

**6. Conclusions, Findings,
Managerial Implications
Recommendations,
Contributions, Limitations,
and scope for further
research**

Introduction

The study seeks to summarize its findings and recommendations based on the research objectives. These objectives were designed to explore the behavioural aspects influencing consumer decisions regarding the purchase of green products, particularly within the cosmetics industry. Key factors examined include demographics, attitudes, promotional influences, social media impact, family recommendations, and other significant elements.

The research also delves into the emotional drivers behind purchase decisions, identifying negative emotions such as fear of side effects, harmful chemicals, and allergic reactions, as well as positive emotions like hope for improvement and performance optimism. Additionally, the study investigates brand loyalty and trust-building factors, including packaging, product quality, brand reputation, and environmental benefits.

Data for the study was collected through a structured respondent questionnaire administered in the cities of Ahmedabad, Surat, and Vadodara. The sample was proportionately selected to reflect the demographic composition of these cities. A total of 1,154 valid responses were analyzed. The collected data was jointly structured and subjected to statistical analysis to draw meaningful conclusions aligned with the research objectives, employing a range of analytical tools.

Findings and Recommendations of the study:

Out of the total of 1154 respondents, 87% of the respondents had used cosmetic products. Of the respondents who used cosmetic products, 75% were aware of green cosmetic products. Overall, 65% of the respondents were aware of green cosmetic products. Of the total 1154 respondents, 739 were female and 415 were male. 95% of females and 74% of males had used cosmetic products. Of the respondents who had used cosmetic products, 82% of female and 60% of male were aware of green cosmetic products. Overall, 77% of females and 45% of male respondents were aware of the term green cosmetic products. From the data, it can be inferred that females' awareness of green cosmetic products is higher than male respondents. Based on statistical tool analysis, it has been observed that with the increase in the education level of the consumers, there was a significant increase in the awareness of the term green cosmetic

products. (Reference H₀₁₀). For the above objective, it is recommended that educational campaigns should be organized primarily for male consumers by leveraging the platforms with female consumers as they have higher awareness, the companies should recommend the government to include the importance of the green cosmetic and include the same in the syllabus so that the young upcoming generation can be made more aware.

From the total respondents 1154, it can be observed that while purchasing the cosmetic behavior, 73% of the respondents bought skin-care products, followed by 45% body-care products, 35% of makeup, 56% of fragrances, 67% of hair-care products and 13% of the respondents did not purchase cosmetic products. From the 477 respondents who have purchased green cosmetic products, 47% of the respondents purchased cosmetic products from social media, 50% of the respondents from the company website, 41% of the respondents from the departmental stores and 9% from other places such as exhibitions. Furthermore, 88% of respondents were influenced to purchase green cosmetic products by the ingredients of the product, 24% by packing, 55% of respondents by its certification, 42% of respondents by the brand name, and 10% of respondents by the place of manufacturing. On the basis of statistical tools, it has been inferred that likeliness of place to purchase green cosmetic products had direct relationship of the respondents getting recommended to use green cosmetic products referred by friends/family (Reference H₀₁₁). Respondents using cosmetic products for certain purposes are likelier to use green cosmetic products for the same purpose (Reference H₀₁₄, H₀₁₅). Respondents perceived quality of green cosmetic products depended on the product's brand name (Reference H₀₂₀). To fulfil the above objective, it is further recommended that the companies enhance their social media presence and optimize their websites to increase consumer reach and engagement ratio. As it can be inferred that natural ingredients, certification and brand name significantly influence the purchasing decisions, the companies should focus on these factors.

Out of 1154 total respondents, 23% of respondents are willing to spend up to Rs.500 per month on green cosmetic products (46% on cosmetic products), 16% of respondents between Rs.500-Rs.2000 per month (39% on cosmetic products), 2% between Rs. 2000-3500 (11% on cosmetic products) and 1% willing to spend more than Rs.3500 per month (4% on cosmetic products). From the statistical tool analysis, it can be inferred that consumer loyalty is directly related to

the promotional methods employed by brands (Reference H₀₃). Consumers of Vadodara city was willing to pay more when compared to the respondents of Ahmedabad city (Reference H₀₇). Consumers purchasing green cosmetic products from social media tend to spend more. (Reference H₀₁₂). Consumers may or may not evaluate the quality of cosmetic products based on the packaging (Reference H₀₁₇). To increase the consumer's spending on green cosmetic products, brands should focus on the various promotional methods that will help build the loyalty among the consumers. The marketing strategies such as promotions and premium packaging on green cosmetic products should be offered for the consumers of Vadodara city as they are willing to pay more. More emphasize should be made on quality of the products to reach a wider audience.

Consumers using green cosmetic products, 62% of respondents gets motivated to purchase green cosmetic products by the factor of not harming the environment, 70% of respondents by the factor of health benefits, 26% by the factor of ethical values, 52% by the factor of no side effects and 4% due to social pressure. While deciding whether to purchase green cosmetic products, 38% of respondents consider price, 88% consider quality, 58% consider brand reputation, 38% consider environmental sustainability, and 24% consider ease of availability of the cosmetic products. Of the respondents, the main demotivating factors for not purchasing green cosmetic products, 37% of respondents found that the green cosmetic products were expensive, 30% of respondents had allergic reactions, 41% considered environmental non-sustainability, 12% of respondents had personal preference and 3% of respondents had health concerns. From the analysis obtained from statistical tool, it can be inferred that respondents who gets motivated by green cosmetic products not causing harm to the environment has environmental impact as the most significant factor while they purchase green cosmetic products (Reference H₀₁₆).

For enhancing the adoption of green cosmetic products, it is recommended that companies should emphasize on health benefits, environmental sustainability and the ethical values for marketing strategies. They should try to cater the price sensitivity part of green cosmetic products and ensure high quality product with minimizing allergic reactions by standardization norms.

Consumers expectations towards green cosmetic products was analyzed on the Likert scale (1-5 from Strongly disagree to Strongly agree). 45% of the 477 respondents agreed (scale 4) that price and affordability as one of the major factor, 26% were neutral (scale 3), 16% strongly

agreed (scale 5), 8% strongly disagree (scale 1) and 5% disagreed (scale 2). Considering quality and performance as another factor, 4% of respondents strongly disagreed, 2% disagreed, 10% were neutral, 35% agreed and 48% strongly agreed. Considering environmental impact and comparison as another factor, 4% of respondents strongly disagreed, 3% disagreed, 31% were neutral, 42% agreed and 21% strongly agreed. Considering sustainability as another factor, 2% of respondents strongly disagreed, 4% disagreed, 25% were neutral, 49% agreed and 20% strongly agreed. Considering brand reputation as another factor, 1% of respondents strongly disagreed, 4% disagreed, 19% were neutral, 54% agreed and 21% strongly agreed. From the statistical tool analysis, it can be inferred that purchase of green cosmetic products had a significant relationship with the environmental awareness of the consumers (Reference H₀₉). To better understand and meet the consumer expectations for green cosmetic products, companies should focus on high-quality products as consumers strongly value. It can maintain competitive pricing and affordability and will address consumers' concerns by building a solid brand reputation.

To examine the quality and satisfaction for green cosmetic products, the factors were analyzed by Likert scale (1-5 from Strongly disagree to Strongly agree). Considering that green cosmetic products should be tested to meet quality standards as a satisfactory factor, 1% of respondents strongly disagreed, 2% disagreed, 12% were neutral, 45% agreed, and 40% strongly agreed. Considering good customer service after purchase of green cosmetic product as a satisfactory factor, 3% of respondents strongly disagreed, 1% disagreed, 14% were neutral, 50% agreed and 33% strongly agreed. Considering that consumers should be provided with accurate information as a satisfactory factor, 1% of respondents strongly disagreed, 1% disagreed, 10% were neutral, 43% agreed, and 45% strongly agreed. Considering offers, discounts and rewards as a satisfactory factor, 2% of respondents strongly disagreed, 1% disagreed, 20% were neutral, 47% agreed and 30% strongly agreed. Focusing on quality assurance, post-purchase customer service, transparency in the ingredients, production methods, and product benefits will help the companies build credibility and meet customer expectations with the product features by implementing promotional strategies and education initiatives.

For analyzing the gender influence among the consumers while they purchase green cosmetic products for factors preference and attitude, 79% of respondents believe that gender does impact the purchase behavior. 83% of respondents believe that women are more likely to

purchase the premium products as compared to male, 81% of respondents speculate that gender plays an important role while evaluating and perceiving quality and safety of green cosmetic products, 86% of respondents deemed different expectations of men and women when it comes to packaging and 77% regarding sustainability. While analyzing the results of statistical tool, it can be inferred that usage of cosmetic products had direct relationship with the gender of the respondents (Reference H_{01}). It can also be inferred that gender may or may not impact purchase behavior and brand loyalty (Reference $H_{04,5}$). Based on the findings of the above objective on the influence of gender on consumer behavior while purchasing green cosmetic products, the companies should try to highlight various aspects such as product benefits, packaging, sustainability and try to make product differentiation based on gender, try to implement brand loyalty programs and try to strengthen their brand positioning.

For evaluating the consumer's intention or attitude towards green products, 82% of respondents dependent on online reviews, 50% of respondents dependent on social media, 49% of respondents dependent on word of mouth, 6% of respondents dependent on other factors such as influencers, blogs, personal research, and eco-labels. 93% of respondents were influenced by reviews, ratings or word of mouth while purchasing green cosmetic products. While analyzing the respondents' emotions while purchasing green cosmetic products, 86% of respondents were guided by positive emotions like hope of improvement and performance optimism. 14% of respondents were impacted by negative emotions such as fear of side effects, harmful chemicals and allergic reactions. By statistically analyzing, it was inferred that word of mouth may or may not generate positive emotions toward purchasing green cosmetic products (Reference H_{024}). Based on the influence of consumer attitude and emotions while purchasing green cosmetic products, the companies should try to improve their online reputation, leverage social media platforms, fostering on positive word of mouth by encouraging the satisfied customers their experience with friends/ family.

While dissecting alternatives to encourage usage of green cosmetic products Likert scale (1-5 from Strongly disagree to Strongly agree) has been used. Considering natural, sustainable and chemical-free products, 4% of respondents strongly disagreed, 2% disagreed, 20% were neutral, 58% agreed, and 16% strongly agreed. Considering that green cosmetic products are better for the environment and help reduce carbon footprint, 3% of respondents strongly

disagreed, 4% disagreed, 18% were neutral, 59% agreed, and 16% strongly agreed. Considering that green cosmetic products have high performance, 2% of respondents strongly disagreed, 6% disagreed, 23% were neutral, 56% agreed, and 14% strongly agreed. Considering the accessibility of green cosmetic products in online and offline stores, 2% of respondents strongly disagreed, 1% disagreed, 10% were neutral, 50% agreed and 36% strongly agreed (Reference H₀₃). Consumers perceiving green cosmetic products as chemical-free products has a significant relation with the awareness of green cosmetic products (Reference H₀₂₁). From the above objective findings, it can be further recommended that companies highlight natural, sustainable, and chemical-free green cosmetic products via marketing communication strategies. Message for reducing carbon footprint and supporting eco-friendly activities, measuring performance assurance, expand the availability of green cosmetic products by making to available online and offline, develop a holistic approach for attracting new customers and foster loyalty among the existing customers.

Consumers not using green cosmetic products were dissected to understand their motive: 33% of respondents felt green cosmetic products to be highly expensive, 42% of respondents felt lack of clarity in communication of products benefits and sustainability position, 21% of respondents felt change in habits as a barrier to shift while purchasing green cosmetic products, 17% of respondents felt they were unable to trust the concept of green or organic cosmetic products. Moreover, 38% of respondents were willing to try green cosmetic products if prices were reduced. To encourage the non-users to try green cosmetic products, companies should introduce affordable green cosmetic products, enhance clear communication and explain the importance of the environmental impact of green cosmetic products by providing information such as certification, ingredients. The companies should offer starter kits in trial, small packs so consumers will try to purchase.

For examining the associations between the environmental Behavior and demographic factors, for 62% of respondents, one motivating factor was to green cosmetic product not harming the environment. The number remained similar specific to gender. For education up to 12th, 67% of respondents felt the importance of environmental awareness, while only 62% of graduates and postgraduate student felt environmental awareness as a significant factor. Respondents of

the Vadodara (69%) city were more proactive towards environmental awareness compared to Surat (62%) and Ahmedabad (60%). While examining the occupation specific to environment awareness, 65% of respondents in business were pro-environment, 63% of service class, 50% of home-makers and 63% of students considered environment awareness as a significant factor. From the statistical tool analysis, it can be inferred that purchase of green cosmetic products had a significant relationship with the environmental awareness of the consumers (Reference H₀₉). Based on the findings of the above objective for adoption of green cosmetic products via environmental awareness, it is recommended that companies should focus more on Vadodara consumers as environmental awareness is higher and a strong customer base can be built, the same can be used in expanding the market in Surat and Ahmedabad. Companies should try to simplify the communication strategies and create engagement programs and initiatives that actively includes consumers in environmental sustainability practices and promote the benefits of green cosmetic products.

Managerial Implications:

The analysis highlights several managerial implications that can guide companies and brands in leveraging this research to establish and expand their presence in the green cosmetics market. The most critical finding of this research is the lack of consumer awareness regarding green cosmetics. Raising awareness is imperative and should form the foundation for strategic initiatives in the green cosmetics industry. Companies should try to adopt a multi-channel approach by utilizing platforms such as television, social media and influencer marketing and try to educate the consumers.

The research reveals consumer responses across varied demographics. While the cosmetics industry has traditionally been dominated by women, the green cosmetics segment follows a similar pattern, with women showing greater awareness of emerging trends. However, a growing acceptance of cosmetics among men signals an important shift. The study found increasing interest among men in using cosmetics, emphasizing the need for marketing strategies tailored to different genders and demographic profiles. Factors such as education, occupation, and income levels directly influence purchasing behavior, with higher education and income correlating with greater spending capacity.

Pricing emerged as a significant factor in consumer decisions regarding green cosmetics. Marketers must adopt competitive pricing strategies that balance affordability with perceived value. Green cosmetics should be priced at a slight premium compared to conventional products to reflect their enhanced quality and benefits. Moreover, where manufacturing costs for green cosmetics do not significantly increase, transparent communication is vital. Certifications and collaborations with pro-environment organizations can further enhance product credibility and consumer trust.

Customer acquisition costs in the cosmetics industry are generally high, and for green cosmetics, fostering customer loyalty is crucial for maximizing mutual benefits. In this highly competitive market, consumer loyalty hinges on factors such as product availability, alignment with consumer demands, value for money, superior quality, safety, and trust in the brand. Building and maintaining loyalty is essential to long-term success in this segment.

The trend of companies entering the green cosmetics market underscores the urgency for existing cosmetic brands to venture into this space to safeguard market share. Companies must act swiftly to innovate and transition seamlessly to organic, sustainable, and environmentally friendly products. As consumer awareness grows, the industry is progressing in the right direction, necessitating proactive adaptation by brands to meet evolving market demands.

Limitations and Scope of Future Research:

The study's main objective was to determine the factors that influence consumer behavior towards purchasing green cosmetics in and how they relate to its demographic characteristics, environmental awareness and perceived product benefits that impacted consumers' willingness to purchase green cosmetic products. The study's limitations can help in reaching out the future scope of the study.

The present study was carried out only in the cities of Ahmedabad, Surat, and Vadodara, which are the cities of Gujarat state. So, the findings of the research are limited to the perception of these cities consumers only. If the researcher takes different geographical locations the consumers will have a different perspective towards the awareness of cosmetic products, their

knowledge, habits, environment awareness, product use and benefits. Thus, in the future, the researcher can cater different geographical locations for more specific insights.

Along with the geography, the researcher should also focus on cross cultural study, it will help to deep dive into culture of one another with the awareness of what is right or wrong and what are the differences, customs, religion, economic status and gender.

As the cosmetic market evolves, longitudinal studies can be conducted to allow researchers to monitor consumer perceptions continuously, how long a consumer is loyal to a brand, and the effectiveness of marketing efforts and strategies. The study will help the researchers and provide a detailed understanding of how environmental awareness, societal value, and market trends affect consumer buying behavior. Keeping an eye on the same consumers over a long period of time will help the researchers to know how loyal a consumer is towards a particular brand, product satisfaction, trustworthiness, and what factors influence the consumers to switch to a different brand. It can also help the companies determine what marketing strategies will be helpful for them in the long term.

On the other hand, with the increase in emerging technologies such as (Augmented Reality) AR, (Virtual Reality) VR and (Artificial Intelligence) AI, researchers can investigate more detail of how they can use these technologies which will help to companies to reach to the consumers more quickly and efficiently. The researchers should analyse how effective the social media and digital marketing impacts. More focus should be there in what kind of social media campaigns can help the companies engage and reach towards their brand of green cosmetic products, are influencers required for their branding and what the consumers require all buying intentions for purchasing green cosmetic products.

The researcher should focus on psychographic factors such as values, lifestyles, personality traits, and environmental awareness to develop more effective and targeted marketing strategies.

Though the concept of green cosmetics is coming around, there are hardly any laws in India for the specifications of ingredients that are to be used and fair for skin compared to the international standards. The government should focus on creating regulations for the formulations of cosmetic products and the standardization process should be made mandatory

for all the companies. After that, the researcher can try to develop a green cosmetic product life cycle from its raw ingredients to packaging, sustainability, manufacturing, recycling and the source of the products. This will help the companies maintain their standards while manufacturing green cosmetic products.

The researchers should try to understand the economic impact for the companies adopting green cosmetic products. They should be made aware of the cost-benefit analysis for companies planning to switch to green cosmetic products; specific metrics should be identified for measuring green cosmetic products.

Concluding Remarks

The above study presented in the thesis is distinguished by its comprehensive and empirical investigation by evaluating the relationships between the variable factors that influence consumers buying behavior while purchasing green cosmetic products. The study has defined the problem statement, research methodology, objectives very meticulously.

According to the major outcomes of the statistical analysis, the key insights from the hypothesis, while evaluating demographic factors, gender, education, city of residence, occupation all of the above plays a crucial role in shaping the behavior of the consumer. Though women were more inclined towards premium green cosmetic products and higher education levels correlated with the increase in environmental awareness. While considering consumer motivation and barriers consumers were motivated to purchase green cosmetics due to their perceived environmental benefits, health advantages, and sustainability. However, high prices, lack of clear communication, habitual purchasing patterns, and trust issues with the concept of green products were identified as primary barriers. Online reviews, social media, word of mouth were significantly important for shaping the consumer attitudes and their intention of purchasing green cosmetic products, the emotional response were predominantly positive and were driven by the factors such as hope of improvement and performance optimism.

The study showed a significant impact on the relationship between environmental awareness and purchase of green cosmetic products. Vadodara city showed the highest engagement and awareness ratio when compared with Ahmedabad and Surat cities. Consumers were giving most importance to the quality of the products; customer service and accurate information and

these factors can help to determine satisfaction and loyalty of the consumers towards green cosmetic products. Based on the findings of the study, the companies should try to focus on enhancing communication strategies and transparency, develop more cost-effective and reasonable green cosmetic products, develop localized marketing strategies as per geographic and demography, launch educational campaigns and find out ways to get customer feedback by which they can develop a deeper connection with the consumers by positively spreading environmental awareness. The study will be valuable for empirical future studies and developing strategies in the green cosmetic industry.