

JGB 1702**Beauty Goes Green: Determinants of Sustainable Purchasing Behavior among
Gen X and Z Filipino Consumers***Nina Isabel Bautista, Jillian Shamira Palmiano, Alyanna Raiza Reyes,**Antonio Etrata Jr. & Ysabel Maria Louise San Juan**University of Santo Tomas**ninaisabel.bautista.comm@ust.edu.ph, jillianshamira.palmiano.comm@ust.edu.ph,**alyannaraiza.reyes.comm@ust.edu.ph, aeetrata@ust.edu.ph***Abstract**

Several companies have adopted sustainability as a business approach to create long-term value by ensuring that they operate ethically to protect social, ecological, and economic environments. Nowadays, the demand for sustainable products has increased in various industries, including cosmetics, and customers go through a complex process when deciding which products to buy. Hence, there is a lack of study in terms of determining the disparity between the purchasing behavior of Generation X and Z. With that, this study determined the specific difference between the purchasing behavior of Gen X and Z as green cosmetic product consumers and identified which among the factors; environmental consciousness, eco-label, attitude, green advertising, and price sensitivity significantly influence their buying behavior as well as their perception towards them. An online questionnaire was distributed to 385 respondents, and the data gathered for this quantitative study were analyzed through descriptive statistics, t-tests, and multiple linear regression. The findings of this study show that while all factors are perceived as necessary for both generations and have a role in their behavior as a

consumer of green cosmetics products, only price sensitivity significantly affects the purchasing behavior of Gen X. On the other hand, both eco-label and price sensitivity significantly affect Gen Z's purchasing behavior toward green cosmetic products.

Keywords: *Sustainable Purchasing Behavior, Gen X, Gen Z*

Introduction

The cosmetics industry is one of the rapidly growing industries at present. This is due to the products that they provide to the consumers and how important it is to their daily life. With that, cosmetics are defined as any mixture or matter that aims to contact a human body's external areas such as the skin, hair, nails, lips, etc. Moreover, this industry has a very competitive market environment. Hence, the pressure to constantly innovate and adapt to societal changes allows them to remain relevant in the ever-growing market.

However, there have been several issues with companies' operations in the cosmetics industry, like deforestation, animal testing, use of toxic chemicals, and improper disposal of waste resulting in a decline in the industry's growth. Hence, these companies then started creating products that contain green ingredients, use recyclable packaging, and create initiatives that contribute to improving the environment.

With that, this research will focus on the purchasing behavior of Generations X and Z. To differentiate; Generation X was born in the years when the world was slowly transitioning to the internet, while Generation Z was born in the years when the internet had already been part of an individual's everyday life. Additionally, it should be noted that in the Asia-Pacific region, the number of consumers interested in green products is the highest (Amberg & Fogarassy, 2019). With that, it is an excellent opportunity for cosmetic companies in the Philippines, for example,

to introduce green cosmetic products and to emphasize how they can strengthen their sustainable initiatives, given that there is a market they can serve.

With that, this paper aims to address the lack of study from an Eastern perspective and determine the factors that mainly influence Generations X and Z's purchase behavior on Green Cosmetic Products.

Review of Related Literature

Cosmetic Industry

According to Zollo et al. (2021), the cosmetic industry is rapidly growing. Thus, the desire to look young and well-groomed among consumers and people, in general, has also enabled the cosmetics industry to grow steadily in the last decade (Degirmen et al., 2022). Hence, the fleeting increase in demand for cosmetic products has driven global competition – motivating the industry to become more innovative and creative. The cosmetic industry has seven (7) categories to which oral care, skin care, sun care, hair care, makeup, body care, and fragrances belong (Cosmetic Products, 2023). On the other hand, according to Petruzzi (2023), in the Philippines, the most consumed cosmetics products are sequentially from the personal care, skin care, perfumes, and makeup categories.

Green Cosmetics: Sustainability in the Cosmetic Industry

Green cosmetics are defined as products that utilize natural components of the environment that create a significant impact on the conservation of the environment. In addition, according to Feng (2016), a cosmetic product can be called sustainable or 'green' if, first; the product does not have a short or long-term potential hazardous impact second if the product is manufactured in a sustainable process that utilizes raw materials for their formula, packaging, distribution, and the like. Several studies have shown that environmentally friendly products are

preferred more than conventional products, and a growing interest in responsible consumption and production is one of the critical issues determined within the context of the Sustainable Development Goals (SDGs) (Degirmen et al., 2022).

In support of this, today's adaptation to become "Green" is a basic need and an opportunity for both companies and consumers. Hence, companies adopting green marketing in order to support green products is a strategic move that will not only attract the interest of consumers who are environmentally aware but it will also get to retain them and give businesses a cutting edge (Kapoor et al., 2019; Zollo et al., 2021; Feng, 2016).

Environmental Consciousness

Environmental consciousness reflects an individual's knowledge about environmental issues and the impact of environmental-friendly practices. Moreover, environmentally conscious consumers are aware of how their consumption of products may affect the environment. Such consciousness stems from an individual's belief, disposition, and concern for the environment, potentially shaping one's buying decision (Tan et al., 2019). Thus, being environmentally conscious makes one knowledgeable of the harmful chemical ingredients that cosmetic products contain, which makes them prefer natural and organic products to potentially reduce harmful impacts on the environment (Feng, 2016). In support of this, as stated by Degirmen et al. (2022) and Tan et al. (2019), the number of consumers leaning towards desiring to reduce their environmental footprint by cutting out the purchase of products made of synthetic chemicals is rapidly increasing.

Eco-label

According to the study of Degirmen et al. (2022), the development of national eco-labeling criteria has been considered necessary to decrease the environmental pollution that

comes from the production and consumption of these products. In addition, eco-labels are the symbol or logo on the product that depicts that the product is sustainable and safe for the environment. Specifically, eco-labeling has been defined as any recognizable symbol attached to the product or its packaging, indicating a company or a product's performance is orientated by environmental friendliness, which is why it is regarded as one of the most recognizable attributes of green products to inform consumers (Song et al., 2019). According to Kumar & Singh (2019), eco-labels are often helpful to consumers when they purchase products, for the packaging is the most appealing factor, which initially impacts a consumer's purchasing decision and then paves the way to make the consumer environmentally aware.

Attitude

In research on green consumer psychology, attitude phenomena have consistently been highlighted as one crucial precursor of behavioral intention and actual conduct. According to Wang et al. (2020), attitude is the degree to which a person assesses a behavior positively or negatively. A study identified attitudes as a significant determinant of behavior, behavioral intentions, and explanatory variables of individual behavior (Kaufmann et al., 2012).

In accordance with Kaufmann et al. (2012), recent times have seen an increasing threat to consumer health and wellness worldwide from the existing deplorable environmental circumstances. As a result, consumers are becoming more environmentally conscious in their attitudes, preferences, and purchases. When someone has a positive attitude toward the environment, they are more concerned with environmental problems and pay more attention to eco-social advantages.

Green Advertising

Green marketing refers to the promotion of goods that are safe for both the environment and society at large (Sharma & Trivedi, 2018). To be more in-depth, green advertising is viewed as a crucial component of a business's entire environmental marketing strategy, which can help it achieve exceptional performance and create a lasting competitive edge (Kao & Du, 2019).

Environmental certifications granted to businesses, their products, and other environmental achievements are shared with consumers through green advertising (Kumar, 2017). From a consumer's perspective, green advertising promotes a green image and increases environmental consciousness (Kao & Du, 2019). Using these policy methods is crucial for changing consumer buying habits to favor environmentally friendly goods and minimizing the harmful effects of synthetic items on the environment (Delafrooz et al., 2014).

Price Sensitivity

Price sensitivity is the level of awareness and response consumer's exhibit when they discover differences in the prices of goods or services. Price has proven to substantially influence consumers' assessment of alternative products and their choice of purchase. Price serves as both an informational cue and a measure of sacrifice in customers' evaluations of alternative products; the former corresponds to the amount of money consumers must pay, while the latter alludes to the quality and prestige implied by ownership of the goods (Hsu et al., 2017).

Meanwhile, according to Erdil (2018), due to increased overhead expenses, green products typically cost more to produce than traditional products. Price has thus been recognized as a key barrier to green consumption (Chaudhary & Bisai, 2018). Customers eager to buy green items were willing to pay a relatively high price since they believed price had little bearing on

their decision to buy. However, not all eco-conscious consumers are prepared to shell out more money for eco-friendly goods.

Consumer Purchase Behavior

The belief that the planet is already suffering from high levels of pollution and deterioration has fueled the inception of the "movement" for protecting the environment – hence, a new market segment called "green consumers" emerged. They are the consumers who are more likely to adopt environmentally friendly practices (Paço et al., 2018). In line with this, there is an increasing trend toward having a 'clean' and 'healthy lifestyle'; hence, the demand for green cosmetics is gaining more popularity (Borges & Paananen, 2020). A study conducted by Castillo (2018) mentioned that the unique purchasing behavior of Filipino consumers is what they are known for since it has already become a way of life, and this can be seen through Filipino consumers' clear understanding of the products and services offered to them. The study on consumer behavior will provide information regarding the needs and wants of consumers and how they deliberate and choose a certain branded product (Bhuvaneshwari & Kanchana, 2020).

Generation X

Those in the Gen X were born between 1965 and 1976. They look for products that can aid them with their issues (Ng & Law, 2015). They are also said to have grown up in a time of rapid consumer change, making them more flexible (Fuciu, 2021). However, marketing for Gen X can sometimes be challenging since they are the digital and traditional generation. Several factors in the marketing process can trigger Gen X. (Slootweg & Rowson, 2018). When buying, they are inherently motivated and still use traditional decision-making methods with risk avoidance (Sedik et al., 2018). Moreover, social influence, environmental concern, self-image, and effectiveness also affect Gen X's green behavior (Fauzi & Hashim, 2015).

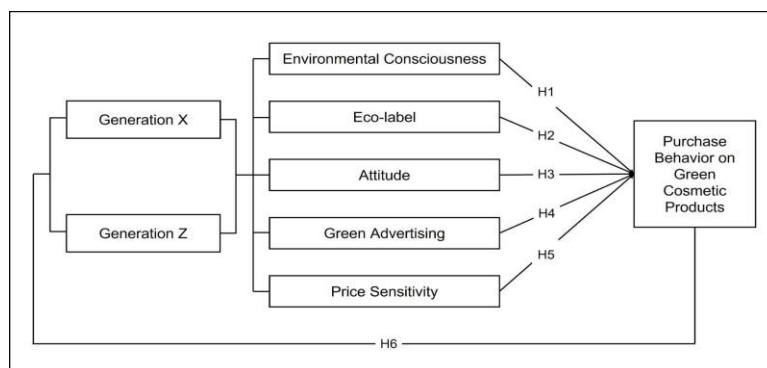
Generation Z

People who belong to Gen Z are born between 1995 and 2010 (Djafarova & Foots, 2022). This generation depends on technology and is highly aware of the most recent news and global crises (Djafarova & Foots, 2022). Moreover, Gen Z is more inclined to new technologies, physical stores, and brand loyalty (Sedik et al., 2018). Those who belong to Gen Z are the ones who are most eager to incorporate sustainability into their daily lives among the current consumer generations (Djafarova & Foots, 2022). In addition, this generation is more environmentally conscious and has a better attitude about buying green products (Lavuri et al., 2021). Although some research indicates that Gen Z looks for companies that they believe have a beneficial impact on the environment, other studies indicate that this generation is more environmentally conscious regarding attitudes than behavior (Djafarova & Foots, 2022).

Framework

Figure 1

Proposed Conceptual Framework



The model above shows a comparison of the results between two (2) generations, Gen X and Gen Z, about how the five (5) determinants of green purchasing behavior, which are environmental consciousness (IV1), eco-label (IV2), attitude (IV3), green advertising (IV4), and price sensitivity (IV5), individually affect (represented by individual arrows) their purchase

behavior on green cosmetic products (DV). At the end of the study, the researcher aims to determine how the two (2) generations differ in their green purchasing behavior.

The framework shown presents the independent and dependent variables, which have the following hypotheses: H1: Environmental consciousness significantly influences the purchase behavior of Gen X and Z on green cosmetic products; H2: Eco-labelling of products significantly influences the purchase behavior of Gen X and Z on green cosmetic products; H3: Gen X and Z's attitude towards the environment is directly associated with influencing their purchase behavior on green cosmetic products; H4: Gen X and Z's perception of green advertising significantly impact their purchase behavior on green cosmetic products; H5: Gen X and Z's price sensitivity significantly influence the purchase behavior on green cosmetic products; and H6: There is a significant difference on Gen X and Z's purchasing behavior on Green Cosmetic Products.

Methodology

The researchers used a quantitative approach to analyze the data accurately and, at the same time, provide an interpretation of the result. To be more specific, the research is descriptive quantitative research since it focuses on describing the characteristics of the researchers' chosen population. Moving forward, this study aimed to determine the difference between Gen X and Z's responses toward the factors influencing green purchasing behavior. Furthermore, the purposive sampling method was utilized to determine the research respondents.

Moreover, the instrument used for the quantitative data collection of this study is a researcher-made survey questionnaire. With a confidence level of 95%, a margin error of 5%, and a response distribution of 50%, a total sample size of 385 is obtained. The qualified respondents are from National Capital Region (NCR), belonging to either Gen X, those born

from years 1965 to 1980, or late Gen Z, those born from years 1997 to 2004. That said, respondents coming from Gen Z but were born from 2005 onwards need to be qualified as they are still under legal age as of the study. Additionally, the respondents went through a screening process. Hence, all qualified respondents are cosmetic product users aware of cosmetic companies' sustainable efforts.

On the other hand, descriptive statistics were deployed in the study. Thus, the mean and standard deviation of each factor was computed. This gave the researchers a summary of the data, which allowed it to include measures of averages, variability, and the like. The means of the data are interpreted as follows: 5.16 - 6.00 (Strongly Agree), 4.33 - 5.15 (Agree), 3.50 - 4.32 (Slightly Agree), 2.67 - 3.49 (Slightly Disagree), 1.84 - 2.66 (Disagree), and 1.00 - 1.83 (Strongly Disagree).

Furthermore, a t-test was also utilized to determine whether there is a significant difference between the two generations, Gen X and Gen Z, for each present factor. Withal, multiple linear regression was applied upon data gathering, seeing that multiple independent variables exist, such as environmental consciousness, eco-label, attitude, green advertising, and price sensitivity. Hence, this analysis allowed the researchers to assess the strength of the influence between the dependent variable and several independent variables that serve as predictors (Takemura, 2021).

Discussion of Results

Table 1

The demographic of the Respondents (n=385)

	Generation X		Generation Z	
	<i>f</i>	%	<i>f</i>	%
Gender				
Female	148	78.31	171	87.24
Male	41	21.69	25	12.76
Civil Status				
Single	64	33.86	195	99.49
Married	106	56.08	1	0.51
Separated	10	5.29		
Divorced	2	1.06		
Widowed	7	3.70		
Socio-Economic Class				
AB (Middle-Upper Class)	82	43.39	91	46.43
C1 (Lower Middle Class)	72	38.10	74	37.76
C2 (Skilled Working Class)	14	7.41	16	8.16
D (Working Class)	18	9.52	10	5.10
E (Lowest Level of Income)	3	1.59	5	2.55
Educational Attainment				
Associate's Degree	6	3.17	1	0.51
Bachelor's Degree	117	61.90	66	33.67
High School Diploma	12	6.35	70	35.71
Master's Degree	18	9.52	2	1.02
Some College, No Degree	36	19.05	57	29.08

The gathered data shows that most of the respondents were female for both Gen X (78.31%) and Gen Z (87.24%). Moreover, 56.07% of Gen X are married, while 99.49% of Gen Z are single, with the majority of both generations belonging to SEC AB accounting for 43.39% and 46.43%, respectively. Lastly, the highest educational attainment for most of Gen X is a Bachelor's degree (61.90%), while a high school diploma (35.71%) for Gen Z.

Table 2

Independent Sample T Test

	Generation	Mean	Std. Deviation	t	p
Environmental Consciousness	Gen X	4.348	.9351	-2.56	.011*
	Gen Z	4.583	.8668		
Eco-Label	Gen X	4.079	1.0735	-2.91	.004*
	Gen Z	4.383	.9765		
Attitude	Gen X	4.375	.9259	-2.48	.014*
	Gen Z	4.611	.9378		
Green Advertising	Gen X	4.213	.8920	-3.23	.001*
	Gen Z	4.507	.8886		
Price Sensitivity	Gen X	4.316	.7472	-2.75	.006*
	Gen Z	4.533	.8053		

Table 2 shows the factors influencing the purchasing behaviors of Gen X and Z – *environmental consciousness, eco-label, attitude, green advertising, and price sensitivity*. The results reveal significant differences in green purchasing behavior factors between the two (2) generations.

Table 3

Descriptive Statistics for Generation X (N = 189)

	Mean	Std. Deviation	p	Interpretation
Environmental Consciousness	4.348	.9351	.011*	Agree
Eco-Label	4.079	1.0735	.004*	Slightly Agree
Attitude	4.375	.9259	.014*	Agree
Green Advertising	4.213	.8920	.001*	Slightly Agree
Price Sensitivity	4.316	.7472	.006*	Slightly Agree

*Significant at $p < 0.05$

Table 4

Descriptive Statistics for Generation Z (N=196)

	Mean	Std. Deviation	p	Interpretation
Environmental Consciousness	4.583	.8668	.011*	Agree
Eco-Label	4.383	.9765	.004*	Agree
Attitude	4.611	.9378	.014*	Agree
Green Advertising	4.507	.8886	.001*	Agree
Price Sensitivity	4.533	.8053	.006*	Agree

*Significant at $p < 0.05$

Tables 3 and 4 describe the perception of the respondents from Gen X and Z for each factor, represented by their level of agreement through the interpretation of each mean score. For both generations, there are *significant differences* in all the factors given. In terms of their level of agreement, Gen X only shows two variabilities, *agreeing* to environmental consciousness and attitude while *slightly agreeing* to eco-label, green advertising, and price sensitivity. On the contrary, Gen Z exhibits no variability in terms of their level of agreement for each factor. The results reveal that Gen Z *agrees* that environmental consciousness, eco-label, attitude, green advertising, and price sensitivity contribute to their green purchasing behavior.

Table 5

Regression Analysis for Generation X

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.024	.261		7.741	.000
Environmental Consciousness	.017	.091	.021	.184	.854
Eco-Label	.150	.078	.218	1.918	.057
Attitude	-.050	.104	-.062	-.477	.634
Green Advertising	.091	.079	.110	1.151	.251
Price Sensitivity	.416	.084	.420	4.946	.000*

Dependent Variable: Consumer Purchase Behavior

Note: $R^2 = 0.391$, (N = 189, p = 0.00)

In line with Table 5, a multiple regression was calculated to predict which factors of green purchasing behavior influence Gen X. A significant regression equation was found ($F(5,183) = 23.503$, $p < 0.00$), with R^2 of 0.391. This means that 39.1% of the variation in Gen X's purchase behavior is because of the variation in several factors of green purchasing behavior. Gen X's purchase behavior equals $2.024 + 0.416Pr$, where Pr is price sensitivity. With this, the respondents' predicted purchase behavior increases by 0.416 for every one-unit increase in price. On the other hand, all other factors were found to be *insignificant* in affecting the purchase behavior of Gen X.

Table 6*Regression Analysis for Generation Z*

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.537	.258		5.970	.000
Environmental	.183	.095	.202	.1923	.056
Eco-Label	-.170	.078	-.211	-2.185	.030*
Attitude	.112	.113	.134	.992	.323
Green Advertising	.098	.096	.110	1.015	.311
Price Sensitivity	.469	.091	.480	5.176	.000*

Dependent Variable: Consumer Purchase Behavior

Note: $R^2 = 0.480$, (N = 196, p = 0.00)

Table 6 displays the results of multiple regression used to predict which factors of green purchasing are significant. A significant regression equation was found ($F(5,190) = 35.106$, $p < 0.00$), with R^2 of 0.480. This means that 48.0% of the variation in Gen Z purchase behavior is because of the variation in several factors of green purchasing behavior. Gen Z's purchase behavior equals $1.537 - .170EL + 0.469Pr$, where EL is eco-label, and Pr is price sensitivity. This means that the respondents' predicted purchase behavior decreases by 0.170 for every one-unit increase in eco-label while it increases by 0.469 for every one-unit increase in price. Moreover, all the other factors were found to be *insignificant* in affecting the purchase behavior of Gen Z.

The study finds that H1.1 and sub-hypothesis H1.2 are both rejected in which it is stated that Environmental Consciousness significantly influences the purchase behavior of Gen X and Z on green cosmetic products. This is due to the statistical analysis resulting in an insignificant value. This contradicts the findings of Bhavana & Thiruchanuru (2018) and Brand et al. (2022), who state that 66% of Gen Z revealed their environmental concerns before purchasing. Hence, it was also discussed in the aforementioned studies that Gen Z is more interested in improving the

environment and is more inclined to purchase sustainable products as they are more concerned about global warming and environmental degradation.

In substantiating H2.1, the statistical results depict that eco-labels do not produce a significant effect on the purchasing behavior of Gen X, given that the statistical value meant that eco-labels bear no importance and impact when it comes to the purchasing behavior of Gen X. According to Brand et al. (2022), one of the possible reasons as to why Gen X is not aware of the sustainable initiatives nowadays could be the fact that throughout most of their lives, environmental issues such as climate change, pollution, and the like did not receive as much media attention and public interest during their time contrary to how it is given attention as they do today. Meanwhile, based on the results for Gen Z consumers, it is found that eco-labels are one of the main factors that affect their purchasing behavior. Having that information, sub-hypothesis H2.2 affirms that eco-labels, essential in green cosmetic products, impact Gen Z consumers. Hence, according to Brand et al. (2022), Gen Z is influenced by eco-label more significantly than Gen X.

As per H3 and sub-hypothesis H3.1, which states that Gen X and Z's attitude towards the environment directly influences their purchase behavior on green cosmetic products, the statistical results show that both Gen X and Z find this factor insignificant. This is contrary to the findings of Hsu et al. (2017) and Pop et al. (2020) that attitude and subjective norms positively impact the intention of consumers to purchase green cosmetic products.

Subsequently, H4 and sub-hypothesis H4.1 state that green advertising significantly impacts Gen X and Z's purchase behavior on green cosmetic products and is found to be ineffective due to its statistical value. Hence, this translates that green advertising is not a primary factor that significantly impacts both generations' purchase behavior toward green

cosmetics. This contradicts the findings of Delafrooz et al. (2014) that environmental advertising significantly influences a consumer's purchasing behavior. In addition, the findings of the current study are in line with the results of the study conducted by Moore (2022), which states that green advertising is not as effective as it may have been for Gen Z because they are more susceptible to being influenced by superficial aspects considering that they are less invested in green advertising.

Sequentially, H5.1 and sub-hypothesis H5.2 point out that Gen X and Z's price sensitivity significantly influence the purchase behavior of green cosmetic products. Price plays a vital role in the intention of Gen X and Z to purchase green products, which is the main factor for both generations. This is in line with the study of Hsu et al. (2017) and Yue et al. (2020), which proves that price substantially influences consumers' purchasing behavior on products and their purchase choice. As per Brand et al. (2022), Gen Z's motivation to buy green products seems stronger, and they are willing to pay a premium for sustainability attributes. Meanwhile, Gen X consumers embody higher purchasing power. Thus, they are more attentive toward product characteristics and evaluating aspects such as quality, price, opinions, and environmental issues, making them more cautious when pursuing new purchases (Brand et al., 2022 & Navas et al., 2021). Given this, if a product increases its price, Gen X and Gen Z consumers are more likely to divert their purchase decision.

On account of this, it is evident that there is a significant difference between the purchasing behavior of Gen X and Z towards green cosmetic products, which validates H6. To be more in-depth, Gen Z consumers are much more likely to purchase green cosmetic products because there are significant differences in all the factors of green purchasing behavior between Gen X and Z. As per Gen Z, they are leaning more towards the positive side of the factors for

green purchasing behavior seeing that the statistical result indicates that they are more environmentally conscious. Subsequently, eco-labels are much more relevant to them, while their attitude significantly impacts their purchasing behavior. Moreover, it is also found that green advertising and price influence them as well as compared to Gen X.

Conclusions

The study finds that while Gen X and Gen Z perceive all factors to play an essential role in their sustainable purchasing behavior, each generation has different levels of agreement. While Gen X acknowledges the connection between environmental consciousness and attitude more than all other factors, Gen Z gives equal weight to all of the factors.

As to the actual behavior of Gen X, the findings indicate that price is the only factor influencing their sustainable purchasing behavior. This means that the said generation is considered price-sensitive, especially when they need to decide whether to buy a green cosmetic product. While for Gen Z, both price and eco-label are crucial upon purchasing a green cosmetic product. Aside from being price-sensitive, the said generation sees that eco-labels presence is important when determining whether they will buy such products, as the absence of eco-labels can result in Gen Z consumers being less likely to purchase.

Limitations and Recommendations for Future Research

This study provided new insights regarding the green purchasing behavior of Gen X and Z and their green buying behavior. Carefully considering how environmental consciousness, eco-label, attitude, green advertising, and price sensitivity of consumers contribute to the improvement and further innovation of the cosmetics industry and help formulate effective marketing strategies. Thus, the researchers make the following recommendations:

Marketers need to focus their marketing efforts on Gen Z since they are more knowledgeable and environmentally aware of issues and initiatives. In sub-hypothesis H2.2, Price Sensitivity, and Eco-label are the factors that significantly affect their buying behavior, suggesting that they are more conscious of the impacts of their purchasing habits. On the other hand, marketers should increase their efforts and create strategies that curate the Gen X taste and understanding to spread awareness among them regarding sustainability and green products since only price greatly affects their purchasing behavior.

Furthermore, the results of this study can help cosmetics businesses to strategize to penetrate their target audience. According to the results, Price Sensitivity and Eco-labelling are the main factors affecting the buying behavior of Gen Z. In contrast, Price Sensitivity significantly affects the buying behavior of Gen X. With that; the R&D team should dwell more on determining the right price for their consumers, as stated in H2 and H5, since it is pivotal for price-sensitive consumers.

Additionally, companies can also deep dive into product development since sustainable factors affecting green purchasing products are identified, research and development teams of business owners in the cosmetics industry can make use of these findings and focus on where they can improve, specifically on maximizing the use of eco-labels on product packaging to be able to depict authenticity.

Lastly, companies should prioritize and rethink their promotion efforts and strategy. As stated in H3, green advertising does not significantly influence the purchasing behavior of Gen X and Z towards green cosmetic products as they believe that this is just a scheme of companies; hence, marketing strategies should be heightened, be more convincing, and authentic, especially for Gen X since they are harder to persuade due to their lack of awareness. Moreover, consumers

need to be made aware of sustainable products and initiatives. Thus, this could be an opportunity for companies to innovate further and increase promotions more inclusively to gain consumers' trust.

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Appendix

Appendix A - Statistical Results

Table 1. The demographic of the Respondents (n=385)

	Generation X		Generation Z	
	<i>f</i>	%	<i>f</i>	%
Gender				
Female	148	78.31	171	87.24
Male	41	21.69	25	12.76
Civil Status				
Single	64	33.86	195	99.49
Married	106	56.08	1	0.51
Separated	10	5.29		
Divorced	2	1.06		
Widowed	7	3.70		
Socio-Economic Class				
AB (Middle-Upper Class)	82	43.39	91	46.43
C1 (Lower Middle Class)	72	38.10	74	37.76
C2 (Skilled Working Class)	14	7.41	16	8.16
D (Working Class)	18	9.52	10	5.10
E (Lowest Level of Income)	3	1.59	5	2.55
Educational Attainment				
Associate's Degree	6	3.17	1	0.51
Bachelor's Degree	117	61.90	66	33.67
High School Diploma	12	6.35	70	35.71
Master's Degree	18	9.52	2	1.02
Some College, No Degree	36	19.05	57	29.08

Table 2. Independent Sample T Test

	Generation	Mean	Std. Deviation	t	p
Environmental Consciousness	Gen X	4.348	.9351	-2.56	.011*
	Gen Z	4.583	.8668		
Eco-Label	Gen X	4.079	1.0735	-2.91	.004*
	Gen Z	4.383	.9765		
Attitude	Gen X	4.375	.9259	-2.48	.014*
	Gen Z	4.611	.9378		
Green Advertising	Gen X	4.213	.8920	-3.23	.001*
	Gen Z	4.507	.8886		
Price Sensitivity	Gen X	4.316	.7472	-2.75	.006*
	Gen Z	4.533	.8053		

Table 3. Descriptive Statistics for Generation X (N = 189)

	Mean	Std. Deviation	p	Interpretation
Environmental Consciousness	4.348	.9351	.011*	Agree
Eco-Label	4.079	1.0735	.004*	Slightly Agree
Attitude	4.375	.9259	.014*	Agree
Green Advertising	4.213	.8920	.001*	Slightly Agree
Price Sensitivity	4.316	.7472	.006*	Slightly Agree

*Significant at $p < 0.05$

Table 4. Descriptive Statistics for Generation Z (N=196)

	Mean	Std. Deviation	p	Interpretation
Environmental Consciousness	4.583	.8668	.011*	Agree
Eco-Label	4.383	.9765	.004*	Agree
Attitude	4.611	.9378	.014*	Agree
Green Advertising	4.507	.8886	.001*	Agree
Price Sensitivity	4.533	.8053	.006*	Agree

*Significant at $p < 0.05$

Table 5. Regression Analysis for Generation X

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.024	.261		7.741	.000
Environmental Consciousness	.017	.091	.021	.184	.854
Eco-Label	.150	.078	.218	1.918	.057
Attitude	-.050	.104	-.062	-.477	.634
Green Advertising	.091	.079	.110	1.151	.251
Price Sensitivity	.416	.084	.420	4.946	.000*

Dependent Variable: Consumer Purchase Behavior

Note: $R^2 = 0.391$, (N = 189, $p = 0.00$)

Table 6. Regression Analysis for Generation Z

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.537	.258		5.970	.000
Environmental	.183	.095	.202	.1923	.056
Eco-Label	-.170	.078	-.211	-2.185	.030*
Attitude	.112	.113	.134	.992	.323
Green Advertising	.098	.096	.110	1.015	.311
Price Sensitivity	.469	.091	.480	5.176	.000*

Dependent Variable: Consumer Purchase Behavior

Note: $R^2 = 0.480$, (N = 196, $p = 0.00$)

Appendix B - List of Figures

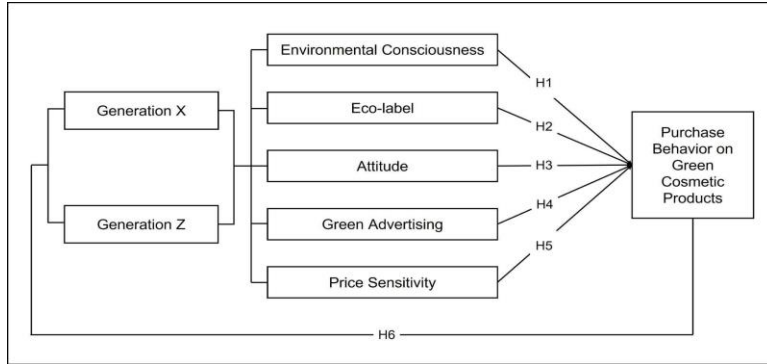


Figure 1. Proposed Conceptual Framework