

AN EMPIRICAL STUDY ON WOMEN'S PURCHASE INTENTIONS TOWARDS GREEN COSMETICS IN KOLKATA

*Kiran Mishra**

Abstract: One of the consumer markets with the quickest growth is the cosmetics industry, where customers may purchase ever-new body care items. Due to increasing environmental problems the demand for green cosmetics have also increased in all over the world. The purpose of this study is to examine how female consumers view environment and health. The goal of the current study is to better understand how various factors affect female consumers' intentions to purchase green cosmetics. The study assessed the impact of environmental concern, health consciousness, convenience and branding & labelling on the intention to purchase green cosmetics among the women of Kolkata. Primary data of 100 female participants from Kolkata were acquired for this study using convenience sampling technique. Closed ended questions with single or multiple-choice options were included in the survey questionnaire. Data analysis has been done using SPSS software. To test the hypotheses, correlation and regression analysis was done and the outcomes were interpreted. The study revealed that health consciousness, convenience and branding & labelling depicted a significant impact on the intention among women to purchase green cosmetics. The results aided marketers in coming up with innovative ways to sell beauty products by emphasising sustainability and product safety to appeal to women's attitudes about green cosmetics.

Keywords: Green Cosmetics, Environmental Problem, Purchase intention, Environmental concern, Health consciousness.

Introduction

The term "green marketing" has received a lot of attention in recent years as a result of technological advancements and industrial operations that have a detrimental effect on our planet. The future of today's manufacturers and marketers is green, and "green marketing" and "green products" are the words of the day. Green marketing is the

practise of promoting goods based on their potential for protecting the environment. Many consumers are switching to a greener lifestyle these days. As a result, producers are focusing on creating environmentally friendly goods that are durable, reusable and recyclable [Dhanashree and K. Viswa, 2019]. There are several types of green marketing. As

* *Research Scholar, University of Calcutta, Email: infokiran1994@gmail.com*

an illustration, a marketer may advertise environmentally friendly features through operational sustainable development, the creation of green products, sustainable advertising strategies, and the promotion of environmental issues. By eliminating pollution, employing greener products and methods, and effectively managing beautification, enhancing beauty, or altering the appearance – which includes any object intended for use as a component of cosmetics – manufacturers and service providers can increase operational sustainability [Naik and Shah, 2020].

Due to women's preference for beauty goods, women currently constitute the majority of consumers. Cosmetics include skincare items like moisturizers, powders, serums, and sun protection for various complexions and textures, as well as hair care items like shampoo, conditioner, hair colors, etc., face care items like foundation, face wash, blusher, highlighter, palettes, etc., and bathroom essentials like shower gel and soap [Sharma and Mehta, 2020]. Most Western consumers, both individual and business, are growing more and more conscious about eco-friendly items. The majority of them consider using environmentally friendly items to be urgent. With a primary focus on promoting environmentally friendly, non-toxic, and biodegradable products and services in society, green marketing has emerged as a result of this shift in consumer preferences. For marketers, this represents a miracle cure for standing apart from the competition, meeting customer demands, and increasing

earnings. In India, a lot of commercial enterprises have begun using green marketing [Rawat, 2012].

The phrase "green" has evolved into a new fad. This term is being embraced by various industries for use in both product names and policy statements. Along with the word, customers have realized how important it is for their health for a product to include green qualities, and marketers have realized how important it is for establishing a competitive edge. Cosmetics are one of these industries. Because they don't want to compromise on the health of their skin, consumers of cosmetic products are refocusing their attention fully on natural or organic products. This change forced the cosmetics industry to create green cosmetics that do no harm to the skin in any way. As a result, the significance of cosmetic product brands, labels, and promotion highlighting the advantages of using a particular brand's green cosmetics expanded and proved to be quite effective in attracting customers to that brand [Srivastava and Mathur, 2018]. Many climatic changes that pose a serious threat to the survival of the planet are gradually changing consumer behaviour from unsustainable to sustainable. Companies are being compelled to consider sustainable societal growth as a result of the environmental issues over the past two decades [Rawat and Garga, 2012]. As a result, consumers in today's world are mostly looking for premium, sustainable items that meet their needs. Today's cosmetics and personal care sector places a high priority on sustainability. Because

of this, consumers' tastes for makeup have changed, while those for skincare products have grown [Kar, 2022]. In the production and sale of natural products, numerous start-ups have emerged. Several of these marketers use the social media network on the internet to spread the word about their goods and persuade customers to buy them. India's online personal care and cosmetics business is anticipated to grow to \$4.4 billion by 2025, citing a 2021 Avendus analysis. According to the report, the number of consumers buying beauty and personal care products online is expected to increase by more than four times, from 25 million in FY20 to 110 million in FY25 [Kalyani and Khatri, 2022].

This study empirically examines a conceptual model to review consumers' purchasing intentions of sustainable items, in particular "green" cosmetics. In order to analyze and comprehend the associations between the constructs in explaining the adoption and involvement towards green cosmetics, the study makes use of a conceptual framework based on Ajzen's (1991) Theory of Planned Behaviour (TPB) model, an extension of the Theory of Reasoned Actions (TRA). For the dependent variable of female consumers' intention towards green cosmetics, other antecedents drawn from the literature and evaluated include: (1) health consciousness; (2) environmental concerns; and (3) other factors.

The study has certain objectives stated as follows:

- To identify all the variables that affect

the purchasing intention of female consumers towards green cosmetics.

- To determine which of the factor has maximum influence on the purchasing intention of female consumers towards green cosmetics.
- To assess the relationship between all the variable which affect women's green purchasing intention.

Research on green cosmetics raises awareness among consumers about the environmental implications of their beauty choices. Educating consumers about the benefits of sustainable products can foster a more conscious and environmentally responsible lifestyle. Green cosmetics aim to minimize the negative impact on the environment by using sustainable sourcing, natural ingredients, and eco-friendly production processes. Understanding the environmental benefits of green cosmetics helps consumers make informed choices and supports the beauty industry's transition towards more sustainable practices. It plays a part in supporting global sustainability goals, such as the United Nations' Sustainable Development Goals (SDGs). The study of green cosmetics is essential for understanding regulatory requirements related to eco-friendly beauty products. Compliance with environmental standards and guidelines is crucial for ensuring product safety and market access. Overall, the study on green cosmetics is crucial for advancing sustainability practices in the beauty industry, meeting consumer demands,

and contributing to a more environmentally friendly and socially responsible business approach.

The review of previous research on consumer's perception towards green cosmetics, the benefits it brings, and the development of relevant hypotheses are covered in the next section of this study. The conceptual framework was created and introduced based on this. The methodology utilized to test the hypothesis is followed in the study. The outcomes and interpretation are covered in the fourth section. The final section discusses managerial implications, the research's constraints, and the future directions.

Literature Review

Askadilla & Krisjanti (2017) evaluated how well TPB explained customer behaviour when selecting eco-friendly cosmetic goods. The study's conclusions show that in order to successfully promote green cosmetic products in Indonesia, manufacturers must not simply concentrate on internal factors or product design. The role of beliefs in relation to the components of the Theory of Planned Behavior is shown by this study and is given fresh support (TPB).

Ahmad (2018) found that environmental and health consciousness were the two factors that had the greatest impact on women's intentions to purchase natural beauty products. As a result, it is strongly advised to use these two variables as a predictor of green cosmetic product purchase intention. The findings indicated that women consumers who

care more about their health will be more likely to purchase green cosmetics products. They also mentioned how safeguarding the environment is crucial for keeping themselves and their family safe, as well as how they feel more positively about participating in environmental activities and being worried about the effects of the environment on their health. In order to fulfil the values of potential customers, it is advised that retail cosmetic stores use successful marketing tactics that place an emphasis on green aesthetic or product safety.

Srivastava & Mathur (2018) stated that the brand of herbal cosmetics, the contents included on the labels, and effective brand promotion have the biggest impact on consumer purchasing decisions. The test demonstrates that there was no noticeable difference in brand, label, advertising, and consumer satisfaction with Green Cosmetics. It is suggested that people be educated on the value of accurate labelling and how to comprehend the information found on herbal cosmetic brands. Instead of only promoting the product, advertisements for green cosmetic products should clearly state the benefits of utilizing them.

Singhal & Malik (2019) created a research paradigm to examine how female consumers' perceptions of price, safety, performance, status, symbolism, and convenience relate to green cosmetic goods. All of the advantageous factors, with the exception of price, have a positive relationship with female consumers' concern, so if green beauty brands work

to make products safer for the hair and skin and improve their functionality, increase their association with status and symbolism, and expand their accessibility, this will lead to a rise in female consumers' concern. When it comes to the categories of cosmetics and foods, women customers place a high priority on quality. Therefore, in order to increase the effectiveness of cosmetics, marketers should concentrate on their quality.

Khan & Salim (2020) expanded the field of inquiry into green cosmetics by demonstrating motivation, awareness, and propensity across all female demographic groups. Finding out which group of Saudi Arabian women is more likely to buy eco-friendly personal care products is the study's main goal. The study found that women in employment are more knowledgeable about eco-friendly and green cosmetics. Additionally, they can afford more expensive cosmetics. The survey showed that working women are concerned about brand awareness and intend to purchase cosmetics provided the items are readily available. The association under consideration is supported by a significant positive relationship between all of the drivers of customer preferences and attitudes towards green cosmetics.

Ishaq et.al (2021) intended to understand how consumer behaviour is influenced by buying of organic cosmetics. This study mainly concentrated on five important aspects: the need for uniqueness, environmental consciousness, health consciousness, price sensitivity, and knowledge about product quality. It was

asserted that all of these factors have a favourable impact on customer behaviour. The study's findings demonstrated that price sensitivity had no appreciable impact on consumer behaviour. It implies that buyers are less concerned with pricing for high-quality organic goods. A key element governing consumer behaviour for the purchasing of various products is health consciousness.

Shimul et.al (2021) tried to understand attitudes towards green cosmetics goods in South Africa, this research included ecological motivations, environmental knowledge, and health consciousness to the theoretical framework of the theory of planned behaviour. A significant predictor of customers' purchasing intentions for green cosmetics was discovered to be subjective norm. This study also shows that consumers' purchasing intentions were not significantly impacted by perceived behavioral control. This study also shows that consumers' purchasing intentions were not significantly impacted by perceived behavioral control. Consumers' concern for the welfare and the environment influences their decision-making and the purchase of green cosmetics, as shown by the large and favourable association between ecological reasons and attitudes towards green cosmetics.

Kar (2022) indicated that customers care about their looks and are aware of the numerous natural or green cosmetics that are accessible and good for both the environment and their wellbeing. One of

the main drivers of people switching from traditional to green cosmetics is awareness, which also appears to have an influence on consumer attitudes. People are eager to include green cosmetics into their lifestyles because they think they are superior than traditional ones. Before making a decision to buy green cosmetics, the majority of respondents are significantly influenced by social media conversations or postings and even conduct in-depth research on numerous websites.

Research Gap

By doing detailed literature review we discovered that many studies on the purchase intention of females related to green products have been conducted. But, as the concept of green products is very emerging and wide there remains a lot of scope for further studies. A very few studies have been done in the international context in relation to green cosmetic industry. In the Indian environment, and more specifically in Kolkata, there is still a knowledge gap in this area. The study's rationale is therefore supported by the gap in the prior literature, which has increased

interest in additional research into these issues.

Development of Conceptual Framework

Model Building: The modified model utilized in this study is based on Ajzen's Theory of Planned Behaviour (TPB) (Figure 1). From Intentions to Actions: A Theory of Planned Behaviour, which he published in 1985, introduced TPB. The theory of reasoned behaviour, proposed by Ajzen and Fishbein in 1980, served as the foundation for this one. The TPB has been used to forecast consumer behaviour related towards going green. The theory's viability has previously been established (Kim & Chung 2011). Kim and Chung (2011) employed TPB specifically to explain the intention for buying organic goods. The variables that have no direct connection to this study are not included in the modified framework. The theories that address every significant facet of green consumer behaviour, environmental concerns, health consciousness and the purchase intention related to purchasing environmentally friendly items make up the ultimate theoretical framework. Green Purchase intention is the only dependent variable in the framework [Akter & Islam, 2020].

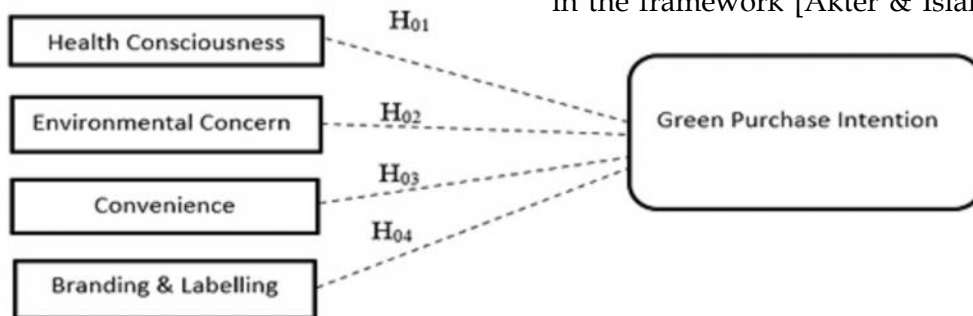


Figure 1: Conceptual Framework

Hypothesis Development: For this study, the following null hypotheses are developed:

H₀₁: Health consciousness will not have significant influence on green purchase intention among female consumers.

H₀₂: Environmental concern will not have significant impact on green purchase intention among female consumers.

H₀₃: Convenience will not have significant impact on green purchase intention among female consumers.

H₀₄: There is no significant impact of Branding & Labelling on female consumers' green purchasing intention.

Research Methodology

Sample Framework: A sample is an accurate representation of population. The formula Paul Leedy (2005) in Arikunto (2010: 123) was used for estimating the number of samples is as follows:

$$n = \left(\frac{z}{e}\right)^2 (P) \left(1 - \frac{1}{P}\right)$$

(where, n= sample size, Z= z-value, P= proportion of population and e= margin of error)

The population involved in this study is

still uncertain. The calculation and sample size indicate that the maximum population value is 0.5, with a 95% confidence level and a 10% error rate.

$$n = \left(\frac{1.96}{0.1}\right)^2 (0.5) \left(1 - \frac{1}{0.5}\right) = 96.4$$

According to the method above, the minimal sample size for this study was 96.4 respondents, which was rounded up to 100 respondents.

Questionnaire Design: An online questionnaire (Google form) was distributed to each respondent through emails and several social media sites in order to collect the primary data for this sample. Two sections make up the questionnaire: one asks about the socioeconomic status and demographics of the respondents, while the other explores the factors that influence consumers' green purchase intention. 100 complete questionnaires were received over the period of two weeks via convenience sampling technique. The questionnaire contains 5 main constructs namely: Environmental Concerns, Health Consciousness, Branding & Labelling, Convenience and Green Purchase Intention which was taken from the following studies:

Constructs	Scale	Source
Environmental Concerns	EC1: I prefer only green cosmetics. EC2: I always make sure the cosmetics I purchase are safe for the environment.	Shimul et.al, 2021

	EC3: I would like to purchase cosmetics based on their features and usage, regardless of environmental concerns.	
	EC4: I suppose green cosmetics won't be as efficient as regular cosmetics.	
	EC5: I don't buy green products because I believe that business and the government should take initiatives to resolve environmental problems.	
Health Consciousness	HC1: I always consider cosmetics with less harmful chemicals/ substances.	Kapoor et.al, 2019
	HC2: I'm willing to pay more for green cosmetics.	Rani & Bharatwal, 2022
	HC3: I favour a greener lifestyle.	
	HC4: I will buy green cosmetics only if the benefits of green cosmetics are equal or more than the non-green cosmetics.	
	HC5: I try to persuade my friends and family to purchase green cosmetics.	
Branding & Labelling	BL1: While purchasing the cosmetics, I look into the packaging or the design of the product	Srivastava & Mathur, 2018
	BL2: I trust the information on the product package concerning green cosmetics.	
	BL3: I pay attention to the advertisements that promote green products or sustainability.	
	BL4: I support green media campaigns.	
	BL5: Before purchasing, I check labels to ensure that the contents are safe for the environment.	
	BL6: The brands which are selling green cosmetics are well known to me.	
Convenience	CO1: If I cannot find green cosmetics at a store, I will seek them online.	Singhal & Malik, 2019
	CO2: While purchasing cosmetic products I compare green and non-green products, then buy according to my convenience.	

Green Purchase Intention	GPI1: I often purchase green skincare products.	Mamun et.al, 2020 Shafira & Mayangsari, 2020
	GPI2: I have already switched to green skincare products.	
	GPI3: I often purchase green skincare products than conventional skincare products.	
	GPI4: I purchase green skincare products because of their positive environmental contribution.	
	GPI5: I often practice environment-friendly consumption.	

Research Instrument: The statistical software SPSS version 26.0 for Windows Operating System was used to carry out

a number of statistical tests, including the Cronbach’s alpha reliability test, correlation analysis, and regression analysis.

Analysis & Interpretation

Reliability Test

Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	N of Items
.895	.899	23

The internal consistency of the dataset is evaluated using the Cronbach Alpha value. Due to the survey’s use of the Likert Scale, it is employed. It’s simple to determine whether your dataset is reliable or not. A Cronbach’s Alpha value greater than 0.7 denotes a reliable set of data. The Cronbach’s alpha value for this study is

shown in Table 1. Cronbach’s alpha, which is evaluated at 0.895, indicates that there is 89.5% variability in a composite score created by adding the 23 items. Hence, 89.5% of the variance in the composite score is indicated, which is considered to be a reliable variance.

Correlation Analysis

Table 2: Correlation Matrix

		Green Purchase Intention	Environmental Concern	Health Consciousness	Branding and Labelling	Convenience
Green Purchase Intention	Pearson Correlation	1	.258**	.331**	.445**	.437**

An Empirical Study on Women's Purchase
Intensions towards Green Cosmetics in Kolkata

		Green Purchase Intention	Environ- mental Concern	Health Consciousness	Branding and Labelling	Convenience
	Sig.(2-tailed)		.009	.001	.000	.000
	N	100	100	100	100	100
Environm- ental Concern	Pearson Correlation	.258**	1	.566**	.399**	.603**
	Sig. (2-tailed)	.009		.000	.000	.000
	N	100	100	100	100	100
Health Conscious- ness	Pearson Correlation	.331**	.566**	1	.776**	.838**
	Sig. (2-tailed)	.001	.000		.000	.000
	N	100	100	100	100	100
Branding and Labelling	Pearson Correlation	.445**	.399**	.776**	1	.661**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	100	100	100	100	100
Convenience	Pearson Correlation	.437**	.603**	.838**	.661**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	100	100	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix depicts the correlation amongst each of the variables as shown in Table 2. For this research, Pearson's The dataset was correlated, which generates a coefficient, r, that assesses the strength of the linear relationships between the pairs of variables. This correlation's range is from -1 to +1. Perfectly negative correlation is represented by a correlation of -1, completely zero by a correlation of 0, and perfectly positive correlation by a correlation of 1. This is the correlation's

associated p-value. The significance level for the correlation is described in the footer note. Environmental Concern and Green Purchase Intention have a statistically significant association, as shown by the correlation coefficient between them, which is 25.8% with a p-value of 0.009. The correlation coefficient between Health Consciousness and Green Purchase Intention is 33.1%, with a p-value of 0.001, indicating that the two variables are significantly related. Green Purchase Intention and Branding &

Labeling are statistically correlated with a correlation coefficient of 44.5% and a p-value of 0.00, respectively, indicating a significant relationship between the two. With a correlation coefficient between Green Purchase Intention and Convenience of 43.7% and a p-value of 0.00, it can be concluded that there is a statistically significant association between the two. There is maximum

positive and significant relationship between Convenience and Health Consciousness (i.e., 0.838) and minimum positive and significant relationship between Green Purchase Intention and Environmental Concern (i.e., 0.258). All the factors are inter-correlated among themselves and has positive and significant relationship with each other.

Testing of Classical Assumptions

Normality Test

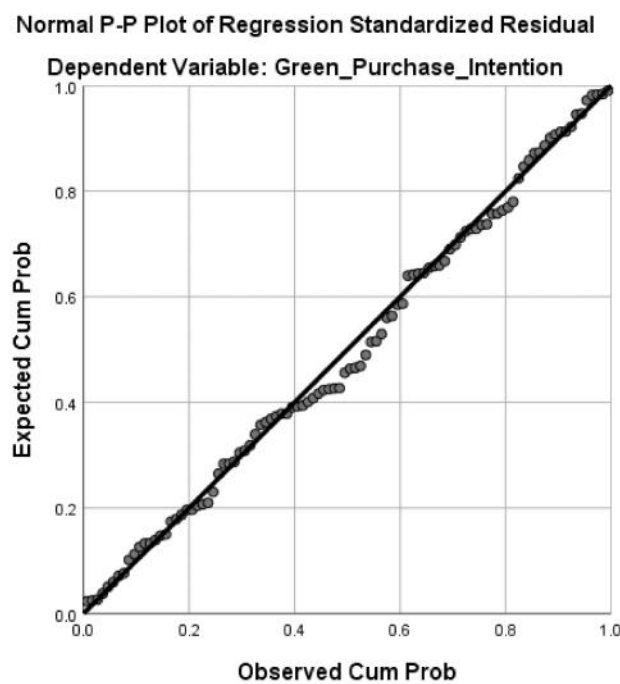


Figure 2: Normal P-P Plot Graphic

Based on the above figure it is indicated that most of the observations falls as well

as follows the diagonal line so the condition for normality is fulfilled.

Multicollinearity Test

Table 3: Multicollinearity

Model	Collinearity Statistics		Status
	Tolerance	VIF	
Environmental Concern	.619	1.615	No Multicollinearity
Health Consciousness	.204	4.902	No Multicollinearity
Branding and Labelling	.394	2.537	No Multicollinearity
Convenience	.272	3.677	No Multicollinearity

Based on the above table, the result shows that Multicollinearity test has been conducted using Variance Inflation Factor (VIF) and Tolerance Value. All the

independent variables having tolerance value >0.2 and VIF <10, so there is no multicollinearity present in the study.

Heteroscedasticity Test

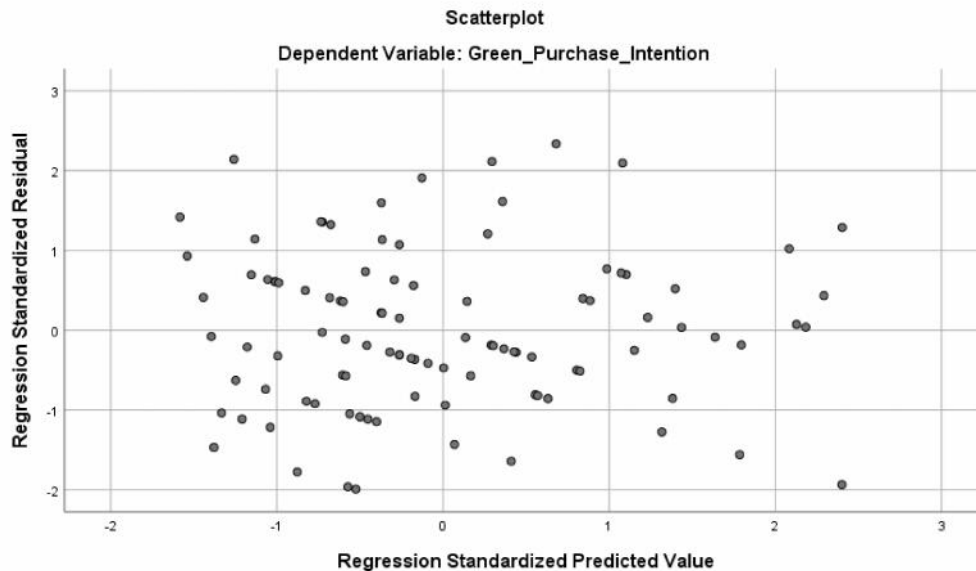


Figure 3: Scatterplot

Based on the above figure, it is seen that data is randomly distributed and it doesn’t follow any kind of systematic

pattern so, we can conclude that there is no symptom of heteroscedasticity is present in this regression model.

Regression Analysis: Model Summary**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.529 ^a	.280	.250	2.17130	1.850

a. Predictors: (Constant), Convenience, Environmental Concern, Branding and Labelling, Health Consciousness

b. Dependent Variable: Green Purchase Intention

Based on the above-mentioned table, the summary model's R-value was 0.529. It displays a moderate association between all the variables and green purchase intention. It can be observed from the

previous table of the most recent summary model that the adjusted R² (R Square) value is 0.280, or 28%. All the factors have a 28% significance on green purchase intention, but additional factors that were not studied here had a 72% significance. The Durbin-Watson value is 1.850, this value should be in the range 1 to 4. So, looking at the value we can conclude that Residuals are independent and not influencing each other.

Regression Analysis: ANOVA**Table 5: ANOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174.077	4	43.519	9.231	.000 ^b
	Residual	447.883	95	4.715		
	Total	621.960	99			

a. Dependent Variable: Green Purchase Intention

b. Predictors: (Constant), Convenience, Environmental Concern, Branding and Labelling, Health Consciousness

F-value is 9.231 and p-value is 0.00 in the ANOVA table. The analysis can therefore be deemed statistically significant because the F-value is larger than 4 and the p-value is less than 0.05. So here, we can conclude that all the independent

variables together have a significant influence on the dependent variable.

Regression Analysis: Coefficients

Multiple Regression Analysis is used here to analyse the influence of environmental concern, health consciousness, branding & labelling and convenience on the Green Purchase Intention (GPI) of the female consumers. The results are depicted in Table 6.

Table 6: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	6.543	.931		7.027	.000		
	Environmental Concern	.029	.086	.037	.332	.740	.619	1.615
	Health Consciousness	-.309	.126	-.473	-2.455	.016	.204	4.902
	Branding and Labelling	.231	.069	.463	3.342	.001	.394	2.537
	Convenience	.789	.261	.505	3.025	.003	.272	3.677

a. Dependent Variable: Green Purchase Intention

Health consciousness has a negative but significant impact of 30.9% on green purchase intention, according to its beta value of -0.309, t-value of -2.455, and p-value of 0.016. Branding & Labelling has a positive significant impact of 23.1% on green purchase intention, according to its beta value of 0.231, t-value of 3.342, and p-value of 0.001. With a positive significant influence of 78.9% on green purchase intention, convenience has a beta value of 0.789, a t-value of 3.025, and a p-value of 0.003. Environmental concern has a beta value of 0.029 with a t-value of 0.332 and p-value of 0.740, indicating that it has a positive but insignificant impact of 2.9% on green purchase intention. For health consciousness, branding & labelling and convenience the significance values are less than 0.05 and t-values are greater than +/-1.96 so here we can reject the null

hypothesis (H_{01} , H_{03} , and H_{04}) while for environmental concern the significance value is greater than 0.05 and t-value is less than +/-1.96 so we accept the null hypothesis (H_{02}). The weighting of the variables is shown by the beta value. The greater the link between the independent and dependent variables, the higher the beta value. From the above table it is seen that beta value (positive) of convenience is 0.789, which is maximum among all the factors. So, we can conclude that convenience has the maximum influence on Green Purchase Intention.

The regression equation developed is: $Y = 6.543 + 0.029 X_1 - 0.309 X_2 + 0.231 X_3 + 0.789 X_4$ based on the values shown in Table 6 above.

(Where, X_1 = Environmental Concern, X_2 = Health Consciousness, X_3 = Branding & Labelling, X_4 = Convenience & Y = Green Purchase Intention)

The regression equation can be explained as follows:

1. Constant (α) shows the influence of Environmental Concern (X_1), Health Consciousness (X_2), Branding & Labelling (X_3) and Convenience (X_4) to Green Purchase Intention (Y), this means that if all independent variables are equal to zero, then the dependent variable is predicted to be 6.543.

2. Environmental Concern (X_1) = 0.029 means that if there is one unit increasing in X_1 , while other variables are constant then Green Purchase Intention (Y) is predicted to increase by 0.029.

3. Health Consciousness (X_2) = -0.309 means if there is one unit increasing in X_2 , while other variables are constant then Green Purchase Intention (Y) is predicted to decrease by 0.309.

4. Branding & Labelling (X_3) = 0.231 means that if there is one unit increasing in X_3 , while other variables are constant then Green Purchase Intention (Y) is predicted to increase by 0.231.

5. Convenience (X_4) = 0.789 means that if there is one unit increasing in X_4 , while other variables are constant then Green Purchase Intention (Y) is predicted to increase by 0.789.

Conclusion, Discussion & Recommendation

Conclusion

The purpose of this study is to gain insight into female consumers' green purchase intention and the variables that influence or drive those emotions. According to study that was conducted using a sample size that was remarkably representative, consumers frequently engage in buying

green cosmetics. The major factors analyzed in the study are environmental concern, health consciousness, convenience and branding & labelling. All the factors except environmental concern have a significant impact on female consumers' green purchase intention towards green cosmetics. In the study three out of four hypotheses were rejected. Health consciousness, convenience and branding & labelling are few aspects that are significant to causing customers to purchase green cosmetics. Consumers now-a-days are health conscious, they want to use cosmetics which enhance their looks but at the same time do not harm their skin so they look for the companies that provide all the benefits and are safe to use as well as has no harmful effects. As a result, companies should keep in mind the products they are manufacturing doesn't contain toxic elements and will not have any side effects on the skin. For the satisfaction of environmentally conscious customers, cosmetic businesses must find methods to become more environmentally friendly. This will be accomplished by using less damaging packaging materials, such as recyclable plastic and by making the production and packaging processes more environmentally friendly. Companies that offer green cosmetics can encourage consumers to buy their products by implementing these strategies. Regarding green purchase intention, branding & labelling can be crucial in the green cosmetics sector. labelling can be quite helpful as they add authenticity of the ingredients used and help to build a positive brand image for

the business. Convenience also is a major factor to influence the purchase intention of the consumer towards green cosmetics. The products which are easily available online or offline has greater reach among consumers than products which are not. So, the companies manufacturing green cosmetics should not only to look after its production process but also to make sure the availability of their products are convenient to the end users.

Managerial Implications

Consumers purchase green cosmetics based on their accessibility, engagement, and cost. It is advised that companies locate the green cosmetics that customers are interested in and are ready to purchase, and then showcase them in a manner that will boost their visibility on various advertising venues. Marketers ought to highlight the advantages associated with employing that green beauty product for the betterment of environmental and health concerns. Given that consumers have become conscious of rising concerns about protecting both people and the environment, they might choose green products over traditional ones.

Marketers must capitalize on this chance to increase awareness of their brands and their goodwill for producing eco-friendly goods. Customers anticipate that enterprises and government agencies will take the lead in using green marketing techniques to safeguard the environment. Marketers should constantly convey their claims in a way that will inspire consumers to look into that product and

ensure that they continue to have that product at the forefront of their list of priorities when considering a purchase.

Limitations and Directions for Future Research

There is no doubt that the current study will act as a foundation for subsequent research. The current study, however, has certain constraints. First of all, the study's sample size is small because of the time constraint. Secondly, it only concentrates on the sample population in Kolkata. It is a representation of the opinions of India's female population. The study also employed Non-probability based (convenience) sampling, which limits the generalizability of results. To improve the generalizability of the results, additional research should look at the relationship between factors in the other relevant industry. Thirdly, while there are numerous other elements that may influence green purchase intention, there are only four variables has been taken in the study to analyze it. Additional research can include a variable that broadens the applicability of the results. Last but not least, this study can be conducted using a variety of other statistical tools.

Future researchers should be able to identify more suitable theoretical frameworks to continue exploring this problem. Further research is needed to determine whether they can draw the same conclusions in various cultural contexts. To supplement this paper's inadequacies, future research can utilize case studies and experimental methods to

better support the findings of empirical study.

Conflict of Interests

I/We declare/s that there are no conflict of interests that are directly or indirectly related to this research work.

Funding

I/We have not received any financial support from any organization to undertake this study.

References

- Ahmad, S. N. B. (2018). *Female Consumers' Attitude towards Natural Beauty Products: Malaysian Perspective. The International Journal of Social Sciences and Humanities Invention*, 5(12), 5099-5102.
- Ajzen, I., & Fishbein M. (1980). *Understanding attitudes and predicting social behavior. green purchasing? Journal of Cleaner Production*, 112 (2016).
- Akter, S., & Islam, M. S. (2020). *Factors Influencing the Attitude of Women towards Purchasing Green Products: An Explorative Case Study of Organic Cosmetics in Sweden. Journal of Consumer Sciences*, 48, 38-64.
- Askadilla W.L., & Krisjanti M.N. (2017). *Understanding Indonesian Green Consumer Behavior on Cosmetic Products: Theory of Planned Behavior Model. Polish Journal of Management Studies*, 15(2), 7-15.
- Ishaq, S., Badar, H., & Javed, H. (2021). *Factors Influencing Female Purchase Behavior for Organic Cosmetic Products in Pakistan. Global Social Sciences Review*, VI(1), 396-407. [https://doi.org/10.31703/gssr.2021\(VI-I\).40](https://doi.org/10.31703/gssr.2021(VI-I).40)
- Kalyani, S., & Khatri, R. (2022). *A Study on Consumers' Buying Perception and Behaviour on Herbal Personal Care Products with Reference to the City of Mumbai. International Research Journal of Modernization in Engineering Technology and Science*, 4(4), 171-175.
- Kapoor, R., Singh, A. B., & Misra, R. (2019). *Green Cosmetics - Changing Young Consumer Preference and Reforming Cosmetic Industry. International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 12932-12939.
- Kar, B. (2022). *Impact of Social Media on Female Consumer's Buying Behavior towards Green Cosmetics. International Research Journal of Modernization in Engineering Technology and Science*, 4(6), 1905-1916.
- Khan, S., & Salim, A. (2020). *Saudi females' buying behavior of green cosmetics: A pertinent motivational aspect. Journal of Marketing Communications. https://doi.org/10.1080/13527266.2020.1720268*
- Kim H., & Chung J. (2011). *Consumer purchase intention for organic personal care products', Journal of Consumer Marketing. Kosmetiaworld. Natural cosmetics in Scandinavia: an overview*, 28(1), 40-47. <https://www.kosmetiaworld.com/2018/11/01/natural-cosmetics-in-scandinavia-an-overview/>
- Laheri, V. K. (2017). *Impact of Demographic Variables for Purchase of Green Products. Indian Journal of Commerce & Management Studies*, VIII (1), 69-76.
- Malik, R., & Sharma, A. (2020). *A Study of Customer attitude towards Organic Cosmetic Products: Indian Context. Mukht Shabd Journal*, IX (IV), 2467-2477.
- Mantiaha, G. F. (2016). *The Influence of Green Marketing on Consumer Buying Behavior (Study at The Body Shop Manado). Jurnal EMBA*, 4(2), 58-67.
- Naik, K., & Shah, P. (2020). *A Study Of*

An Empirical Study on Women's Purchase Intentions towards Green Cosmetics in Kolkata

- Consumer Behavior Towards Green Cosmetics In Ahmedabad. Psychology and Education, 57(4), 357-405.*
- Narang, R., & Sharma, R. (2021). *Impact of Demographic Factors on Purchase Intention of Organic Skin Care Products: A Study in Select Cities of India. Orissa Journal of Commerce, 42(4), 58-73.*
 - Rawat, S. R. (2012). *Feasibility of Green Marketing in the Women Cosmetics Industry. Journal of Applied Management- Jidnyasa, 4, 51-56.*
 - Shafira, A., & Mayangsari, L. (2020). *A Study Towards Barriers of Organic Personal Care Consumption Among Indonesian Young Woman. Malaysian Journal of Social Sciences and Humanities (MJSSH), 5(8), 48-59.*
 - Shakeel, S., & Karim, E. (2019). *Consumer Buying Behavior: Organic Cosmetics versus Non-Organic Cosmetics. MPRA Paper No. 110098.*
<https://mpra.ub.uni-muenchen.de/110098/>
 - Sharma, A., & Mehta, M. (2020). *Effect of Covid-19 Consumer Buying Behaviour towards Cosmetics: Study Based on Working Females. PalArch's Journal of Archaeology of Egypt/ Egyptology, 17(9), 5155-5175.*
 - Shimul, A. S., Cheah, I., & Khan, B. B. (2021). *Investigating Female Shoppers' Attitude and Purchase Intention toward Green Cosmetics in South Africa. Journal of Global Marketing.*
<https://doi.org/10.1080/08911762.2021.1934770>
 - Singhal, A., & Malik, G. (2019). *The Impact of Consumer Value Positioning on Female Consumers Related to Green Cosmetic Products. International Journal of Environment, Ecology, Family and Urban Studies (IJEEFUS), 9(3), 61-76.*
 - Srivastava, S., & Mathur, S. (2018). *A Study on Role of Brand, Label and Advertising on Consumer Behaviour towards Green Cosmetics. International Journal of Research in Economics and Social Sciences (IJRESS), 8(1), 27-40.*

Copyright © Kiran Mishra & Time's Journey (CC BY-NC 4.0)

