

Original Research Article

The impact of cosmetics on self-esteem, consumer satisfaction, and economic expenditures: A study of Saudi Arabian consumers

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Abstract

Purpose: To explore consumers' satisfaction and perceived improvement of self-esteem and economic aspects of cosmetics in Saudi Arabia.

Methods: An online survey using a cross-sectional design was carried out in Saudi Arabia from March to June 2022. All residents, regardless of gender or age, were invited via social media and email to participate in the survey and report on their use of cosmetics, level of satisfaction, and perceived effects on self-esteem and economic aspects.

Results: A total of 147 participants, predominantly female (57.1 %) and highly educated, completed the survey. About 10 % of household budgets were allocated to cosmetics, with 34 % spending ~50 SR per month on personal care products. Satisfaction with cosmetic expenses was reported by 48.8 % of females and 39.7 % of males. Personal care (43.5 %) and fragrance products (37.7 %) were considered essential, enhancing self-esteem and confidence. Skin and hair care products were positively perceived, while opinions on makeup, skincare, and nail care varied.

Conclusion: This study provides baseline data on consumer behaviour, satisfaction, and the economic impact of cosmetics in Saudi Arabia, offering insights for industry stakeholders and future studies.

Keywords: Cosmetics, Personal care, Self-esteem, Consumer satisfaction, Economic expenditures, Saudi Arabia

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INTRODUCTION

Cosmetics and personal care products include a wide range of items intended to improve health, beauty, and overall well-being [1]. They have become an integral part of daily routines across all age groups [2,3]. Beyond aesthetic improvement, cosmetics provide important functional and emotional benefits [4–8]. Their use can elevate mood, enhance appearance, foster

positive self-esteem, serve as a means of social expression, and improve overall quality of life [4–8]. Cosmetics are often employed as tools for social self-presentation and self-image management, which in turn bolster self-confidence [8]. According to a study by Cosmetics Europe, one-fourth of consumers reported that cosmetics positively impact their quality of life and contribute to building self-esteem [1].

The cosmetics and personal care industry is one of the most profitable and rapidly growing sectors worldwide [9]. The global cosmetics industry reached USD 330.10 million in 2025 and is projected to reach USD 545.19 million by 2033 and is expected to increase at compound annual growth rate (CAGR) of 6.6 % from 2026 to 2033 [10]. In the Middle East, the cosmetics and personal care industry is growing at twice the rate of any other part of the world [11]. The Saudi Arabian beauty and personal care market is undergoing robust growth driven by rising disposable incomes, a youthful and digitally connected population, and evolving consumer preferences [12-15]. According to IMARC Group, the cosmetic market was valued at USD 4.6 billion in 2024 and is estimated to grow to USD 6.4 billion by 2033. Forecasted to increase at a CAGR of 3.7 % from 2025 through 2033; supported by increased interest in premium, organic and natural products, and heightened e-commerce engagement. Younger consumers, high internet and social media penetration, and cultural shifts—including greater workforce participation and broader acceptance of grooming and cosmetics—further fuel demand for both skincare and cosmetic categories [12,13]. Emerging trends such as halal-certified and clean beauty products, alongside rising expenditure on male grooming, further stimulate market expansion [12,13]. Several studies have examined the utilization and purchase patterns of cosmetics in Saudi Arabia [15–19]. However, limited studies have explored the economic aspects of cosmetics and personal care products. Therefore, this study aims to provide baseline data on household spending, consumer satisfaction, and the influence of cosmetics on quality of life and self-esteem. The findings may also inform future socio-economic assessments and modelling of consumer behaviours in the Saudi cosmetics market.

METHODS

An online, cross-sectional survey was carried out across Saudi Arabia from March to June 2022. The questionnaire was distributed via online platforms, including WhatsApp, Facebook, Twitter, Telegram, and Instagram. Participants were invited to access the survey link after a brief description of the study. Both Arabic and English versions of the study questionnaire were made available through Question PRO.

Classification system of cosmetics

U.S. Food and Drug Administration (FDA) cosmetic product labeling and classification guidelines were followed for the purpose of this

study [20]. The classes include skin care products, hair care products, makeup cosmetics, and fragrances. Skin care products include creams, lotions, makeup removers, scrubs, and face mask toners. Hair care products include shampoos, hair sprays, conditioners, hair colours and gels. Make-up cosmetics include mascaras, lipsticks, eye liners, foundation, loose powders, eyebrow pencils, and nail care products (nail polish and nail polish removers). Fragrance includes perfumes and eau de cologne, antiperspirant/deodorant, personal hygiene toothpastes, shaving creams, soaps and lotions.

Study population

All residents of Saudi Arabia, irrespective of age and gender, were eligible to participate in the study. Participation was entirely voluntary. The survey was shared through social media and email, and respondents were encouraged to share the survey link within their networks to increase outreach using a snowball sampling approach. An electronic informed consent form was attached at the start of the survey, and respondents were required to provide consent before proceeding to the questionnaire. Individuals who exclusively used traditional cosmetic products, such as henna or mud masks, without using commercially manufactured cosmetics or personal care products, were excluded from the study. The Institutional Review Board (IRB) of Imam Abdulrahman bin Faisal University approved the study (Approval No. IRB-2022-05-055).

Data collection tool

The questionnaire consisted of three structured sections designed to comprehensively assess socio-demographic characteristics, cosmetic usage behavior, spending patterns, and perceived psychosocial benefits.

The first section included socio-demographic questions. These were primarily closed-ended, categorical questions designed to obtain background information about the participants. Variables such as age, gender, qualification, employment, monthly income, and marital status were measured using nominal or ordinal response options.

The second section focused on cosmetic usage patterns and financial expenditure. This section assessed the types of cosmetic products used, frequency of purchase, expenditure distribution across product categories and preferred purchasing channels. Most items were structured as multiple-choice questions with predefined

response categories.

The third section included two items assessing the perceived functional and psychological benefits of cosmetic use. These items specifically examined participants' perceptions of cosmetics in relation to self-esteem, self-confidence, personal image, and overall quality of life. A five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) was used to quantify participants' agreement with each statement.

At the beginning of the survey, a clear operational definition of cosmetics and their classification was provided based on the FDA guidelines. This introductory section ensured consistent understanding among participants regarding what constitutes a cosmetic product to enhance the validity of responses.

The questionnaire was prepared with the support of a pharmacoeconomic expert; later, it underwent face and content validation by an expert panel consisting of a clinical pharmacist, a university professor, a statistician, and a layperson not familiar with the study to assess clarity, relevance, and comprehensiveness. Minor revisions were made based on their feedback.

Before data collection, the survey was converted to Arabic by a parallel blind translation method conducted by three independent pharmacy researchers, followed by reconciliation to ensure conceptual and linguistic equivalence.

A pilot study was conducted among 10

consumers in Saudi Arabia to evaluate the clarity, feasibility, and comprehensibility of the questionnaire. Necessary modifications were made based on pilot feedback. Data from the pilot participants were excluded from the final analysis.

Sample size calculation

The sample size was calculated by Raosoft® online sample size calculator. Assuming a 95 % confidence level, a 5 % margin of error, and a 50 % response distribution (to ensure maximum sample variability and obtain the largest required sample size), the minimum required sample size was calculated as 377 participants.

Statistical analysis

Data was evaluated using the Statistical Package for the Social Sciences (SPSS), version 24. Descriptive statistics were used to summarize the data. Categorical variables were displayed as frequencies and percentages. Likert-scale responses were analyzed as ordinal data and summarized using frequencies and percentages, and average scores were appropriate.

RESULTS

A total of 147 individuals took part in the survey, the majority being female (n = 84, 57.1 %). Most participants held a university degree (n = 131, 89.1 %). Nearly half of the respondents were employed (n = 70, 47.6 %), while 38.1 % were students.

Table 1: Demographic Characteristics of the Study Population

Characteristics		Frequency(n)	Percentage (%)
Gender	Male	63	42.9
	Female	84	57.1
Education Level	Primary/Lower school	5	3.4
	High school	11	7.5
	University Degree	131	89.1
Employment Status	Student	56	38.1
	Employed	70	47.6
	Not employed	21	14.3
	<5000	39	26.5
Family Monthly Income (SAR*)	5000-9999	51	34.7
	10000-14999	30	20.4
	15000-19999	14	9.5
	20000-24999	9	6.1
	≥25000	4	2.7
	Daily	2	1.4
Frequency of Shopping	Once a week	42	28.6
	Once every two weeks	22	15
	Once a month	42	28.6
	Every 2 months or more	39	26.5

*1 USD=3.75 SR

More than half of the study participants ($n = 95$, 64.6 %) reported a family monthly income between 5,000 and 19,999 SAR (approximately 1,333–5,333 USD). Socio-demographic details of the participants are presented in Table 1.

Monthly expenditure versus cosmetic product expenditure

Among the survey participants, the largest proportion of monthly expenditure was allocated to essential needs, particularly food and groceries (34 %), followed by housing and electricity (19 %). On average, participants reported allocating approximately 10 % of their monthly income to personal care and cosmetic products. Within this 10 % allocation, a considerable proportion was spent on beauty

salon services (19.3 %). Equal proportions (17 % each) were allocated to hair care products and perfumes, while the smallest share (5 %) was spent on nail care products and services. A detailed breakdown of monthly expenditure distribution is presented in Figure 1.

Average spending on cosmetics and personal care products

Among the 147 survey participants, the largest proportion (34 %) reported spending approximately 50 SAR (≈ 13.3 USD) per month on cosmetics and personal care products. In contrast, only 2 % of the participants reported spending between 1,000 and 2,000 SAR (≈ 266 –533 USD) monthly on these products.

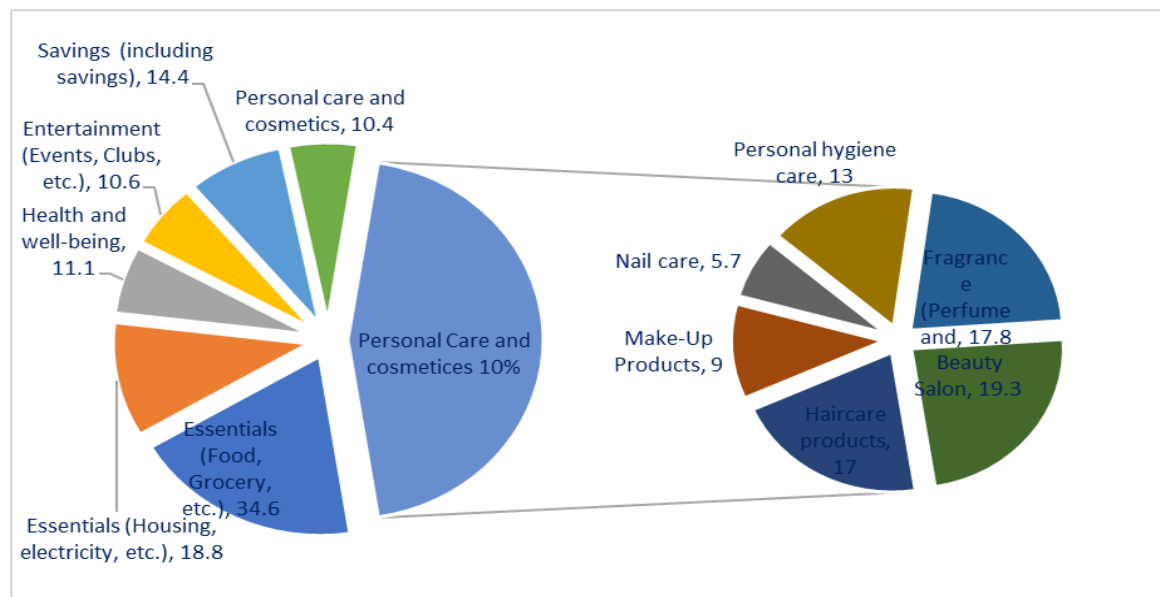


Figure 1: Comparison of Total Monthly Expenditure and Cosmetic Expenditure

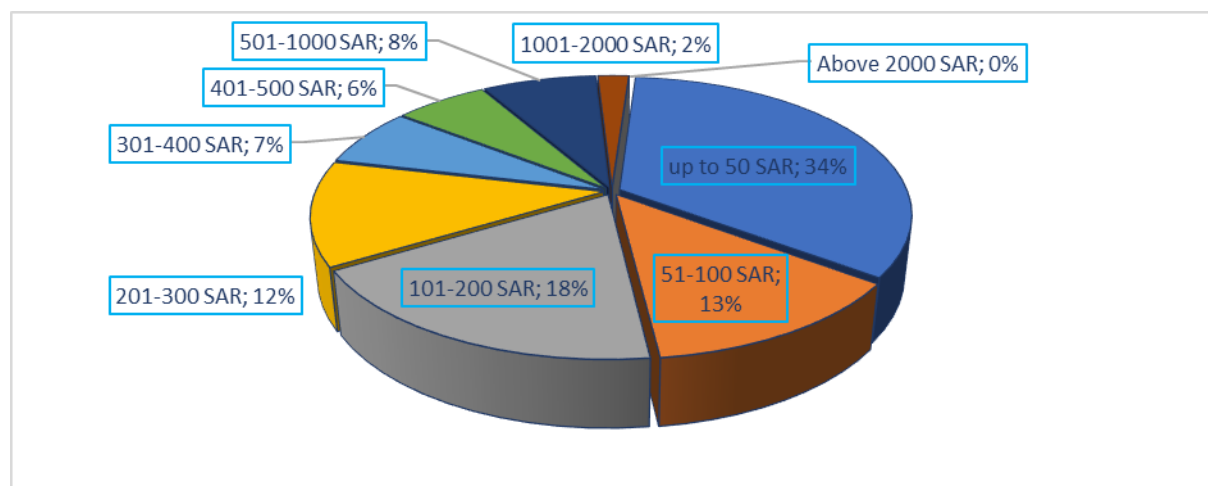


Figure 2: Average Monthly Spending on Cosmetics and Personal Care Products. **Key:** *1 USD=3.75 SR

Consumers' satisfaction with money spent on cosmetics

A total of 65 participants (44.2 %) were "Satisfied," and 17 participants (11.6 %) were "Very Satisfied" with the money they spent on cosmetics. Females generally reported higher satisfaction than males. Among females, 41 (48.8 %) were "Satisfied" and 11 (13.1 %) "Very Satisfied," compared to 24 males (38.1 %) and 6 males (9.5 %), respectively. Dissatisfaction was slightly higher among males in the "Very Unsatisfied" category (11.1 %) compared to females (2.4 %), whereas more females reported "Unsatisfied" (9.5 %) than males (1.6 %). These findings suggest that while most consumers are satisfied with their cosmetic expenditures, a notable proportion remains neutral, indicating room for consumer preference improvements. Detailed distributions of satisfaction levels by gender are presented in Figure 3.

Significance of cosmetic products in daily life

Many participants considered certain cosmetic products essential in their day-to-day life. Personal care products were rated as important by 64 participants (43.5 %), while fragrances were considered important by 55 participants (37.7 %). Skin and hair care products were also perceived as moderately important by a large portion of the sample. In contrast, nail care products were rated as less important, with approximately three-fourths of participants (76 %) indicating that they are either "not at all important" or "slightly important" in daily life.

Enhancing self-esteem and confidence through personal care and cosmetic products

Participants' responses regarding the impact of cosmetics on self-esteem are presented in Table 2. A significant majority (85 %) agreed that personal care products and fragrances enhance their confidence, followed by hair care and beauty salons, which were reported by 64 % and 61 % of participants, respectively. Nail care was reported to have the least impact on self-esteem, with only 15 % of participants indicating a positive effect.

DISCUSSION

The findings of this study highlight the influence of cosmetics and personal care products on self-esteem of the participants. The demographic profile of the 147 participants provides further context for these findings. The predominance of female participants aligns with broader industry trends, indicating that women are the primary consumers in the cosmetics sector—a pattern consistently observed in prior studies [16–19]. Moreover, a substantial proportion of participants held university degrees. This higher educational attainment may influence their consumer behavior and attitudes toward personal care and cosmetic products, as individuals with higher education often demonstrate greater awareness of product ingredients, efficacy, and brand reputation [21]. In terms of employment, over 70 % of participants were employed, highlighting the potential influence of income and occupational status on personal care behaviours.

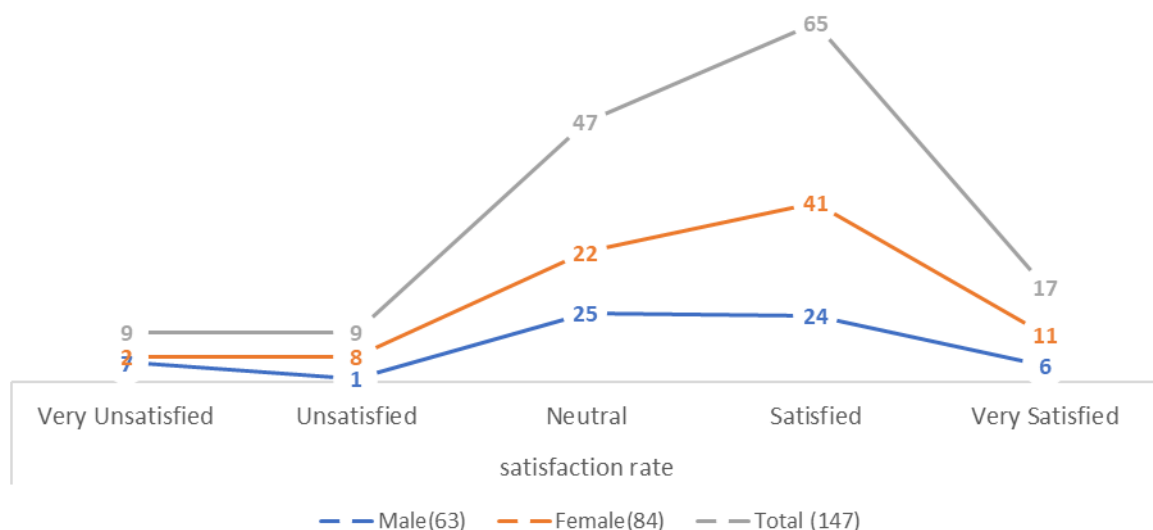


Figure 3: Participant Satisfaction with Money Spent on Cosmetics by Gender

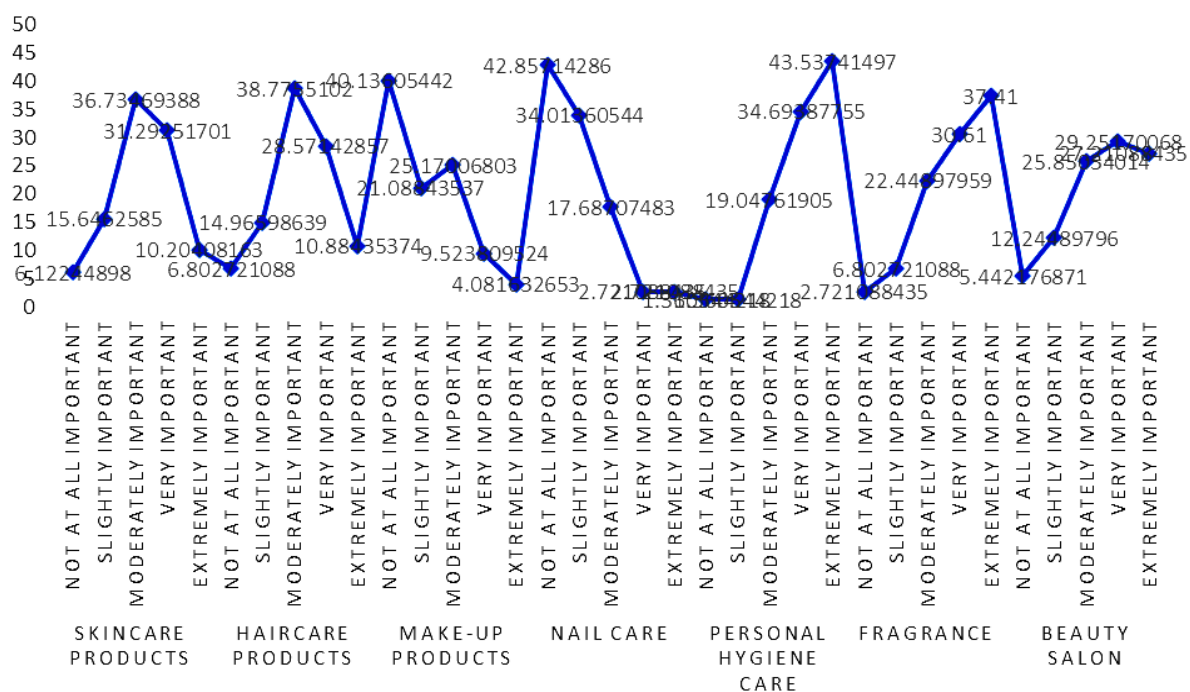


Figure 4: Importance of Cosmetics in the Daily Life of Consumers

Table 2: Participant responses on cosmetics and personal care products

Product/Service	Response	Frequency (n)	Percentage (%)
Skincare cosmetics	Strongly disagree	9	6.12
	Disagree	6	4.08
	Neutral	46	31.29
	Agree	63	42.86
	Strongly agree	23	15.65
Haircare products	Strongly disagree	9	6.12
	Disagree	4	2.72
	Neutral	39	26.53
	Agree	74	50.34
	Strongly agree	21	14.29
Make-Up Products	Strongly disagree	30	20.41
	Disagree	16	10.88
	Neutral	45	30.61
	Agree	49	33.33
	Strongly agree	7	4.76
Nail care	Strongly disagree	36	24.49
	Disagree	23	15.65
	Neutral	65	44.22
	Agree	20	13.61
	Strongly agree	3	2.04
Personal hygiene care	Strongly disagree	4	2.72
	Disagree	2	1.36
	Neutral	16	10.88
	Agree	33	22.45
	Strongly agree	92	62.59
Fragrance	Strongly disagree	5	3.40
	Disagree	3	2.04
	Neutral	12	8.16
	Agree	54	36.73
	Strongly agree	73	49.66
Beauty Salon	Strongly disagree	15	10.20
	Disagree	15	10.20
	Neutral	27	18.37
	Agree	44	29.93
	Strongly agree	46	31.29

Employment impact spending patterns and the perceived importance of cosmetics in daily life, as individuals with greater financial independence may prioritize grooming and self-presentation. Previous studies have shown that higher income levels correlate with increased spending on luxury cosmetics, suggesting that economic factors play a significant role in shaping consumer behaviour in this sector [22].

The survey findings regarding the monthly expenditure of families are consistent with trends reported by the General Authority for Statistics in Saudi Arabia [23]. On average, participants allocate approximately 10 % of their monthly expenditure to cosmetics, reflecting a strong emphasis on personal grooming and appearance. A substantial proportion of participants (34 %) reported spending around 50 SR (\$13) per month on these products. This aligns with previous studies showing a positive correlation between personal income and cosmetic use [24] and is comparable to expenditure patterns observed in countries such as Sri Lanka, where monthly spending ranges from \$5 to \$15 [24].

Interestingly, a small subset of participants (2 %) reported significantly higher monthly spending, ranging from 1,000 to 2,000 SR (\$500). Such high expenditure may reflect higher disposable income, heightened attention to appearance, or specific personal or professional requirements. Similar findings have been reported in Saudi Arabia, where monthly spending on whitening and bleaching products ranges from \$60 to \$100 [25]. International comparisons, such as Guo's study in Helsinki, also indicate that men spend €22.1 (\$24) monthly on personal care products [26], highlighting cultural and regional differences in cosmetic consumption.

A significant proportion of both male (39.7 %) and female (48.8 %) participants reported satisfaction with their cosmetic expenditures, indicating overall positive perceptions of spending in this domain. However, notable differences in dissatisfaction levels were observed between genders. Among males, 11 % reported being not at all satisfied with their cosmetic expenses, compared to only 2.4 % of females. This disparity may reflect differences in expectations or priorities regarding cosmetics and related spending, with males potentially having higher expectations or distinct criteria for value, leading to greater dissatisfaction when these expectations are unmet. These findings underscore the importance of considering gender-specific attitudes in understanding

consumer satisfaction and decision-making in the cosmetics sector.

The current study reaffirms that personal care and fragrance products are widely perceived as essential in daily life, significantly enhancing participants' self-esteem. These findings are consistent with the European Consumer Perception Study (2022), which reported that 72 % of European customers think personal care products are crucial or very important for improving quality of life and self-esteem [1]. Beyond boosting confidence, various types of cosmetics have been reported to promote proactiveness, relaxation, and positive mood [27-30]. A study among Japanese participants further demonstrated that makeup has psychological benefits, increasing satisfaction and self-confidence [30]. Interestingly, in the present study, only 15 % of participants indicated that nail care products improved their self-esteem. This contrasts with findings by Atsushi Kawakubo et al., which showed that nail care progressively elevated three psychological aspects: positive emotions, relaxation, and vitalization [30]. This discrepancy may reflect cultural differences, individual preferences, or the relative emphasis placed on different personal care practices, suggesting that not all cosmetic products contribute equally to perceived well-being.

Limitations

Several limitations should be considered when interpreting the findings of this study. First, the use of a cross-sectional online survey limits the ability to infer causal relationships between cosmetic use, self-esteem, and spending patterns. Second, the study relied on self-reported data, which may be subject to recall bias or social desirability bias, potentially influencing participants' responses regarding expenditures, satisfaction, and perceived psychological benefits. Third, although the survey was distributed across multiple social media platforms and offered in both Arabic and English, participation was voluntary, which may have introduced selection bias; individuals more interested in cosmetics or active on social media may have been overrepresented. Fourth, the sample size (147 participants) was smaller than the initially calculated minimum sample of 377, which may limit the generalizability of the findings to the broader Saudi population. Finally, while the questionnaire was validated for face and content, internal consistency reliability was not assessed, and the study primarily focused on descriptive and categorical measures, limiting the depth of psychometric evaluation.

Future studies with larger, more representative samples, longitudinal designs, and validated psychometric instruments are recommended to better understand the relationships between cosmetic use, satisfaction, and psychosocial outcomes in Saudi Arabia.

CONCLUSION

This study provides valuable insights into the economic aspects and consumer behavior related to cosmetics and personal care products in Saudi Arabia. Moreover, it identified high levels of satisfaction among participants regarding their spending on cosmetics. Participants overwhelmingly considered personal care and fragrance products essential in their daily lives, attributing these products to enhancing self-esteem and confidence. Overall, this study contributes valuable baseline information for understanding consumer preferences and economic impacts within the Saudi Arabian cosmetics market.

DECLARATIONS

Acknowledgement/Funding

None.

Ethical Approval and Informed Consent Statements

The study was approved by the Imam Abdulrahman bin Faisal University Institutional Review Board IRB 2022-05-055. Informed consent was obtained from all individual participants included in the study.

Use of Artificial intelligence/Large language models

The authors confirm that AI-based tools were used solely for language editing and manuscript polishing purposes (e.g., grammar, phrasing, and clarity). No AI tools were used to generate content, interpret data, or influence study design, results, or conclusions. All intellectual contributions, study analyses, and interpretations reported in the manuscript are the original work of the authors.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Conflict of interest

No conflict of interest is associated with this work.

Contribution of authors

We declare that this work was done by the author(s) named in this article, and all liabilities pertaining to claims relating to the content of this article will be borne by the authors. Jisha: Concept, design, definition of intellectual content, clinical studies, manuscript preparation, manuscript editing and manuscript review. Royes: design, manuscript preparation, manuscript editing and manuscript review. Dhafer: literature search, manuscript preparation. The manuscript has been read and approved by all the authors, that the requirements for authorship as stated earlier in this document have been met, and that each author believes that the manuscript represents honest work, if that information is not provided in another form.

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