmetics (Wang et al., 2022). Different likes and choices about gender in

Generation Z affect how much the things that can predict it and the final decision to buy green makeup. Beauty and taking care of people may be affected by gender. Ladies might be more aware of beauty fashions and self-care habits (Quoquab et al., 2020; Felix et al., 2021). Thinking about gender helps us study how eco-friendly cosmetics match these trends and likes. This influences whether people decide to use and buy them (Felix et al., 2021).

2.2. Purchase Intention Toward Online Green Cosmetics

Generation Z is entitled tech-savvy, digital native, and virtual bonder because of the significant differences in its ‘multi-channel’ purchase frequency, behavior, and amount spend compared to preceding generational cohorts (Jilkova & Kralova, 2020; Topic & Mitchell, 2019). Multi-channel refers to the various transactional modes, offline and online, that are available for merchants and potential buyers to interact and exchange value (Srisathan W. A. et al., 2023; Jilkova & Kralova, 2020). Generation Z is more likely to commit to online green cosmetic purchases (Jilkova & Kralova, 2020), have a better online experience juxtaposed to preceding generational cohorts, primarily attributed to their utilitarianism and green attitudes (Brand, 2022). Srisathan et al. (2023) explain Generation Z’s tendency to proactively seek out green online products through the Theory of Innovation Diffusion, which explains how technological developments spread through societies and cultures, making permanent ground with the fresh perspectives, utilities, lifestyles, and practices they have on offer. Kapoor et al. (2019) accredit this tendency to online shopping’s time convenience, instant comparisons, better discounts, easy exchange policy, easy return policy, energy efficiency, and perceived safety (Srisathan W. A. et al., 2023). Online environment is very important in making the connections between things that can be guessed and the wants of Gen Z for online shopping of green beauty products. Understanding the effect of the internet can help businesses create plans tailored to use features special to online tools. This aims to make a better link with the likes and actions of Generation Z (Jilkova & Kralova, 2020). Trust also greatly depends on how clear and real the internet is. Using trustworthy info, user reviews, and brand talk on the internet helps to control how green product trust affects buying plans (Brand, 2022). The internet plays a big role in creating and keeping trust.

Diverging from Tran et al. (2022) who, based on their empirical study on green fashion products in Vietnam, argued that product knowledge and environmental attitude were insignificant in their relationship with green purchase intention, Srisathan et al. (2023) argue that “online social

norms have a higher influence on buying behavior, in which attitudes act as intermediaries to intervene in online consumer behavior” (p. 7). This is significant because green consumer attitude toward purchasing green products on online platforms is a function of, amongst the range of determinants, perceived relative advantage (perceived green product value against perceived non-green product value), perceived risk, and perceived digital social norms (Srisathan W. A. et al., 2023; Chin et al., 2019). Tran et al.’s (2022) focus on traditional retail outlets compared to Srisathan et al.’s (2023) online scope of research may explain this contrast in findings. Srisathan et al.’s (2023) findings, however, come with the following caveats: mid-high-income earners perceive green online products more favorably; online platforms’ utility, choice, control, and other comparable functions should be perceived more advantageous than traditional purchase methods; and green online products must be perceived less risky than their traditionally retailed counterparts.

Previous studies have identified several online merchant characteristics significant to purchase intention: good online customer ratings, free returns, plastic-free packaging, product test judgments, climate-neutral delivery, country of origin, replacement services, human touch, personalized interactions, and social labels (Brand, 2022; Anbuselvan & Nivasini, 2020). Zeng’s (2020) study, based on female Generation Z consumers of green cosmetics, recognized the significance to green online purchase intention of personalized recommendations, timing of said recommendations, arrangement of information, content marketing, social product reviews, stimulusorganism-response model-based e-promotion, utilization paradigm, perceived usefulness, privacy, convenience, online banking, credibility of merchant and online platform, price, and application content and design. Zeng (2020) also found online brand trust (OBT) mediating the effect of hedonic and utilitarian values, purchase loyalty, and purchase willingness on online purchase intention of green cosmetics. Zeng’s (2020) findings concurred with that of Brand et al.’s (2022): social value and country of origin proved significant to green online purchase decision. The study also found green cosmetic brands’ identification, authenticity, passion, and trust as significant influencers of green online purchase intention. Malar & R (2023), adding to this list, identified electronic service quality (firm characteristics), and green consumer psychology (green word of mouth, green trust, consumer social responsibility, green perceived value, and green involvement) as significant antecedents to green online purchase intention.

Jilkova & Kralova (2020) attributed the differences in eCommerce adoption rates between generational cohorts to perceived value, purchased goods type, perceived online buying strategies (digital coupons, promo codes, discounts, pre-sales, limited editions, price comparisons, product comparisons, and expert reviews), perceived ease of purchasing experience, payment methods, and

lifestyle choices. Having said that, a few similarities between generations, namely, word of mouth and celebrity endorsements, were also found (Jilkova & Kralova, 2020).

Influence of social media is another dimension affecting online green purchase behavior. Previous studies have established a strongly positive role of social media on Generation Z's purchase intention of green cosmetics online (Sethuraman, 2023; Parker et al., 2023; Montes et al., 2022; Sun & Xing, 2022; Nekomahmud et al., 2022; Mazur-Wierzbicka, 2021; Wuisan & Februadi, 2022; Jilkova & Kralova, 2020; Osburg et al., 2020; Pop et al., 2020). These studies have found a profound direct impact of social media on green purchase behavior (including purchase intention). Pop et al. (2020), referring to a 2019 global study exploring social media's strength of influence on online purchase behavior – online beauty brand discovery via: social media ads (37%), social media recommendations and comments (33%), expert bloggers (22%), brand's social media page (22%), celebrity endorsements (22%) – stressed on the probable impact value of creating and sharing content, ideas, opinions, information, and partnerships on social media.

However, as Sun & Xing (2022) note, social media information sharing is an external cue. Therefore, the research frameworks are always augmented with intrinsic cues (green product dimensions), personal/customer-related factors (awareness, concern, knowledge, and attitude, perception of severity), subjective norms (lifestyle, self-identity, frugality, peer pressure, social value), perceived behavioral control (financial capacity, urgency, convenience), and green thinking conjoined with social media marketing efforts to assess this external stimulus' influence on consumer psychological states and emotional perceptions (U & Praseeda, 2023; Tran et al., 2022; Sun & Xing, 2022; Nekomahmud et al. 2022; Zhang & Dong, 2020; Ganeshan & Suresh, 2016).

The use of celebrities to drive green branding on media platforms is also a significant factor to consider in researching green product awareness. Sethuraman et al. (2023), in discussing Norm Activation Theory and Social Learning Theory, argue that “individuals are much more likely to engage in environmentally responsible behaviors when believe such behaviors are the social norm and are supported by their peers and social media influencers” (p. 1). When celebrities and influencers promote green cosmetics, it powerfully influences the image of these products in the minds of Generation Z consumers (Cervellon & Carey, 2011). This is a necessary condition for green cosmetics to earn the reputation in the eyes of Generation Z consumers. In the online shopping world, public feedback, including reviews, ratings, and testimonials, plays a major role in the favor or disfavor in which green cosmetics are held (Cervellon & Carey, 2011). Similarly, Sun & Xing (2022) contend that “using the information-sharing capabilities of social media channels, well-known bloggers expand their market and promote their business philosophy” (p. 4). This, however, comes

with a caveat: one-third of the consumers do not consider an eCommerce business's social media an important criterion of their purchase decision and social media information's direct impact on purchase intention is limited as it is one part among a multitude that influence purchase intention (Sun & Xing, 2022). Similarly, email newsletters and media advertisement have been found to be insignificant factors (Sun & Xing, 2022). Another element of green product awareness is a green firm's content marketing efforts (Mazur-Wierzbicka, 2021; Zeng, 2020). Mazur-Wierzbicka (2021) argue that media presence should focus on environmental, economic, and socially sustainable content to inspire green user engagement.

Age makes studying age groups in Generation Z more complicated. It helps us understand how different age groups react to green cosmetic products. This can change awareness, worthiness, reliability, and desire to buy these products online (Chiang et al., 2022). Older people might think differently about how long something can last. They might focus more on the fast benefits that they can get now. Young people might care more about how their choices affect the environment in the future (Srisathan W. A. et al., 2023).

2.3. Constraints & Deterrents to Green Purchase Intention

Consumers do not necessarily have the knowledge to rationally distinguish between green and non-green cosmetics based on the ingredient list and price comparison. Most consumers, despite being ethically and environmentally aware, are not well-versed in formulations and cannot be expected to recognize every ingredient (Sun & Xing, 2022). Green firms can either expect their consumers to browse the internet and proactively seek explanations or try to alleviate their predicament by explaining all or most ingredients on digital platforms e.g., social media channels, website, etc. However, both options levy an inconvenience a green consumer might not be willing to undergo. Similarly, some consumers, while being abstractly environmental conscious, might not be aware of the specifics to resonate with overdone environmental claims, advertising, and corporate image (Tran et al., 2022). Simultaneously, their abstractness may hinder their purchase intention from converting into a purchase decision, the lack of which may only surge up a green firm's cost of acquisition.

Resource constraints involving green product manufacturing shorten the array of materials, variations, suitability, and customization. Competing against conventional brands, consumers' propensity to accept the tradeoff depends on a multitude of factors, including the degree of their environmental concern when faced with a choice (Tran et al., 2022), which is to say, there exists a

degree of propensity that they lack personal action as they near the last yard. Generation Z, while expected to possess considerable purchasing power by 2026 (Nguyen, 2020), does currently run on low budgets. Brand loyalty to conventional brands is a significant constraint to a potential green consumer switching from met expectations on price, quality, and experience, to supporting a socially and/or environmentally-led cause (Topic & Mitchell, 2019). However, if a firm has acquired a loyal clientele, then switching to a conventional brand is also met with self-manifested constraints.

Many consumers find it “challenging to differentiate greenwashing companies from ethical companies due to limited information access” (Utami et al., 2022, p. 733). Lack of adequate information is widely characterized as a strong deterrent to green purchasing behavior. Kurnia & Mayangsari (2020) studied the impact of the following barriers: value, usage, risk, tradition, and image and found that all barriers significantly and negatively impact purchase intention of green cosmetics. Risk barrier alludes to the difference between expected value and perceived value.

Mhlamvu (2021) identified higher price, minimal availability, perceived product inferiority, and lack of product attributes and information as green consumer skepticism factors. Lack of authentic and adequate information has also been characterized as a deterrent in Kapoor et al.’s (2019) review of literature.

Another well-documented deterrent is greenwashing, defined as firms presenting themselves and/or their product(s) greener than they are in reality. As such, greenwashing is effective malpractice, driven by bogus claims and aimed at exploiting green consumers to drive revenue growth. Greenwashing is often borne out of competitors’ fair success or emergence of green consumers as a target market. It is a lasting deterrent in that consumers’ continuous purchase intention towards green industry is crippled from being initially misled (Malar & R, 2023; Utami et al., 2022; Anbuselvan & Nivasini, 2020). Riccolo (2021) argues that “consumers need to take the time to research the products they purchase and educate themselves on the characteristics of the chemicals contained inside” (p. 151). The only issue is that without strict regulations, ridding off greenwashing needs consumers’ initiative-taking with respect to green product knowledge, label verifications, and factchecking, which, too, has a significantly inverse relationship to purchase intention.

2.4. Green Purchase Behavior – Theories & Models

Parker et al. (2023) studied individualistic emotional and social values to seek knowledge-seeking green consumption value formation’s determinants. Through the Theory of Consumption

Values, they identified social value (value derived from associating to one or more groups), and social risk (fear of being unfavored or embarrassed by significant others) as significant drivers of green consumption behavior. Based on value-attitude-behavior model, it suggests that “functional, social, emotional, conditional, and epistemic values” (Zhang & Dong, 2020, p. 9) determine purchase intention. The underlying causes for this phenomenon are explained by individuals’ need for social approval, susceptibility to peer pressure, good image projection, social status seeking, and selfexpression (Parker et al., 2023). Social value’s relationship to purchase intention can be understood by realizing the mediating effects of hedonic and utilitarian value on social value and purchase intention (Zeng, 2020).

Value-Belief-Norm theory develops a construct between altruistic, biospheric, and egoistic values, pro-environmental belief, and personal/subjective norms to understand the link between a consumer’s obligations, anticipations, and drivers to move forward with a particular consumption (Jaini et al., 2020; Zhang & Dong, 2020). Jaini et al. (2020) define value as “conceptions of the desirable that influence the way people select action and evaluate events (p. 188). While altruistic values derive their obligatory appeal from remedial actions towards adverse consequences from human intervening activities (Zhang & Dong, 2020).

Norm Activation Theory suggests peer pressure, social approval, and social norms indicative of consumer behavior (Sethuraman et al., 2023). Theory of Social Norms takes a similar approach and identifies collectivist values (peer pressure and need for social acceptability), descriptive norms (following one’s reference group) and injunctive norms (behavioral patterns aligned with reference group’s moral inclinations) (Srisathan et al., 2023). Social Learning Theory suggests that individuals tend to assimilate behaviors of individuals they are in learning proximity with (Sethuraman et al., 2023).

Generational Marketing Theory builds on Inglehart’s Generational Cohort Theory of 1977 which paired individuals born in a certain time bracket, usually 15 to 16 years, and share common life and social events during critical stages of their development (Jilkova & Kralova, 2020). Generational Marketing Theory suggests that each generations’ novelty, subtle expectations, experiences, generational background, lifestyle choices, and values can significantly influence traffic (Djafarova & & Fouts, 2022).

To better explain and anticipate people's actions, researchers have turned to the theory of planned behavior, which states that, in some contexts, people's perceptions of their own behavioral control and their behavioral intentions serve as immediate determinants of their conduct (Kan & Fabrigar, 2017). Perceived behavioral control, subjective norms, and attitudes toward the conduct all

work together to establish behavioral intents. The theory of planned behavior (TPB) was established by Icek Ajzen as a general model to predict and explain behavior across various domains. It is commonly seen as an expansion of the theory of reasoned action (Fishbein & Ajzen, 1975).

Theory of Reasoned Action studies customer-related factors, namely, subjective norms (defined as “an individual’s belief about a particular behavior due to opinions given by the reference group or influential people about them” (Noor et al., 2017) and attitudes (formed via internal, product-level, and external factors) to understand motivations behind a particular action (Saran et al., 2023; Noor et al., 2017). Upon the Theory of Reason Action builds Ajzen’s (1985) the Theory of Planned Behavior, a socio-cognitive model that adds perceived behavioral control into the mix (Saran et al., 2023; Sethuraman, 2023; Djafarova & & Foots, 2022; Sun & Xing, 2022; Noor et al., 2017). Perceived behavioral control represent consumer’s ease or difficulty of performing a desired action e.g., financial capacity (Djafarova & & Foots, 2022).

Knowledge-Attitude-Behavior Model suggests that environmental/product knowledge and environmental/product attitude translates into behavior. (Ngoc, 2021). Unless the consumer is a free actor, behavior cannot be explained without perceived behavioral control, i.e., external factors molding consumption behavior. Stimulus-Organism-Response Model assumes that external stimuli affect human cognition and emotions’ that mediate external stimuli’s relationship toward purchase intention (Zeng, 2020).

In this digital age, consumers of Generation Z are experiencing a gradually increasing dependence on product websites as the main source of information when making purchases (Amberg & & Fogarassy, 2019; Braimah & Tweneboah-Koduah, 2011). Well-designed and informing product websites are mentioned by several studies as influential in shaping the preferences and purchase intentions of this group. Social media platforms have become effective media in molding the generation Z consumers 'purchase intentions for green cosmetics (Cheung et al., 2015).

2.5. Research Gaps

Green Product Awareness – Topic & Mitchell (2019) argue that Generation Z consumers tend to find “novel products and experiences to share” (p. 9). Their green attitude, combined with green knowledge and brand awareness, assists their choosing of a green product for consumption (Suki et al., 2016). According to Ansu-Mensah (2021), green product awareness growth among consumers is associated with environmental awareness, partially mediated by media pressure, group events, and environmental consciousness. Green product awareness is a green firm’s undertaking of

corporate social responsibility, organizational effort, and strategy to build a mental image or description of a green brand (Suki et al., 2016). According to Tran et al. (2022), “firms should raise (green product) awareness and increase the accessibility of green products to promote sustainable consumption” (p. 16). Awareness of fragile ecology and human intervention’s adverse consequences is partially activated by product and brand-specific awareness of consumers (Zhang & Dong, 2020). Green companies should integrate into their marketing efforts the awareness policies promulgated by governments and organizational and individual activists to foster green online consumers’ environmental awareness and responsibility (Montes et al., 2022; Magano et al., 2022). According to Qalati et al. (2020), brand image has “full mediation between the electronic word of mouth and purchase intention, and partial mediation between brand awareness and purchase intention” (p. 24). While brand awareness does not always translate to purchase behavior (Rani & Bharatwal, 2022; Quoquab et al., 2020), its influence on purchase intention has been thoroughly validated (Al-Haddad et al., 2020). Additionally, Amberg & Fogarassy (2019) have found health awareness and environmental awareness significant to consumer behavior regarding green cosmetics. Similarly, in their study on time orientation’s impact on green cosmetics purchase intention, Pham et al. (2021) found that future-time orientation, associated with higher willingness to make green cosmetic purchases (Biswas, 2021), is closely related to environmental awareness, consciousness, concern, and attitude (Pham et al., 2021).

According to Mhlamvu (2021), the outlook is positive for beauty products on digital platforms. Srisathan et al. (2023) add that “perceived digital social norms had a significant positive effect on consumer attitudes toward purchasing green products on an online platform” (p. 17).

Digital information sharing is a growing trend and found to have a good social effect, including attitude and purchase intention toward green products (Sun & Xing, 2022). Sun & Xing (2022) further argue that “stakeholder companies have begun to use social media information sharing to promote green consumer actions” (p. 5). Significance of consumer exposure to social media efforts has also been emphasized in other studies (Sethuraman et al., 2023; Nekomahmud et al., 2022; Osburg et al., 2020; Pop et al., 2020; Abdollahbeigi & Salehi, 2019). Previous studies have also confirmed the significance of media presence on purchase intention of Generation Z in the cosmetic industry (Nekomahmud et al., 2022; Jilkova & Kralova, 2020).

Perceived Green Product Value – This is another key criterion of purchase intention as identified by previous researches (Wang et al., 2022; Garcia-Salirrosas & Rondon-Eusebio, 2022). Interchangeably entitled green customer value and green experiential value, it is “consumers’ overall appraisal of what they give for and receive from a product or service, based on their environmental

desires, sustainability expectations, and green needs” (Wang et al., 2022, p. 2). Among the subelements of perceived value, price is an important one. Price value image is a consumer’s “perceived value of a product in terms of quality and satisfaction regarding its price” (Tran et al., 2022, p. 4). Quality and satisfaction are affected by inherent environmental values (as indicated by previous studies), net personal and social benefits, and normative comparisons with unsustainable alternatives (Tran et al., 2022). While product features, benefits, and ancillary product information are important components of perceived value, Malar & R (2023) classify it as a psychological antecedent for aforementioned components’ variability in influencing a green consumer’s purchase intention. This could be explained by the perceived social utility derived from a green purchase. Parker et al. (2023) define this as social value and argue that it depends on peer pressure, pleasure-seeking orientation, social status seeking, and good image projection. Sun & Xing (2022) classify social value under prevailing social norms that are directed by social pressure, social acceptability, accepted behavior, and cultural environment, associating these with consumers’ highly predictive consumer behavior.

Additionally, hedonic and utilitarian values have been shown to fully mediate the relationship between purchase intention and social value (Zeng, 2020). Hedonic value depends on a green consumer’s tendency to prefer recreation and enjoyment while utilitarian value is the convenience, time saving, and efficiency that a green consumer believes to experience (Zeng, 2020). Song et al. (2020) agrees, stating that “consumers who value individual satisfaction tend to choose functionally oriented products” (p. 2). For this reason, Song et al. (2020) suggest that firms remain socially and environmentally responsive while maximizing stakeholders’ value and firm’s value creation beyond economic, technical, and legal requirements, thereby “swaying consumers’ evaluations and attitudes towards the firms with such credentials” (p. 212). Tran et al. (2022) identified cultural value another mediator of perceived green product value. Conducting their study in the developing country of Vietnam, they found that while Vietnam saw an increased shift towards sustainability, the shift’s gradualness was associated with persisting cultural values towards conventional products.

Another component of perceived value is emotional value, define by Parker et al. (2023) as “the perceived utility acquired from an alternative’s capacity to arouse feelings or affective states” (p. 867). Social and emotional values may exist because of past experiences or acquired by knowledge-seeking behavior as a result of environmental concerns (Parker et al., 2023; Tran et al., 2022). Zeng (2020), after conducting a quantitative study on female Generation Z green online cosmetics consumers in China, concluded that online brand trust mediated the relationship between hedonic values, utilitarian values, purchase loyalty, willingness to buy, brand feedback, and

consumer-corporate identification, and online purchase intention. While the study did not research perceived social value, it highlighted the importance of doing so. Genovese & Green's (2021) study on green promotional cues' effect on consumer beliefs and purchase intention found that intrinsic cues such as product attributes, functionality, ingredients, and perceived efficacy – “relates to if the product provides the desired results it promises and is a symbol of good quality and value towards a consumer's interpretation of if a product is worth purchasing” (p. 7) – have a strong influence on purchase intention. Interestingly, they did not find brand image significant to purchase intention, although packaging in itself was found significant. Brand et al. (2022), too, found packaging, particularly plastic-free packaging, a key influencer of purchase intention of online products. Other key variables identified in their study were good online customer ratings, and free returns. Zeng (2020), adding to the list of factors affecting online purchase intention, identified social reviews, epromotion, web atmospherics and design, and payment methods as cues that affect online consumption behavior. Public opinions have an important role in deciding how predictor variables affect Generation Z people's intention to shop for green cosmetics online. The way people act, what information they choose and how it affects trust makes public reviews very important in understanding and planning buy intentions for this group. Companies need to talk and answer back to what the public says about them. Therefore, the second variable tested i.e., perceived green product value will depend on these aforementioned components of value to assess Lithuanian Generation Z's purchase intention of green cosmetics sold online.

Green Trust – According to Wang et al. (2022), green trust involves “being reliable, dependable, satisfying consumers' expectations, trustworthy, and having product's potential to ensure the environment's safety, among other qualities” (p. 5). Green product trust builds a firm's green brand and loyalty (Wang et al., 2022). Thorough and meaningful labelling – social labels and eco-labels (Parker et al., 2023; Wang et al., 2022; Garcia-Salirrosas & Rondon-Eusebio, 2022; Wuisan & Februadi, 2022; Mazur-Wierzbicka, 2021; Genovese & Green, 2021; Song et al., 2020; Kurnia & Mayangsari, 2020; Osburg et al., 2020; Anbuselvan & Nivasini, 2020; Nguyen, 2020; Zhang & Dong, 2020; Lin et al., 2018; Suki et al., 2016) – and information aids consumers' trust in their perceived usefulness of a given green product (Osburg et al., (2020). Signaling theory suggests that information asymmetry can be addressed by producers' disclosing of pertinent information which adds credibility, builds trust, and positively affects purchase intention (Osburg et al., 2020). Verifiably authentic labelling can help lead to an “indirect effect on brand equity and purchase intention of consumers” (Kreitzen, 2022, p. 19). Sharing information, as part of a firm's green corporate strategy, can also help consumers distinguish between greenwashing companies and

truthful businesses (Utami et al., 2022; Osburg et al., 2020). Informative CSR efforts construct an institutional green image, positively impacting product image, quality attributes, and consumer confidence. (Suki et al., 2016). Osburg et al. (2020) refer to Inoculation Theory to describe how trusting consumers can help spread word of mouth, help curb disinformation, and lure in more prospective green consumers. Particularly in the digital domain, online brand trust is an important antecedent to online purchase intention (Zeng, 2020).

Lin et al. (2018) found that consumers tend to show a lack of trust in green cosmetics that are priced cheaply as sustainable cosmetics are commonly known to have ingredients that relatively expensive on the ingredient spectrum. This explains why, to a certain degree, Generation Z consumers are willing to pay more for premium green products. However, as green price goes up, the overall demand for it is consistently shown to go down. Moreover, celebrity endorsements, widely used as trust-building corporate efforts, also depend in their effect on purchase intention on their trustworthiness, a function of their industry relevance and expertise (Al Mamun et al., 2023). Some studies have also shown green trust as a mediator between perceived quality and purchase intention (Thwe et al., 2021). Similarly, merchant (website, eCommerce platform) credibility has also been shown to be a key influencer of online shopping purchase intention (Zeng, 2020). Famous stars greatly help in building trust in nature cosmetics. Celebrities who are trusted can help make a product look good (Lin et al., 2018). This can improve how people trust, knowing the product is good too. Celebrity support can help to build trust quickly, making people want to buy. Famous people saying they like something can change what people decide to do (Al Mamun et al., 2023; Zeng, 2020). This shows how important marketing with social media stars is in making Generation Z want to buy.

As discussed, the chosen three factors, namely, green product awareness, perceived green product value, and green product trust have been found significant to green online purchase intention in multiple studies. Their findings also establish close linkages with other factors such as green perceived risk and green marketing mix (Srisathan et al., 2023; Gomes et al., 2023; Tran et al., 2022; Quoquab et al., 2020; Topic & Mitchell, 2019).

Knowing about green products can change how Generation Z views and buys things. If they are familiar with a product or brand, their trust in it can increase. This might make them more likely to use a well-known green brand when they shop (Pop et al., 2020). Familiarity helps make and keep trust in green cosmetics. Popular brands might get advantages from good feelings already linked to them, which can affect how we build trust (Srisathan W. A. et al., 2023). A good familiarity with the green products can make trust strong or happen quickly, affecting what Generation Z wants to buy (Teixeira et al., 2023).

3. FACTORS AFFECTING PURCHASE INTENTION OF GENERATION Z CONSUMERS FOR ONLINE SHOPPING OF GREEN COSMETICS RESEARCH METHODOLOGY

3.1 Purpose of research, model, purpose, and hypotheses

The method section of this part explains the approach to research. Its contents include the purpose, methods, basic content, theoretical model, and theoretical hypotheses of the study. That is, this framework is constructed from the conceptual foundations set out in the review of the literature.

The target population is Gen Z youths who plan to buy green cosmetics online. It covered from 2010 to 2023, focusing on the determinants of purchase intention of Generation Z consumers towards the online purchase of green cosmetics (Abdollahbeigi & Salehi, 2018). Generation Z consumers, primarily aged from 13 years to 28, actively participating in buying green cosmetics online, were sampled purposely (Al-Haddad et al., 2020). Online surveys have been used to conduct this study in light of the Theory of Planned Behavior (TPB), which is more appropriate for this research, because it offers a systematic approach to looking at the various factors that affect Intent to Purchase green cosmetics by online users of Generation Z (Kan & Fabrigar, 2017; Fishbein & Ajzen, 1975). For the study, using the Theory of Planned Behavior, the research will explore what is causing Generation Z's views, how they feel about what others think, and their ability to control their behavior about shopping green cosmetics online. The study wants to give a full view of the mental parts that affect Generation Z likes buying green cosmetic stuff. It does this by combining ideas from the theory of planned behavior. The results will help study how personal thoughts, society's impact, and feeling of control all combine to shape choices about buying green beauty products online among young people from Generation Z.

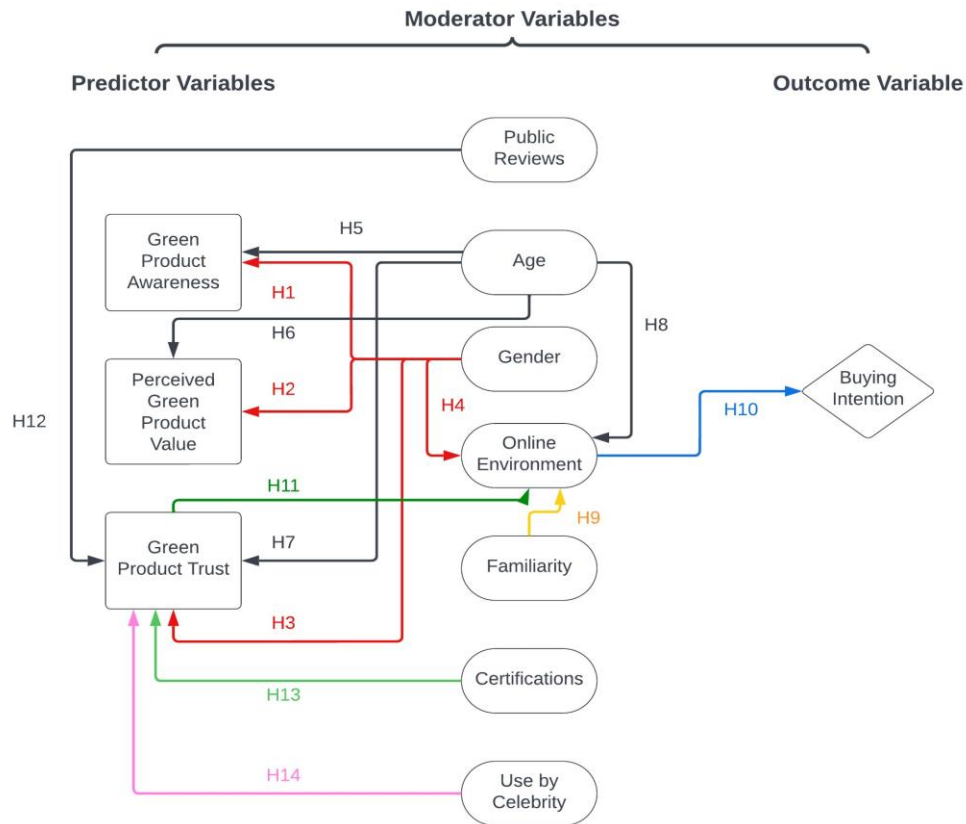


Figure 1. Research Model

Research object – The researchers employed an explanatory study design to examine the unexplored causal relationship between the variables under investigation. Consequently, this study can be classified as an explanatory study. There is an excellent fit with the target demography, market trends and consideration of sustainability. As the study of the Generation Z for their intent to purchase Green Cosmetics relates to ‘age’ and ‘gender’ more than the other elements, the preference in the hypotheses formulation and testing is given to these demographic environments. Whereas other questions are also considered that connect directly to either the ‘buying intention’ or the medium of purchase, which is ‘online’ in this case.

Research into the factors affecting the generation Z consumers’ intention to purchase online observed that in the study of green cosmetics, gender, and Green Product (GP) Awareness have a close relationship (Ansu-Mensah P. , 2021). Sexual differences are clear for generation Z when it comes to environmental concerns (Zhang et al., 2023). Research also shows that females tend to be more environmentally conscious and are more frequent practitioners of green living. Hence, Green Product Awareness differs between men and women, in that women have both higher awareness of,

and being more sensitive to, environmentally sustainable cosmetic products (Rani & Bharatwal, 2022). Women, who have been more exposed to social pressures, may therefore pay more attention to green beauty products (Suki et al., 2016). This might lead to Green Product Awareness among males lagging that of females. It is essential to understand these social works to better decipher the influence of gender on awareness levels (Rani & Bharatwal, 2022). Most cosmetic labels match their marketing strategies to those of different gender groups (Mostafa, 2022). The culture of green cosmetics The marketing for green cosmetics genuinely reflects what women and men appreciate about them, it will affect the ways in which women and men look at these products. In fact, for people gender is only one aspect of their identities (Hope, 2022). These crossings are three-dimensional axes that must be contemplated to get a more sophisticated insight into the relationship and possible differences between the Generation Z buyers (Prado et al., 2020).

H₁: Gender has an impact on GP Awareness.

Generation Z may well have gender-specific biases when it comes to assessing the value of green cosmetics (Pinem & Pinem, 2019). Maybe there are different advantages that females and males appreciate. For instance, in assessing green beauty products, females will put more emphasis on natural ingredients or products not being tested on animals (Felix et al., 2021). These preferences are very gender-based and are thus essential to understanding the effect on value. Different sexual roles and standards of beauty impact different views of the value of cosmetics among males and females (Sreen et al., 2018). But if some green cosmetic characteristics fit in more closely with an expectation for one gender, this may influence people's overall evaluation of the worth of green beauty products (Rahardja & Fataya, 2023). Thus, social factors exist that produce gender stereotypes (Dagher et al., 2015). Green cosmetics marketing can also use gender-oriented communication. Successful marketing should put gender-related values and priorities at center stage, to convince people about the value of green beauty products. For instance, sustainability-type messaging will be interpreted differently by the sexes and affect their sense of self-worth (Felix et al., 2021). Generation Z values individual self-empowerment and personalization (Dagher et al., 2015). For this group, gender identity and expression are not necessarily uniform. To thoroughly analyze how people value green cosmetics, gender identity and gender expression are important elements in the equation (Zhao et al., 2021). This also involves considering the effect on self-esteem for those whose lifestyle may not be considered normal by society at large (Sreen et al., 2018).

H₂: Gender has an impact on GP Perceived value.

Research has shown that trust in products is closely related to personal characteristics and attitudes (Waites et al., 2020). For example, gender-related considerations, including levels of credibility and authenticity, might influence people's ability to trust green beauty products. The differences in the way men and women communicate also affect the way information about green cosmetics is received and assimilated (Suhartanto et al., 2021). Building trust is usually closely related to communication. To discover how males and females develop a sense of trust in green products, it is necessary to start with providing information about them and then match that up with an understanding of the different ways men and women communicate and seek to understand (Mostafa, 2022). In fact, social pressure and gender roles are intimately connected with trust. However, this stereotype-laden language can also influence the way Gen Zers trust certain products, the reviews they read, and the things they are recommended (Wang et al., 2019). Among women there might be a difference of opinion about the risks of green cosmetics. Knowing how generation Z sees these risks as connected to green products and in line with their gender identity is very important (Suhartanto et al., 2021). As another example, males and females may have different attitudes toward risks related to the effectiveness or safety of green beauty products (Chen et al., 2015).

H₃: Gender has an impact on trust on GP.

Generation Z members of both sexes have online shopping gender differences. Platform, decision-making, shopping motivations, and so on, may also differ between men and women (Quoquab et al., 2010). It is only with an understanding of these distinctions can one interpret how gender is influencing the process of buying green cosmetics online (Tengli & Srinivasan, 2022). Gender looks set to become a key determining factor in online shopping behavior. If we discover that trust in green cosmetics is gender-specific, this will influence the way that people of different genders engage in the online purchasing experience (Shimul et al., 2022). The two take very different perspectives on whether online platforms, product reviews, and brand credibility should have a strong influence on whether men or women buy a product. Generation Z's emergence of individualized gender identity and expression are reflected in online shopping (Tengli & Srinivasan, 2022). Exploring the interplay between digital identity and online buying behavior as well helps us see the whole picture more clearly.

H4: Gender has an impact on buying green cosmetics online.

There is also the question of whether there are differences in environmental awareness between various age cohorts within Generation Z (Akter & Islam, 2020). Furthermore, since its sustainability trends and the quality of the environment are related to it, the younger age group may have a higher degree of sensitivity to green cosmetics (Ansu-Mensah P. , 2021). Deducing how the generation gap affects Green Product Awareness requires an understanding of these differences (Ogiemwonyi et al., 2020). The younger generation, being the people born in the age of the Internet, usually have more sources of information available online (Ansu-Mensah P. , 2021). This in turn could cause them to become much more exposed to news about green products. Differences in age-related access to information have a cascading effect on how the different generations within the younger section of Generation Z view green cosmetics and how they interact with them (Song et al., 2019). The different age cohorts in Generation Z now coming of age may be at markedly dissimilar stages of their education, with resultant differences in the quantity of sustainability-related information they are exposed to (Akter & Islam, 2020). They are aware of green cosmetics to a higher degree, as they may understand the environment at a deeper level than people in other fields of learning (Song et al., 2019). It is certainly important to examine the influence of educational background on Green Product Awareness (Brammah & Tweneboah-Koduah, 2011).

H5: Age has an impact on GP Awareness.

Some young people may place priority on things like sustainability or the sourcing of raw ingredients, which influence how green cosmetics are viewed (Hamid, 2014). Differences in the standards value systems vary between generations (Cheung et al., 2015). The younger parts may well be more sensitive to new trends, as may older segments that have a better grasp of the larger environment (Dhewi et al., 2018). This requires examining how ages differ in their environmental awareness and how this grows with age (Doszhanov & Ahmad, 2015). Speaking of different levels of financial independence, they are usually connected to different ages. Older members may have more spending money (Hamid, 2014). Such factors as intention to spend and return on investment may be different with each age group.

H6: Age has an impact on GP Perceived value.

As people, in Generation Z grow older their experiences play a role in shaping their trust perceptions (Waites et al., 2020). Older individuals having met a range of products and brands have an influence on their trust in environmentally friendly cosmetics (Nuttavuthisit & Thøgersen, 2015). Understanding the relationship between experiences, age related trust formation and digital literacy is crucial (Lee, 2020). Differences in literacy across age groups can affect how trust is built on online platforms (Ansu-Mensah P. , 2021). Younger individuals, being natives tend to have trust levels in online sources compared to older individuals who may approach online information with more skepticism (Lee, 2020).

H₇: Age has an impact on trust in GP.

Younger people, in Generation Z who are natives may show behaviors when it comes to online shopping (Srisathan W. A. et al., 2023). The platforms they prefer their browsing habits and the way they make purchasing decisions can vary based on their age (Chiang et al., 2022). It is important to understand these differences in order to understand how age influences the act of buying cosmetics online (Teixeira et al., 2023). As the cohort of individuals belonging to Generation Z progresses through the life course, it is anticipated that they will exhibit a propensity to acclimate themselves to the evolving patterns and dynamics observed within the realm of electronic commerce (Kartikasari et al., 2021). The impact of age on online shopping behavior is a topic of interest, as older individuals may have a greater degree of familiarity with shopping features and technologies (Pop et al., 2020). This familiarity can potentially influence their decision-making processes when making purchases through online platforms (Chiang et al., 2022).

H₈: Age affects green cosmetics online buying.

The connection between how people know about products and how effort they put into learning about sustainable practices has been seen (Tran T. T., 2022). When individuals are familiar with these concepts, they tend to be more open to types of content, which in turn affects their shopping habits (Photcharoen et al., 2020). Another interesting aspect to explore is how familiarity influences brand loyalty. People who understand brands often show a tendency to repeatedly buy from them (Vergura et al., 2020). Examining the relationship between familiarity, brand loyalty and

online shopping behavior supplies insights into how familiarity changes consumers decision making processes over time (Sajinčič et al., 2021).

H₉: Familiarity with green products impacts Green Cosmetics buying behavior online.

People who are interested in purchasing cosmetics often prioritize sustainability and environmental benefits (Kim & Seock, 2009). According to the hypothesis those who have an intention to buy tend to prefer products that align with eco-friendly values even when there are potential monetary incentives involved (Wu et al., 2017). The inclination to buy online is often associated with perceiving long-term value in cosmetics. Among Generation Z consumers with an intention to buy online they may see the benefits as adding value to the product outweighing any short-term financial gains (Grădinaru et al., 2022). Having an intention to buy online can also contribute to building brand loyalty especially if the brand demonstrates a commitment to sustainability (Wijekoon & Sabri, 2021). People tend to prioritize brands that align with their preferences, for purchases and show dedication to causes even if it means giving up immediate financial benefits (Chen et al., 2018).

H₁₀: Online buying intentions impacts preference of environment over monetary benefits in purchasing cosmetics.

The trust that Generation Z consumers place in cosmetic brands information has an impact on their online purchasing behavior (Tran T. T., 2022). Those who have confidence in the information provided are more likely to make informed decisions when buying green products online considering sustainability and environmental impact (Keränen, 2020). Trusting the information presented by brands also plays a role in setting up brand credibility (Kahraman & Kazançoğlu, 2019). When Generation Z consumers see brands as sources of sustainability related information, they tend to develop loyalty towards them (Moslehpour et al., 2021). This loyalty in turn influences their decision to purchase products online from those trusted brands (Ebrahimi et al., 2021). Brands that actively provide content on sustainability eco environmental impact foster trust by showcasing their commitment, to transparency (Kahraman & Kazançoğlu, 2019). Generation Z consumers appreciate brands that prioritize education as it influences their level of trust and subsequently impacts their decision-making process when buying products online (Moslehpour et al., 2021).

H₁₁: Trust in the information green cosmetic brands supply concerning sustainability, ecofriendliness, and environmental impact of their products through marketing affects online buying of green products.

Online reviews and feedback posted by the public have an impact on how Generation Z consumers perceive the trustworthiness of friendly products (Hui He, 2020). Positive reviews contribute to building trust while negative ones can raise concerns (Wiencierz et al., 2015). The overall perception of trust is shaped by the feedback online regarding green cosmetics. Genuine and genuine reviews play a role in establishing trust in these products (Sebastianelli & Tamimi, 2018). Generation Z consumers value real life experiences shared by others, which influences their level of trust in a product (Fu et al., 2022). The alignment between reviews and real consumer experiences plays a role in shaping perceptions of trustworthiness (Huang & Chen, 2006).

H₁₂: Online public reviews and feedback impact the green products' trustworthiness.

Certifications have an impact, on reducing risks and uncertainties associated with claims made by cosmetics (Brach et al., 2018). It is important to consider both government and third-party certifications when looking for certified products as they serve as indicators of authenticity (Cervellon & Carey, 2011). Generation Z consumers value certifications because they supply evidence of adherence to recognized standards. When products have certifications, it instills confidence in Generation Z consumers assuring them that the products meet established standards (Dayan & Kromidas, 2011). Understanding the role of certifications in managing risks and building consumer trust is crucial. Additionally, it is worth noting that certifications add value to products by supplying consistent information (Brach et al., 2018). The younger generation often referred to as Generation Z owns a desire for knowledge and heightened awareness. Therefore, having certifications helps them make choices when it comes to green products (Cervellon & Carey, 2011). Recognizing the connection between certifications, consumer awareness and product reliability is vital, within this context (van der Zee, 2018).

H₁₃: Governmental or third-party certifications improve reliability of green cosmetic products.

When a well-known figure uses a cosmetic product, it creates a sense of aspiration and influences how people perceive the trustworthiness of those products (Waqas et al., 2020). The younger Generation Z consumers tend to believe that if influencers endorse certain products, it reflects their own values and practices (Pop et al., 2020). This connection between celebrities or influencers and cosmetic products can have a significant impact on their decision to buy them because they trust the reliability of these products based on the influencer's image (Fileri et al., 2023). It is essential to analyze how endorsements from influencers translate into people's intentions to buy (Macheka et al., 2023). Celebrity and influencer endorsements supply evidence that a particular trend or product is popular and widely accepted (Macheka T. Q., 2023). Given that Generation Z values validation, an endorsement of a green cosmetic product by a prominent figure can signal its reliability by aligning with current trends (Pop et al., 2020). Understanding the influence of proof in shaping perceptions of reliability is essential.

H₁₄: A green cosmetic product used by a celebrity/social influencer/opinionmaker impacts the product's reliability.

3.2. Data collection methods and research instruments

Individual consumers within the targeted age bracket who purchase cosmetics online comprise the first unit of analysis. To begin with, common and general observations were obtained. The population comprised online platforms, websites, and social media platforms providing green cosmetic products for Gen Z consumers. Representative content was analyzed using a systematic random sampling technique to ensure a balanced and fair representation.

The survey universe involved Generation Z shoppers of green cosmetics on the internet. At the same time, the population encompasses Generation Z individuals aged 18 to 28 who have either purchased or intended to purchase green cosmetics online. The survey took one month, ensuring an intense study of consumer opinions. In this case, a stratified random sampling technique was used, providing representation from various groups in the Generation Z group. In a study about green cosmetics buying intentions for Generation Z consumers, groups (strata) might be made by looking at things like age groups (like 18-21 and 22-25), males and females. As there is a defined age group, this gives a fuller picture of the whole Generation Z. The research focused on primary aspects such as (a) time/age (Generation Z), (b) sex (gender), (c) target choice (green products), (d) consumer intention (purchase), and (e) reliability factors (use by celebrity, certifications). For instance,

respondents were asked whether “a green cosmetic product used by a celebrity/social influencer/opinionmaker is enough evidence of the product’s reliability”, or “to my opinion, the criteria for the green cosmetic product reputation are...”, where (a) what brand claims, (b) governmental certification (c) third-party certification (d) reviews of general users (e) family and friends; were presented as possible choices. This way the respondents were deeply analyzed. In the formation of the questionnaire, certain characteristics have been taken into consideration for all questions. In view of this aspect, the novelty of the formation of questions, closed-ended, specific focus, generation of a set of answers, and neutrality was taken into consideration.

Table 1

Constructs of the Questionnaire

Variable	Description	Measurement	References
Awareness/ Familiarity	<ol style="list-style-type: none"> 1. I am aware of the significance of product labels, I read them before buying green cosmetic products. 2. I am aware of the positive environmental impact of green products. 3. I am fully familiar with green cosmetics products. 	5-Point Likert Scale	Saut and Saing (2021), Nguyen et al. (2021)
Perceived Value	<ol style="list-style-type: none"> 1. I value the environment over monetary benefits in my purchasing of cosmetics. 2. Besides being eco-friendly, green cosmetics are sustainable, valuable and much safer for human use. 3. I rely on organic and natural ingredients in cosmetics as they add more value to these products. 4. Eco-friendly green cosmetics offer better value for money compared to traditional cosmetics. 5. I am confident that green cosmetics are better in brand value and product value. 	5-Point Likert Scale	Lee (2020)
Online Environment	<ol style="list-style-type: none"> 1. I often share my opinion concerning green products on my social media handles. 	5-Point Likert Scale	Nguyen et al. (2021)

Trust	1. I trust the information green cosmetic brands supply concerning sustainability, ecofriendliness, and environmental impact of their products through marketing.	5-Point Likert Scale	Lee (2020), Irfany, Khairunnisa, and Tieman (2023)
Certifications	1. I ask for public and private certifications from green cosmetic brands to verify their claim of being eco-friendly.	5-Point Likert Scale	(Amberg & Fogarassy, 2019)
Review/Feedback	1. I look for a review or feedback section before buying a green cosmetic product.	5-Point Likert Scale	(Zeng, 2020)
Use by Celebrity	1. A green cosmetic product used by a celebrity is enough evidence of the product's reliability.	5-Point Likert Scale	(Cervellon & Carey, 2011)
Gender	1. Male 2. Female 3. Other		
Age	1. 20-24 2. 25-34 3. 35-44 4. 45-54		

The design of the questionnaire was intended to assess the variables under investigation and collect demographic data from the participants. The utilization of an online survey, facilitated by the implementation of Google Forms software, enabled the researcher to efficiently conduct the experiment and acquire data from a substantial cohort of participants. The data was collected using Microsoft Excel software, which was chosen for its user-friendly interface and efficient data management capabilities. This facilitated the seamless transfer of the data to the SPSS software, where it underwent further processing and analysis.

3.3. Research sample size and structure

The study involved a population of individuals at both undergraduate and postgraduate levels. The sample was taken in a non-specific way, without any set criteria applied or a deliberate selection

process. A random sample was taken from a pool of educational institutions without any specified inclination or predisposition. An irregular examination procedure was used in a systematic approach for determining samples for selection. The sample size for the current study was determined by a widely accepted methodology by Krejcie and Morgan (1970). The methodology entailed using a sample size table that factored the desired level of confidence of 95%. According to this strategy, the sample size for this research was calculated as 384 individuals. The condition was that the population size was more than one million people and appropriateness of the decision. As per the findings of Haar et al. (2006), at least 300 cases should be used for a valid visualization of something under the ground. Henceforth, a singular exemplification has been selected from a pool of 384 participants. The calculation for the projected population was required, which can be determined through the following equation:

$$PPPPPPPPPPPPPPPPPPPP \frac{SSPPSSPPPPPP \ SSPPSSPP}{SSPPSSPPPPPPSS \ FFPPPPPPPPPPPPPP} = \frac{PP}{ff}$$

Which is represented by the following equation using reference values of the critical variables:

$$PPPPPPPPPPPPPPPPPPPP \frac{PP}{ff} = \frac{PP}{ff}$$

Where *n* shows the sample size, *N* is the total population while *f* is the sampling fraction, which the equation would calculate under:

$$ff = \frac{PP}{NN}$$

The unit of analysis is the individual respondent, giving information on the person’s attitudes, perceptions, and behavior towards online shopping of green cosmetics. Quantitative and qualitative variables influencing purchase intentions was determined using a structured online survey questionnaire comprising closed-ended and Likert scale questions. Consistency was ensuring reliability in survey administration and data collection. Content validity of the survey questions (such as using SPSS) and established scales from prior research helped verify validity. The sample size was calculated using the following equation.

$$PP = \frac{ZZ^2 * PP * (1 - PP)}{EE_2}$$

Where:

n = Represents the sample size which is required

Z = denotes the Z-score, which is the confidence level of the consumer

P = Shows the (estimated) population proportion that has an interest in buying green cosmetics E

= Denotes the margin for error

To calculate the minimum sample size for Generation Z consumers in Lithuania who shop online for cosmetics, the study needed to determine the following parameters:

- Confidence level (Z): Assume a 95% confidence level for a reliable estimation. This means $Z = 1.96$.
- Estimated population proportion (p): Since no specific information about the population proportion of Generation Z online cosmetics shoppers in Lithuania is available, a conservative estimate of $p = 0.5$ (assuming 50% of the population fits the criteria) can be used.
- Margin of error (d): Set a margin of error of $d = 0.05$ for a desired level of precision.
- Finite population correction: Since Lithuania has a relatively small population, it needs to apply the finite population correction factor.

Below is the formula for calculating the sample size with finite population correction:

$$PP = \frac{(Z^2 * p * (1 - p) * N)}{(d^2 * (N - 1) + Z^2 * p * (1 - p))}$$

Where:

n = sample size Z =

confidence level

p = estimated population proportion d

= margin of error

N = population size

Step 1: Estimate the population size (N):

Since no exact number of Generation Z consumers in Lithuania is available. However, based on available data, population size can be estimated as follows:

Total population of Lithuania: 2.72 million (as of 2023)

Percentage of Generation Z: Approximately 20% (based on global estimates)

Estimated Generation Z population: $0.2 * 2.72 \text{ million} \approx 544000$ Step

2: Calculate the sample size:

$$PP = \frac{(1.96^2 * 0.5 * (1 - 0.5) * 544000)}{(0.05^2 * (544000 - 1) + 1.96^2 * 0.5 * (1 - 0.5))}$$

$n \approx 383.67$

Therefore, the minimum sample size required to achieve the desired level of precision and representativeness for your study is approximately 384 Generation Z consumers who shop online for cosmetics in Lithuania.

In this study, statistical analysis was conducted using IBM SPSS Statistics. Descriptive statistics were computed using IBM SPSS Statistics and inferential analyses were conducted through the application of chi square (Greenwood & Nikulin, 1996) and logistics regression (Edgar & Manz, 2017) with the assistance of SPSS syntax. Interpreting the results of a Chi-Square test involves assessing whether there is a significant association between categorical variables. The Chi-Square test is commonly used when you have categorical data and want to determine if there is a relationship between two variables. The p-value in statistical hypothesis testing is a measure that helps you assess the evidence against a null hypothesis (Dahiru, 2008).

4. FACTORS AFFECTING PURCHASE INTENTION OF GENERATION Z CONSUMERS FOR ONLINE SHOPPING OF GREEN COSMETICS ANALYSIS OF GATHERED DATA AND FINDINGS

4.1. Demographic characteristics and reliability of collected data

Pilot Testing – Prior to the culmination of data collection for the study, the research instrument underwent a comprehensive pilot testing phase. The researcher chose a total of 30 samples (15 females, 15 males) to be utilized in the initial pilot testing phase. The researcher conducted onsite visits to all the designated areas to carry out pilot testing. The determination of the coefficient of instrument quality was conducted utilizing the well-established Cronbach's alpha reliability strategy. The information under investigation was subjected to decomposition, and subsequently, an

assessment of its unwavering quality was conducted utilizing the SPSS 23 software version. The properties associated with Cronbach's alpha or device reliability are enumerated below.

Table 2

Demographic Information

	Breakup	Tally	%
Age	20-24Y	12	40
	25-34Y	8	26.6
	35-44Y	10	33.3
Gender	Male	15	50
	Female	15	50
Education	Undergraduate	22	73.3
	Graduate	8	26.6
Employment Status	Employed	19	63.3
	Unemployed	11	36.6

Table 3

Reliability Testing

Scale	Value of Cronbach's Alpha
Buying Intention of Green Products	0.673
Perceived Value	0.713
Green Product Trust	0.736
Green Products Usage	0.718

The present study includes tables that display the cumulative results obtained from various statistical tests. Specifically, the tables showcase the findings derived from the application of the Nominal-by-Nominal test, which measures the Contingency Coefficient. Additionally, the results obtained from the Interval-by-Interval test, which utilizes Pearson's R as the statistical measure, are also presented. Lastly, the tables include the outcomes of the Ordinal-by-Ordinal test, which employs the Spearman Correlation as the statistical measure. For a comprehensive understanding of the tests conducted, readers are encouraged to refer to the Annex Section, which provides detailed information on each test. The Annex Section encompasses a range of tests, spanning from Test 1 to Test 14.

Table 4*Demographic Information*

	Breakup	Tally	%
Age	20-24Y	160	41.6
	25-34Y	56	14.5
	35-44Y	92	23.9
	45-54Y	76	19.7
Gender	Male	57	14.8
	Female	225	58.5
	Other	102	26.5
Area	Lithuania	214	55.7
	Northern Europe	45	11.7
	Southern Europe	36	9.3
	North America	23	5.9
	South America	15	3.9
	Asia Pacific	33	8.5
	Other	18	4.6
Education	Less than High School	22	5.7
	High School	98	25.5
	College	145	37.7
	Non-Degree	1	0.2
	Tertiary/Technical certification	6	1.5
	Bachelor's degree	49	12.7
	Master's degree	26	6.7
	Doctoral degree	2	0.5
	Other	35	9.1
Marital Status	Married	82	21.3
	Widowed	13	3.3
	Divorced	29	7.5
	Separated	44	11.4
	Single	78	20.3
	Prefer not to say	138	35.9
Employment Status	Full Time	122	31.7
	Part Time	143	37.2

	Contract/Temporary	56	14.5
	Unemployed	45	11.7
	Prefer not to say	18	4.6
Language	Lithuanian	214	55.7
	English	75	19.5
	Spanish	21	5.4
	French	15	3.9
	Italian	15	3.9
	Prefer not to say	44	11.4
	Monthly Income (Euro)	0-500	15
500-1000		68	17.7
1000-1500		64	16.6
1500-2000		102	26.5
Above 2000		135	35.1

Table 5

Symmetric Analysis Nominal by Nominal (Contingency Coefficient)

		<i>Value</i>	<i>Approx. Sig.</i>
<i>Nominal by Nominal</i>	Contingency Coefficient	.376	.000
		.293	.000
		.293	.000
		.144	.017
		.0376	.000
		.308	.000
		.308	.000
		.177	.006
		.127	.175
		.187	.007
		.187	.007
		.144	.017
		.187	.007
	<i>N of Valid Cases</i>		.177
		384	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Table 6*Symmetric Analysis Interval by Interval (Pearson's R)*

		<i>Value</i>	<i>Asymp. Std. Error^a</i>	<i>Approx. T^b</i>	<i>Approx. Sig.</i>
<i>Interval by Interval</i>	Pearson's R	-.263	.048	-5.319	.000 ^c
		.027	.051	.536	.593 ^c
		.027	.051	.536	.593 ^c
		.085	.054	1.673	.095 ^c
		.110	.048	2.162	.031 ^c
		-.216	.049	-4.316	.000 ^c
		-.216	.049	-4.316	.000 ^c
		.128	.047	2.531	.012 ^c
		-.054	.050	-1.060	.290 ^c
		.051	.052	1.000	.318 ^c
		.051	.052	1.000	.318 ^c
		.085	.054	1.673	.095 ^c
		.051	.052	1.000	.318 ^c
		.128	.047	2.531	.012 ^c
		384			

N of Valid Cases

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Table 7*Symmetric Analysis Ordinal by Ordinal (Spearman Correlation)*

		<i>Value</i>	<i>Asymp. Std. Error^a</i>	<i>Approx. T^b</i>	<i>Approx. Sig.</i>
<i>Ordinal by Ordinal</i>	Spearman Correlation	-.257	.048	-5.204	.000 ^c

	.020	.051	.389	.697 ^c
	.020	.051	.389	.697 ^c
	.072	.054	1.406	.161 ^c
	.140	.048	2.759	.006 ^c
	-.230	.048	-4.618	.000 ^c
	-.230	.048	-4.618	.000 ^c
	.140	.046	2.756	.006 ^c
	-.053	.050	-1.041	.299 ^c
	.049	.052	.957	.339 ^c
	.049	.052	.957	.339 ^c
	.072	.054	1.406	.161 ^c
	.049	.052	.957	.339 ^c
	.140	.046	2.756	.006 ^c
<i>N of Valid Case</i>	384			

- Not assuming the null hypothesis.
- Using the asymptotic standard error assuming the null hypothesis.
- Based on normal approximation.

For H_1 “Gender has an impact on GP Awareness”, the Contingency Coefficient is 0.376. It is one of the most frequently applied measures to measure the association between two nominal variables. Pearson’s R value is -0.263, with asymptotic standard error of 0.048. This measure determines the linear relationship between two interval variables. T value is -5.319, p-value is less than 0.001 (written .000c), showing a statistically significant negative correlation. The contingency coefficient is a measure of the level of association between two nominal variables. In this case, it considers the relationship between “Gender” and “I am fully Familiar with GCP.” The value of 0.376 (from the symmetric measures table) denotes a moderate association.

In case of H_2 “Gender has an impact on GP Perceived value” A 0.293 contingency coefficient implies a moderate relationship between gender and environmental value versus monetary benefits in purchasing cosmetics. There is a weak positive correlation between Pearson’s R and p-value of 0.027. This relationship, however, is statistically insignificant. Also, a weak positive correlation without statistical significance is indicated by Spearman correlation is 0.020 with a p-value of 0.697. According to the data (Annex-2), the relationship is moderate regarding gender and the relative value of the surroundings in comparison to money when buying cosmetics. Women are more likely to make a choice that shows that they are environmentally conscious.

According to the surveyed data for H_3 (Annex-3 for values Cross Tabulation and bar chart), there is a moderate correlation between gender and trust in the information provided by the green

cosmetic brands related to sustainability, eco-friendliness, and environmental impact. Female trust tends to be higher in the “Completely” and “Often” categories, while male and others show higher counts in lower-trust categories. There is a weak positive correlation, but it is not statistically significant. The contingency score of 0.293 suggests a moderate relationship exists between gender and the level of trust in the information provided by green cosmetic brands. The correlation is weak and positive, as revealed by Pearson’s $R = 0.027$, $p\text{-value} = 0.593$. Nevertheless, the correlation is not statistically significant. The Spearman correlation is 0.020 with a $p\text{-value}$ of 0.697, which suggests a weak positive correlation with a lack of statistical significance.

The contingency coefficient of 0.144 for H_4 shows a weak relationship between gender and the chances of purchasing green cosmetics online. Pearson’s $R = 0.085$ with $p\text{-value} = 0.095$ indicating a weak positive relation. But the correlation is not statistically significant. Spearman correlation coefficient is 0.072 and $p\text{-value}$ is 0.161, implying a weak positive non-significant correlation. The data suggests a weak relationship between gender and willingness to purchase green cosmetics online. The number of “Yes” (in the Annex-4) indicates that a significant number of females purchase green cosmetics from online stores as compared to male and other people.

The table demonstrates how respondents of various age groups responded to the question concerning familiarity with GP in case of H_5 . Each age group has a distinct number in every response category. Contingency coefficient = 0.376, showing a moderate link between age and awareness of GP. This thus implies that there exists a link between age groups and GP awareness. Pearson’s $R = 0.110$; $p\text{-value} = 0.031$, showing a weak positive association. The correlation is significant at the five percent significance level. The Spearman correlation is 0.140, and a $p\text{-value}$ of 0.006 (weak positive). The correlation is significant at the 0.01 level. From the data of symmetric Analysis (Cross Tabulation and Tables in Annex 5), it is evident that age affects Green Product awareness.

For H_6 , the distribution of responses to the question whether the people would be willing to pay more for products that are environmentally friendly as opposed to monetary benefits when buying cosmetics or not, there are different counts in each response category for different age groups (Annex-6). The correlation coefficient of 0.308 implies a fair relationship between age and the importance placed on the environment against money in buying cosmetics. Pearson’s R is -0.216 with $p\text{-value} = 0.000$, which implies a moderate negative correlation. It is a statistically significant correlation at the 0.05 level of significance. Spearman correlation of -0.230 with a $p\text{-value}$ of 0.000 shows a moderate negative relationship. Statistically, at a 0.05 significance level the correlation is significant. The data reveals that the hypothesis that age influences the valuation of the environment

as against economic benefits in making cosmetic purchases is supported. Pearson's R and Spearman correlation coefficients suggest a moderate negative correlation that is statistically significant.

In case of H_7 , distribution of respondents' answers to Trust in sustainability, Eco friendly and greenness information provided by green cosmetic brands by age group (Annex-7). Among different age groups, there are distinct numbers of responses for each category. Contingency coefficient of age = 0.308 implies a moderate positive correlation between age and trust in information offered by the green cosmetic brands. A moderately negative relationship exists between Pearson's R and p-value = 0.000 (-0.216). The statistically significant correlation exists at a significance level of 0.05. Spearman (r) = -0.230, $p < .001$ indicating a moderate negative correlation. Statistically significant correlation at the .05 level. The data tables (Annex-7) suggest that age influence trust that green cosmetic brands provide towards sustainability, eco-friendly, and environmentally.

The distribution by age groups of responses to the question on buying green cosmetics online is illustrated in the table (see Annex- 8). The response categories are varied according to age groups. The contingency coefficient for age is 0.177, suggesting that age has a weak relation to buying green cosmetics online. There is a weak positive correlation at Pearson's R of 0.128 and p-value of 0.012. This relationship is statistically significant at the 0.05 level. The Spearman correlation is 0.140, pvalue is 0.006, suggesting a weak positive relation. The correlation is statistically significant at the $p < 0.01$ significance level. The tables (Annex-8) support this hypothesis that age is a determining factor to buying green cosmetics online. Contingency coefficient suggests a weak association and both, Pearson's R and Spearman correlation coefficients, indicate a weak positive correlation that is statistically significant.

The table (in Annex-9) for H_9 shows the distribution of responses to the question on buying green cosmetics online according to the level of familiarity with green cosmetics product. Each response category has different levels of familiarity with a corresponding count. Nominal by Nominal (Contingency Coefficient) is 0.127, which suggests a low link between familiarity with Green Cosmetics Products and likeliness to purchase green cosmetics online. Nevertheless, the pvalue is not statistically significant ($p = 0.175$). Interval by interval (Pearson's R) -0.054, pvalue=0.290 Very weak negative correlation. There is no statistically significant correlation. Spearman Correlation = -0.053 and p-value = 0.299, which is a very weak negative correlation. However the correlation is not statistically significant.

The tables (Annex-10) for H_{10} depict how respondents in the sample answered to the question whether the environment is worth more than monetary benefits when buying cosmetics and the online buying intention categorization. Counts vary in each response category for different online buying

intention categories. Contingency coefficient is 0.187 which shows a weak relation between intentions to purchase cosmetics online and preference of environment over financial benefits. Pvalue is statistically significant ($p = 0.007$). The Pearson's R equals 0.051 with a p-value of 0.318, showing a very weak positive correlation. The correlation is not significant at the statistical level. Spearman correlation equals 0.049 and p-value is 0.339, meaning a very weak positive correlation. The correlation is not substantial but can be accepted with caution.

The contingency coefficient of 0.293 in case of H_{11} indicates a link between gender and the preference for environmentally friendly choices over monetary benefits when purchasing cosmetics. Pearsons R value is 0.027 with a p value of 0.593 indicating a positive correlation but it is not statistically significant. Similarly, the Spearman correlation of 0.020 with a p value of 0.697 also suggests a positive correlation without statistical significance. According to the tables (see Annex11) there is indeed an association between gender and the preference for environmentally friendly options when buying cosmetics with females showing a stronger inclination towards such choices.

The table for H_{12} (Annex 12) shows the distribution of answers according to gender and the inclination to read reviews or feedback on green cosmetics before making purchases. The hypothesis posits that the online reviews/feedback and the trustworthiness of green products are related. The value of Contingency Coefficient (Nominal by Nominal) is 0.144, meaning that there is a weak correlation between gender and the tendency to look for reviews before buying green cosmetics. The p-value (Approx. Sig.) is 0.017, which implies statistically significant association. Pearson's R (Interval by Interval) = 0.085: There is a weak positive correlation between variables (if any). The p-value (Approx. Sig.) is 0.095, which is greater than 0.05. This means that the correlation is not statistically significant. Spearman Correlation (Ordinal by Ordinal) 0.072.

Crosstabulation in case of H_{13} indicates how the frequency of asking for certifications are related to the online buying behavior of green cosmetics consumers. Those who ask for certifications make up a higher proportion of those who "Always" or "Usually" ask for them, and also buy green cosmetics online more often. A contingency coefficient of 0.187 indicates a moderate correlation between the variables. Pearson's R (0.051) and Spearman Correlation (0.049) suggests weak positive correlations. Chi-square test of independence tests for the relationships of asking for certifications and online buying behavior. The association is statistically significant: $\chi^2(4, N = 384) = 21.648, p < 0.001$. Contingency coefficient (0.187) represents a moderate relationship. Pearson's R (0.051) and Spearman Correlation (0.049) reveal weak positive correlations. These three measures are all statistically significant ($p < 0.05$).

The table (Annex 14) lists the number of people in each age group who buy green cosmetics or who do not in case of H_{14} . The strength of the association is measured by the contingency coefficient (0.177). Pearson's R (0.128) and Spearman Correlation (0.140) determine the direction and intensity of linear relationships between variables. According to both the crosstab and symmetric indicators, the impact of celebrities/social influencers/opinion-makers on consumers 'green cosmetics purchasing behavior seems to have a noticeable connection with age groups. A statistically significant relationship is indicated by the contingency coefficient, Pearson's R, and Spearman Correlation. According to this statistical analysis, the effect of celebrities/social influencers/opinionmakers on green cosmetics purchasing behavior is significantly correlated with age groups. The moderate strength of the association implies that these are factors that influence perception of the reliability of green cosmetic products.

Logistic Regression – The logistic regression model is designed to predict the purchasing behavior of customers when it comes to cosmetics. For the study on how Generation Z customers buy green cosmetics online, using logistic regression could be good if the answer also include binaries such as yes or no. This helps to understand factors if a person would want to buy green cosmetics which are relevant to probability. First, we have a model (Block 0) that only includes a constant. Then in the model (Block 1) we add variables X, Y and Z. Interestingly the overall classification performance of the model remains unchanged between Block 0 and Block 1. However, when we include Z in Block 1 we observe a significant improvement in how well the model fits the data as indicated by omnibus tests and the significant Wald statistic for Z. It's worth noting that although Cox & Snell R Square and Nagelkerke R Square indicate low explanatory power for our model there may be a need for additional variables or adjustments to better understand and explain variations in online buying behavior, for green cosmetics.

Table 8

Dependent Variable Encoding

Original Value	Internal Value
yes	0
No	1

Block 0: Beginning Block – The performance of the model in predicting whether individuals purchase cosmetics online is displayed in the classification table. The model accurately predicted "yes" 297 times and "no" 0 times resulting in a correct prediction rate of 77.3%.

Table 9

Classification Table^{a,b}

	Observed		Predicted		
			Do you buy green cosmetics online		Percentage Correct
			yes	No	
Step 0	Do you buy green cosmetics online	yes	297	0	100.0
		No	87	0	.0
	Overall Percentage				77.3

a. Constant is included in the model.

b. The cut value is .500

In the regression model a constant term is included. The coefficient for the constant is 1.228. The Wald statistic tests whether the coefficient is equal to zero. In this case the constant is highly significant ($p < 0.05$). Exp(B) represents the odds ratio associated with a one unit change in the predictor variable. In this case it refers to the constant with an Exp(B) value of 0.293.

Table 10

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-1.228	.122	101.442	1	.000	.293

The "Score" column presents Wald statistics for variables X, Y and Z that are not included in the equation at this stage. The p values for X, Y and Z are greater than 0.05 indicating that they do not hold significance as predictors at this point. The "Overall Statistics" section provides an overview

of the significance of variables excluded from the equation, as a whole. The square value is 8.216 and has a p value of 0.042 indicating overall significance.

Table 11

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	X	.679	1	.410
		Y	.163	1	.686
		Z	2.618	1	.106
	Overall Statistics		8.216	3	.042

Block 1: Method = Enter – The omnibus test assesses both the significance of the model and its individual coefficients. In this scenario the model shows statistical significance at the 0.05 level.

Table 12

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	8.300	3	.040
	Block	8.300	3	.040
	Model	8.300	3	.040

The summary of the model provides insights into how it fits the data. The Cox & Snell R Square and Nagelkerke R Square are indicators of how much variance in the variable is explained by the model. In this case both measures indicate a low level of explanation suggesting that the model has limited ability to account for variations.

Table 13

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	402.649 ^a	.021	.033

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Looking at the classification table for Step 1 we can see that the model predicts "yes" 297 times and "no" 0 times with an accuracy rate of 77.3%. Interestingly there are no changes in performance compared to Block 0.

Table 14

Classification Table^a

	Observed		Predicted		
			Do you buy green cosmetics online		Percentage Correct
			yes	No	
Step 1	Do you buy green cosmetics online	yes	297	0	100.0
		No	87	0	.0
	Overall Percentage				77.3

a. The cut value is .500

During Step 1 three variables (X, Y, Z) were included in the equation along with a term. The Wald statistics and p values assess the significance of each variable. At this stage only variable Z shows a significant impact on the outcome (p = 0.022). The Exp(B) values represent odds ratios associated with a one-unit change, in each predictor variable.

Table 15

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	X	-.034	.052	.432	1	.511	.967
	Y	-.125	.100	1.569	1	.210	.882
	Z	.166	.072	5.270	1	.022	1.181
	Constant	-1.375	.452	9.242	1	.002	.253

a. Variable(s) entered on step 1: X, Y, Z.

Table 16

Result of Hypothesis Analysis

HYPOTHESIS	RESULT
H₁: Gender has an impact on GP Awareness	Accepted
H₂: Gender has an impact on GP Perceived value.	Accepted
H₃: Gender has an impact on trust on GP.	Accepted
H₄: Gender has an impact on buying the green cosmetics online.	Rejected
H₅: Age has an impact on GP Awareness	Accepted
H₆: Age has an impact on GP Perceived value.	Accepted
H₇: Age has an impact on trust on GP.	Accepted
H₈: Age impacts green cosmetics online buying.	Accepted
H₉: Familiarity with green products impacts Green Cosmetics buying behavior online.	Rejected
H₁₀: Online buying intentions impacts preference of environment over monetary benefits in purchasing cosmetics.	Rejected
H₁₁: Trust in the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing affects online buying of green products.	Accepted

H12: Online public reviews and feedback impact the green products' trustworthiness.	Accepted
H13: Governmental or third-party certifications improve reliability of green cosmetic products.	Accepted
H14: A green cosmetic product used by a celebrity/social influencer/opinionmaker impacts the product's reliability.	Accepted

4.2. DISCUSSION

This study empirically investigates three factors, among the several that previous studies have shown to be impactful on consumers' green product purchase intention, including green cosmetics.

While such studies were conducted in several developed and developing countries, with many researching Generation Z consumers, none were based on Lithuanian Generation Z consumers. As such, it is differentiated in that it explores Generation Z's green purchase intention based on factors identified, and largely validated, in other regions. Moreover, the study does not strictly rely on theories and models (e.g., Theory of Planned Behavior) already investigated at length (Limbu & Ahamed, 2023; Saran et al., 2023; Sethuraman et al., 2023; Djafarova & Fouts, 2022; Sun & Xing, 2022; Pop et al., 2020; Noor et al., 2017) but formulates an independent conceptual framework that, assuming on the basis of concrete research establishing Generation Z's relatively higher environmental awareness, concern/consciousness, and knowledge, and positive environmental attitude, has its sole focus product-specific factors' – green product awareness, perceived green product value, and green product trust – role in impacting sustainability-driven Generation Z's purchase intention of green cosmetics sold online.

Hence, this study aims to help fill the yet gaping void of limited existing literature on Generation Z's purchase intention for online shopping of green cosmetics (Ganeshan & Suresh, 2016). The study found that there is a link between gender and awareness of environmentally friendly products (GP) among Generation Z consumers (Jilkova & Kralova, 2020; Noor et al., 2017). Female participants showed a level of awareness compared to males and other gender groups. This suggests that gender plays a role in shaping how people perceive green cosmetics possibly influenced by societal norms and marketing strategies targeting different genders (Abdollahbeigi & Salehi, 2018).

Genders matter for the choice of using eco-friendly cosmetics (Wijekoon & Sabri, 2021). From the contingency table, the results of H₁ there seems some association between gender and GP

awareness. In each cell of the table the distribution of responses is presented, and the contingency coefficient indicates a moderate degree of association. It is important to point out the direction of the association which is also moderate. The number in each cell presents some information about male and female responses to the GP awareness question. For example, there are more females than males and other people in the “Agree” and “Partially Agree” columns. Cross Tabulation and Bar Chart for “Gender has an impact on GP Awareness” are presented in Annex-1. The gender of individuals influences their awareness of GP (Supported by measures such as the Contingency Coefficient, Pearson's R and Spearman Correlation). Whereas for H₂ The correlation methods (Pearson's R and Spearman Correlation) suggest weak positive correlation, though these correlations are not statistically significant. Thus, the relationship will not be strong and consistent across all variables. Gender has an effect on the perceived value of GP (Supported by logistic regression analysis with Z although the overall model fit is weak). Gender affects trust in GP, supported by logistic regression analysis with Z although the overall model fit is weak in case of H₃, however in case of H₄ the correlation measures point to the weak positive relationship but not significantly. The result did not support the hypothesis.

Just like gender, age has a strong impact in choosing green cosmetic products (Fu et al., 2022). The contingency coefficient (for H₅) suggests a moderate relationship, and both Pearson's R and Spearman correlation suggest weak positive correlations that is statistically significant. It shows that with increasing age, there is an inclination to GP awareness. However, the correlation is not very much, maybe other factors can also contribute to the GP awareness that are not considered in this analysis. Age, as a moderator variable, plays a role in influencing GP awareness (Supported by the Contingency Coefficient). However, in case of H₆, the contingency coefficient implies a moderate association. This implies that with increasing age, people are likely to consider purchasing cosmetics as expensive, and therefore, the environment takes a lower value. Age influences the perceived value of GP (Supported by the Contingency Coefficient but overall model fit is weak). Moreover, for H₇ the contingency coefficient showed moderate association, and both Pearson's R and Spearman correlation were moderately negatively correlated at the statistical significance level. The findings of this study indicate that age is positively associated with reduced levels of belief in the products offered by “green” cosmetic brands. Age impacts trust in GP (Supported by the Contingency Coefficient but overall model fit's weak). The results of H₈ show that with advance in age, the probability of buying green cosmetics online increases. Age influences purchase behavior for green cosmetics (Supported by the Contingency Coefficient but overall model fit is weak).

On the basis of the data of H₉, the hypothesis that familiarity with Green Cosmetics Product influences the probability of buying green cosmetics online can hardly be confirmed. The association is weak, with p-value being statistically nonsignificant and contingency coefficient. The correlation measures (Pearson's R and Spearman's correlation) also show very weak negative correlations that are not statistically significant. This implies that the familiarity with Green Cosmetics Product may not strongly correlate with buying behavior for green cosmetics online. The result did not support the hypothesis.

However, from the data of H₁₀, the hypothesis is only moderately supported that online buying intentions affect the preference for environment over money in purchasing cosmetics. The contingency coefficient shows the moderate association, but the correlation measures (Pearson's R and Spearman correlation) give a very weak positive correlation which is not statistically significant. This means that the relationship between online buying intentions and preference for the environment instead of for money may not be strong or consistent.

In case of H₁₁, it is important to note that both Pearsons R and Spearman Correlation show positive correlations that lack statistical significance. Overall, while there is an association between gender and the preference for friendly cosmetics its impact may not be strong or consistent across all measurement methods. The level of trust in information about cosmetics has an influence on online purchasing decisions. A logistic regression analysis was conducted with Z but the overall model fit was not particularly strong but has the inclination towards the acceptance of the hypothesis.

As suggested in the results if H₁₂, there is a moderate positive correlation between variables. The corresponding p-value (Approx. Sig.) is 0.161, which is greater than 0.05. This implies that the correlation is not significant statistically. But, according to the value of the Contingency Coefficient, which demonstrates a statistically significant link between gender and choice of green cosmetics, the hypothesis is embraced. The analysis provides a basis for saying that there is a link between gender and the tendency to seek reviews.

The results for H₁₃ are encouraging. The symmetric analysis and tables and graph shown (in Annex 13) that we are using chi square test, Contingency Coefficient, Pearson's R, Spearman Correlation and Bar Chart and this show that I value the certifications in my purchasing of cosmetics the p- value of Contingency Coefficient, Pearson's R and Spearman Correlation are less than $\alpha=0.05$. Moreover, the analysis provides support for H₁₄, and shows that when celebrities, social opinionmakers, or social influencers are involved the reliability of green cosmetic products is

impacted, particularly in terms of online buying behavior because the p- value of Contingency Coefficient, Pearson's R and Spearman Correlation are less than $\alpha=0.05$.

The findings highlight the influence of age on the awareness of friendly products (GP) among Generation Z consumers (Anbuselvan & Nivasini, 2020; Cheung et al., 2015). Older participants tended to have a level of awareness indicating a potential positive relationship between age and environmental consciousness. As Generation Z grows older their awareness and consideration for cosmetics may deepen, reflecting changes in their consumer mindset (Kreitzen, 2022; Kumudhini & Kumaran, 2020; Amberg & Fogarassy, 2019).

While logistic regression analysis indicated a connection between gender and perceived value (with Z) the overall model fit was not strong enough. This mixed support suggests that the relationship is more nuanced, emphasizing the need for exploration. Understanding the factors that contribute to perceived value beyond gender could unveil complex dynamics that influence Generation Zs preferences for green cosmetics. Like perceived value there was support in the relationship between gender and trust, in environmentally friendly products (GP). Logistic regression revealed a connection (with the variable Z). The overall fit of the model was limited. This emphasizes the intricacy of trust building factors and the need for an approach in marketing and communication strategies to enhance trust among Generation Z consumers (Cervellon & Carey, 2011).

Although there is an association between age and perceived value (Contingency Coefficient) it yielded a weak overall fit for the model. This suggests that while age contributes to how green cosmetics are perceived there are other variables that also play important roles in shaping Generation Zs assessment of environmentally conscious products worthiness.

Similarly significant links were found between age and trust in GP. Again, the overall model fit was modest. This indicates that while age is a contributing factor there are elements that influence Generation Z consumers establishment of trust in green cosmetic brands. The research uncovered a connection between age and online buying behavior for green cosmetics. Although the overall model fit was weak this correlation suggests that age plays a role in shaping Generation Zs preferences when it comes to purchasing cosmetics online. This aligns with the increasing impact of platforms, on consumer behaviors.

The relationship between online purchase intentions and the preference for friendly products (represented by variable Z) was found to be statistically significant through logistic regression analysis. However, it is important to note that the overall model fit was somewhat limited. This emphasizes the need for exploration into the various factors that motivate Generation Z when making

online purchasing decisions (Kumudhini & Kumaran, 2020; Ganeshan & Suresh, 2016), particularly their dedication to choosing environmentally conscious options.

Additionally trust in green cosmetic brands was found to have an impact on online buying behavior among Generation Z (also represented by variable Z). Although the model fit was not extensive it suggests that building trust in these brands plays a role in influencing their decision to make purchases. Understanding the elements that contribute to trust building is essential for developing effective marketing strategies (A & U, 2022; Sreen et al., 2018).

CONCLUSIONS, SUGGESTIONS AND PRACTICAL IMPLICATIONS OF THE STUDY BASED ON THE ANALYSIS OF RESEARCHED FACTORS

Findings of research stress the differences in green cosmetics awareness between male and female Generation Z consumers. However, some degree of awareness is exhibited by female consumers compared to male ones. This may imply that gender has a bearing on environmental awareness in this group (Chiang et al., 2022; Malar & R, 2023). Therefore, companies in the Green cosmetics industry need to take gender variations into account when formulating their marketing strategies. More effectiveness in raising overall awareness can be achieved by producing campaigns that appeal to what consumers value and prefer (Amberg & & Fogarassy, 2019).

In addition, age comes out as a determinant of environmental consciousness among Generation Z. The study shows that older group of people in this demography has a consciousness concerning the green cosmetics (Ganeshan & Suresh, 2016). This shows how the values of generation Z about the environment change as they grow (First Insight, 2021). Thus, for effective engagement with this demographic, demographic businesses can utilize age specific communication strategies. Promotional campaigns can be more relevant and effective by customizing marketing efforts to suit the likes and worries of the various age groups of Generation Z (A & U, 2022). Although the research showed some links between gender, perceived value of green cosmetics, and trust in green cosmetics among Generation Z consumers, these relationships are complex and multifaceted. Generation Z perceives value and trust with regard to cosmetics is heavily influenced by other factors than gender (Suhartanto et al., 2021).

Celebrities and influencers using green products is important because they can convince Generation Z consumers. Their influence matters a lot. When famous people support a brand, it helps make the brand more believable and trusted. In the world of natural makeup, famous people and

popular figures help to promote its use (Al Mamun et al., 2023). They shape what people think about it and how likely they are to buy it (Al Mamun et al., 2023; Macheka et al., 2023; Waqas et al., 2020).

The online internet world helps shape Generation Z's choices to buy eco-friendly cosmetics (Fu et al., 2022; Huang & Chen, 2006). The digital world affects how Generation Z people buy green cosmetics (Macheka T. Q., 2023; Hui He, 2020). It helps them learn, meet friends, be clear about things and use tech tools (Jilkova & Kralova, 2020). This effect makes it important for companies to understand and use these methods if they want to succeed in selling green cosmetics online to Generation Z (Srisathan W. A. et al., 2023).

The comments and scores parts on internet sites are very important for Generation Z buyers. They help them learn more (Macheka T. Q., 2023; Sebastianelli & Tamimi, 2018). When people read honest reviews, it affects their trust and choice to buy something. Looking at the effect of these parts gives information about how much friends' opinions matter (Wiencierz et al., 2015; Teixeira et al., 2023). This helps to see how good or bad comments about green makeup change how they are seen (Sebastianelli & Tamimi, 2018). This search is important for companies trying to create and keep trust in the online shopping place.

Getting to know a product well is very important in how Generation Z thinks about buying green beauty products. It affects trust, feelings of connection, and consistent choices of brands (Bramah & Tweneboah-Koduah, 2011). Since knowing a brand well is linked to good opinions, fair actions, and people recommending them, green makeup businesses have to really try to make and keep familiarity (Chin et al., 2019; Seal & Bag, 2022). This is necessary if they want Generation Z customers to remain faithful and continue buying from them.

Certificates are very important because they show that a company is really good and cares about the environment, which can change how Generation Z wants to buy green cosmetics (Brach et al., 2018; Lin et al., 2018). Certificates are important in making decisions. They help build trust, match values, and separate products from each other (van der Zee, 2018). They are necessary for businesses going after Gen Z in the green cosmetics market.

Implications of the Study

It is essential for people to accept change and appreciate the changing environmental values for Generation Z. For the engagement purposes, communication and presentation formats should be made that meet the changing needs of different age groups (Cervellon & Carey, 2011). During life stages the needs, preferences and values change significantly among human beings. These shifts can

assist organizations in developing a connection with their target audience. Build meaningful connections (Zhao et al., 2021). A vital issue that should be taken into account is shifts in the priorities of age groups (A & U, 2022). For instance, younger demographics such as Generation Z usually prioritize authenticity, social responsibility as well as personalized experiences (AnsuMensah P. , 2021). Such consumers adore brands that align with their values and are engaged in relevant causes. Therefore, creating communication that focus on these elements and products or services could work well (Hope, 2022).

Online platforms should put the users first by providing enriching experiences. This should, focus on optimizing responsiveness and incorporating elements to enhance the overall user experience through smooth navigation (Grădinaru et al., 2022) as it is that obvious from the results section that reviews, celebrities, influencers add to the trust of the consumers. It is crucial to use social media power to build communities across different social media (Zhang et al., 2023). We can use user generated content to reach this since it is essential in helping to create an authenticity with the brand and meaningful connections (Braithair & Tweneboah-Koduah, 2011). These conversations must be promoted and encouraged to revolve around the same principles and convictions.

Limitations and future research directions

The study is based in Lithuania. Therefore, its findings are limited in their insight on Generation Z cohort as a whole (Amberg & & Fogarassy, 2019). Due to the varying definitions of Generation Z's age bracket, only respondents who strictly matched the widely accepted temporal regime, i.e., born between 1995 – 2010 were analyzed. As such, the findings do not necessarily encompass all bordering age groups, however reflective of the broader Generation Z demographic they might be. As widely researched, purchase intention is not an absolute determinant of purchase decision/behavior. As such, the results of this study may not be indicative of Generation Z's eventual green cosmetic-related purchase behavior online. Furthermore, respondents' social desirability bias is a common occurrence. Lastly, the study only investigates three variables in relation to their impact on purchase intention of online-bought green cosmetics (Srisathan W. A. et al., 2023). Purchase intention is a function of a multitude of variables. Therefore, this study's findings, discussion, and recommendations lack the holistic perspective recommended to make crucial commercial, academic, and/or personal decisions in a capacity even remotely similar to the content researched herein.

By taking this approach businesses can ensure that their marketing efforts truly represent the nature of their target audience (Rani & Bharatwal, 2022). It is essential for companies to approach

this task with sincerity avoiding gestures and instead emphasizing authentic stories and experiences that create a strong bond, with Generation Z (Wijekoon & Sabri, 2021; Al-Haddad et al., 2020).

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ANNEXES

ANNEX 1

H₁: GENDER HAS AN IMPACT ON GP AWARENESS

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Contingency				
Nominal Coefficient	.376			
Interval by Pearson's R				.000
Ordinal by Spearman	-.263	.048	-5.319	.000 ^c
Ordinal Correlation	-.257	.048	-5.204	.000 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

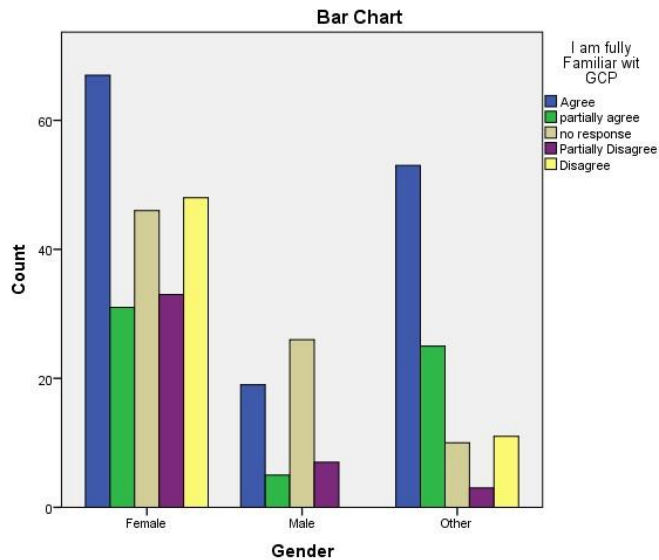
b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Crosstab

Count

	I am fully Familiar with GCP					Total
	Agree	partially agree	no response	Partially Disagree	Disagree	
Female	67	31	46	33	48	225
Male	19	5	26	7	0	57
Other	53	25	10	3	11	102
Total	139	61	82	43	59	384



ANNEX 2

H₂: GENDER HAS AN IMPACT ON GP PERCEIVED VALUE.

Symmetric Measures

	Value	Asymp. Error ^a	Std. Approx. T ^b	Approx. Sig.
Nominal by Nominal Contingency Coefficient	.293			.000
Interval by Interval Pearson's R	.027	.051	.536	.593 ^c
Ordinal by Ordinal Spearman Correlation	.020	.051	.389	.697 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

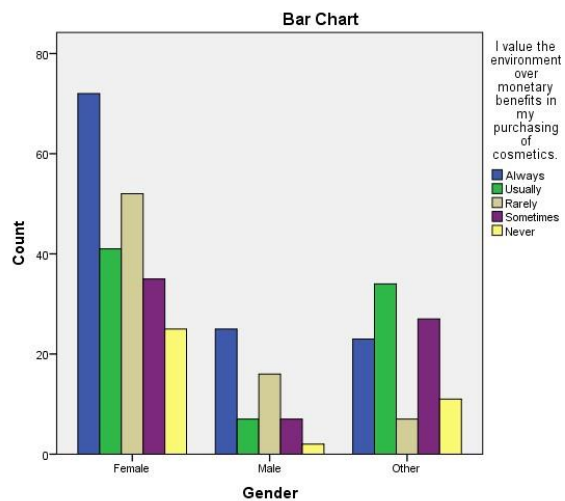
b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Crosstab

Count

	I value the environment over monetary benefits in my purchasing of cosmetics.					Total
	Always	Usually	Rarely	Sometimes	Never	
Female	72	41	52	35	25	225
Male	25	7	16	7	2	57
Other	23	34	7	27	11	102
Total	120	82	75	69	38	384



ANNEX 3

H₃: GENDER HAS AN IMPACT ON TRUST ON GP.

Symmetric Measures

	Value	Asymp. Error ^a	Std.	Approx. T ^b	Approx. Sig.

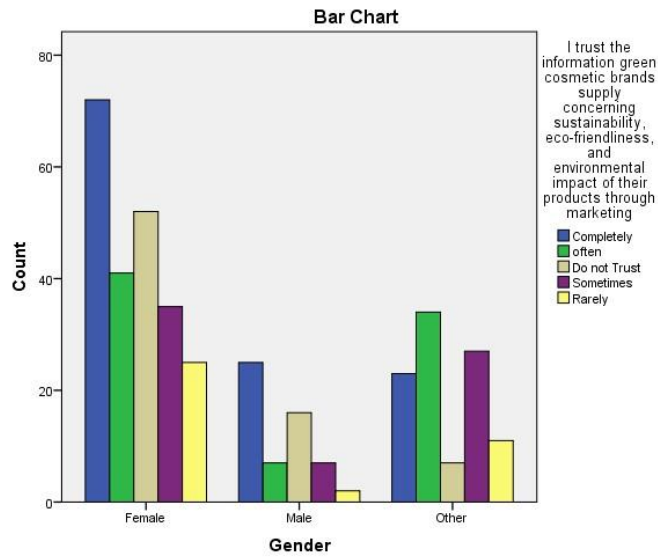
Nominal by Contingency					
Nominal Coefficient	.293				.000
Interval by Interval Pearson's R	.027	.051	.536		.593 ^c
Ordinal by Ordinal Spearman Correlation	.020	.051	.389		.697 ^c
N of Valid Cases	384				

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Crosstab

Count

	I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing					Total
	Completely	often	Do not Trust	Sometimes	Rarely	
Female	72	41	52	35	25	225
Male	25	7	16	7	2	
Other	23	34	7	27	11	
Total	120	82	75	69	38	102
						384



ANNEX 4

H4: GENDER HAS AN IMPACT ON BUYING THE GREEN COSMETICS ONLINE.

Symmetric Measures

	Value	Asymp. Error ^a	Std. Approx. T ^b	Approx. Sig.
Nominal by Nominal Contingency Coefficient	.144			.017
Interval by Interval Pearson's R	.085	.054	1.673	.095 ^c
Ordinal by Ordinal Spearman Correlation	.072	.054	1.406	.161 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

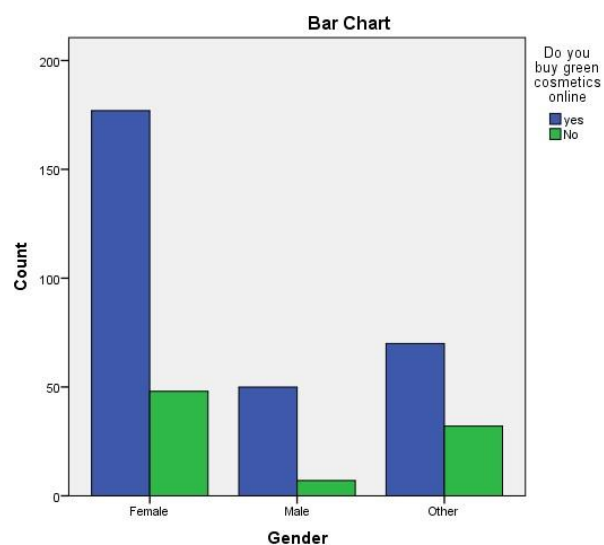
c. Based on normal approximation.

Crosstab

Count

	Do you buy green cosmetics online		Total
	yes	No	

	Female	177	48	225
Gender	Male	50	7	57
	Other	70	32	102
Total		297	87	384



ANNEX 5

H₅: AGE HAS AN IMPACT ON GP AWARENESS.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Contingency	.376			.000
Nominal Coefficient				
Interval by Interval Pearson's R	.110	.048	2.162	.031 ^c
Ordinal by Ordinal Spearman Correlation	.140	.048	2.759	.006 ^c
N of Valid Cases	384			

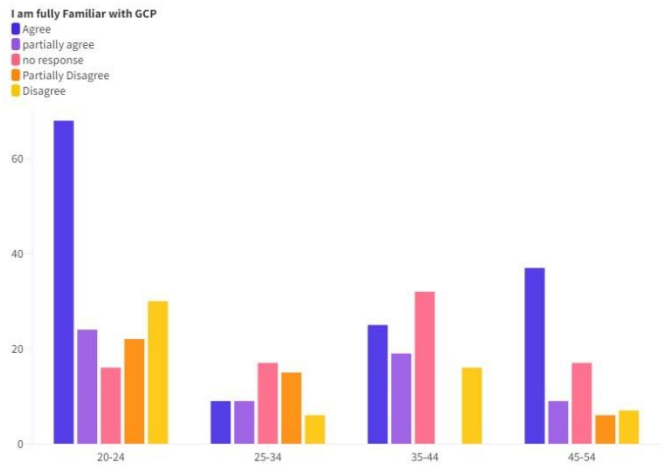
a. Not assuming the null hypothesis.

- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Crosstab

Count

		I am fully Familiar with GCP					Total
		Agree	partially agree	no response	Partially Disagree	Disagree	
Age	20-24	68	24	16	22	30	160
	25-34	9	9	17	15	6	56
	35-44	25	19	32	0	16	92
	45-50	37	9	17	6	7	76
Total		139	61	82	43	59	384



ANNEX 6

H₆: AGE HAS AN IMPACT ON GP PERCEIVED VALUE.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.

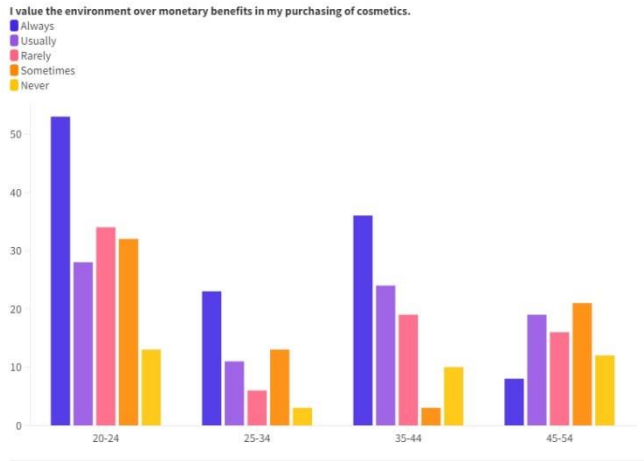
Nominal by Contingency					
Nominal Coefficient	.308				.000
Interval by Interval Pearson's R	-.216	.049	-4.316		.000 ^c
Ordinal by Ordinal Spearman Correlation	-.230	.048	-4.618		.000 ^c
N of Valid Cases	384				

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Crosstab

Count

	I value the environment over monetary benefits in my purchasing of cosmetics.					Total
	Always	Usually	Rarely	Sometimes	Never	
Age 20-24	53	28	34	32	13	160
25-34	23	11	6	13	3	56
35-44	36	24	19	3	10	92
45-54	8	19	16	21	12	76
Total	120	82	75	69	38	384



ANNEX 7

H₇: AGE HAS AN IMPACT ON TRUST ON GP.

Symmetric Measures

	Value	Asymp. Error ^a	Std. T ^b	Approx. Sig.
Nominal by Contingency				
Nominal Coefficient	.308			.000
Interval by Interval Pearson's R	-.216	.049	-4.316	.000 ^c
Ordinal by Ordinal Spearman Correlation	-.230	.048	-4.618	.000 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

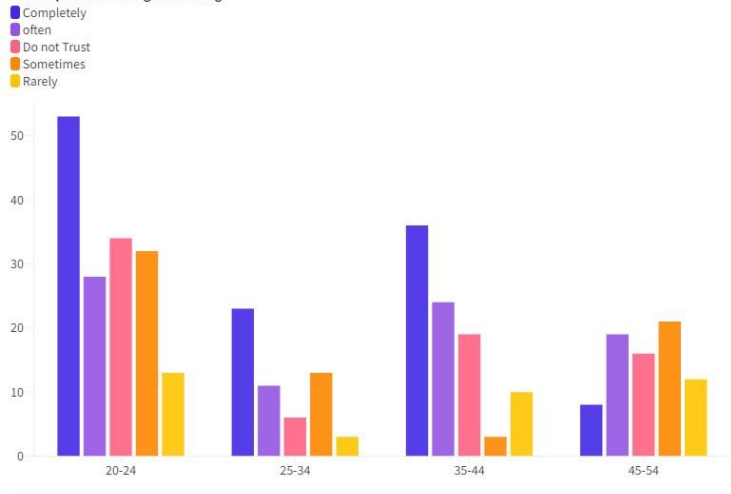
Crosstab

Count

	I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing					Total
	Completel y	often	Do not Trust	Sometimes	Rarely	

20-24	53	28	34	32	13	160
Age 25-34	23	11	6	13	3	56
35-44	36	24	19	3	10	92
45-54	8	19	16	21	12	76
Total	120	82	75	69	38	384

I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing



ANNEX 8

H₈: AGE IMPACTS GREEN COSMETICS ONLINE BUYING.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Contingency				
Nominal Coefficient	.177			.006
Interval by Interval Pearson's R	.128	.047	2.531	.012 ^c
Ordinal by Ordinal Spearman Correlation	.140	.046	2.756	.006 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Crosstab

Count

		Do you buy green cosmetics online		Total
		yes	No	
Age	20-24	120	40	160
	25-34	39	17	56
	35-44	68	24	92
	45-54	70	6	76
	Total	297	87	384

ANNEX 9

H₉: Familiarity with green products impacts Green Cosmetics buying behavior online.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.127			.175
Interval by Interval	Pearson's R	-.054	.050	-1.060	.290 ^c
Ordinal by Ordinal	Spearman Correlation	-.053	.050	-1.041	.299 ^c
N of Valid Cases		384			

a. Not assuming the null hypothesis.

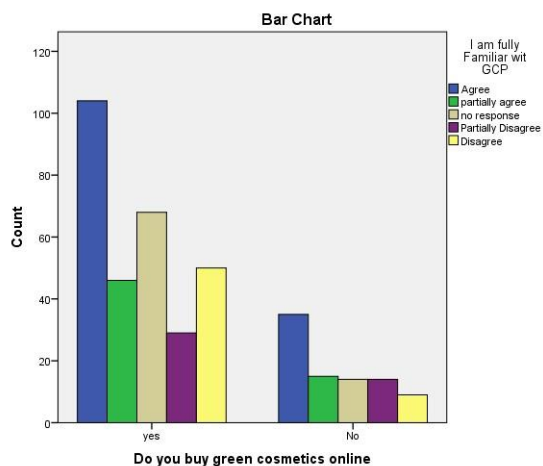
b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Crosstab

Count

		I am fully Familiar with GCP					Total
		Agree	partially agree	no response	Partially Disagree	Disagree	
Do you buy green cosmetics online	yes	104	46	68	29	50	297
	No	35	15	14	14	9	87
Total		139	61	82	43	59	384



ANNEX 10

H₁₀: ONLINE BUYING INTENTIONS IMPACTS PREFERENCE OF ENVIRONMENT OVER MONETARY BENEFITS IN PURCHASING COSMETICS.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Contingency	.187			.007
Nominal Coefficient				
Interval by Interval Pearson's R	.051	.052	1.000	.318 ^c
Ordinal by Ordinal Spearman Correlation	.049	.052	.957	.339 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

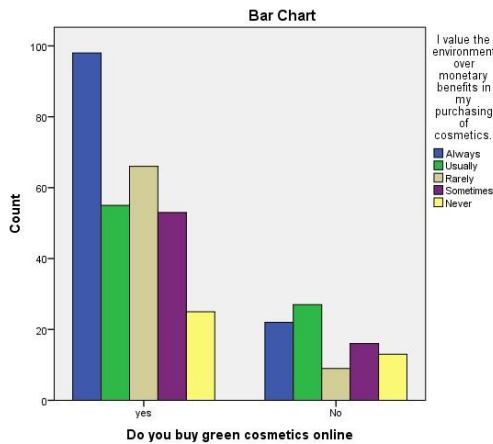
b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Crosstab

Count

		I value the environment over monetary benefits in my purchasing of cosmetics.					Total
		Always	Usually	Rarely	Sometimes	Never	
Do you buy green cosmetics online	yes	98	55	66	53	25	297
	No	22	27	9	16	13	87
Total		120	82	75	69	38	384



ANNEX 11

H₁₁: TRUST IN THE INFORMATION GREEN COSMETIC BRANDS SUPPLY CONCERNING SUSTAINABILITY, ECO-FRIENDLINESS, AND ENVIRONMENTAL IMPACT OF THEIR PRODUCTS THROUGH MARKETING AFFECTS ONLINE BUYING OF GREEN PRODUCTS.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal	by Contingency	.187			.007
Nominal	Coefficient				

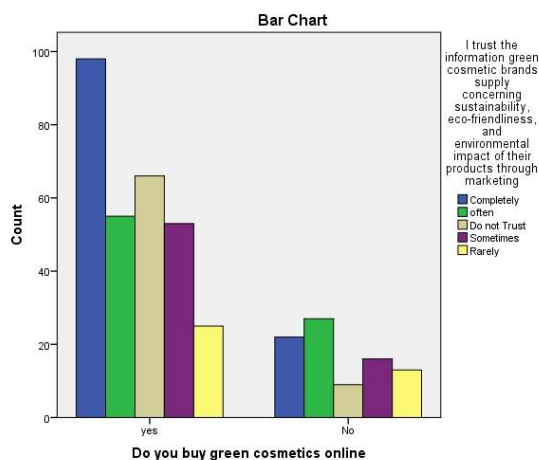
Interval by Interval	Pearson's R	.051	.052	1.000	.318 ^c
Ordinal by Ordinal	Spearman Correlation	.049	.052	.957	.339 ^c
N of Valid Cases		384			

- Not assuming the null hypothesis.
- Using the asymptotic standard error assuming the null hypothesis.
- Based on normal approximation.

Crosstab

Count

		I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing					Total
		Completely	often	Do not Trust	Sometimes	Rarely	
Do you buy green cosmetics online	yes	98	55	66	53	25	297
	No	22	27	9	16	13	87
Total		120	82	75	69	38	384



ANNEX 12

H₁₂: ONLINE PUBLIC REVIEWS AND FEEDBACK IMPACT THE GREEN PRODUCTS' TRUSTWORTHINESS.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.144			.017
Interval by Interval	Pearson's R	.085	.054	1.673	.095 ^c
Ordinal by Ordinal	Spearman Correlation	.072	.054	1.406	.161 ^c
N of Valid Cases		384			

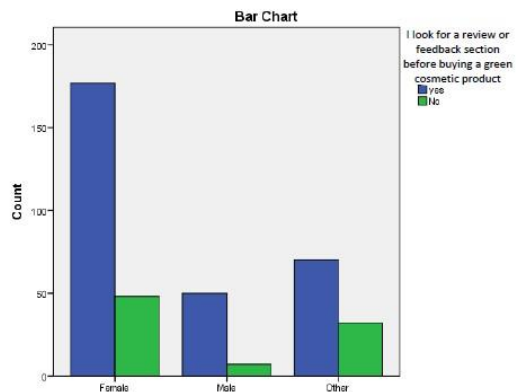
a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Crosstab Count

		I look for a review or feedback section before buying a green cosmetic product		Total
		yes	No	
Gender	Female	177	48	225
	Male	50	7	57
	Other	70	32	102
	Total	297	87	384



ANNEX 13

H₁₃: GOVERNMENTAL OR THIRD-PARTY CERTIFICATIONS IMPROVE RELIABILITY OF GREEN COSMETIC PRODUCTS.

Symmetric Measures

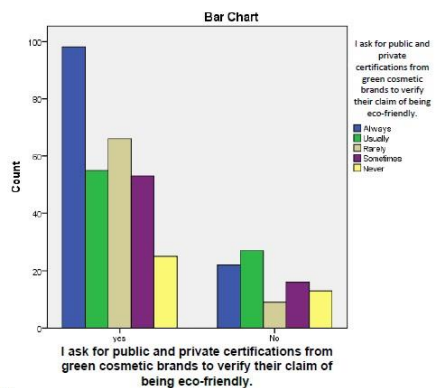
	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Contingency				
Nominal Coefficient	.187			.007
Interval by Interval Pearson's R	.051	.052	1.000	.318 ^c
Ordinal by Ordinal Spearman	.049	.052	.957	.339 ^c
Ordinal by Ordinal Correlation				
N of Valid Cases	384			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Crosstab

Count

		I ask for public and private certifications from green cosmetic brands to verify their claim of being eco-friendly.					Total
		Always	Usually	Rarely	Sometimes	Never	
Do you buy green cosmetics online	yes	98	55	66	53	25	297
	No	22	27	9	16	13	87
Total		120	82	75	69	38	384



ANNEX 14

H₁₄: A GREEN COSMETIC PRODUCT USED BY A CELEBRITY/SOCIAL INFLUENCER/OPINIONMAKER IMPACTS THE PRODUCT'S RELIABILITY.

Symmetric Measures

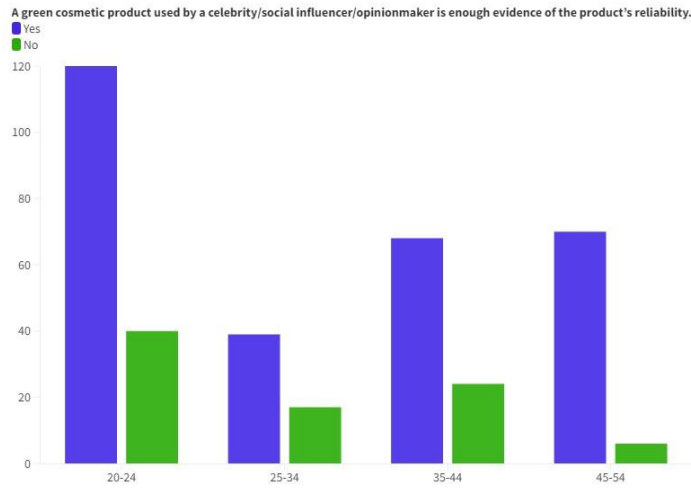
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.177			.006
Interval by Interval	Pearson's R	.128	.047	2.531	.012 ^c
Ordinal by Ordinal	Spearman Correlation	.140	.046	2.756	.006 ^c
N of Valid Cases		384			

- Not assuming the null hypothesis.
- Using the asymptotic standard error assuming the null hypothesis.
- Based on normal approximation.

Crosstab

Count

		A green cosmetic product used by a celebrity/social influencer/opinionmaker is enough evidence of the product's reliability.		Total
		yes	No	
Age	20-24	120	40	160
	25-34	39	17	56
	35-44	68	24	92
	45-54	70	6	76
	Total	297	87	384



ANEEX 15
FURTHER ANALYSIS
GENDER * I AM FULLY FAMILIAR WITH GCP.

Crosstab Count

	I am fully Familiar wit GCP					Total
	Agree	partially agree	no response	Partially Disagree	Disagree	
Female	67	31	46	33	48	225
Gender Male	19	5	26	7	0	57
Other	53	25	10	3	11	102
Total	139	61	82	43	59	384

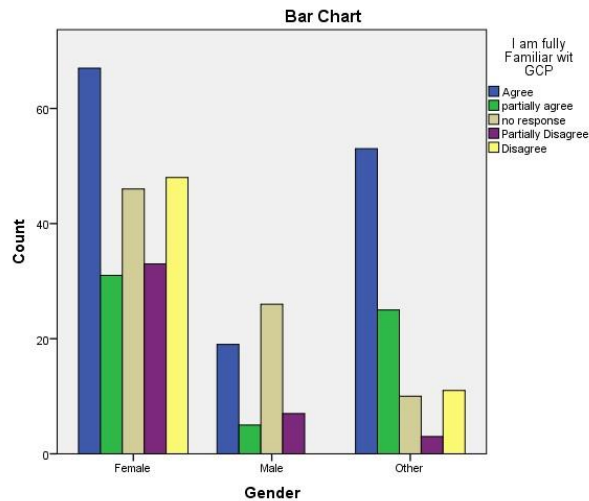
Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Contingency Coefficient	.376			.000
Interval by Interval Pearson's R	-.263	.048	-5.319	.000 ^c
Ordinal by Ordinal Spearman Correlation	-.257	.048	-5.204	.000 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



GENDER * I VALUE THE ENVIRONMENT OVER MONETARY BENEFITS IN MY PURCHASING OF COSMETICS.

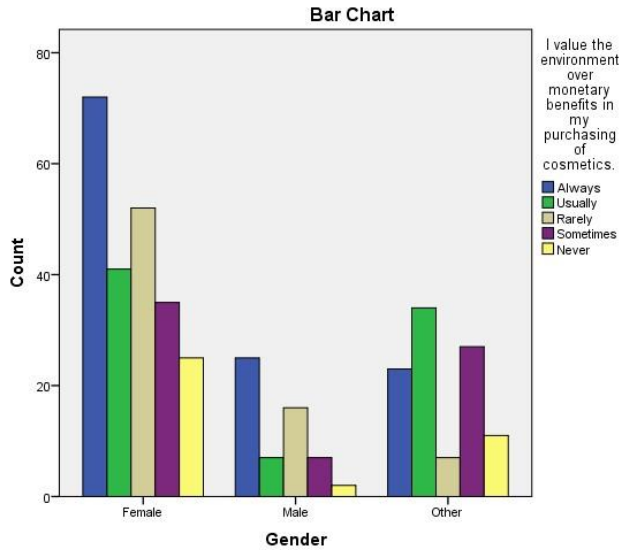
Crosstab

	I value the environment over monetary benefits in my purchasing of cosmetics.					Total
	Always	Usually	Rarely	Sometimes	Never	
Female	72	41	52	35	25	225
Gender Male	25	7	16	7	2	57
Other	23	34	7	27	11	102
Total	120	82	75	69	38	384

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.293			.000
Interval by Interval	Pearson's R	.027	.051	.536	.593 ^c
Ordinal by Ordinal	Spearman Correlation		.051	.389	.697 ^c
N of Valid Cases		.020 384			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.



GENDER * I TRUST THE INFORMATION GREEN COSMETIC BRANDS SUPPLY CONCERNING SUSTAINABILITY, ECO-FRIENDLINESS, AND ENVIRONMENTAL IMPACT OF THEIR PRODUCTS THROUGH MARKETING.

Crosstab

	I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing					Total
	Completely	often	Do not Trust	Sometimes	Rarely	
Gender Female	72	41	52	35	25	225
Male	25	7	16	7	2	57
Other	23	34	7	27	11	102
Total	120	82	75	69	38	384

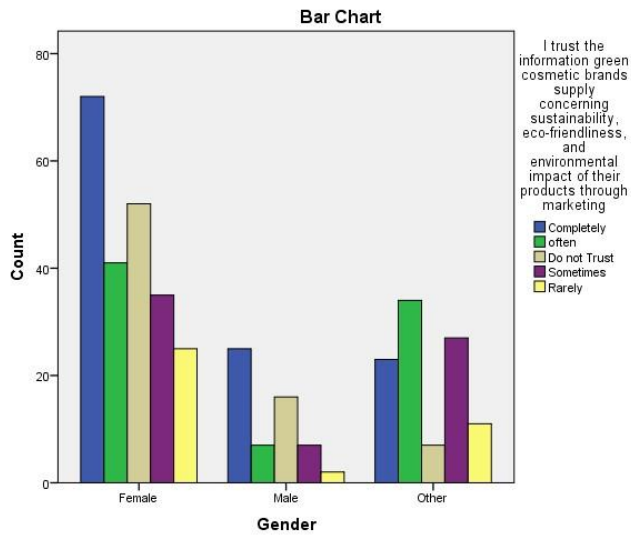
Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Contingency Coefficient	.293			.000
Interval by Interval Pearson's R	.027	.051	.536	.593 ^c
Ordinal by Ordinal Spearman Correlation	.020	.051	.389	.697 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



AGE * I AM FULLY FAMILIAR WITH GCP.

Crosstab

Count

		I am fully Familiar with GCP					Total
		Agree	partially agree	no response	Partially Disagree	Disagree	
Age	20-24	68	24	16	22	30	160
	25-34	9	9	17	15	6	56
	35-44	25	19	32	0	16	92
	45-54	37	9	17	6	7	76

Total	139	61	82	43	59	384
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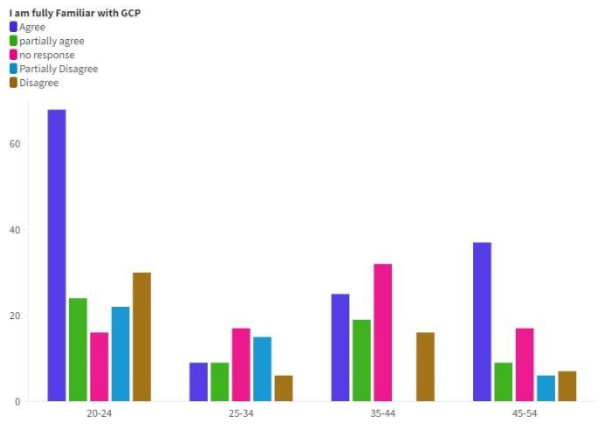
Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Contingency				
Nominal Coefficient	.376			.000
Interval by Interval Pearson's R	.110	.048	2.162	.031 ^c
Ordinal by Ordinal Spearman Correlation	.140	.048	2.759	.006 ^c
N of Valid Cases	384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



AGE * I VALUE THE ENVIRONMENT OVER MONETARY BENEFITS IN MY PURCHASING OF COSMETICS.

Crosstab

Count

	I value the environment over monetary benefits in my purchasing of cosmetics.					Total
	Always	Usually	Rarely	Sometimes	Never	
20-24	53	28	34	32	13	160
25-34	23	11	6	13	3	56
35-44	36	24	19	3	10	92

45-54	8	19	16	21	12	76
Total	120	82	75	69	38	384

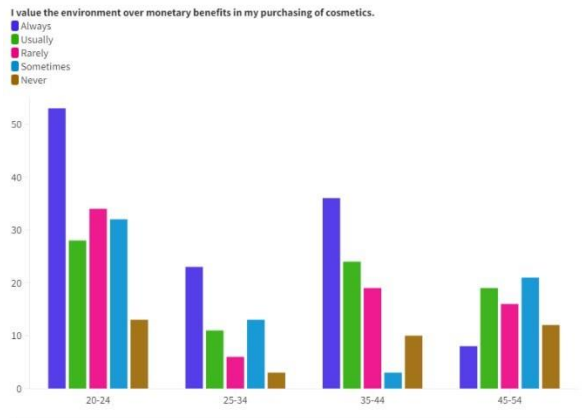
Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.308			.000
Interval by Interval	Pearson's R	-.216	.049	-4.316	.000 ^c
Ordinal by Ordinal	Spearman Correlation	-.230	.048	-4.618	.000 ^c
N of Valid Cases		384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



AGE * I TRUST THE INFORMATION GREEN COSMETIC BRANDS SUPPLY CONCERNING SUSTAINABILITY, ECO-FRIENDLINESS, AND ENVIRONMENTAL IMPACT OF THEIR PRODUCTS THROUGH MARKETING.

Crosstab

Count

	I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing	Total
--	--	-------

	Completely	often	Do not Trust	Sometimes	Rarely	
	53	28	34	32	13	160
Age 20-24	23	11	6	13	3	56
Age 25-34	36	24	19	3	10	92
Age 35-44	8	19	16	21	12	76
Age 45-54	8	19	16	21	12	76
Total	120	82	75	69	38	384

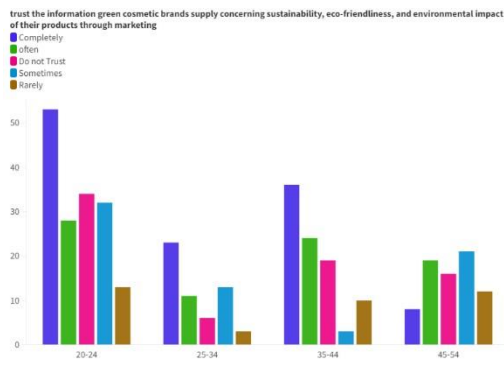
Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Contingency Coefficient	.308			.000
Interval by Interval Pearson's R	-.216			.000 ^c
Ordinal by Ordinal Spearman Correlation	-.230			.000 ^c
N of Valid Cases	384	.049	-4.316	
		.048	-4.618	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



DO YOU BUY GREEN COSMETICS ONLINE * I AM FULLY FAMILIAR WIT GCP.

Crosstab

Count

	I am fully Familiar wit GCP	Total

		Agree	partially agree	no response	Partially Disagree	Disagree	
Do you buy green cosmetics online	yes	104	46	68	29	50	297
	No	35	15	14	14	9	87
Total		139	61	82	43	59	384

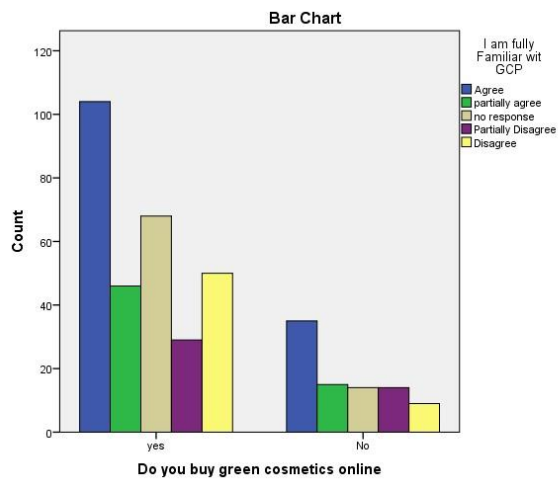
Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.127			.175
Interval by Interval	Pearson's R	-.054	.050	-1.060	.290 ^c
Ordinal by Ordinal	Spearman Correlation	-.053	.050	-1.041	.299 ^c
N of Valid Cases		384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



DO YOU BUY GREEN COSMETICS ONLINE * I VALUE THE ENVIRONMENT OVER MONETARY BENEFITS IN MY PURCHASING OF COSMETICS.

Crosstab Count

	I value the environment over monetary benefits in my purchasing of cosmetics.	Total
--	---	-------

		Always	Usually	Rarely	Sometimes	Never	
Do you buy green cosmetics online	yes	98	55	66	53	25	297
	No	22	27	9	16	13	87
Total		120	82	75	69	38	384

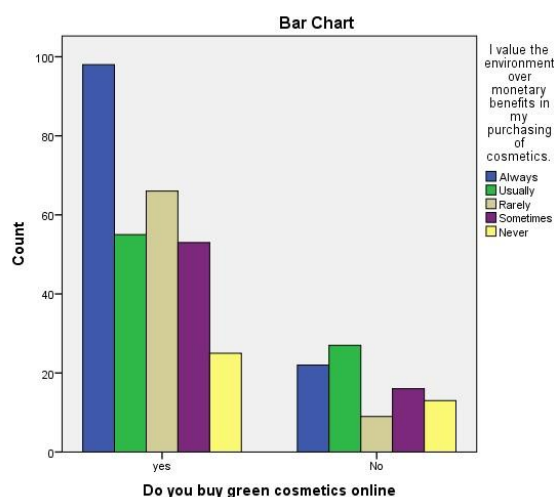
Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.187			.007
Interval by Interval	Pearson's R	.051	.052	1.000	.318 ^c
Ordinal by Ordinal	Spearman Correlation	.049	.052	.957	.339 ^c
N of Valid Cases		384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



DO YOU BUY GREEN COSMETICS ONLINE * I TRUST THE INFORMATION GREEN COSMETIC BRANDS SUPPLY CONCERNING SUSTAINABILITY, ECO-FRIENDLINESS, AND ENVIRONMENTAL IMPACT OF THEIR PRODUCTS THROUGH MARKETING.

Crosstab Count

		I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing					Total
		Completely	often	Do not Trust	Sometimes	Rarely	
Do you buy green cosmetics online	yes	98	55	66	53	25	297
	No	22	27	9	16	13	87
Total		120	82	75	69	38	384

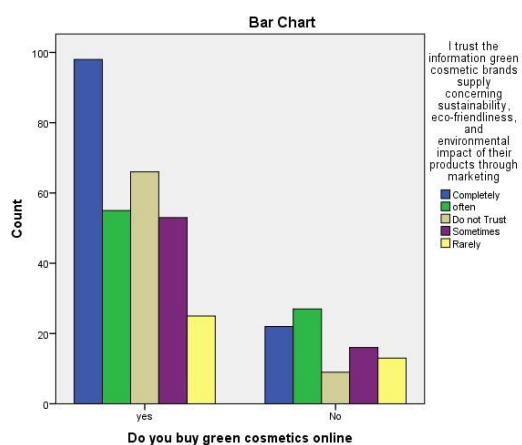
Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.187			.007
Interval by Interval	Pearson's R	.051	.052	1.000	.318 ^c
Ordinal by Ordinal	Spearman Correlation	.049	.052	.957	.339 ^c
N of Valid Cases		384			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



ANNEX 16 NOTES AND SUMMARIES

Notes

Output Created

10-DEC-2023 13:08:36

Comments		C:\Users\PC\Documents\U ntitled1.sav DataSet1
	Data	<none>
	Active Dataset	
	Filter	
Input	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	384
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
		CROSSTABS /TABLES=Gender Age BY Q1 Q6 Q11 Q16 /FORMAT=AVALUE TABLES /STATISTICS=CC CORR /CELLS=COUNT /COUNT ROUND CELL /BARCHART.
Syntax		
	Processor Time	00:00:01.48
	Elapsed Time	00:00:01.59
	Dimensions Requested	2
Resources	Cells Available	174762

Case Processing Summary

	Cases		
	Valid	Missing	Total

	N	Percent	N	Percent	N	Percent
Gender * I am fully Familiar wit GCP	384	100.0%	0	0.0%	384	100.0%
Gender * I value the environment over monetary benefits in my purchasing of cosmetics.	384	100.0%	0	0.0%	384	100.0%
Gender * I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing	384	100.0%	0	0.0%	384	100.0%
Gender * Do you buy green cosmetics online	384	100.0%	0	0.0%	384	100.0%
Age * I am fully Familiar wit GCP	384	100.0%	0	0.0%	384	100.0%
Age * I value the environment over monetary benefits in my purchasing of cosmetics.	384	100.0%	0	0.0%	384	100.0%
Age * I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing	384	100.0%	0	0.0%	384	100.0%
Age * Do you buy green cosmetics online	384	100.0%	0	0.0%	384	100.0%

Notes

Output Created Comments	10-DEC-2023 13:13:44
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Input	Active Dataset	DataSet1	
	Filter	<none>	
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	Split File	<none>	
	N of Rows in Working Data File		384
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.	
Syntax		CROSSTABS /TABLES=Q16 BY Q1 Q6 Q11 /FORMAT=AVALUE TABLES /STATISTICS=CC CORR /CELLS=COUNT /COUNT ROUND CELL /BARCHART.	
	Processor Time		00:00:00.58
	Elapsed Time		00:00:00.58
	Dimensions Requested		2
Resources	Cells Available		174762

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Do you buy green cosmetics online * I am fully Familiar wit GCP	384	100.0%		0.0%		100.0%

Do you buy green cosmetics online * I value the environment over monetary benefits in my purchasing of cosmetics.	384	100.0%	0	0.0%	384	100.0%
Do you buy green cosmetics online * I trust the information green cosmetic brands supply concerning sustainability, eco-friendliness, and environmental impact of their products through marketing	384	100.0%	0	0.0%	384	100.0%

LOGISTIC REGRESSION

Notes

Output Created	10-DEC-2023 15:16:30
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Active Dataset	<none>
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Input	
Weight	
Split File	<none>
N of Rows in Working Data File	384
Missing Value Handling	User-defined missing values are treated as missing
Definition of Missing	LOGISTIC REGRESSION VARIABLES Q16 /METHOD=ENTER X Y Z /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) CUT(.5).
Syntax	
Processor Time	00:00:00.02

Resources	Elapsed Time	00:00:00.02
-----------	--------------	-------------

Case Processing Summary

Unweighted Cases ^a	N	Percent
Included in Analysis	384	100.0
Selected Cases Missing Cases	0	.0
Total	384	100.0
Unselected Cases	0	.0
Total	384	100.0

a. If weight is in effect, see classification table for the total number of cases.