Social Media Marketing Effort in Impacting the Intention of Purchase of Green Cosmetics by Indian Consumers

Asma Unnisa Begum I.*, R. Kalpana

Department of Management, Srimad Andavan Arts And Science College (Autonomous), Affiliated to Bharathidasan University, Nelson Road, Srirangam, Thiruvanaikoil, Tiruchirapalli, India. *Email: phdresearch.asma@gmail.com

ABSTRACT

In the earliest days of civilization, cosmetics evolved with the development of appealing and aesthetic senses. Even people's perceptions of beauty and fashion have changed over period of time, the demand and craving for cosmetics has not diminished. Indeed, the market for this industry is always expanding. Green cosmetics are nothing but natural cosmetics or personal care products made only with natural ingredients, which stem from plants and minerals. Such cosmetics save the environment, eliminate pollution to a certain extent and ensure the cautious use of non-renewable resources. This research attempts to identify how the variables social media marketing effort and environmental attitude impact the intention towards purchase of Green Cosmetics by Indian female consumers. The role of Brand Attachment has also been examined as a part of this study. Data has been collected from 393 female working professionals from South India. Three states namely Tamilnadu, Karnataka and Kerala have been considered for primary data collection purpose. Stratified sampling is applied to collect the data. Data has been collected in Quantiative form and statistical analysis has been applied on the data. The results of the hypothesis testing using structural equation modelling analysis shows that Environmental attitude creates an impact on the intention of consumers to buy Green Cosmetic Products Online. At the same time, Brand attachment does not moderate the relationship between Environmental Attitude of the consumers and their intention to buy the products.

Keyword: Cosmetics, Organic Cosmetics, Online Purchase, Indian Women, Social Media
JEL Classifications: M310, M370, M390

1. INTRODUCTION

As a developing economy, India has a lot of environmental complications as a result of excessive usage of chemical ingredients. Customers in modern era have completely accustomed themselves with the changes in the business environment. Also, these customers are becoming more informed, which is clearly evident in changing purchasing behaviour and purchasing intention of customers. The chemical components have not affected the environment alone, but also damage the health conditions of people as well. This is where green products came to light in order to save health conditions of people and environment as a whole (Bali and Acharya, 2021). Customization in terms of green cosmetics will going to be quite popular (Acharya and

Bali). Given that India is one of the developing economies with most populated country in the world, and its citizens spend a considerable amount on cosmetics, various companies that include green or organic cosmetics are entering this market. Gone are the days when women prefer only natural products, that is, they made use of kitchen items to enhance their beauty. Then the chemical products invaded the cosmetic industry as people become too busy with their life schedule and found only less time to prepare these items on their own. However, as individuals become too concerned about environmental complications, the beauty and personal care sector started welcoming green product conceptions (Limbu and Ahamed, 2023) just like other sectors do. Green-cosmetics-related knowledge environmental knowledge (Magano et al., 2022) and awareness of green cosmetics (Moslehpour et al., 2021) are

some of the important factors that play an important role in the purchasing intention of green cosmetics.

Cosmetics businesses have been making the best use of natural products to influence consumers' opinions and viewpoints and persuade them to make purchases (Hsu et al., 2017), and also manufacturing and marketing their goods and products as sustainable. Using eco-friendly products have gained a lots of attention among customers and in this context, green products have played a major role in the cosmetic industry.

In the fast-changing business environment, price is not considered as the only significant variable that influence the purchase intention of customers, but product and service quality are equally playing an important role in the process of customer's purchasing intention (Mirabi et al., 2015). According to Mirabi et al. (2015), purchase intention is the condition in which a consumer has an inclination to acquire any specific product under specific circumstances. To be precise, it represents the choice a customer makes to buy a particular product or service after considering it in the future. The consumers' intention alone specifies the extent to which they are willing to involve in a particular behaviour. With regards to green cosmetics, customers who are determined about environmental issues (Lestari, 2020) will likely to change their consumption items and intend to act as the problem solvers.

Customers are becoming more aware of the importance of being natural and unpolluted as a result of the extreme changes caused by chemicals in the environment. Green consumerism has undoubtedly become a popular trend in the twenty-first century, which also endorses cosmetic industry to strengthen their environmental friendliness and expand their product offerings in order to deal with the demands of the customers, particularly who want to choose organic. Now, every business will be considered incomplete when it does not make use of social media platform for promotion. And, in this case, green products are not an exceptional as well. Social media has a major role in this chemical-to-organic transformation by influencing customers' perceptions and persuading more eco-friendly behaviour (Rao, 2012). Social media has turned out to be an active medium for content creation, and information sharing.

With an extensive selection of goods and preparations for healthy lifestyle and green beauty products, the cosmetics industry has paid heed to customer trends. In the digital era, social media now has created a huge impact on how consumers think, feel, believe and make decisions about what exactly to purchase (Chwialkowska, 2019). Many studies, including those in the cosmetics field, have discussed the impact of social media network on customers' intentions to make green purchases along with their green behaviour. In terms of social media, peer communication plays an important role that enables users to communicate with and impact one another (Kozinets et al., 2010). Consequently, social media assists people in acquiring skills, knowledge, and attitudes, i.e. they almost act as consumers in the social media platform, a process generally termed as consumer socialization.

Social media networks have turned out to be effective means of communicating and endorsing sustainability in the cosmetics industry. Cosmetic firms can develop their commitment to social responsibility, instruct consumers on eco-friendly products and packaging, and spread awareness of sustainable practices by making the best use of social media. Hazra et al. (2024) discusses how user-generated content and social media with the help of influencers can spread awareness, increase interest, spread the importance of sustainability, and influence consumers' purchasing intention. Facebook, Instagram, and Twitter, YouTube are some of the popular social media sites, which have developed into effective tools for green cosmetic industry to communicate with customers, promote their eco-friendly products, and strengthen brand attachment. Social media acts as a tool (Hazra et al., 2024) that promote community development, education, transparency, and commercial marketing.

Demand for green products has evolved thanks to the customers' concern towards environmental wellbeing (Kong et al., 2014). Perceived authority support has created a considerable impact on purchase intention (Chin et al., 2018). According to Murwaningtyas et al. (2020), Instagram influencers have created a huge impact on consumers' intentions to purchase green cosmetics. Celebrities on social media also considered having the potential to influence consumers' perspectives of green cosmetics (Murwaningtyas et al., 2020) and social media platforms can encourage environmentally friendly behaviour. Social media has developed into a main platforms for content creation, idea and information sharing. To conclude, social media has absolutely changed how end users and businesses communicate, particularly when it comes to eco-friendly products, and it has made purchasing not only more engaging for customers, but also make customers more environmental (Pop et al., 2020) conscious people. Social media influencers have developed all the potential to influence consumers' views of green cosmetics (Pop et al., 2020) and social media platform can encourage and endorse environmentally friendly behaviour.

Brand attachment determines the success and longevity of any product and green cosmetics are not an exceptional. A positive relationship between a particular brand and its customers is generally referred to as brand attachment, and it has number of benefits for both brands and customers, i.e. loyalty and a positive approach towards the brand (Kim et al., 2015). A significant element in the development of brand loyalty to green products is an individual's level of concern for sustainability.

Customers' emotional connection is significant in the cosmetics products (Hwang et al., 2021). Brand attachment of customers is likely to create purchase intention, repeat purchase intention and defend the brand. Gradinaru et al. (2022) emphasized that customers are more likely to build a strong connection with aesthetically pleasing green cosmetic products on an emotional and cognitive level, which might lead to positive brand attachment. This research intends to find the role of Social Media Marketing Efforts and Environmentally friendly attitude towards the intention to purchase green cosmetics by Indian consumers. It also explores how brand attachment moderates the relationship between the variables.

2. LITERATURE REVIEW

This section in detail discusses about the social media marketing effort and its impact on the intention of purchase of green cosmetics

by consumers. Factors influencing social media marketing effort towards purchase intention of green cosmetics by consumers are customization and trendiness. Further this chapter discusses about environmental attitude towards purchase intentions of green cosmetics by consumers. Moderating factor selected in this research are brand attachment and concluded with chapter summary.

2.1. Social Media Marketing Effort Creates an Impact on the Intention of Purchase of Green Cosmetics by Customers

Kapoor et al. (2019) carried out research to examine the different factors that impact the consumers' behavior with respect to green cosmetics (GC) and identified that environmental concerns and consciousness of the health are most important factors influencing the behavior of the consumer. Social media plays a main role in consumer's attitude towards buying purpose of GC (Pop et al., 2020). Murwaningtyas et al. (2020) claimed that social networks could sustain and motivate eco-friendly behavior and also celebrities or influencer on social media could impact the attitudes of consumer towards GC. Rao (2022) stated that education about environment on social media concentrate on environmental, public concerns. It motivates customers to modify their attitude and intention of purchase towards GC, marketing of social media is maximizing customer's interest about green products. Further, it is noted that social media allow customers for supporting firms that generate green goods.

Companies of green cosmetics that deploy strategies on social media could impact the buying intention of green customer particularly through brand content, influencer marketing, e-WOM (electronic word of mouth) as mentioned by (Panopoulos et al., 2023; Jaini et al., 2019; Rahaman et al., 2022; Gupta and Syed, 2021). Teixeira et al. (2023) verified that strategies in green marketing optimistically influence the buying intention towards GC with respect to Portuguese consumer such as brand content and e-WOM. Rahal (2020) stated that influencer marketing is one of best form of strategy in marketing. Lusiah et al. (2020) pointed out that advertising in social media, product quality, e-marketing have significant and positive effect on customer's intention to purchase green cosmetics.

H_1: Social media marketing effort creates an impact on the intention of purchase of Green cosmetics by Indian consumers

2.2. Customization has an Impact on the Intention of Purchase of Green Cosmetics by Customers

Shaji (2020) conducted a research to study about customer's level of satisfaction with respect to green cosmetics. Factors such as safety, ingredients, quality of product impact the level of satisfaction towards products. Respondents of the research have shown their level of satisfaction and intention to buy green cosmetics. Kar (2022) determined that majority of customers are conscious about fairness regarding their personal look and develop the knowledge of different green or organic cosmetics present that are helpful for environment and health.

Consumers are aware about health trends and environmental effects towards green patterns of consumption have seen a growth in eco-friendly products such as natural ingredients are included

in cosmetic products (Kumar et al., 2021; Zollo et al., 2021; Amberg and Fogarassy, 2019). Green cosmetics or eco friendly and personal care goods such as organic and natural cosmetics (oral care, hair care, color cosmetics, body care and skin care) which contain organic and natural ingredients source and neglect synthetic chemicals that are packaged in reusable or environment friendly materials concentrating on protecting the environment (Chin et al., 2018; Amberg and Fogarassy, 2019; Sadiq et al., 2021).

Firms could expand interaction and connection with most of the people. Further it was noted that personalized offers or customization of products would maximize the loyalty and engagement of customers (Shamsudeen and Ganeshbabu, 2018). Quoquab et al. (2020) pointed out that gender mediates the link between pro-environmental beliefs and altruistic values, personal norms and environmental beliefs; green purchase behaviour and personal norms. Customers purchase products from GCs on the basis of their price, presence and availability and it is recommended to marketers for identifying GC products where customers like to purchase and to show such products in such a manner to maximize it ['/reach on different platforms for advertising, umarketers must highlight the advantages of adopting that GC products for environmental and health concern (Siddharth and Simon, 2021).

$H_{1.1}$: Customization has an impact on the intention of purchase of Green cosmetics by Indian consumers.

2.3. Trendiness has an Impact on the Intention of Purchase of Green Cosmetics by Customers

According to Jaiswal and Kant (2018), health and environmental awareness trends were increasing among cosmetic sections; thus developed a rise in the usage of green products. Customers like to choose and buy products are eco-friendly, do not harm environment or animals since they care for environmental concern (Rustam et al., 2020). Clothes and lipsticks share similar qualities regarding customer's green buying intention. They are durable customer traits and directly used for our skin. They are aware of fashion trends and must be purchased again over particular period of time. Continuous and sustainable purchasing decisions are required for both items (Ma et al., 2018). Because of high environmental and health issues linked with traditional cosmetics, trend of adopting GC is maximizing all over the globe as mentioned by Matic et al. (2018).

Maximizing awareness towards the significance of environment, health and problems associated with synthetic chemicals has paved a way for following healthier life pattern (Zollo et al., 2021). It was clear that GC trend has become a main factor in personal beauty sector. Celebrities are invited for promoting responsible and healthy behaviour of adopting GC to develop a trend in United Kingdom. Furthermore, being green requires financial, government support and time that are efficient to develop GC industry (Lin et al., 2018). Belanger (2021) added that it is significant for customer to be aware of marketing trend for GC. They could adopt this knowledge for marketing their products and have best campaigns for advertisement.

$H_{1.2}$: Trendiness has an impact on the intention of purchase of green cosmetics by Indian consumers

2.4. Environmental Attitude has an Impact on the Intention of Purchase of Green Cosmetics by Customers

GC products are significant to reach the different requirements of consumers as acquiescence remain sustainable and eco-friendly is considered. Factors influencing behavior of the eco-awareness and social influences cause a transformation in purchasing attitude and behavior (Abdulmoaz and Ayham, 2021). Nguyen et al. (2019) claimed that trends of green marketing and protection of environment that leads to transformation of customer behaviour and demand. Customers are more willing towards eco-friendly lifestyle, thus they focus on perspectives of ecological protection and personal benefits from GC. Prakash et al. (2024) mentioned that para-social communications, pro-environmental beliefs and cosmetic packaging encourage young customer to purchase GC or zero-waste cosmetics.

Knowledge of environment positively and significantly impacted behaviour willingness of Gen Y customers toward trend of GC (Moslehpour et al., 2021 and Magano et al., 2022). Zou and Chan (2019) and Solis and Barska (2021) mentioned that perceived quality has optimistic impact over attitude towards trend of GC. Factors influencing the decisions of young buyers toward GC are studied by Lili et al. 2022. Efforts which promote GC must teach consumers about the goods and aimed for increasing their intrinsic and extrinsic motives to adopt them. Strategy of celebrity endorsement for GC must emphasize the celebrity's affinity, experience and credibility for product. To buy eco-friendly goods such as GC goods, customers show their pro-environmental attitudes and concern for the atmosphere (Prakash et al., 2019). On the other hand, Al Mamun et al. (2020) discussed that adoption of eco-friendly cosmetics seen less development, as consumers show minimized interest for environmental welfare and no concern for personal happiness.

H_2: Environmental attitude has an impact on the intention of purchase of green cosmetics by Indian consumers

2.5. Brand Attachment Moderates the Relationship Between Social Media Marketing Effort and the Intention of Purchase of Green Cosmetics by Customers

Consumers who are highly connected with brand would impact relatives to transform as a consumer (Nawaz and Kaldeen, 2020). Marketing of social media could develop a maximized intention toward purchase any product (Agarwal, 2020). Attitude of the customer would influence willingness to buy (Liu et al., 2020) and engagement of customer also influences the consumer to buy a product in social media (Xu and Nuangjamnong, 2022; Sun et al., 2019; Xu and Nuangjamnong, 2022). A research was carried out by Li and Nuangjamnong (2022) that factors influencing attitude of the customer and buying intention in GC product. It was found that review valence and quality have influence on attitude of customer. Buying intention of customer purchase influenced by marketing of social media, customer engagement and attitude.

Awareness of brand must be taken into consideration and executed by expanding and initiating new strategies and plans for marketing to inform individuals and idea of GC. GC are pretended to fulfill these criteria and requirements; that was outlined by customers. It is important to know about the difference between GC and chemical based cosmetics for better results. At the same time, customers must be aware of GC brand and like to start buying eco-friendly cosmetic products with high quality, further with that brand loyalty are developed. From the findings of the research, it was found that majority of the consumers who frequently buy GC are from 20 to 30 years. They prefer customization which suit their expectations and requirements (AL-Haddad et al., 2020).

H_3: Brand attachment moderates the relationship between social media marketing effort and the intention of purchase of green cosmetics by Indian consumers

2.6. Brand Attachment Moderates the Relationship between Environmental Attitude and the Intention of Purchase of Green Cosmetics by Customers

Marketers could concentrate on improving the confidence of the customers in GC by enlightening them regarding their eco-friendly certified green products (Limbu et al., 2022). GC marketers could encourage their initiatives of CSR by incorporating charitable contributions with activities of business, combining their initiatives of environment with business procedures and allow their commitments and promises to enhance the environment (Munerah et al., 2021). Lee and Chen (2019) highlighted that when focusing ecologically conscious customers, it is important for cosmetics firms for promoting their brand's initiatives of ecological sustainability. It was identified that main impact of brand image towards intention of buying that recommends that GC marketers could concentrate on developing trust and custom their interaction campaigns for building and promoting a brand image by indicating their loyalty to eco-sustainability and improving customers' confidence in their environmental security of brands (Lee and Chen, 2019).

Chin et al. (2018) emphasized that support and recruit opinion influencers or leaders and public figures are efficient strategy to support and promote GC products and maximizing customer attention to GC goods. It found that positive and significant impact of green value on consumer attitude with respect to green products. Green marketing such as green WoM, environmental advertising and green psychological advantages such as nature experience, self-expressive benefits and warm glow mediate the link between value of the customer, attitude towards intention of green purchase and product (Liao et al., 2020). Thoo et al. (2019), Yusiana et al. (2021), Yen and Hoang (2023) and Vania and Ruslim (2023) pointed out that eco-friendly brands promote intention of purchase towards green products. Knowledge about green brand has significant and optimistic impact on purchase intention towards green products (Verma et al., 2019; Ru et al., 2018; Sreen et al., 2018; Pebrianti and Aulia, 2021; Kautish et al., 2019; Jaiswal and Kant, 2018; Rivera and Paula, 2024).

H_4: Brand attachment moderates the relationship between environmental attitude and the intention of purchase of green cosmetics by Indian consumers

2.7. Conceptual Framework

There are numerous studies and researchers examined about the green purchase intention (Teixeira et al., 2023; Lee and Chen, 2019; Kapoor et al., 2019; Jaiswal and Kant, 2018), Authors also focused on impact of social media towards green cosmetics (Pop et al., 2020). However there are no studies and researchers concentrated on social media marketing effort in impacting the

intention of purchase of green cosmetics with respect to Indian consumers. Therefore, this research tries to bridge that gap by investigating in detail about social media marketing effort in impacting the intention of purchase of green cosmetics with respect to Indian consumers. Figure 1 presents the conceptual framework developed based on the gap derived.

2.7.1. Research hypothesis

H_1: Social media marketing effort creates an impact on the intention of purchase of Green cosmetics by Indian consumers

$H_{1.1}$: Customization has an impact on the intention of purchase of Green cosmetics by Indian consumers

$H_{1.2}$: Trendiness has an impact on the intention of purchase of green cosmetics by Indian consumers

H_2: Environmental attitude has an impact on the intention of purchase of green cosmetics by Indian consumers

H_3: Brand attachment moderates the relationship between social media marketing effort and the intention of purchase of green cosmetics by Indian consumers

H_4: Brand attachment moderates the relationship between environmental attitude and the intention of purchase of green cosmetics by Indian consumers.
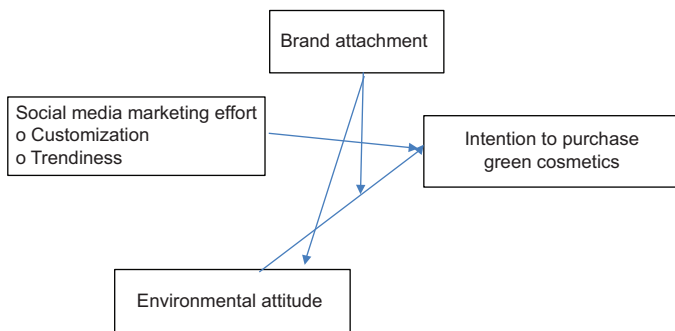
3. RESEARCH METHODOLOGY

Quantiative research approach has been adapted in this research. Data has been collected from female working professionals alone. Male consumers have been excluded in the data collection process. Data has been collected online through the design and circulation of structured questionnaire (Closed Ended Questionnaire). Google forms has been used as a tool to collect the data. The region of study is South India. In particular women belonging to three states Tamilnadu, Kerala and Karnataka have been surveyed for this research. The target population included the women from the following cities: Chennai, Trivandrum and

Table 1: Research Instrumentations

Variable name	Type of variable as per the model	Number of items
Environmental attitude (ET)	Independent variable (IV)	5
Social media marketing effort (Customization) (SMMC)	Independent variable (IV)	3
Social media marketing effort (Trendiness) (SMMT)	Independent variable (IV)	3
Intention to purchase green cosmetics (IT)	Dependant variable (DV)	2
Brand Attachment (BA)	Moderating variable.	4

Figure 2: SEM model

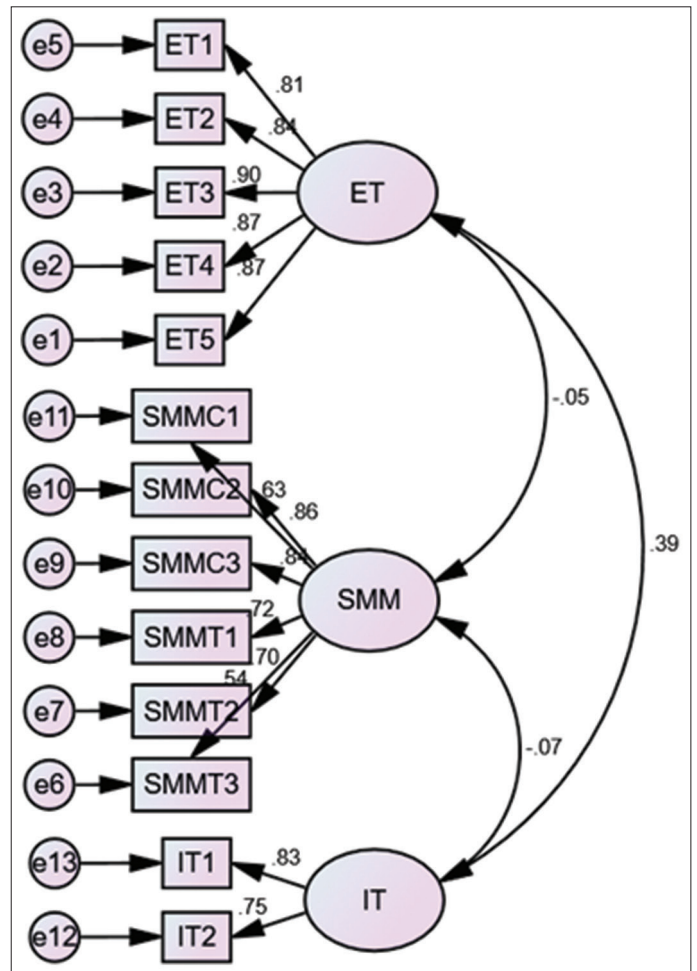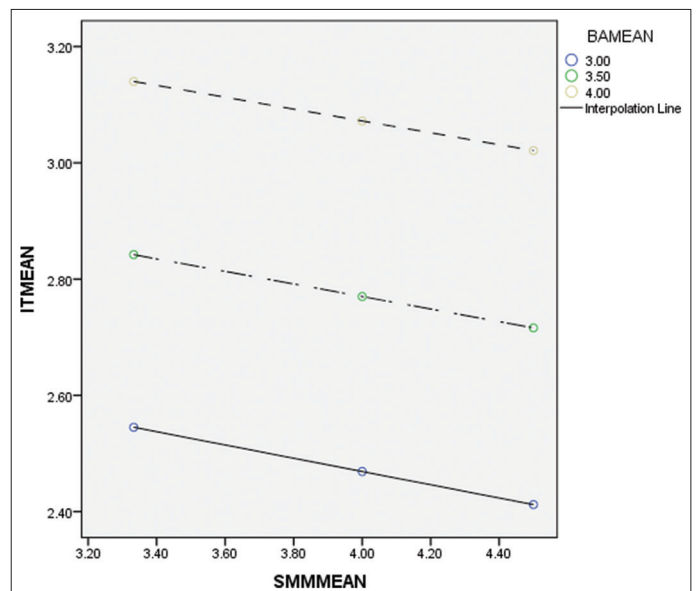**Figure 1:** Conceptual framework.

Source: Author

Figure 3: Brand attachment and social media marketing effort and intention to purchase green cosmetics

Bengaluru from the three selected states respectively. Since these three cities are Industrial hubs, the probability of finding working professionals is higher in these cities when compared with that of other Tier 2 and Tier 3 cities. This justifies the choice of the cities for collecting research samples. Stratified sampling has been adapted for the primary data collection. The sample size after the collection of data, coding and curation of data arrived at was 393 respondents. Questionnaire was distributed to around 650 people. The response rate obtained is identified to be 60%. The details of the instrumentation used for data collection is as follows. Table 1 presents the details of the variables that have been measured in this research along with the number of items used to measure them.

Figure 4: Brand attachment moderates the relationship between environmental attitude and intention to purchase green cosmetics
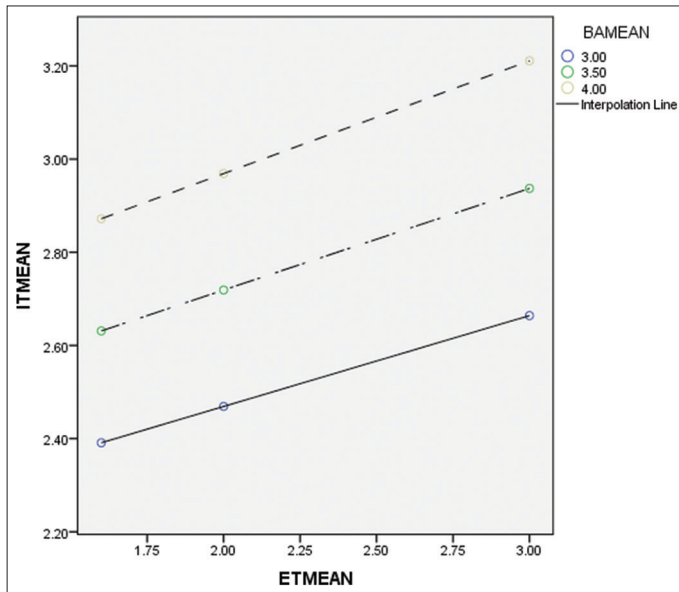
i. Independent variable 1- Social media marketing effort [Customization (3 items)- Wang et al. (2019); Trendiness (3 items)- Sharma et al. (2021)]
ii. Independent variable 2- Environmental attitude (5 items)– Choi and Ann (2023)
iii. Dependant variable – Intention to purchase green cosmetics (2 items)- Teixeira et al. (2023)
iv. Moderating variable- Brand attachment (4 items) – Gradinaru et al. (2022).

The primary data collected has been analysed using AMOS software. A reliability analysis has been carried out to ensure the content validity and reliability of the survey instrument used and the Cronbach's alpha values have been presented in this research (Table 3). The researcher has ensured to conduct the research without violating ethical guidelines. Confidentiality and Anonymity of the respondents have been maintained throughout the research. The respondents were provided with an informed consent form before they filled out the survey forms.

4. ANALYSIS AND RESULTS

4.1. Demographic Profile Analysis
The below Table 2 includes only demographic characters such as age, income, marital status and income.

4.2. Reliability Analysis
In the reliability analysis, the Cronbach Alpha statistical test has been used. When a variable of Cronbach Alpha value is found to be >0.60, it is considered reliable and it is considered unreliable when it is found to be ≤0.60. Table 3 shows the value of reliability analysis.

Figure 5: Test of hypothesis- result.

H1: Social media marketing effort creates an impact on the intention of purchasing green cosmetics by Indian consumers	H2: There is correlation between environmental attitude and customer's intention to purchase green cosmetics	H3: Brand attachment moderates the relationship between social media marketing effort and intention to purchase green cosmetics	H4: Brand attachment moderates the relationship between environmental attitude and intention to purchase green cosmetics
H1a: There is correlation between Customization and customer's intention to purchase green cosmetics • REJECTED H1b: There is correlation between Trendiness and customer's intention to purchase green cosmetics • REJECTED	Accepted	Rejected	Rejected

Source: Author

Table 2: Analysis of the demographic profile of consumers

Demographic profile	Frequency (f)	Percent	Valid %	Cumulative %
Age				
20-30 years	65	16.5	16.5	16.5
31-40 years	191	48.6	48.6	65.1
41-50 years	117	29.8	29.8	94.9
51 years and above	20	5.1	5.1	100.0
Total	393	100.0	100.0	
Income				
Rs. 10000-Rs. 40000	76	19.3	19.3	
Rs. 41000-Rs. 70000	138	35.1	35.1	19.3
Rs. 71000-Rs. 100000	127	32.3	32.3	54.5
Rs. 100000 and above	52	13.2	13.2	86.8
Total	393	100.0	100.0	100.0
Marital status				
Single	113	28.8	28.8	28.8
Married	199	50.6	50.6	79.4
Divorced	43	10.9	10.9	90.3
Widow	38	9.7	9.7	100.0
Total	393	100.0	100.0	
Education				
Upto school level	20	5.1	5.1	
Diploma	40	10.2	10.2	5.1
UG	66	16.8	16.8	15.3
PG	131	33.3	33.3	32.1
Doctorate	40	10.2	10.2	65.4
Others	96	24.4	24.4	75.6
Total	393	100.0	100.0	100.0

Table 3: Cronbach analysis

Item name	Number of items	Alpha value (a)
Environmental attitude (ET)	5	0.931
Social media marketing effort (Customization) (SMMC)	3	0.823
Social media marketing effort (Trendiness) (SMMT)	3	0.756
Intention to purchase green cosmetics (IT)	2	0.763
Brand attachment (BA)	4	0.726

Table 4: KMO and Barlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy	0.840
Bartlett's test of sphericity	
Approx. Chi-Square	3868.378
Df	136
Sig.	0.000

4.3. Factor Analysis

The value of KMO Barlette is given in the below Table 4 and value of principal component analysis (PCA) is given in the Table 8.

As the above Table 4 shows, the obtained value of KMO is 0.840, which is close to 1, i.e. the variables can be considered significant and the P = 0.000 (<0.05).

The coefficient absolute values presented in the Table 5, show that all the variances are maximized with reduced dimensionality.

4.4. SEM Analysis

The SEM path diagram shows the associations of the variables involved. It is illustrated in the Figure 2.

Table 5: Rotated component matrix

Label	Rotated component matrix[a]			
	Component			
	1	2	3	4
ET1	0.829			
ET2	0.872			
ET3	0.903			
ET4	0.883			
ET5	0.881			
SMMC1		0.712		
SMMC2		0.850		
SMMC3		0.841		
SMMT1		0.783		
SMMT2		0.783		
SMMT3		0.657		
IT1				0.796
IT2				0.870
BA1				0.838
BA2			0.804	
BA3			0.904	
BA4			0.911	

Extraction method: Principal component analysis
Rotation method: Varimax with kaiser normalization.
[a]Rotation converged in 5 iterations.
The coefficient absolute values show that all the variances are maximized with reduced dimensionality

Table 6: Computation of degrees of freedom

Number of distinct sample moments	91
Number of distinct parameters to be estimated:	29
Degrees of freedom (595-83):	62

4.4.1. Result (default model)

The degree-of-freedom (dof) is computed (Table 6) and the obtained dof value is 62.

The estimated chi-square value is presented in the Table 7 and the value obtained is 156.477, with dof of 62 and probability as .000, which shows that the proposed model is a good-fit.

Table 7: Default model's result: Achieved the minimum

Chi-square	156.477
Degrees of freedom =	62
Probability level =	0.000

Table 8: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	29	156.477	62	0.000	2.524
Saturated model	91	0.000	0		
Independence model	13	2976.815	78	0.000	38.164

Table 9: RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	0.026	0.941	0.914	0.641
Saturated model	0.000	1.000		
Independence model	0.252	0.376	0.272	0.322

Table 10: Baseline comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	0.947	0.934	0.968	0.959	0.967
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

Table 11: Parsimony-adjusted measures

Model	PRATIO	PNFI	PCFI
Default model	0.795	0.753	0.769
Saturated mode0l	0.000	0.000	0.000
Independence model	1.000	0.000	0.000

Table 12: NCP

Model	NCP	LO 90	HI 90
Default model	94.477	61.406	135.234
Saturated model	0.000	0.000	0.000
Independence model	2898.815	2724.105	3080.844

Table 13: FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	0.399	0.241	0.157	0.345
Saturated model	0.000	0.000	0.000	0.000
Independence model	7.594	7.395	6.949	7.859

Table 14: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	0.062	0.050	0.075	0.047
Independence model	0.308	0.298	0.317	0.000

Table 15: Hoelter

Model	Hoelter (0.05)	Hoelter (0.01)
Default model	204	228
Independence model	14	15

As the above Table 8 shows, the observed value of CMIN/DF (Chi-square) is 2.524 and RMR (root-mean-square) value is 0.26 with significance P = 0.000, whereas Table 9 shows that GFI

Table 16: Regression weights: (Group number 1-default model)

			Estimate	S.E.	C.R.	P	Label
IT	<---	ET	0.373	0.058	6.440	***	
IT	<---	SMM	-0.075	0.093	-0.809	0.419	
ET5	<---	ET	1.000				
ET4	<---	ET	1.079	0.047	23.067	***	
ET3	<---	ET	1.001	0.040	24.753	***	
ET2	<---	ET	1.110	0.051	21.880	***	
ET1	<---	ET	1.013	0.050	20.192	***	
SMMT3	<---	SMM	1.000				
SMMT2	<---	SMM	1.293	0.129	10.001	***	
SMMT1	<---	SMM	1.208	0.119	10.152	***	
SMMC3	<---	SMM	1.476	0.134	11.003	***	
SMMC2	<---	SMM	1.478	0.133	11.116	***	
SMMC1	<---	SMM	1.216	0.129	9.403	***	
IT1	<---	IT	1.000				
IT2	<---	IT	0.959	0.141	6.808	***	

Table 17: Brand attachment moderates the relationship between social media marketing effort and intention to purchase green cosmetics

Model: 1
Y: ITMEAN
X: SMMMEAN
W: BAMEAN
Sample Size: 393
Outcome variable: ITMEAN

Model Summary			
MSE	F	Df1	Df2
499	33.378	3.000	389.000

Model					
	coeff	se	t	p	LLCI	ULCI
Constant	1.259	1.588	0.793	0.428	−1.863	4.381
SMMMEAN	−0.150	0.406	−0.370	0.712	−0.947	0.647
BAMEAN	0.555	0.444	1.250	0.212	−0.318	1.429
Int_1	0.012	0.113	0.105	0.916	0.211	0.235

***Level of confidence for all confidence intervals in output: 95.0000

Table 18: Brand attachment moderates the relationship between environmental attitude and intention to purchase green cosmetics

Model: 1
Y: ITMEAN
X: ETMEAN
W: BAMEAN
Sample Size: 393
Outcome variable: ITMEAN

Model Summary			
MSE	F	Df1	Df2
0.472	42.60	3.000	389.000

Model					
	coeff	se	t	p	LLCI	ULCI
Constant	0.861	0.610	1.412	0.159	−0.338	2.060
SMMMEAN	0.054	0.267	0.203	0.839	−0.471	0.579
BAMEAN	0.406	0.168	2.410	0.016	0.075	0.737
Int_1	0.047	0.071	0.659	0.510	−0.093	0.187

***Level of confidence for all confidence intervals in output: 95.0000

(goodness-fit-index) value as 0.941, in which all the values are within the acceptable range. The Table 10 shows the value of NFI (0.947), IFI (0.934) and CFI value is (0.967).

As the above Table 11 shows, the obtained PNFI value is 0.753.

The Tables 12-15 present the results of the estimation of the fitness of the model. As the above Table 13 shows, The FMIN value is .399. Table 14 shows that the value of RMSEA is .062, with p-close value as .000, referring to that model is perfectly fit. Table 15 presents the HOELTER value. The results reveal that the model is a perfect fit.

The regression weights of the model is given in Table 16.

4.5. Moderator Analysis

The graph presented in the Figure 3 is generated for the moderating analysis based on the values of Table 17.

5. FINDINGS, DISCUSSION AND CONCLUSION

The graph presented in the Figure 4 is generated for the moderating analysis based on the values of Table 18.

The findings of the test of hypothesis have been illustrated in the Figure 5.

Over the last two decades, the green cosmetics business has gained enormous attention. Research relating to this subject in the field has increased concurrently. In spite of its recent popularity, only few comprehensive analysis have been carried out to compile and only few studies available that examined the variables linked to green cosmetics and its purchase intention. Thus, this research makes a serious effort to close this gap. There are many factors found that might influence a consumers' intention to purchase eco-friendly products, in particular, and eco-friendly cosmetics, in general. The main positive factors for purchasing intention of green products include perceived consumer effectiveness, attitudes, and environmental concerns along with knowledge, perceived behavioural control, and awareness (Simanjuntak et al., 2023). The green revolution, and various government regulations and motivations are also considered as the major driving forces behind the acceptance of green cosmetics and a healthy lifestyle (Limbu and Ahamed, 2023). The current study has formulated four hypothesis and only relationship between environmental attitude and customer's intention to purchase green cosmetics has been and accepted. Also, study by Simanjuntak et al. (2023) emphasized that environment attitude plays a major role in influencing the purchasing intention of green cosmetic products. Existing studies were mainly focusing on green purchase of common products (Mishal et al., 2017), organic food products (Rashid and Lone, 2023) only less attention has been given to green cosmetic products. Thus, the findings of the study will assist researchers in analysing the boundaries of knowledge and help decision-makers and marketers create methods that efficiently promote green cosmetics.

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