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Factors Affecting Consumer Satisfaction of Skin Care Products; An Empirical Analysis of Undergraduate Females in Pakistan

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ABSTRACT

Aim of the Study: In professional settings, an attractive appearance is often essential. Therefore, cosmetics are a common practice to enhance one's appearance. Globalization has increased competition in the cosmetic business, requiring the right marketing strategies to appeal to consumers. In recent years, there has been growing attention to skincare products in personal care and other areas related to fashion. The purpose of this study is to examine the influence of some important factors such as Brand Image, Product Price, Product Quality, and Digital Marketing on Consumer Satisfaction with skincare products.

Methodology: This study adopts a quantitative research approach, collecting primary data through the distribution of online questionnaires to 150 respondents (undergraduate females of Pakistan) who have used skincare products of different brands.

Findings: The findings reveal that price, product quality, and digital marketing have a significant impact on consumer satisfaction, while reports are insignificant on brand image.

Conclusion: This study provides valuable insights for firms, enabling them to enhance their brand management strategies based on the findings. By referencing these results, businesses can gain a competitive advantage over their rivals.

Keywords: Consumer Satisfaction, Brand Image, Product Quality, Digital Marketing, Skincare Products.

Introduction

Customer satisfaction is an attitude which is determined by the customer's experience. Satisfaction is a level of consumer pleasure associated with the characteristics, features, or privileges of a product or service (Sugeng, 2016). Fornell et al., (1996) claimed that consumer satisfaction is a driving force behind spending. Moreover, it is also an essential predictor of macroeconomic growth in the national economy and changes in the country's GDP (Fornell, 2020). Customers are more likely to spend when they are

pleased with their prior purchases. The satisfied customer is the core concern of any organization, so they pay close attention to the factors that influence a customer's decision to purchase a product. Moreover, a satisfied client is an asset for companies that not only need to be maximized but optimized as well (Hanif et al., 2010).

Skincare has always been a fundamental aspect of human health and appearance, which plays a significant role in boosting the overall well-being of people. The market for skin care products, both local and foreign brands, has expanded exponentially over the years, offering a plethora of choices for consumers (Kastulani & Septiana, 2023; Ulfat, 2013). Among Asian developing countries, the customers of the beauty market in Pakistan spend Rs101 billion per year on personal care products, which is 4% of all household expenditures and hence gaining a prominent market share with increased penetration of 90 percent (GALLUP, 2020; Manto, 2011). As per a report by the Pakistan General Cosmetic Authority (2022), only the skincare segment in Pakistan is estimated to be worth $709.70 million, and it is predicted to expand by 2.58% annually, which shows a high level of public awareness regarding maintenance of health skin and increasing the use of skin care products of different brands in Pakistan (GALLUP, 2020). Along with the significant use, some concerns related to the use of high levels of mercury (the third most hazardous chemical) in famous products with the highest sales being used by Pakistani women are also gaining attention (Bushra et al., 2018).

Hence, it has become crucial to find the factors that affect consumer satisfaction concerning skin care products. The decision-making process of consumers purchasing cosmetic products can be significantly influenced by factors like brand image and product quality. A product's brand image might enhance consumers' positive perceptions, whereas product quality makes them feel satisfied and trust-worthy (Ayuniah, 2018). Cosmetic consumption is influenced by multiple factors, such as price, quality, brand name, brand loyalty, and labeling (Anjana, 2018). The satisfaction level of consumers is determined by the product quality (Jahanshahi et al., 2011; Amanah, 2010) and reasonable prices. These factors play significant roles in shaping customers' satisfaction with their purchases (Martín -Consuegra et al., 2007; Etemad-Sajadi and Rizzuto, 2013).

This study is conducted to analyze the impact of different factors such as Brand Image, price, Product Quality, and Digital Marketing on the satisfaction of female females with skin care products of various reputable brands. Targeting female college and university students at the undergraduate level is essential because they represent a substantial segment of the market and are a vulnerable group due to their susceptibility to societal pressures and influence from celebrities, leading them to prioritize their appearance and start using skincare products at an early age. There is also little research evidence regarding the preferences and satisfaction of female undergraduates for skin care products in Pakistan. This study aims to address this gap by analyzing and highlighting significant factors in consumer satisfaction, thereby providing valuable insights for the cosmetic industry to make informed policy decisions at a micro level.

The primary objective of this study is to track and examine the satisfaction of females specifically college and university under-graduates of regarding the use of skin care products of different local and foreign brands. This study will bring potential contributions to both academia and the skincare industry. The demographic (female college and university undergraduates) has not received adequate attention in previous research concerning their preferences and satisfaction with skin care products. Secondly, it will help local and international brands in tailoring marketing strategies and campaigns to align more closely with the desires of the target audience. Furthermore, this research will help consumers make informed decisions about the skin care products they choose, which will lead to overall satisfaction and well-being of society.

Literature Review

Zamazalová (2008) outlines essential factors influencing customer satisfaction that can be used as indicators to measure it. These factors encompass product quality, price, which includes favorable

payment terms, services; distribution; and overall perception of a product. Females are more concentrated on cosmetic consumption to enhance their beauty and appearance and become more conscious regarding the quality of cosmetic products and tend to use a wider range of beauty products than men (Ma, Rau, & Guo, 2018). Developing a consumer-oriented technique is essential for obtaining a comprehensive understanding of consumer preferences regarding beauty products. Multiple factors influence consumers' consumption and purchase decisions; hence the cosmetic industry needs to identify these determinants to provide desired value to customers effectively (Pudaruth, Juwaheer, & Seewoo, 2015). Avianty and Waloejo (2019) outline key factors indicating consumer satisfaction. These factors encompass repeated purchases of similar products, positive word-of-mouth generated by satisfied customers, and the formation of a strong brand image that captures consumers' attention, making them less likely to consider or notice competing brands. Junaid, et al. (2012) examined the attitude of young girls in Delhi related to cosmetic use and the findings revealed the direct association between girls' income and spending on cosmetics. Moreover, the study highlighted the strong awareness of respondents regarding various cosmetic brands in the market.

Luong et al., (2017) researched the Vietnam cosmetic industry and evaluated three key factors influencing consumer satisfaction, such as country of origin, pricing, and brand image. Cosmetics purchase decisions and satisfaction is also affected by product knowledge, emphasizing the need for companies to effectively convey product information (Eze et al., 2012). Media influence has made people more conscious of beauty, hygiene, and a healthier lifestyle. In this context, the brand name of the product was the most important aspect for female consumers, followed by the ingredient and advertisement, highlighting the importance of these aspects in their preferences (Koshy, 2017).

Consumer behavior toward the use of cosmetics in daily life is influenced by many socio-economic, cultural, psychological, and personal factors (Lakshmi, 2019). Moreover, lifestyle changes, higher disposable income, intensified advertising, elevated social status, population migration, demand for superior quality, evolving consumer preferences, and impactful advertisements have caused a substantial transformation in the way women purchase and use cosmetics (Shaji, 2020). Thakur and Singh, (2012) explored the relationship between loyalty, intention, brand image, and customer satisfaction concerning cosmetic products among the residents of central India. The study also identified five key advantages related to brand image: symbolic, functional, social, appearance enhancement, and experiential, which are closely associated with loyalty, intention, and customer satisfaction. Many females are satisfied and prefer good quality skin care products and friendly skin items, and most importantly, affordability plays a vital role in customers' buying preferences. In addition, Nivea is the most-loving brand for skincare among females of Nagpur city of Maharashtra, India (Khan et al. 2023). Marketing mix, service quality, and visual appearance had a significant influence in forming consumer satisfaction for in-store cosmetics. Additionally, the paper emphasized the synergy between marketing and branding initiatives in creating customer satisfaction within the cosmetic industry of Vietnam (Lien & Bich, 2016). Other studies that explored the numerous factors affecting consumer satisfaction empirically are discussed in the following table.

Table: *Expending the variables from the Literature Review*

Authors	Variables	Methods	Findings
Kastulani & Septiana (2023)	brand image, price, product quality, and digital marketing and consumer satisfaction	100 Questionnaire is collected and analyzed quantitative method with a descriptive statistical approach and multiple linear regression analysis.	Brand image and product quality have a positive and significant effect while the price and digital marketing have a positive but not significant effect on consumer satisfaction for Scarlett Whitening Products
Rahmaniar et al., (2022)	Service quality, product quality, promotion,	Primary and secondary data with multiple linear regression that includes normality tests, OLS assumption checking	All the variables effect consumer satisfaction positively and significantly
Siregar et al., (2022)	taste and price on consumer satisfaction	Primary Data Validity and Reliability Tests, Multiple Regression Techniques with R^2	taste and price have positive and significant impact on consumer satisfaction
Novia et al., (2020)	product quality, service quality, consumer satisfaction	100 questionnaires are analyzed by descriptive analysis is used. With classic assumption test, validity test and reliability test.	product quality, service quality has a positive and significant effect on customer satisfaction
Lestari & Elwisam (2019)	Price Perception, Product Quality, and Brand Image to Consumer Satisfaction	Partial least square technique (PLS)	Price perception and brand image do not affect customer satisfaction while product quality affects customer satisfaction.
Ramesh & Siranjeevi, (2017)	Income, Product quality,	Percentage analysis, ANOVA, mean analysis and correlation	The quality of cosmetic products is highly influential in the purchasing decisions of females.
Khan & Khan (2013)	Awareness regarding the ingredients of skin care products, Product Quality	Chi-square	Female buyers had an awareness regarding the ingredients of skincare products and were conscious about product quality.
Tjahjono, et al., (2021)	Product Quality, Brand Image, and consumer satisfaction through purchase decision	PLS (Partial least square) method	Strong and significant correlation between PQ, BI and influence on purchase decision

| Setiawan, et al., 2023 | Brand Image, Product quality and consumer satisfaction | SEM with PLS approach | Brand image has insignificant impact while product quality has positive and significant impact on CS. |
| Hannifah, N., & Susanti, A. (2023). | Digital Marketing, Brand Preference, Product Quality and Buying Decision | AVE, Coefficient of determination tests | Digital Marketing, Brand Preference, Product Quality are the influencing factors for Buying Decision of skincare products. |

The theoretical ground of this study lies in the empirical research examining the impact of price and product quality on consumer satisfaction (Hariyanti et al., 2023; Wibowo et al., 2021). In addition, this study measures the impact of Brand image and digital marketing along with price and quality on consumer satisfaction. The hypothetical relationships are depicted in the following conceptual framework.

Conceptual Framework
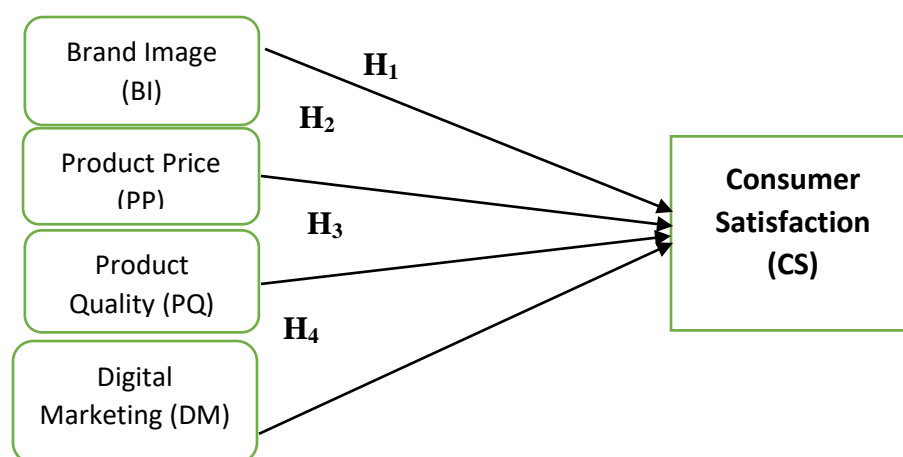
From the prior literature (Rahmaniar et al., 2022; Lestari & Elwisam, 2019; Hannifah, N., & Susanti, 2023; Kotler & Armstrong, 2018), four hypotheses have been developed from the conceptual framework:

H_1: Brand Image has a significant influence on consumer satisfaction towards skincare products.

H_2: Product Price has a significant influence on consumer satisfaction towards skincare products.

H_3: Product Quality has a significant influence on consumer satisfaction towards skincare products.

H_4: Digital Marketing has a significant influence on consumer satisfaction towards skincare products.

Methodological Design

The study employs quantitative methods to examine the variables influencing customer satisfaction. Since the research aims to examine the relationships between variables, the quantitative approach is appropriate to test the hypothesis (Bryman & Bell, 2011). This paper was conducted to determine the effect of brand image, price, product quality, and digital marketing on consumer satisfaction for skin care products with a descriptive statistical approach and OLS technique. The research sample consists of undergraduate females attending various public and private colleges and universities in Lahore, Pakistan. A total of 150 students are selected from nine administrative towns of Lahore, including Ravi, Allama Iqbal, Wagha,

Shalimar, Data Ganj Baksh, Nishtar, Gulberg, Aziz Bhatti, and Samanabad and one cantonment area to examine young consumers' behavior towards skin care products in Pakistan.

This study employs a non-probability convenience sampling technique, and the data is collected using a questionnaire, comprising close-ended and open-ended questions through Google Forms. Convenience sampling has deliberately opted for its ease of access to the researcher (Sekaran & Bougie, 2013). This sampling approach is selected as it is extensively used in related literature (Ahmad & Sherwani, 2015; Mahfooz, 2015; Khan et al., 2015; Malik et al., 2013). Moreover, the questionnaire is structured to collect information relating to respondents' demographics and address all independent and dependent variables of this study. All variables are measured on a five-point Likert scale, where 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. To test the hypothesis proposed above, the following model is employed,

$$CS = \beta_o + \beta_1\,BI + \beta_2\,PP + \beta_3\,PQ + \beta_4\,DM + \varepsilon_{it} \qquad (1)$$

The explanatory variable in (1) is consumer satisfaction denoted by CS and explained variables of the models are BI (Brand Image), PP (Product Price), PQ (Product Quality), and DM (Digital Marketing); β_o denotes constant term, $\beta_1 - \beta_4$ are the estimated coefficients, and εit is a stochastic error term.

Explanatory Variable

Satisfaction is measured in terms of pride, pleasure, and perception of the desired results. The feeling of satisfaction can exist in the form of pride, happiness, and exceeding expectations on the part of the consumer. To measure satisfaction a five-point Likert scale is adapted from (Kotler & Armstrong (2018) and Lestari & Elwisam (2019).

Explained Variable

An organization's brand image is built by three indicators: producer image, user image, and product image (Lestari & Elwisam, 2019). Product price is determined by four factors, including affordability, product quality conformity, benefits suitability, and price competitiveness, and is adapted by Kotler & Keller (2009). Another important determinant that affects consumer satisfaction is product quality which is assessed from performance, features, consistency of specifications, reliability and durability, perception, and functionality (Tjiptono, 2008). Through digital marketing, companies can communicate with their customers and promote products and services more effectively (Tjiptono, 2016). Digital marketing involves eight indicators: websites, search engine optimization, PPC advertising, affiliate marketing, strategic partnerships, online public relations, social media, and email marketing (Ryan & Jones, 2009).

The reliability of the questionnaire is evaluated by the Cronbach Alpha test (Cronbach, 1951). A reliability test is used to determine how consistent a measuring instrument is and to show to what extent it can be relied on to conduct research. A construct is considered reliable when both its Cronbach's Alpha (α) and composite reliability values exceed 0.70 (Cortina, 1993). The reliability of the construct is evaluated by calculating Cronbach's Alpha values and the composite reliability values are calculated based on the following formula,

$$R = \frac{\left(\sum_{i=1}^{p} \lambda_i\right)^2}{\sum_{i=1}^{p} \lambda_i^{\,2} + \sum_{i}^{p} V(\delta)}$$

In this study, the instrument's validity is evaluated using two methods: average variance extracted (AVE) and discriminant validity (Fornell & Larcker, 1981). AVE is computed by using the following formula.

$$AVE = \frac{\sum_{i=1}^{p} \lambda_i^{\,2}}{n}$$

According to the standard rule, the AVE value should be 0.5 or greater (Chin, 1998; Fornell and Larcker, 1981). In addition, to check multicollinearity, Tolerance and VIF (variance inflation factor) is calculated (Neter, Wasserman, & Kutner, 1983). If the VIF is less 10 which means there is no issue of multicollinearity between the variables (Chatterjee & Price, 1991; Midi & Bagheri, 2010).

Results and Discussion

Respondents' Demographic

The results of table 1 indicates that significant portion of respondents are female, aged between 19 to 21 years (46%) and most of the participants (almost 25.6%) are graduating from university. 60 % of graduate students have pocket money in the range of 3000 to 5000 rupees. The findings reveal that many undergraduate females use skin care products often during the period of 6-12 months.

Table 1. *Respondents' Profile*

Variable	Frequency	Percentage
Age		
16-18	28	18.7
19-21	69	46
22-24	38	25.3
25 and above	15	10
Institute		
College	71	47.4
University	79	52.6
Pocket Money		
3000-5000	90	60
6000-8000	40	26.7
9000-11000	13	8.6
12000 and above	7	4.7
Usage of skin care product		
Sometimes	65	43.4
Often	85	56.6
Duration of use		
Less than 6 months	29	19.3
6-12 months	94	62.7
13- 36 months	4	2.7
More than 36 months	23	15.3

Model Testing

During data analysis, it is essential to check the reliability and validity of the data (Hair et al., 2014). The construct reliability is calculated using Cronbach's Alpha where its value should exceed 0.6 (Irfany et al., 2023; Nunnally, 1987). According to the reliability test reported in table 2, the values of Cronbach's alpha for all the constructs are greater than 0.6 that shows the reliability of this questionnaire. Additionally, a variable is considered reliable if its composite reliability (CR) value is greater than 0.7 (Bagozzi & Yi', 1988; Ghozali & Latan, 2015). All variables in table 2 are considered reliable because they have a composite reliability (CR) value greater than 0.7.

Table 2. *Reliability Statistics*

Construct	No of Items	Cronbach's Alpha (CA)	Composite Reliability (CR)
Brand Image (BI)	3	0.643	0.742
Product Price (PP)	4	0.782	0.832
Product Quality (PQ)	6	0.857	0.836
Digital Marketing (DM)	8	0.869	0.846
Consumer Satisfaction (CS)	4	0.882	0.823

The AVE values computed for all five constructs, as presented in Table 3, exceed 0.5, confirming the validity of the instrument. Discriminant validity is further evaluated by taking the square root of the AVE, calculated, and highlighted in bold along the diagonals of Table 2. These bold values should be higher than the inter-correlation values of the constructs displayed under the respective columns and the results indicate that the instrument has discriminant validity.

Table 3: *Discriminant Validity*

Variables	AVE	BI	PP	PQ	DM	CS
BI	0.505	**0.710**				
PP	0.554	0.486	**0.744**			
PQ	0.561	0.468	0.768	**0.748**		
DM	0.511	0.537	0.677	0.768	**0.714**	
CS	0.501	0.432	0.579	0.677	0.803	**0.707**

Some other tests like Tolerance, VIF (Variance Inflation Factor), are employed to examine multicollinearity and data-related deviations. This analysis measures the level of multicollinearity among the multiple regression variables. All the independent variables in this study exhibited a tolerance greater than 0.1 and a VIF less than 10. Therefore, there is no evidence of multicollinearity, indicating the absence of correlations between variables (see table 4).

Table 4. *Multicollinearity Test*

Variables	Tolerance	VIF
Brand Image (BI)	0.683	1.465
Product Price (PP)	0.387	2.583
Product Quality (PQ)	0.253	3.955
Digital Marketing (DM)	0.307	3.252

This study aims to analyze the impact of Brand Image, Product Price, Product Quality, and Digital Marketing on consumer satisfaction for skin care products in Pakistan. The results presented in table 5 reveal the impact of all independent variables on consumer satisfaction and further employed to test the hypothesis of this study.

H_1: Brand Image has a significant influence on consumer satisfaction towards skincare products.

According to the results presented in table 5, Brand Image has positive but insignificant impact on consumer satisfaction for skin care products (H_1: $\beta_1 = 0.006$, SE = 0.069, p = 0.928), the findings do not support first hypothesis, consequently H1 is rejected. This outcome indicates that consumers are not particularly brand conscious when it comes to skincare products. The result confirms previous findings of (Setiawan et al., 2023) regarding the non-significant relationship between brand image and consumer satisfaction for the purchase decision of skin care products.

H_2: Product Price has a significant influence on consumer satisfaction towards skincare products.

Product price has a significant negative impact on consumer satisfaction (H_2: $\beta_2 = -0.179$, SE = 0.066, p = 0.008), which implies that as price of skincare product increases, the satisfaction of consumers decreases

(see table 5). The findings fully support H_2, therefore H_2 is accepted. This result is in accordance with the previous studies of (Hariyanti et al., 2023; Wibowo et al., 2021) which showed the significant impact of price on consumer satisfaction for beauty products.

H_3: Product Quality has a significant influence on consumer satisfaction towards skincare products.

As indicated in the table 5, next hypothesis measures the impact of Product quality on consumer satisfaction and the results reveals that quality of product has a positive and significant impact on consumer satisfaction for skincare products (H_3: $\beta_3 = 0.425$, SE = 0.058, p = 0.000). Many previous studies also justified that product quality was an essential dimension of consumer satisfaction (Lamasi & Santoso, 2022; Dyson *et al.*, 1996; Farquhar, 1989; Keller, 1993; Sari, 2019). Abd et al. (2021) identified that the quality of a product or service is one of the most important factors affecting customer satisfaction particularly in the purchasing of skincare products.

H_4: Digital Marketing has a significant influence on consumer satisfaction towards skincare products.

This paper further determines that Digital marketing has a positive relationship between consumer satisfaction in the case of skincare products. The result presented in table 5 (H_4: $\beta_4 = 0.230$, SE = 0.041, p = 0.000) supports H_4, thus last hypothesis related to digital marketing is accepted which confirms that companies can increase the satisfaction of consumers by strong digital marketing. Hannifah & Susanti (2023) argued that digital marketing along with development of digital technology became major influencing factor in consumer purchase decision and for consumer satisfaction.

Table 5. *Baseline Results*

Variables Dep. Variable: Consumer Satisfaction (CS)	Standardized Beta Coefficients	Coefficient Standard Error	T-stats
Constant	0.759	0.738	1.029
Brand Image (BI)	0.006	0.069	0.091
Product Price (PP)	-0.179***	0.066	-2.706
Product Quality (PQ)	0.425***	0.058	7.359
Digital Marketing (DM)	0.230***	0.041	5.576

The significance is represented by *** at 1%; ** at 5%; *at 10%.

Conclusion and Future Implication

The purpose of this study is to investigate the relationship between brand image, product price, product quality and digital marketing on consumer satisfaction for skincare products especially in the context of Pakistan. Based on the well-established rules for hypothesis testing, all the hypotheses are accepted except brand image because it is perceived to have a limited impact on consumer satisfaction. In addition, many other variables, like product quality play a more significant role in shaping consumer decisions. Additionally, development of digital technology and its associated marketing strategies have significantly impacted consumer preferences during the last few years. In the competitive skincare market, it is critical for businesses to understand the close relationship between product quality, pricing, branding, and digital marketing. Understanding these factors can guide marketing strategies, product development, and overall business decisions, ultimately enhancing customer satisfaction and brand loyalty in the ever-evolving skincare industry of Pakistan.

This study has several implications for future research and practical applications. Social media advertising, influencer marketing, or personalized online experiences, among other digital marketing elements that influence consumer behavior, could be explored in greater depth in future research. It is possible to optimize your online strategies by knowing which aspects of digital marketing are the most

effective. Moreover, brand image significantly impacts consumer satisfaction. It is important for manufacturers to establish a strong brand image and strengthen emotional connections with consumers. Celebrity endorsers, quality products, and competitive pricing can help achieve this goal. The quality of skincare products must be in accordance with the consumer expectations and quality should be maintained by using natural and organic ingredients. By improving product quality, consumers can gain trust, strengthen their brand image, and become more loyal.

As Brand image, product price, product quality and digital marketing significantly influence consumer satisfaction of skincare products. These factors association can also be measured in other industries of Pakistan. Moreover, the influence of the above-cited factors can be explored only for one brand of any product.

Contribution

The study contributes to the literature by examining the perceptions and behavior of Pakistani consumers concerning cosmetics products. This paper provides valuable insights both for local and foreign cosmetic brands owing to the lack of exploration of this topic in the Pakistani context. This research sheds light on the perceptions of consumers and the various factors influencing their decisions in terms of price, marketing, quality, and brand image in relation to the market. Moreover, the study's findings serve as a foundation for offering recommendations to local cosmetics manufacturers. These insights can guide these manufacturers in strengthening their market presence and enhancing their strategies to secure a stronger foothold in the industry in the future.

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References

Abd, W. N. A. B. W., Azahari, M. S. B., Azam, N. M. B. M. N., Kamalrozaman, N. A. K. B., Kamal, N. B. C., Min, P. C. F., ... & Krishnan, I. A. (2021). Customer Satisfaction on the Quality of Services of Local Skin Care Products. *Malaysian Journal of Social Sciences and Humanities (MJSSH),* 6(11), 442-453.

Ahmad, F., & Sherwani, N. U. (2015). An empirical study on the effect of brand equity of mobile phones on customer satisfaction. *International Journal of Marketing Studies*, *7*(2), 59.

Amanah, D. (2010). Pengaruh Harga Dan Kualitas Produk Terhadap Kepuasan Konsumen Pada Majestyk Bakery & Cake Shop cabang H,M, Yamin Medan. Jurnal Keuangan & Bisnis. 2 (1), 71-87.

Anjana, S. S. (2018). A study on factors influencing cosmetic buying behavior of consumers. *International Journal of Pure and Applied Mathematics*, 118(9), 453-459.

Avianty, V., & Waloejo, H. D. (2019). Pengaruh kualitas pelayanan, harga, dan keragaman produk terhadap kepuasan pelanggan cafe stove syndicate semarang. *Jurnal Ilmu Administrasi Bisnis,* 8(2), 67-72.

Ayuniah, P. (2018). Analisis Pengaruh Citra Merek, Kualitas Produk, Iklan, dan Harga terhadap Keputusan Pembelian Produk Kosmetik Wardah (Studi Kasus pada Mahasiswi Jurusan Manajemen Fakultas Ekonomi Universitas Gunadarma yang Mengambil Kuliah di Kampus Depok). *Jurnal Ilmiah Ekonomi Bisnis*, 22(3).

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the academy of marketing science, 16, 74-94.

Bryman, A., & Bell, E. (2011). *Business Research Methods*. Oxford University Press Inc. New York.

Bushra Afzal SR, Waqar Ali S, Abbas Z, Mahmood A, K. Mercury poisoning associated with international and local skin Skin Care creams in Pakistan. Ministry of Climate Change (MOCC), Sustainable Development Policy Institute (SDPI) Islamabad, Pakistan. Available from: https://www.think asia.org/bitstream/handle/11540/9423/ Mercury Poisoning Associated with International and Local Skin Care reams in Pakistan. pdf? sequence=1. 2018.

Chatterjee, S., & Price, B. (1991). *Regression analysis by example*. John Wiley & Sons.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, *295*(2), 295-336.

Cortina, J. M. (1993). What Is Coefficient Alpha? An Examination of Theory and Applications. *Journal of Applied Psychology*, *78*(1), 98–104. https://doi.org/10.1037/0021-9010.78.1.98

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, *16*(3), 297-334.

Dyson, P., Farr, A., & Hollis, N. S. (1996). Understanding, measuring, and using brand equity. *Journal of Advertising Research*, *36*(6), 9-22.

Etemad-Sajadi, R., & Rizzuto, D. (2013). The antecedents of consumer satisfaction and loyalty in fast food industry: A cross-national comparison between Chinese and Swiss consumers. *International Journal of Quality & Reliability Management, 30*(7), 780-798.

Eze, U., Tan, C. and Yeo, A., 2012. Purchasing Cosmetic Products: A Preliminary Perspective of Gen-Y. *Contemporary Management Research*, 8(1), Pp.51-60.

Farquhar, P. H., & Equity, M. B. (1989). Marketing research. *Marketing research*, *1*(3), 24-33.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & BrYant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of marketing*, *60*(4), 7-18.

Fornell, C., Morgeson III, F. V., Hult, G. T. M., VanAmburg, D., Fornell, C., Morgeson, F. V., ... & VanAmburg, D. (2020). Defining Customer Satisfaction: A Strategic Company Asset?. The Reign of the Customer: Customer-Centric Approaches to Improving Satisfaction, 1-24.

GALLUP. Hair care study, findings from a national study. PIRANA; 2020. Available from: athttp://gallup.com.pk/wp-content/uploads/ 2015/02/Hair-Care-Study-Report.pdf.

Ghozali, I., & Latan, H. (2015). Partial least squares konsep, teknik dan aplikasi menggunakan program smartpls 3.0 untuk penelitian empiris. Penerbit Universitas Diponegoro.

Hair Jr, J. F., & Lukas, B. (2014). McGraw-Hill Education Australia.

Hanif, M., Hafeez, S., & Riaz, A. (2010). Factors affecting customer satisfaction. *International research journal of finance and economy*, *60*(1), 44-52.

Hannifah, N., & Susanti, A. (2023). The Influence of Digital Marketing, Brand Preference, and Product Quality on Buying Decision of Skincare Products. *Airlangga Journal of Innovation Management,* 4(1),1-19 .

Hariyanti, N. T., WW, E. T. D. R., & Siswanto, E. (2023). Effect of Perceived Price and Brand Image on Purchase Decision through Customer Satisfaction, a Study on Azarine Buyers in Malang City. *Journal of Business Management and Economic Development*, *1*(02), 291-297.

Irfany, M. I., Khairunnisa, Y., & Tieman, M. (2023). Factors influencing Muslim Generation Z consumers' purchase intention of environmentally friendly halal cosmetic products. *Journal of Islamic Marketing*.

Jahanshahi, A. A., Gashti, M. A., Mirdamadi, S. A., Nawaser, K., & Khaksar, S. M. (2011). Study the Effects of Customer Service and Product Quality on Customer Satisfaction and Loyalty. *International Journal of Humanities and Social Science, 1*(7), 253-260.

Junaid, A. B., & Nasreen, R. (2012). Determination of consumer behaviour amongst millennials in ermaceuticals (skin care products). *International Journal of Marketing Studies, 4*(3), 88.

Kastulani, R. P., & Septiana, M. (2023, January). Consumer Satisfaction Analysis of Scarlett Skin Care Products through Brand Image, Price, Product Quality, and Digital Marketing Factors. In *Proceedings of the 4th International Conference on Applied Economy and Social Science, ICAESS 2022, 5 October 2022, Batam, Riau Islands, Indonesia: ICAESS 2022* (p. 48). European Alliance for Innovation.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of marketing*, *57*(1), 1-22.

Khan, A. F., & Khan, M. F. (2013). A study on the awareness of product ingredients among women skincare users in state of Madhya Pradesh. *ISOR Journal of Business and Management*, *14*(4), 65-72.

Khan, N., Rahmani, S. H. R., Hoe, H. Y., & Chen, T. B. (2015). Causal relationships among dimensions of consumer-based brand equity and purchase intention: Fashion industry. *International Journal of Business and Management*, *10*(1), 172.

Khan, R., khan, S., Tanveer, A., & Tiwari, S. (2023). Project Report on"An Analytical study on Consumer satisfaction with respect to skin care products (A brand-wise analysis)".

Koshy, L., & Manohar, S. J. (2017). Factors influencing the buying behaviour of face care products among youth. *International Journal in Management & Social Science, 5*(1), 63-72.

Kotler, P., & Armstrong, G. (2018). Pearson Education Limited. *Principles of Marketing 17th Global Edition*.

Kotler, P., & Keller, K. L. (2009). *Menejemen Pemasaran*. Penerbit: Erlanggga. Jakarta.

Lakshmi, Y., & Babu, M. S. (2019). Study of factors that influence the consumer behaviour towards cosmetics-conceptual frame work. *Iconic Research and Engineering Journals, 2*(7), 21-28.

Lamasi, W. I., & Santoso, S. (2022). The influence of promotion, product quality and brand image towards customer purchase decisions of Wardah cosmetic products. *International Journal of Research in Business and Social Science, 11*(2), 67-73.

Lestari, R., & Elwisam, E. (2019). Pengaruh Persepsi Harga, Kualitas Produk, dan Citra Merek Terhadap Kepuasan Konsumen dan Dampaknya Pada Minat Beli Ulang Produk Mie Instant Sedaap. *Ilmu dan BudaYa*, *41*(63).

Lien, T. P., & Bich, N. D. (2016). The Determinants of Customer Satisfaction When Purchasing In-store Cosmetics in Vietnam. *VNU Journal of Economics and Business*, *32*(5E).

Luong, D., Vo, T. and Le, K., 2017. The impacts of country of origin, price, and brand on consumer behavior toward cosmetics products: A review of Vietnam. *International Journal of Research Studies in Management, 6*(2), 53-71

Ma, G., Rau, P.-L. P., & Guo, Z. (2018). The effects of environmental awareness and consumption value on green makeup product purchase intentions. *Psychology, 9*(7), 1898-1916.

Mahfooz, Y. (2015). Brand equity-consequence relationship: Evidence from automobile industry. *International Journal of Business and Management*, *10*(3), 81.

Malik, M. E., Ghafoor, M. M., Iqbal, H. K., Riaz, U., Hassan, N., Mustafa, M., & Shahbaz, S. (2013). Importance of brand awareness and brand loyalty in assessing purchase intentions of consumer. *International Journal of business and social science*, *4*(5), 167-171.

Manto, E.A., (2011). *The Beauty Mindset*. 6th Edn., Aurora by Dawn Media Group, Pakistan, pp: 24-25.

Martín-Consuegra, D., Molina, A., & Esteban, A. (2007). An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. *Journal of Product & Brand Management, 16*(7), 459-468.

Midi, H., & Bagheri, A. (2010, July). Robust multicollinearity diagnostic measure in collinear data set. In *Proceedings of the 4th international conference on applied mathematics, simulation, modeling* (pp. 138-142). World Scientific and Engineering Academy and Society (WSEAS).

Neter, J., Wasserman, W., & Kutner, M. H. (1983). *Applied linear regression models*. Richard D. Irwin.

Novia, M. A., Semmaila, B., & Imaduddin, I. (2020). Pengaruh kualitas Layanan Dan Kualitas Produk Terhadap Kepuasan Pelanggan. *Tata Kelola*, *7*(2), 201-212.

Nunnally, J. C. (1987). *Teorıa psicometrica*. Mexico: McGraw-Hill.

Pudaruth, S., Juwaheer, T. D., & Seewoo, Y. D. (2015). Gender-based differences in understanding the purchasing patterns of eco-friendly cosmetics and beauty care products in Mauritius: a study of female customers. *Social responsibility journal, 6*(2), 31-39.

Rahmaniar, R., Ilham, R. N., Sinta, I., & Jamatia, P. L. (2022). Analysis of Factors Affecting Customer Satisfaction with MS Glow Skin Care In Kota Tebing Tinggi. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS), 2*(5), 773-782.

Ramesh, N., & Siranjeevi, M. S. (2017). The Determinants of Customer Satisfaction towards Cosmetic Products. *Indo-Iranian Journal of Scientific Research (IIJSR), 1*(1), 189-203.

Ryan, D., & Jones, C. (2009). Digital Marketing: *Marketing Strategies for Engaging Digital Genaration*. Kogan Page Limited.

Sari, A. P. (2019). *The Effect of Product Quality, Price, and Brand Image Toward Customer Loyalty with the Mediation of Customer Satisfaction on Personal Care Product of Unilever Indonesia in Surakarta* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).

Sekaran, U. and Bougie, R. (2013), Research Methods for Business: *A Skill-Building Approach,* 6th ed., Wiley, New York.

Setiawan, I., Mulyana, D., Prianto, A., Desi, M., & Setyaningrum, R. P. (2023). The Effect of Brand Image and Product Quality on Consumer Purchase Decisions On'skincare Ine'cosmetic Products At The Cikarang Skin Center Mediated By Word Of Mouth. *Jurnal Ekonomi*, *12*(3), 334-339.

Shaji, E. (2020). A Study on Customer Satisfaction Towards Cosmetic Products- Brand Wise Analysis. *International Journal of Creative Research Thoughts (IJCRT)*, *8*(5), 596-613.

Siregar, A. P., Nofirman, N., Yusuf, M., Jayanto, I., & Rahayu, S. (2022). The Influence of Taste and Price on Consumer Satisfaction. *Quantitative Economics and Management Studies, 3*(6), 998-1007.

Sugeng. (2016). Understanding & Indicators of Customer Satisfaction According to Experts. https://Etalasepustaka.Blogspot.Com.

Thakur, S., & Singh, A. P. (2012). Brand image, customer satisfaction and loyalty intention: A study in the context of cosmetic product among the people of Central India. EXCEL *International Journal of Multidisciplinary Management Studies*, 2(5), 37-50.

Tjahjono, E. J., Ellitan, L., & Handayani, Y. I. (2021). Product Quality And Brand Image Towards Customers' satisfaction Through Purchase Decision Of Wardah Cosmetic Products In Surabaya. *Journal of Entrepreneurship & Business*, *2*(1), 56-70.

Tjiptono, F. (2008). *Strategi pemasaran* Yogyakarta: ANDI. Product's Attributes.

Tjiptono, F., & Diana, A. (2016). *Pemasaran Esensi & Aplikasi*. Yogyakarta: ANDI.

Ulfat, S. (2013). Pairing of customer' satisfaction with brand consciousness and price sensitivity (a feminine study in Pakistan on beauty care products' selection, use and satisfaction). *Asian Journal of Business Management*, *5*(1), 144-152.

Wibowo, Y. G., Wulandari, R. H., & Qomariah, N. (2021). Impact of price, product quality, and promotion on consumer satisfaction in cosmetics and skincare. *Journal of Economics, Finance and Management Studies*, *4*(7), 978-986.

Zamazalová, M. (2008). Customer satisfaction. *Acta Oeconomica Pragensia, 4*, 76-82.