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Green Cosmetics Purchasing Behaviour : A Study of Eco-Conscious Choices of Generation Z consumers

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ABSTRACT

The present study explores the factors determining the behavioural pattern and purchase intention of Generation Z consumers regarding Green Cosmetics in India. The study aims to present a theoretical framework by assessing the influence of environmental awareness, health consciousness and social influence on the purchasing pattern of Gen Z towards Green cosmetics. Further, the study employs Quantitative research approach collected with the help of convenience sampling technique. The data was collected from 160 Gen Z respondents with the help of structured questionnaire constructed on a 5-point Likert scale circulated by the way of online google forms. The collected data was analysed using SPSS software, descriptive statistics was utilized to provide an overview of the sample data. Underlying variables were identified using Exploratory Factor Analysis (EFA). Inferential statistics like correlation and regression analysis was used to test the influence of identified factors on Gen Zs preference and purchase intention towards green cosmetics. Further, the study found that two factors i.e. environmental awareness and health consciousness has a significant positive influence on Gen Zs purchase intention towards green cosmetics, which means Gen Zs possess higher level of consciousness towards environmental sustainability and health concerns. However, social influence though having a positive correlation, was found to be insignificant which was contrary to previous researches. The insights of the study will help the businesses and marketers in leveraging the demands and needs of this particular cohort in the cosmetic industry. Additionally, this study is also helpful for researchers and contributes to existing knowledge as it states the future research scope and serves as the basis by providing a theoretical model.

Keywords : Consumer Behavior, Environmental Awareness, Generation Z, Green Cosmetics, Generation Z, Health Consciousness, Purchase Intention, Social Influence

I. INTRODUCTION

Environmental Sustainability is emerging as a transformative global movement, where consumers are moving towards living a clean and healthy life (Bhattacharya, 2022). Especially the younger generation, like millennials and Generation Z are rising as the responsible stewards of this green and clean movement as a virtue of their environmentally conscious behavior (Bhattacharya, 2023). Cosmetic industry is one of the prominent segments of this movement as it is witnessing a huge shift from conventional cosmetics to green or organic cosmetics. This shift can be evidenced by the global green cosmetics market which was worth US $33.7 billion in 2023 and is estimated to reach US $70.6 billion growing at a CAGR of 7% by 2034 (Transparency Market Research, 2023). Consumers inclination towards organic and eco-friendly cosmetics is clearly evident from this overwhelming growth in the recent years.

Conscious Consumerism has become a new trend for the younger generation. The new generation, Generation Z aka Gen Z being digitally inclined, tech savvy, connected to internet are way more informed about the environmental and social issues. In comparison with the previous cohorts, they have greater concern for the environment and inclination towards sustainable consumption behaviour. Today, their concern is not limited to the makeup brand they wear but also the ingredients of that makeup and its effect on their skin and environment as well. They prioritize brands which works on ethical principles, such as, environmental sustainability, corporate transparency and social justice. Gen Zs loyalty and trust towards brands are attributed to some prerequisites like eco-friendly packaging, organic ingredients, cruelty-free and fair-trade practices (NIQ REPORT, 2024).

Even India's retail sector is witnessing a green tide of conscious consumerism where consumers are being mindful of their purchasing habits, more likely, this shift can be seen post Covid 19 pandemic. The outbreak has made consumer prioritize their personal, social and environmental well-being. Moreover, the government is promoting local production by taking initiatives like 'Aatmanirbhar Bharat', which further contributes to the sustainable development goals.

The cosmetics industry is witnessing a continuous rise in demand of green products, resulted by heightened consumer awareness regarding the harmful effects of the synthetic cosmetics. However, the factors influencing Gen Z's purchase intention towards green cosmetics is still unclear. Their consumption pattern and motivating factors regarding green cosmetics is unexplored. Broder patterns like green consumerism have been examined in previous literature. However, to be more specific, the role of specific factors such as environmental awareness, health consciousness and social influence in molding Gen Z's purchase intention towards green cosmetics is not well reported in the previous researches.

The present study aims to offer insights that enable businesses to design green cosmetic products that aligns with Gen Z's values. Additionally, the findings contribute to the academia and add to the existing knowledge in the context of green cosmetics.

II. LITERATURE REVIEW

The concept of sustainable consumption can be traced back from the second or third century BC, when it was referred to as "an overconsumption of resources". However, the concept gained much prominence when United Nations Conference on Environment &

Development was held in 1992 in Rio De Janeiro (Quoquab & Mohammad, 2020), which called for an attention towards the impact of our choices on the global environmental health (UNEP,2010). Further recommended the adoption of sustainable consumption and production behaviour, which aligns with SDG 12, which ensures 'responsible consumption and production'. It is defined among the 17 Sustainable Development Goals introduced by United Nations in 2015 (United Nations, 2015). Subsequently, the late 1960's witnessed prominent research on green marketing and green purchase behaviour (Liobikienė & Bernatonienė, 2017). Over the years, previous works were primarily focusing on identification of the factors that influence consumer's behaviour towards green products. These factors can be categorised in 2 broad categories i.e. personal factors and product factors. However, most studies have explored the personal factor considering their complex and dynamic nature. (Ahmad et al., 2015; Okada et al., 2019)

Although various studies have been conducted on analysing the behaviour of consumers towards green products. However, Gen Z's consumer behaviour remains unexplored as their consumption pattern and preferences as consumers are still evolving and is in the nascent stage. The study aims to address this gap by analysing the behaviour of Gen Z's and their purchase intention towards green cosmetics. The thorough analysis of the literature facilitated identification of three important factors influencing behaviour of Gen Z towards green cosmetics purchase intention, which involves, environmental awareness, health consciousness and social influence.

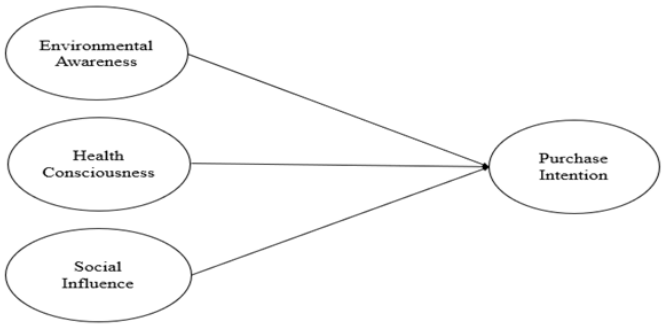

Figure 1: Conceptual Framework of the Study

2.1 Consumer Behaviour and Purchase Intention: Models & Theories

Theoretical models have been established in previous works determining consumer behaviour and purchase intention across different green products. For instance, the Theory of Planned Behaviour first introduced by Azjen (1991) has been extensively used in previous works (Meliniasari and Mas'od (2024); Liang et al., 2024; Silvianie & Salim, 2024; Syed et al., 2024; Zhao et al., 2024; Vermeir & Verbeke, 2008) in order to explore the significance of attitudes, subjective norms and perceived behavioural control in determining consumer's purchase intention towards various green products. Further expanding the model, Soo and Gong (2023) combined the VBN (Value-Belief-Norm) model with the TBP, showcasing the importance of personal values in shaping consumer's purchase intention in addition to attitude and PBC. In line with this, the significance of self-efficacy and product knowledge have been demonstrated by Andika et al. (2023) with the help of Information-Motivation-Behaviour (IMB) model, which highlighted the mediating role of self-efficacy between attitude and purchase intention. Moreover, Srivastava et al. (2024) has incorporated a different perspective by using a fuzzy analytic hierarchy process (F-AHP), which further identified brand trust, perceived consumer effectiveness and behavioural control as the crucial drivers of green cosmetics consumption in Indian context. Collectively, these studies stresses upon the diverse framework of green consumerism which is still evolving as a result of increased consumers awareness regarding the environmental impacts of their choices.

2.2 Eco-Conscious behaviour of Generation Z:

Generation Z aka Gen Z are the Individuals born between 1997-2012 (Dimock, 2019; Hughes & Seneca, 2019) regarded as the most informed and dynamic cohort. Over the period of time, studies (Csobanka,

2016; Dudek, 2017; Hysa, 2016) have given different names to refer gen z's, like Post-Millennials, Digital Generation, Facebook Generation, Dotcom Children, iGeneration, Responsibility Generation, Switchers etc. Don Tapscott (1998) and Prensky (2001) has referred Gen Z as the net generation and digital immigrants because they are born in the era of information technology and surrounded by devices and gadgets. Previous studies have shown that consumers, in general, are moving towards green products, but this new generation is continuously emerging as conscious consumers by indulging themselves in practices like upcycling, recycling, slow fashion, second-hand clothing, eco-packaging and even gifting (First Insights report, 2024; Herold & Prokop, 2023). Being an online generation, they spend most of their time on social media and internet which helps them be aware of the environmental and social issues, they rely on online reviews and influencer's recommendations which eventually affect their green purchasing behaviour (Kahawandala et al., 2020; Nagvanshi et al., 2023). In addition to this, their purchase decisions are also significantly influenced by social groups like peer and friends because as a teenager they seek approval and identity by purchasing green products so as to establish themselves as an eco-conscious person (Lee, 2008). Although, Gen Zs are ready to buy more of sustainable and eco-friendly products, issues, such as accessibility, green washing, premium prices, etc. hamper their green purchase aspirations (Aisyah et al., 2023; First Insights report, 2024). Despite these challenges, they are emerging as responsible stewards of environmental sustainability through their environmentally driven consumer behaviour. In order to cater to the expectations and needs of this conscious cohort, brands are also indulging in ethical procedures so as to ensure human and environmental well-being (Cohen, 2024).

2.3 Environment Awareness

Environmental awareness can be referred to as one's reaction to environmental issues in a specific manner on the basis of his/ her knowledge, attitude, beliefs and value system (Ham et al., 2016). Being a multidimensional concept, it comprises both cognitive and affective components such as environmental knowledge, sustainability concern, and adoption of ethical practices (Cooray et al., 2024). The area of its definition has expanded over time, where knowledge has considered to be the key element in the previous researches, recent studies are stressing upon the behavioural and emotional concepts like altruism, brand evangelism and relationship with nature (Li et al., 2020; Despotović et al., 2021). Moreover, the literature (Sabzehei et al., 2016) reveals that environmental awareness has a significant impact on individual's attitude, behaviours, which eventually contributes to their purchase intention towards green products. In line with this, (Li et al., 2020) also confirms that environmental awareness promotes sustainable consumption and ethical living among consumers.

Consumer's continuous shift towards green consumption is driven by their environmental awareness which is evident in their active participation in other industries like, green cosmetics, green furniture, sustainable fashion, sustainable tourism, sustainable food etc. (Fei et al., 2024; Liang et al., 2024; Dwivedi et al., 2015; Vermeir & Verbeke, 2008). Taking this idea forward, Pimtong Tavitiyaman et al. (2024) in their study of sustainable tourism confirms that consumers intend to choose eco-friendly accommodations over the conventional one's as a result of their eco-conscious behaviour and environmental awareness. Similarly, Okada et al. (2019) also reported its direct impact on purchasing decisions of non-EV users (Electric Vehicles) and post-purchase satisfaction of EV users. Further, in the context of green cosmetics, it aligns business practices with consumer values by promoting sustainable packaging, ethical sourcing and cruelty-free manufacturing eventually results in less harm to the

environment. Building on another perspective, (Pop et al., 2020 & Pukdeemai, 2020) claim that social media is emerging as a powerful tool towards for raising awarenss among consumers regarding environment and social issues with the help of celebrity promotions, influencer endorsements and various campaigns. As the present study aims to examine Gen Z's purchase intentions toward green cosmetics, the following hypothesis has been drawn in the light of the above findings from the literature:

H1: Environmental awareness significantly influences Gen Z's purchase intention toward green cosmetics.

2.4 Health Consciousness:

Health consciousness lies in one's own orientation or awareness towards his/her overall wellbeing. In addition to this definition, (Hong, Hyehyun, 2009), has given three components of health consciousness which includes personal responsibility, health motivation and self-health awareness. Its relevance can be seen across various disciplines starting from marketing and consumer research as a virtue of its dynamic nature (Acharya & Lee, 2022). Further, studies such as (Hu, 2013; Marsall et al., 2021) considered it as a key determinant of wellness and confirmed the assumption that health-conscious consumers tend to have improved health conditions as they prioritize their health and promote their well-being. Moreover, it significantly drives consumer's purchase intention with regard to green products by stimulating their attitude and subjective norms (Liang et al., 2024; Silvianie & Salim, 2024). Expanding upon previous work, (Ahsan & Ferdinando, 2023; Liobikiene & Bernatoniene, 2017) also reported that individuals with greater inclination for health tend to make more healthier choices that supports their health values, hence established that health consciousness mediates the relationship between attitudes and purchase intentions. Majority studies have highlighted its significance in affecting consumer behaviour and consumption pattern (Magnusson et al., 2003). Despite this widespread consensus, some studies like (Pop et al., 2020) claimed that environmental consciousness precedes health consciousness while shopping for eco-friendly products which stresses upon 'environment over health'.

Therefore, studying this construct becomes significantly important when it comes to analysing Gen Z's purchase intention towards green cosmetic as it promotes healthy lifestyle and viewed as a better choice over synthetic cosmetics (Silvianie & Salim, 2024). With these findings, the following hypothesis has been formulated:

H2: Health Consciousness significantly influences Gen Z's purchase intention toward green cosmetics.

2.5 Social Influence:

Social influence reflects a change in one's feelings, attitude, thoughts, or behaviour after interacting with another person or a group (Rashotte, 2007). Over time, research has conceptualized it as a process where individual's actions and behaviour are guided by their group membership and collective norms of the group (Vannoy & Palvia, 2010). Additionally, it is claimed by (Flache et al., 2017) that social influence tends to reduce interpersonal differences among individuals by promoting conformity and accepting diverse attitudes, beliefs and value system. Further, (Liang, Xu et al., 2024) discussed its important characteristics which include trust, credibility and emotional connection and informed that individual's purchase intentions are strongly influenced by close friendships and celebrity endorsements on real-time streaming platforms and social media, which builds trust in individuals through interactive and live communication. Recent studies on green consumption (Pop et al., 2020; Lee, 2008) have shown that consumer's peer groups, families, relatives, online reviews and influencer endorsements on social media collectively shapes their purchasing behaviour towards green products. Similarly, in green cosmetic sector, social influence plays a major role by fostering

trust, enhancing product awareness and create positive attitude to purchase organic cosmetics (Nagvanshi et al., 2023; Suki & Suki, 2015). However, some studies (Teo et al., 2019) appears to contradict previous findings by revealing that consumer's purchase intentions is not significantly affected by word-of-mouth influence on visual platforms like Instagram.

Hence, the study of social influence becomes more important in assessing Gen Z's behaviour for green cosmetics as they often look to trusted figures and their social groups before purchasing anything. Taking this insight forward, the study hypothesizes the following:

H3: Social influence significantly influences Gen Z's purchase intention toward green cosmetics.

3. METHODOLOGY

This section outlines the formulation of research framework and hypothesis followed by questionnaire and data collection procedure.

3.1 Hypothesis and research framework

The study seeks to examine the purchase intention of Generation Z consumers towards green cosmetics. For this purpose, a research framework as shown in Fig. 1, has been introduced based on thorough review of literature which includes three major factors i.e. environmental awareness, health consciousness and social influence. To be more specific, the study aims to analyze the influence of these factors on purchase intention of gen z regarding green cosmetics, where these factors employ as independent variables while purchase intention serves as the dependent variable. Firstly, the environmental awareness construct has been adopted from (Okada et al., 2019). Secondly, the health consciousness construct has been sourced from (Hong, Hyehyun, 2009). Thirdly, the social influence construct has been drawn from (Liang et al., 2024). Lastly, the purchase intention variable stems from (Azjen, 1991). Further, the independent variables consist of 4 items each, whereas the dependent variable consists of 2 items. Accordingly, hypotheses are proposed which is stated above in the literature review section.

3.2 Data collection & formulation of Questionnaire

The present study collected first hand data with the help of a structured questionnaire which was circulated among the Gen Z (born between 1997-2012) students of a university in the Sagar region of Madhya Pradesh in India through the platform of online google form. The research employed the non-probability sampling method of data collection. Under this, convenience sampling technique has been used considering the limited time and resources. Further, it works best when population is directly accessible and readily available (Kothari, 2009). The questionnaire was broadly divided into two sections. The first part contains the demographic questions including respondent's age, gender and education level and second part contains statements that can measure respondent's environmental awareness, health consciousness, social influence and purchase intention. The respondents were supposed to give a rating to each statement on a 5-point Likert scale (Joshi et al., 2015), where 1 resembles 'strongly disagree', 2 'disagree', 3 'neutral', 4 'agree' and 5 'strongly agree'. Initially, a total of 210 questionnaires were sent, out of which 160 valid responses were taken after screening.

4. Results & Discussion

Data was analyzed using SPSS software version 26.0 by performing different statistical analysis including descriptive statistics analysis, normality & reliability analysis, exploratory factor analysis, correlation and multiple regression analysis.

4.1 Analyzing Descriptive Statistics

Table (1) outlines the demographic profile of respondents reveals slight majority of males (53.1%) compared to female (46.9%). Most of the participants

are young gen z's falls between age 17-23 years (70.6%), while (29.4%) falls between 23-27 years of age. Majority respondents are pursuing their Bachelor's degree (65%), while (23.8%) are in Master's program and a smaller proportion are enrolled in Doctoral program (11.3%). Overall, the participants primarily consist of younger Gen Zs who are undergrads.

Table 1: Respondent's demographic profile

		Frequency	Percentage (%)
Gender	Male	85	53.1
	Female	75	46.9
Age	17-23	113	70.6
	23-27	47	29.4
Current academic level	Bachelor's	104	65.0
	Master's	38	23.8
	Doctoral Degree	18	11.3
Total		160	100

Descriptive statistics summarizes the dataset, offers a way to understand its characteristics in simpler manner (Kothari, 2009). It gives an overview of the dataset by revealing its mean, standard deviation, skewness and kurtosis measures. These measures are outlined in the below table (2) for 160 samples considering 14 items divided into four constructs: (EA_SCORE) Environmental awareness, (HC_SCORE) Health Consciousness, (SC_SCORE) Social Influence and (PI_SCORE) Purchase Intention. The mean scores and standard deviation show a moderate variability in the responses. Additionally, the skewness values indicate slight negatively skewed data which ranges from -1.582 to -0.387 while the kurtosis values fall between 0.250 to 1.942 demonstrating a sharper peak than a normal distribution. However, according to the rule of thumb, data is considered to be normally distributed when skewness and kurtosis ranges between -2 to +2 and -7 to +7 respectively (Hair et al., 2010; Bryne, 2010). Hence, the collected data is considered to be approximately normally distributed, making it efficient for performing correlation and regression analysis further.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
EA_SCORE	160	1.00	5.00	4.0891	.07282	.92116	-1.582	.192	1.942	.381
HC_SCORE	160	1.00	5.00	3.9953	.07167	.90659	-.901	.192	.250	.381
SC_SCORE	160	1.00	5.00	3.6453	.07483	.94647	-.387	.192	-.576	.381
PI_SCORE	160	1.00	5.00	4.0125	.08004	1.01242	-1.130	.192	.870	.381
Valid N (listwise)	160									

4.2 Exploratory Factor Analysis (EFA)

EFA is a statistical tool used when the researcher is not using an already developed framework and has no idea about the nature or number of underlying variables, which makes it exploratory (Watkins, 2018). Additionally, it helps in identifying the main constructs by reducing the number of variables from a set of larger latent constructs. Also, evaluates the construct validity of items, scales and instruments and highlights the multicollinearity issues, eventually validating the theoretical constructs (Williams et al., 2010).

Firstly, there are universally accepted measures for performing EFA. The first one being the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) which need to be greater than 0.5 and the second one is Barlett's Test of Sphericity which needs to be less than 0.05 (Taherdoost et al., 2014). The dataset has to satisfy these two conditions for conducting EFA. As shown in the table (3) below, the research data under the study surpasses both conditions, where KMO is reported 0.830 and Bartlett's Test of Sphericity is less than 0.001, which indicates strong sample adequacy and suitability for factor analysis. Further, the Total Variance Explained table show that 4 components have eigenvalues more than 1 which means that items can be club into 4 constructs. Initially, there were 19 items which were reduced to 14 items after conducting EFA and removing the items with cross-loadings. Hence, the results of EFA ensured the validity of the constructs of the study. Moreover, the detailed values of commonalities, total variance explained, and rotated factor matrix are reported in (Appendix 1).

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.830
Bartlett's Test of Sphericity	Approx. Chi Square	1394.396
	Df	91
	Sig.	<.001

4.3 Reliability analysis

Reliability analysis reports the internal consistency of the scales adopted in the study. This research employed the Cronbach's Alpha value for checking the reliability. This value ranges from 0 to 1 and should not be less than the required limit of 0.07 (Cronbach, 1951). More specifically, as shown in table (4), the value is between 0.853 to 0.901 for all four constructs, indicating high level of internal consistency and is considered as good reliability (Konting et al., 2009). Hence, it is evident from these values that the items in each construct reliably measure the underlying variables, which makes this data appropriate for further analysis. Moreover, it is also validated that these constructs can be used for assessing the behaviour and purchase intention of Gen Zs towards green cosmetics.

Table 4: Reliability Coefficient of Constructs

Construct	No. of Items	Cronbach's Alpha Value	Interpretation
Health Consciousness	4	0.839	Good reliability
Environment Awareness	4	0.862	Good reliability
Social Influence	4	0.819	Good reliability

Purchase Intention	2	0.810	Good reliability

4.4 Correlation analysis

Correlation analysis examines the degree of association between two variables on the basis of their direction of change. It assesses whether changes in one variable leads to changes in another, highlighting their dependence on each other (Kothari, 2009). Karl Pearson's Coefficient of Correlation, denoted by (r) is the most widely used measure for quantitative correlation analysis. It's value ranges from -1 to +1, a direct relationship can be demonstrated by positive value of r, whereas a negative r denotes inverse relationship and a value close to 0 signifies no relationship between variables (Pearson, 1920). The relationship between variables is significant or not, is determined by the level of significance (p-value), where a lower p-value indicates statistically significant or meaning relationship. With reference to the present study, it was found that Environmental Awareness (EA_SCORE) and Purchase Intention (PI_SCORE) has a moderate positive correlation where ($r=0.450$, $p<0.01$). Further, recorded a stronger positive correlation between Health Consciousness (HC_SCORE) and Purchase Intention (PI_SCORE) where ($r=0.483$, $p<0.01$). However, Social Influence (SC_SCORE) shown a positive yet low correlation with Purchase Intention (PI_SCORE) where ($r=0.378$, $p<0.01$). Hence, all three constructs possess a positive and significant correlation with purchase intention, where health consciousness emerged as the strongest influencing factor among the three. A more detailed table (5) of correlation coefficient and significance value is given in appendix (1).

Table 5: Pearson's Correlation Metrix

	EA_SCORE	HC_SCORE	SC_SCORE	PI_SCORE
EA_SCORE	1	.681*	.621*	.450*
HC_SCORE	.681*	1	.598*	.483*
SC_SCORE	.621*	.598*	1	.378*
PI_SCORE	.450*	.483*	.378*	1

Note: *Correlation is significant at the 0.01 level (1-tailed)

4.5 Multiple regression analysis

The study employed the regression model to assess the influence of environmental awareness, health consciousness and social influence on purchase intention of Gen z towards green cosmetics. The results reported an R value of 0.514 as per the model summary table (6), which indicates moderate but positive relationship between the independent and dependent variable. Further, it shows the R^2 value of 0.264, which means 26.4% change in the purchase intention of gen z is explained by the three independent variables. As per table (8), the first variable EA_SCORE marginally predicts PI_SCORE with (beta coefficient = 0.215, p-value=0.053); the p-value is slightly more than the limit of 0.05. It means that environmental awareness has positive but marginal influence on purchase intention. Hence, H_1 is marginally supported. Further, the second variable HC_SCORE emerged as the most significant predictor of PI_SCORE with (beta coefficient = 0.341, p-value=0.002). It means that health consciousness has a significant influence on purchase intention. Thus, H_2 is accepted. Finally, the last variable SC_SCORE does not significantly predict the PI_SCORE, as (beta coefficient = 0.079, p-value=0.426), the p-value is far more than the threshold of 0.05. Although, these variables have a

positive correlation but social influence has no significant influence on purchase intention. As a result, H_3 is rejected. Moreover, the ANOVA results validate the overall model's fitness with an F-value of 18.622 ($p<0.001$), suggesting that the three predictor variables significantly explain the variation in purchase intention of Gen Z.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514[a]	.264	.250	.87706

Note: (a) denotes Predictors: (Constant), SC_SCORE, HC_SCORE, EA_SCORE

Table 7: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.975	3	14.325	18.622	.000[b]
	Residual	120.000	156	.769		
	Total	162.975	159			

Note: a. Dependent Variable: PI_SCORE

b. Predictors: (Constant), SC_SCORE, HC_SCORE, EA_SCORE

Table 8: Summary of hypotheses

Hypothesis	Regression Weights	Beta Coefficient	t-value	p-value (sig.)	Decision
H_1	EA →PI	.215	1.947	.053	Marginally Supported
H_2	HC →PI	.341	3.105	.002	Accepted
H_3	SC →PI	.079	.799	.426	Rejected

5. DISCUSSION & IMPLICATIONS

5.1 Environmental Awareness

The study found that environmental awareness is one of the important factors in shaping Gen Zs purchase intention towards eco-friendly cosmetics. Statistically, the results showed a moderate positive correlation between both these factors. As a result, our H1 is supported which means Gen Z's purchase intention for green cosmetics is positively influenced by environmental awareness. The acceptance of this statement confirmed that environmentally aware Gen Z consumers are more like to purchase eco-friendly cosmetics; this finding was found in agreement with the previous studies (Sabzehei et al., 2016; Okada et al. 2019; Li et al., 2020, Pukdeemai, 2020; Despotović et al., 2021; Cooray et al., 2024; Pimtong Tavitiyaman et al. 2024). The research recommends that businesses should highlight

their products' environmental benefits in terms of sustainability issues, eco-friendly packaging and labelling etc. They must practice ethical reporting, organize educational campaigns, get certifications (like organic, cruelty-free). Gen Zs being an eco-conscious generations have a greater inclination towards these kinds of practices.

5.2 Health Consciousness

Among all the factors studied in this paper, health consciousness emerged as the most prominent factor influencing the purchase intention of Gen Z. Statistically, it has the strongest positive correlation with purchase intention, validating our H2, in line with the findings of (Magnusson et al., 2003; Hu, 2013; Liobikiene & Bernatoniene, 2017; Marsall et al., 2021; Acharya & Lee, 2022; Ahsan & Ferdinando, 2023; Liang et al., 2024; Silvianie & Salim, 2024). It means health consciousness significantly influences purchase intention of Gen Z towards green cosmetics. It means that this generation prioritizes their health by choosing products that promotes their overall well-being. Cosmetics companies must leverage this insight and focus on promoting safety, usage of natural and plant-based ingredients and highlight health benefits of their cosmetics. They should incorporate transparent labelling and recommendations of dermatologist to make their product even more trustable that can boost Gen Zs confidence and loyalty towards their brand.

5.3 Social Influence

In contrast with what previous literature has suggested (Lee, 2008; Suki & Suki, 2015; Pop et al., 2020; Liang, Nagvanshi et al., 2023; Xu et al., 2024), this study informed that social influence does not significantly influences Gen Zs purchase intention towards green cosmetics. Although, statistically, it has a lower positive correlation with purchase intention but it does not possess a significant relationship. Hence, the study rejected H3. These findings suggest that though Gen Zs may get influence by peer opinions, family, social media recommendations, for some decisions, but they do not get substantially impacted when it comes to green cosmetic purchase decision. It means that Gen Zs are more inclined towards intrinsic values such as environment and personal well-being as compared to the extrinsic values like social pressure. Hence, it is recommended that instead of high reliance on celebrity and influencer endorsements on social media platforms, companies should promote community-based storytelling and build platforms where individuals can share their experiences without being bias. In this way brands can connect with this cohort more organically. Further, brands should give more importance to build individual-centric strategies Further, brands should come up with strategies that are based on individual-centric values rather than promoting external social pressure.

1. CONCLUSION

The study concludes that Gen Zs purchase intention towards eco-friendly cosmetic is prominently affected by personal and intrinsic values such as health consciousness and environmental concerns and less influenced by extrinsic factors like social influence. In order to cater to the needs of this eco-conscious consumer, generation Z, it is very much important for the sustainable cosmetic brands to incorporate this insight into their marketing campaigns and to derive policies and adopt practices that can promote individual's health and ensure environmental well-being. In this way, they can tap into the emerging opportunities in the field of green production and consumption.

2. LIMITATIONS & FUTURE SCOPE

Although the research was conducted to the best of researchers' abilities and skills but it has some limitations which needs further improvements in the future research. Firstly, due to limited time and resources, convenience sampling technique was used to collect data and online survey method was used. Further, questionnaires were sent to 210 respondents, out of which only 160 valid responses were taken for analysis. Secondly, data was collected from university students who falls under age of Gen Z and further it was found that most of the respondents comprises of younger Gen z student, aged 17-23 years, who were pursuing Bachelor's degree that can generate biasness in the results. Moreover, the respondents were from the same university. Lastly, out of several factors determining the consumer's purchase intention towards green products, only

three constructs were studied in the present study, which fails to show a complete picture of Gen Z's consumer behaviour. Hence, there is a need for future research in the field which can conduct studies on larger sample size, large geographic area, use probability sampling, offline data collection and discuss other motivating factors that shapes purchase intention of Gen Zs towards sustainable cosmetics.

Appendix:

Table 9: Communalities

	Initial	Extraction
I am concerned about the environmental issues.	1.000	.774
I am concerned about the use of harmful chemicals in beauty products.	1.000	.728
I believe we can solve environmental issues by making eco-friendly choices.	1.000	.743
I am willing to avoid cosmetics that contain synthetic or harmful ingredients.	1.000	.696
I choose cosmetic products that are safe for my skin, even if they are more expensive.	1.000	.661
I prefer using natural ingredients in my personal care products.	1.000	.727
I believe green cosmetics are safer & healthier than synthetic cosmetics.	1.000	.728
I am willing to shift to eco-friendly cosmetics due to health concerns.	1.000	.753
I trust social media content promoting eco-friendly cosmetics influences my purchasing decisions.	1.000	.719
I trust the opinions of celebrities & influencers who endorse green beauty products.	1.000	.711
I feel encouraged to purchase green cosmetics when I see others using them.	1.000	.801
I believe using green cosmetics positively impacts my social image.	1.000	.696
While shopping, I actively look for cosmetics that contains natural ingredients.	1.000	.838
I am willing to pay more for cosmetics that are environmentally friendly	1.000	.859

Extraction Method: Principal Component Analysis.

Table 10: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.730	48.073	48.073	6.730	48.073	48.073	3.085	22.035	22.035
2	1.457	10.408	58.481	1.457	10.408	58.481	2.804	20.029	42.064
3	1.143	8.161	66.643	1.143	8.161	66.643	2.757	19.693	61.756
4	1.103	7.878	74.520	1.103	7.878	74.520	1.787	12.764	74.520
5	.706	5.042	79.562						
6	.591	4.221	83.784						
7	.454	3.245	87.028						
8	.400	2.861	89.889						
9	.341	2.437	92.326						
10	.326	2.332	94.657						
11	.245	1.749	96.406						
12	.206	1.474	97.879						
13	.171	1.223	99.103						
14	.126	.897	100.000						

Extraction Method: Principal Component Analysis.

Table 11: Rotated Component Matrix[a]

	Constructs				
	Items	1	2	3	4
Health Consciousness	1	0.604			
	2	0.806			
	3	0.725			
	4	0.742			
Environmental Awareness	1		0.793		
	2		0.779		
	3		0.697		
	4		0.588		
Social Influence	1			0.731	
	2			0.592	
	3			0.849	
	4			0.719	
Purchase Intention	1				0.831
	2				0.896

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 9 iterations.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.481	.348		4.256	.000
	EA_SCORE	.215	.111	.196	1.947	.053
	HC_SCORE	.341	.110	.306	3.105	.002
	SC_SCORE	.079	.098	.073	.799	.426

Note: a. Dependent Variable: PI_SCORE

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