



Herbal Beauty Products and the Indian Knowledge System: Insights from Young Consumers in Aurangabad

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Abstract: Recent research in cosmetics is guiding scholars to explore traditional knowledge systems, using nature's resources to create safe and sustainable beauty products. This study investigates young consumers' perceptions of herbal beauty products in Aurangabad, Maharashtra, within the context of the Indian Knowledge System and Ayurveda. Government of India initiatives undertaken by the Ministry of Education (MoE) AICTE, New Delhi, to inculcate Indian Knowledge Systems (IKS) emphasizes the importance of integrating traditional wisdom into modern applications. This study examines consumers' understanding, awareness, attitudes, satisfaction, and preferences regarding herbal beauty products through a comprehensive survey. The questionnaire covers demographic information, awareness, perception, usage, personal preferences, purchasing behavior, cultural influences, sustainability, health concerns, innovative features, social and peer influences, and convenience. The findings reveal a significant increase in the use of herbal beauty products, highlighting a growing demand driven by traditional knowledge and modern preferences.

Keywords: Indian Knowledge system, Ayurveda, Herbal Beauty products, Personal hygiene, Young consumers

I. INTRODUCTION

In recent years, the cosmetics industry has seen a significant shift towards natural and sustainable products, driven by increasing consumer awareness of the risks associated with synthetic ingredients and a preference for holistic, eco-friendly alternatives. Herbal cosmetics, formulated with permissible cosmetic ingredients as a base and enhanced with herbal components for defined cosmetic benefits, have garnered attention for their roots in traditional knowledge systems that historically utilized natural resources for health and wellness. India, rich in ancient wisdom such as Ayurveda, offers a unique perspective on integrating herbal ingredients into beauty and personal care. The Indian Knowledge System (IKS), encompassing diverse traditional sciences refined over millennia, has prompted governmental initiatives under the Ministry of Education (MoE) and AICTE to promote innovation and sustainability in this field. The ancient practice of cosmetology, originating in Egypt and India and tracing back to the Indus Valley civilization (2500-1550 B.C.), was deeply intertwined with seasonal rituals and daily life in ancient India, emphasizing not only aesthetic enhancement but also health, longevity, and happiness.¹

Today, consumer choices, especially among the younger population, favor products that are gentle on the skin, environmentally friendly, nutrient-rich, compatible with all skin types, promote skin health, offer a wide variety of options, and are budget-friendly. According to the World Health Organization (WHO), approximately 80% of the global population relies on natural products for healthcare due to fewer side effects and rising costs of modern medicine. WHO currently advocates for traditional herbal remedies in natural healthcare programs, citing their affordability and comparative safety.² India's natural cosmetics market is set to reach INR 0.94 billion by 2024, with a 3.29% annual growth rate, reflecting increasing cultural preference for Ayurvedic ingredients and traditional beauty practices amidst global comparisons.³ Aurangabad, Maharashtra, renowned for its historical and cultural significance exemplified by sites like the Ajanta and Ellora caves, provides an ideal setting for this study. This research aims to explore young consumers' perceptions and acceptance of herbal beauty products in Aurangabad. By investigating factors such as consumer understanding, awareness, attitudes, satisfaction, and preferences, the study aims to uncover the underlying drivers of the growing demand for herbal beauty products. Additionally, it examines how Ayurvedic principles within the Indian Knowledge System influence consumer behaviors in this context.

Through a comprehensive survey and analysis, this research provides insights into the evolving dynamics of the beauty industry, showcasing the potential of herbal products as sustainable and effective alternatives. The findings aim to inform stakeholders, including policymakers, manufacturers, and marketers, about opportunities and challenges in promoting herbal beauty products, thereby contributing to a more sustainable and informed consumer market.

II. AIMS AND OBJECTIVES OF THE STUDY

Aim: The aim of this survey study was to investigate the perception of herbal beauty products among consumers in Aurangabad, Maharashtra, in the context of the Indian Knowledge System.

Objectives of the study:

1. To assess consumer understanding of herbal beauty products.
2. To evaluate consumer satisfaction levels with herbal cosmetic products.
3. To identify and analyze consumer challenges and concerns.
4. To investigate consumer awareness, attitudes, and preferences towards herbal beauty products.
5. To examine the buying behavior of consumers regarding herbal products and analyze the factors influencing their purchasing decisions.

III. METHODOLOGY

This research was conducted in Aurangabad, Maharashtra, focusing on young college students. To achieve the study's objectives, a structured 29-item questionnaire was developed and distributed to consumers via Google Forms. A total of 569 participants were invited to participate, and their responses were analyzed to understand the factors influencing consumer purchasing potential and behavior.

IV. RESEARCH QUESTIONS-QUESTIONNAIRE

The questionnaire has been meticulously structured to comprehensively cover various factors influencing the perception, usage, and preferences of herbal beauty products among consumers. It is categorized into key parameters, including demographic information, awareness, perception, usage, personal preferences, purchasing behavior, cultural influences, sustainability, health concerns, innovative features, social and peer influences, and convenience. This structured approach ensures a holistic understanding of consumer behavior, preferences, and motivations towards herbal beauty products. This approach was undertaken to ensure the questionnaire effectively captures insights on the perception of herbal beauty products among young consumers in Aurangabad, within the context of the Indian Knowledge System.

Questionnaire

Demographic	
1) Age group a) 12-18 b) 19-24 c) 25-30 d) 31-36 e) 36 above	2) Gender a) Male b) Female c) Others
Awareness/social and peer influence	
3) In your opinion what is natural/herbal beauty products? a) A natural/herbal product based on natural active principles (extracted from roots, flowers, fruits) b) A natural/herbal product that does not contain chemical or preservatives substance c) A herbal product which does not contain allergens/perfume.	4) How did you come to know/ got awareness/ information about herbal beauty a) Newspaper b) Radio c) Friends d) Magazine e) Beauty expert f) Tv g) Internet (social media) h) Family members
5) Which are the brands of herbal beauty products you are aware of? a) Lotus b) Mama earth c) Patanjali d) Himalayas e) Ayush f) Boutique g) Others	6) Your knowledge of herbal products is based upon? a) Ancient ayurveda b) Modern ayurveda c) Both 7) Do you know all herbal ranges a) Yes b) No c) Maybe
Usage	
8) What kind of beauty product do you use? a) Herbal b) Synthetic c) Others	9) Have you ever used herbal beauty products? a) I use only herbal beauty products b) I often use herbal cosmetics products c) I prefer using non herbal cosmetics products
10) When was the last time you used herbal beauty products? a) Last 3 days back b) Last 5 days back c) Last 7 days back	11) How often do you use herbal beauty products? a) On daily basis b) Only sometimes c) Use as per need
12) Which herbal beauty products have you used? a) Hair care herbal beauty products b) Skin care beauty products c) Body care beauty products d) Makeup herbal beauty products e) Personal care herbal products	13) How long have you been using herbal beauty products? a) 1 to 2 months b) 2 to 3 months c) 3 to 6 months d) 6 to 12 months e) More than a 1 year
Perception	
14) Why do you use herbal beauty products? a) Because it doesn't provoke allergies/ irritation on my skin b) Because it's components are not aggressive on the skin and favors the normal process of cell regeneration	15) What image do you perceive towards cosmetics users? a) Stylish b) Confident c) Trendy d) Low self esteem 16) Give your remark regarding the herbal beauty products.

c) Because it is better in quality and let me feel safe	
Personal Preferences and sustainability	
17) What do you look first when you buy a product?	18) Will you prefer herbal remedy prepare at home. If yes, why/ if no why?
a) Brand b) Efficiency	a) Less side effects b) Less time consuming
c) Advertisement d) Effects	c) More Natural d) Cost effective e) None
19) Will you prefer herbal OTC products. If yes, why/ if not why?	20) Which herbal remedy you prepare at home
a) Less side effects b) Less time consuming	a) Skin care b) Hair care
c) More natural d) Cost effective e) None	c) Cosmetics d) Colouring agent
Purchasing Behavior	
21) Promotion or advertisement has always influenced your intention towards a particular brand?	22) What motivates you purchasing in terms of cosmetics?
a) Strongly disagree b) Disagree	a) Discount b) Trend
c) Neutral d) Agree e) Strongly agree	c) Advertisement d) Celebrity endorsement
23) What were the reasons for your shifting to herbal brand?	24) Where do you tend to buy herbal products?
a) Brand name b) Price	a) Super market b) Chemist c) Online platform
c) Appearance d) Ingredients	d) Specialist store e) Direct sales
25) Does price of herbal beauty products affect your decision regarding the purchase?	26) Are herbal products easily available or assessable?
a) Yes b) No	a) Yes b) No
Health concern, Cultural influences, Innovative features	
27) Have you ever felt side effects of herbal beauty products?	28) According to you which state is more inclined for using herbal products and manufacturing?
a) Yes b) No c) Maybe	
29) Which types of products give better results?	
a) Herbal beauty products	
b) Cosmetics beauty products	
c) Synthetic cosmetic beauty products	

V. RESULTS AND DISCUSSION

The present study investigates the use of herbal beauty products among consumers in Aurangabad. Data was collected through a questionnaire distributed to consumers, and responses were analyzed from 569 participants of various ages and both sexes. The results revealed a significant increase in the usage of herbal cosmetics in personal care, indicating a high demand for herbal beauty products in Aurangabad. Figure 1 depicts demographic data, showing that 60% of respondents aged 19-24 prefer herbal beauty products, valuing appearance as a statement of personality, particularly due to their active social lives.⁴ Moreover, 57% of respondents are female, indicating higher awareness and usage of herbal beauty products among women, consistent with previous findings highlighting women's greater use of beauty products compared to men.⁵

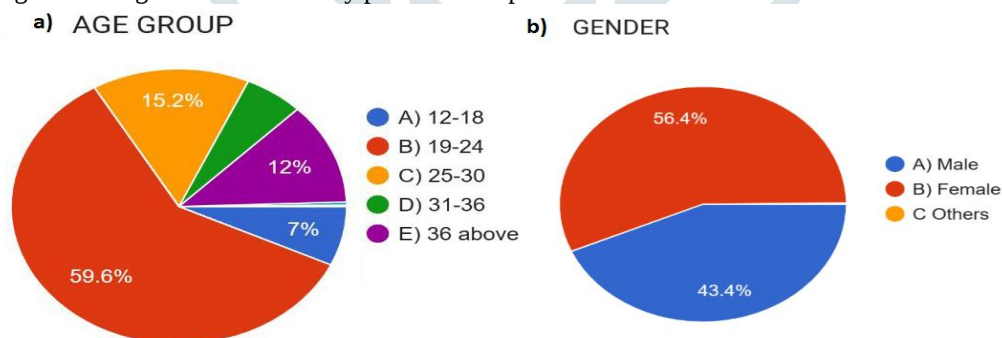


Figure1. Demographic data related to a) age group b) gender

The data from Figure 2 highlights significant insights into awareness concerning herbal beauty products. Among respondents, 55% perceive herbal beauty products as natural formulations derived from roots, flowers, and fruits, indicating a strong preference for organic and chemical-free options. Another 37% view herbal products as free from chemicals or preservatives, underscoring concerns related to skin safety and sensitivity. The remaining 8% consider herbal products as allergen or perfume-free, appealing to those seeking hypoallergenic skincare solutions. The influence of social media emerges as a pivotal factor in enhancing awareness about herbal beauty products, playing a crucial role in modern consumer education and engagement strategies.⁶ Notably, Mama Earth stands out with 71.9% brand awareness among respondents, attributed to its strategic digital marketing campaigns and celebrity endorsements. Initiatives such as "Plant Goodness" and "Plastic Positivity" further bolster its brand image by promoting environmental sustainability, resonating effectively with environmentally-conscious consumers.⁷ Regarding knowledge of Ayurveda, the study reveals that 43% of respondents are familiar with both ancient and modern Ayurvedic principles, reflecting a balanced awareness of traditional and contemporary health systems. Additionally, 29% are acquainted solely with modern Ayurveda, while 28% recognize ancient Ayurveda, emphasizing the enduring relevance of Ayurvedic practices in skincare.

Ayurvedic medicine, a traditional Indian health care system practiced for over 3,000 years, remains widely used today, especially in India, and has evolved through institutionalization and pharmaceuticalization during the late 19th and early 20th centuries.^{8,9} Approximately 39.7% of respondents express uncertainty about knowing all herbal product ranges, indicating potential gaps in market awareness that could be addressed through enhanced marketing and awareness campaigns. This highlights opportunities for expanding market reach by promoting products with comprehensive advertising strategies compared to those with limited promotional efforts.

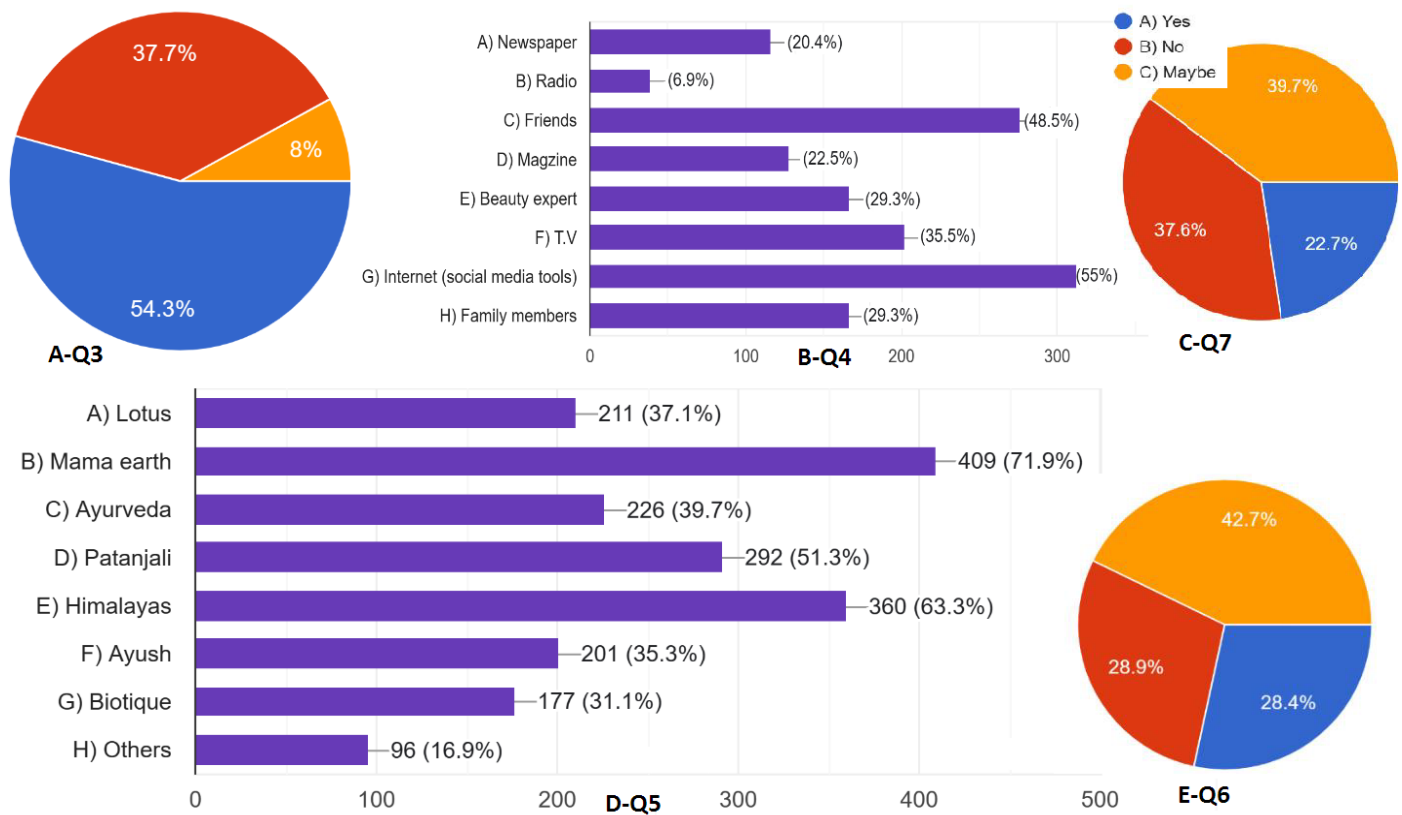


Figure 2- Insights into awareness concerning herbal beauty products A-Q3, B-Q4, C-Q7, D-Q5, and E-Q6 (Q-questionnaire)

The data presented in Figure 3 features the key factor usage and its effect on herbal beauty products. It highlights a significant trend: 55% of individuals prefer herbal beauty products, while 24% opt for synthetic alternatives and 21% use other types. This shift towards herbal products is driven by a rising demand for chemical-free, environmentally sustainable options in hair and skin care, with the global market projected to grow from US\$ 88.52 billion in 2021 to US\$ 130.3 billion by 2030.¹⁰ Survey results indicate that 60% of respondents frequently use herbal cosmetics, with 44% having used them in the past week, 33% within the last three days, and 22% within the last five days. Users choose herbal products based on convenience and necessity rather than adhering to fixed usage intervals, reflecting a consumer-driven approach to purchasing. Key reasons for preferring herbal cosmetics include their natural composition, which avoids harmful synthetic chemicals, ensuring safety and hypoallergenic properties suitable for all skin types. Skin care beauty products are particularly popular, as skin care is essential for protecting the body from bacteria, viruses, and environmental damage. The use of products like face wash, foundation, cleanser, and moisturizers helps maintain healthy skin, enhance self-confidence, provide nutrition, and keep the skin youthful. This data underscores a growing preference for natural and safe beauty solutions, marking a significant shift in personal care routines towards herbal alternatives.

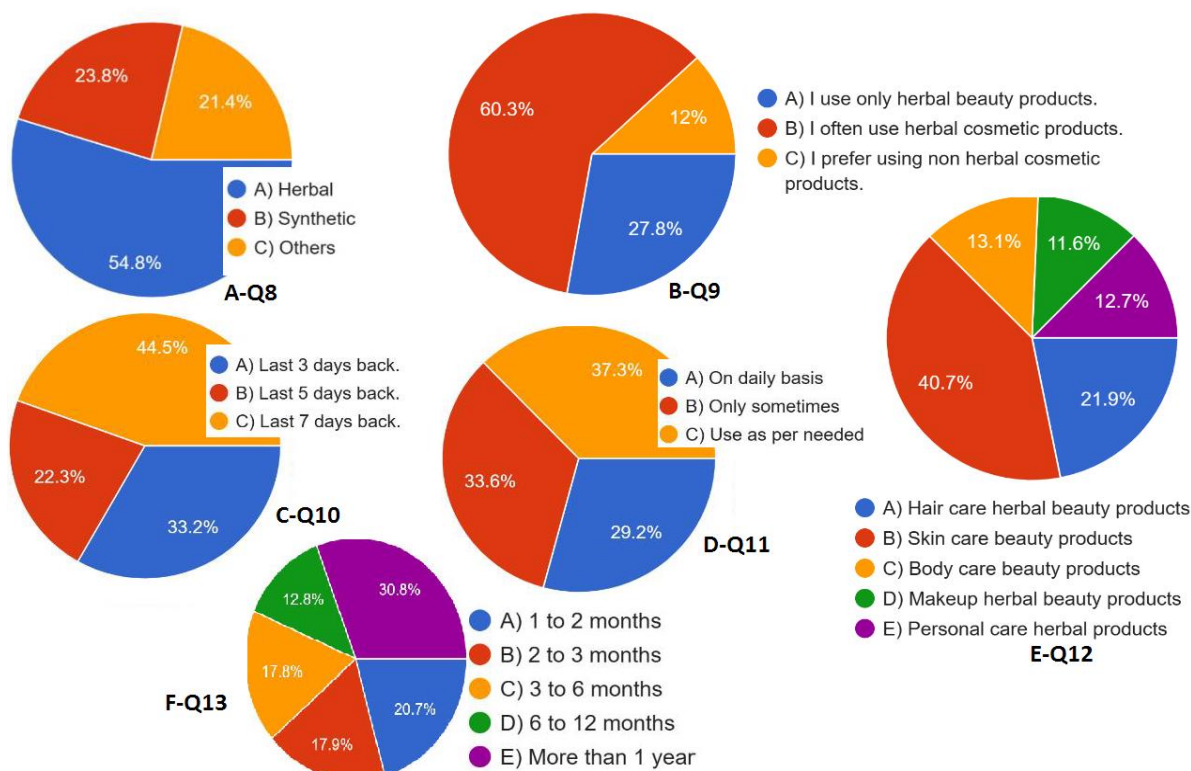


Figure 3- Features the key factor usage and its effect on herbal beauty products A-Q8, B-Q9, C-Q10, D-Q11, E-Q12 and F-Q13 (Q-questionnaire).

In understanding how a consumer perceives the benefits of a product, their existing mindset plays a crucial role. Figure 4 highlights the influence of perception on herbal beauty products, presenting a compelling shift towards these products. The data shows that 37% of users choose herbal beauty products to avoid skin irritation and allergies, and 60% value their safety and superior quality. This preference is driven by a broader cultural movement towards natural, chemical-free alternatives that align with environmental sustainability. Additionally, 44.4% of respondents associate cosmetic use with enhanced confidence, reflecting the profound psychological impact of beauty products. Thomas Cash's research, "Effects of Cosmetics Use on the Physical Attractiveness and Body Image of American College Women," supports this sentiment, revealing that makeup boosts both perceived attractiveness and self-esteem. Respondents' insights show a deep appreciation for herbal products' minimal side effects, natural ingredients, and non-toxic nature, which offer peace of mind and a holistic approach to beauty. This study highlights a growing awareness and desire for products that nurture both the body and the planet, indicating a transformative shift in consumer values towards health, sustainability, and authentic self-expression.

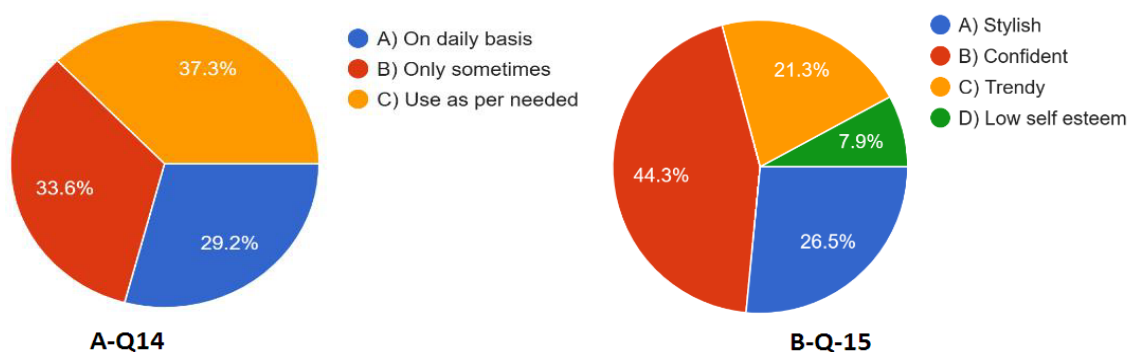


Figure 4: Influence of Consumer Perception on the Preference for Herbal Beauty Products A-Q14 and B-Q-15 (Q-Questionnaire)

Presentation of data findings related to personal preferences and sustainability is shown in Figure 5. Herbal beauty products are gaining popularity for their effectiveness and lack of side effects, appealing to 37% of users who avoid skin irritation and 60% who value their safety and quality. This trend reflects a broader shift towards natural, chemical-free alternatives that align with environmental sustainability.¹² Home remedies are favored for their perceived safety, cost-effectiveness, and deep-rooted family traditions, offering a comforting and nostalgic value.¹³ Consumers also prefer herbal OTC products for their minimal side effects and natural composition. Common home remedies like turmeric, multani mitti, uttan, and sandalwood for brightening skin, anti-aging, and anti-acne benefits; virgin coconut oil for moisturizing; aloe vera for soothing; and papaya for exfoliating highlight the enduring appeal of natural solutions.^{12,13} This data accentuates a significant shift in consumer values towards health, sustainability, and authentic self-expression, marking a transformative movement in personal care routines.

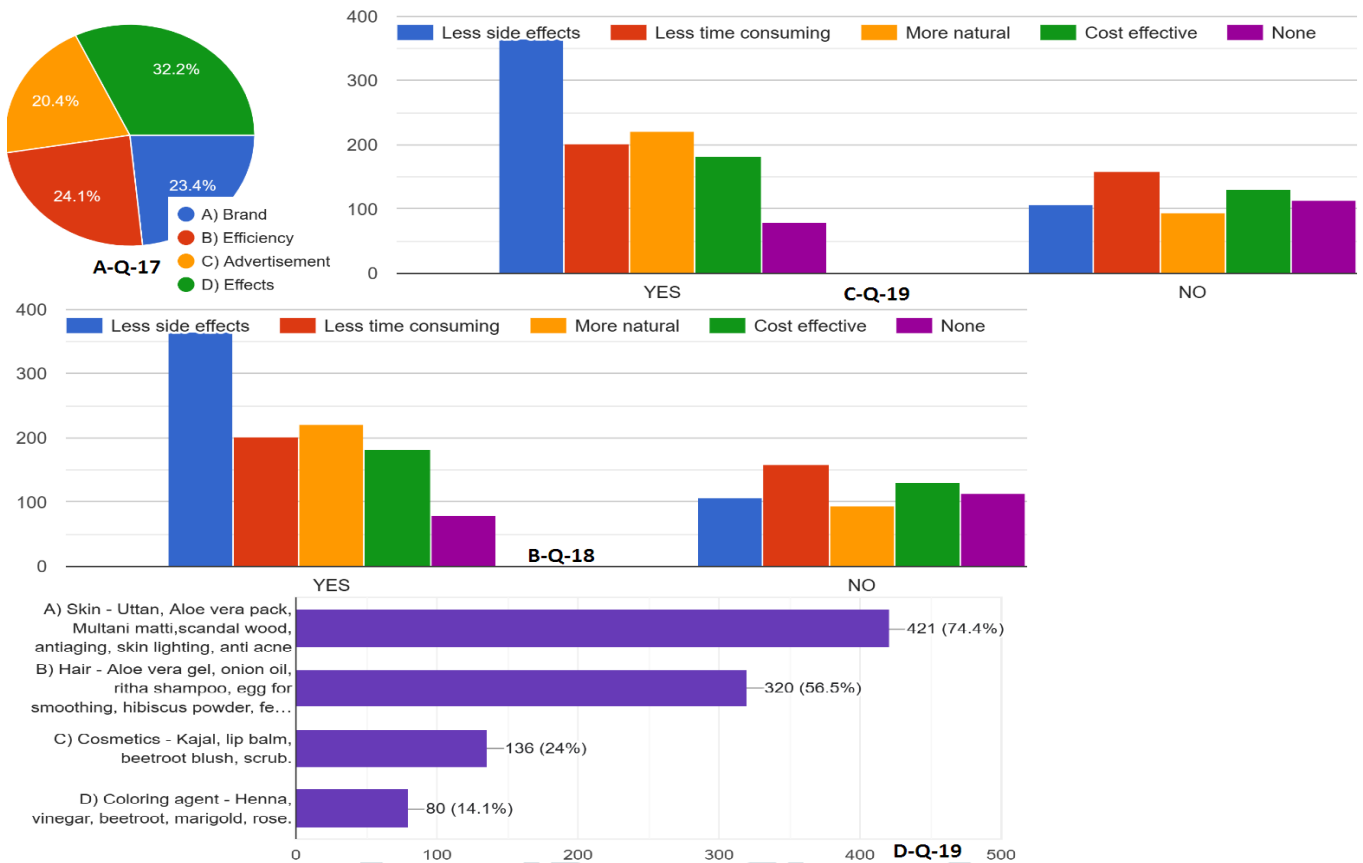


Figure 5: Presentation of Data Findings Related to Personal Preferences and Sustainability

The data reveals (Figure 6) key insights into the purchasing behavior towards herbal beauty products. Promotion and advertisement have a variable impact, with 32% of respondents feeling neutral, indicating that while promotions can influence purchases, they do not always do so.

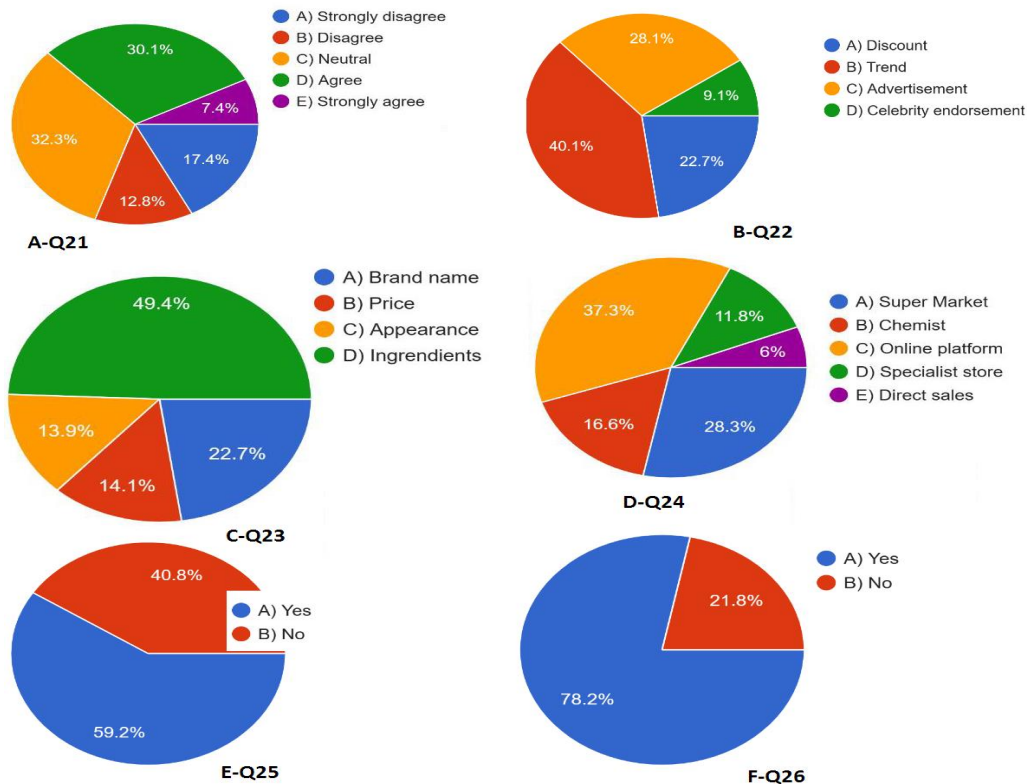


Figure 6- Data Findings Related to Purchasing Behavior

Trend is a significant motivator, with 40% of respondents purchasing cosmetics due to market trends, particularly influenced by social media and celebrity endorsements. The primary reason for shifting to herbal brands for 49.3% of consumers is the natural ingredients, which are perceived to be more effective and have fewer side effects compared to chemical products. The convenience of online platforms is evident, with 37% of participants purchasing herbal beauty products online due to the ease of comparing prices, reading reviews, and enjoying benefits like free shipping and flexible return policies. Price sensitivity is a crucial factor, with 59% of

respondents indicating that the cost of herbal beauty products affects their purchasing decisions, influenced by social, cultural, and psychological factors. Finally, the accessibility of herbal products is high, with 78% of respondents finding them easily available through various channels, including brand websites and popular online marketplaces like Amazon and Flipkart.¹⁴ This comprehensive analysis underscores the importance of natural ingredients, trend influence, price sensitivity, and the growing reliance on online shopping in shaping consumer behavior towards herbal beauty products. Figure 7 provides a comprehensive insight into health concerns, cultural preferences, and innovative features associated with herbal beauty products based on survey responses. It highlights that 58% of respondents have not experienced side effects from herbal cosmetics, underlining their formulation without parabens and silicones, which are irritants commonly found in synthetic products.

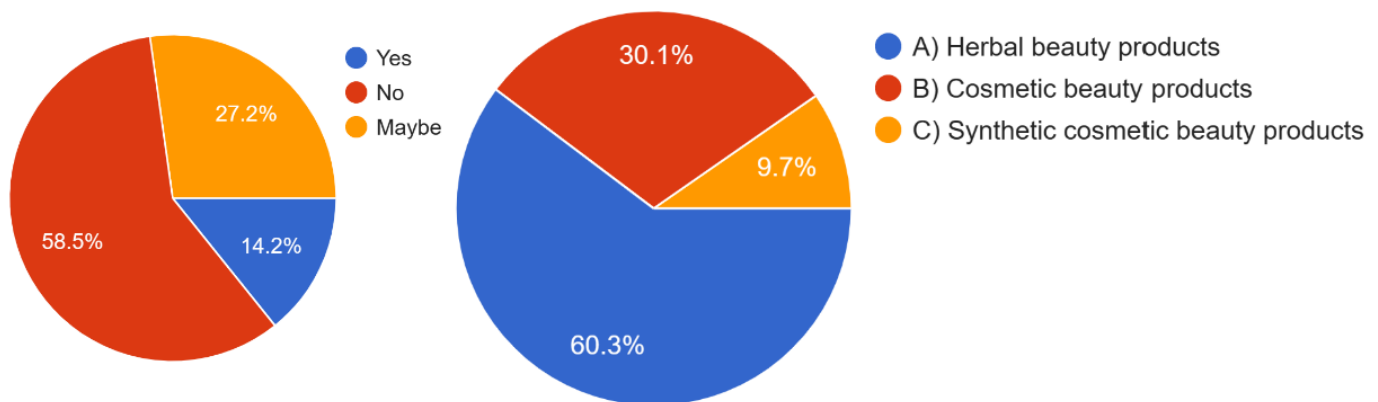


Figure 7- Comprehensive insight into health concerns, cultural preferences, and innovative features associated with herbal beauty products

Cultural preferences are exemplified through Kerala's prominence, where Ayurvedic traditions thrive amidst favorable environmental conditions, making it a hub for herbal remedies. Known as 'God's own country', Kerala embraces Ayurveda not just as wellness but as mainstream medicine, evident in its renowned treatment centers.¹⁵ This cultural affinity underscores a deep trust in herbal products as effective and safe skincare options. Additionally, 60.2% of participants perceive herbal beauty products to deliver superior results, attributing this to their natural ingredients and efficacy in enhancing skin health without synthetic drawbacks. These insights signify a consumer shift towards health-conscious choices and a preference for products blending tradition with modern skincare innovation.

V. INTERPRETATION AND IMPLICATIONS

The interpretation of these findings reveals a clear consumer preference for herbal beauty products, driven by their natural ingredients, safety, and alignment with cultural and health values. The lack of side effects associated with herbal cosmetics, coupled with a strong cultural affinity, particularly in regions like Kerala where Ayurvedic traditions are mainstream, underscores the trust and efficacy perceived by users. This trend towards natural and sustainable products reflects a broader shift in consumer behavior, emphasizing health-conscious and environmentally-friendly choices. The implications of these findings are profound for stakeholders such as policymakers, manufacturers, and marketers. Policymakers can use this information to support regulations and incentives that promote the use and production of herbal beauty products, contributing to public health and environmental sustainability. Manufacturers are presented with an opportunity to innovate, focusing on developing and enhancing herbal formulations that meet the high demand for natural and effective skincare solutions. For marketers, the insights highlight the importance of emphasizing the natural, safe, and sustainable aspects of herbal products in their campaigns, leveraging social media and influencer endorsements to reach a broader audience.

VI. CONCLUSION

The substantial increase in herbal beauty product usage highlights a consumer shift towards natural, chemical-free alternatives driven by skin safety and environmental sustainability concerns. Younger adults aged 19-24 and women (57% of respondents) show a strong preference for these products, seeing them as expressions of identity and social engagement. Cultural influences, particularly from Kerala, emphasize the trust in Ayurvedic skincare traditions. Brands like Mama Earth succeed by leveraging digital marketing and sustainability initiatives to appeal to environmentally-conscious consumers. These findings provide stakeholders with insights into market trends and consumer preferences, guiding the promotion of herbal beauty products that align with evolving values of health, sustainability, and authentic self-expression.

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