

## An Assessment of Factors Influencing University Students' Intentions to Purchase Luxury Skincare Products

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### Abstract

This study explores the consumer behavior of university students in the Delhi-NCR region toward purchasing luxury skin care products, focusing on the impact of vanity, brand equity, brand loyalty, brand awareness, and perceived quality on their purchase intention. The rapid growth of the luxury skincare market in India, coupled with the increased spending power and influence of the younger generation, makes it vital to understand the factors driving their purchasing decisions. A quantitative research methodology was employed, using a structured questionnaire to collect data from 200 university students in the Delhi-NCR region. SEM and multiple regression analysis examined the relationships between vanity, brand equity, brand awareness, brand loyalty, perceived quality, and purchase intention. The findings of this study reveal that all independent variables significantly influence the purchase intention of luxury skincare products among university students in the Delhi-NCR region. Vanity emerged as the most influential factor, followed by brand loyalty, perceived quality, brand equity, and brand awareness. This suggests that in addition to the functional benefits of luxury skin care products, social and emotional aspects play a critical role in shaping the purchase intentions of university students. This research has practical implications for marketers and luxury skincare brands targeting youth, particularly in product development, branding, and promotional strategies. By understanding the role of each factor in driving purchase intention, brands can tailor their marketing efforts to enhance brand equity, raise awareness, foster loyalty, build strong brands, and communicate the high quality of their products, ultimately increasing their market share in the competitive luxury skincare market.

**Keywords:** Vanity, Brand Equity, Perceived Quality, Brand Awareness, Brand Loyalty, Purchase Intention, NCR Region.

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### 1. Introduction

In recent years, India has been experiencing a growing trend towards luxury skincare products. This is due to rising disposable incomes and a growing awareness of the benefits of using high-quality skincare products. The luxury skincare market in India includes international brands such as L'Oreal, Estée Lauder, Shiseido, and Lancôme, as well as Indian brands such as Forest Essentials and Kama Ayurveda. The market is segmented by product type, with anti-aging creams,

face masks, serums, and moisturizers being some of the most popular categories. Anti-aging creams are in high demand due to the increasing desire for products that can help reduce the appearance of fine lines and wrinkles.

Regarding distribution, luxury skincare products in India are sold through specialty stores, online retailers, and department stores. E-commerce platforms have become a popular channel for consumers to purchase luxury skincare products due to their convenience and availability of a wide range of products. Luxury skincare products in India typically range from INR 2,000 to INR 10,000, with some products priced

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even higher. This shows the willingness of Indian consumers to invest in high-quality skincare products that can deliver visible results. Overall, the luxury skincare market in India presents a promising opportunity for international and domestic brands to tap into the growing demand for premium skincare products. With rising consumer awareness and disposable income, the market is expected to grow in the coming years. Recent years have seen explosive expansion for the premium skin care industry due to factors such as the rising middle class, globalization, and an increasing focus on personal grooming and wellness [11]. As part of the younger demographic, university students have emerged as an influential consumer segment, particularly in the Delhi-NCR region, which has a substantial concentration of higher education institutions [10].

Understanding consumer behavior and purchase intentions in this segment can offer valuable insights for luxury skincare brands aiming to develop and enhance their marketing strategies. The research aims to investigate the consumer behavior of university students in the Delhi-NCR region toward purchasing luxury skin care products, focusing on the impact of vanity, brand awareness, brand equity, brand loyalty, and perceived quality on purchase intention. Previous studies have identified various factors influencing the purchase behavior of luxury products, including social status, conspicuous consumption, personal identity, and the desire for self-expression [18]. Moreover, the role of brand-related factors in shaping consumer preferences has been well-established in the marketing literature [6]; [20]. However, there is a need to explore the specific factors affecting the purchase intention of luxury skincare products among university students in the Delhi-NCR region. By analyzing the impact of vanity, brand loyalty, brand awareness, brand equity, and perceived quality on the purchase intention of luxury skincare products among university students in the Delhi NCR area, this research has added to the body of knowledge [21]. Furthermore, the findings have provided practical implications for marketers and luxury skincare brands targeting this consumer segment, particularly in product development, branding, and promotional strategies [22].

## 2. Review of literature

Purchase intention is a critical concept in consumer behavior research, as it reflects an individual's likelihood to buy a product or service given their current attitudes and beliefs [4]. In order to create successful marketing strategies that target prospective customers and drive sales development, marketers must have a firm grasp of the elements that impact purchase intention. Numerous studies have investigated factors influencing purchase intention, such as perceived value, product attributes, personal factors, and social influences [3];[15];[8]. Perceived value refers to the consumer's assessment of the product's overall benefits to its price, where higher perceived value is likely to result in stronger purchase intention [3]. Product attributes, such as quality, design, and functionality, have also significantly

impacted purchase intention [6];[15]. Personal factors, including consumer needs, motivations, and attitudes, are vital in shaping purchase intention [15]. For instance, consumers who are highly motivated by social status and prestige are more likely to have a higher purchase intention for luxury products [18]. Attitudes toward a product or brand, shaped by consumers' beliefs and evaluations, are strong predictors of purchase intention, as proposed by the Theory of Reasoned Action [4]. Social influences, such as family, friends, and reference groups, can also impact purchase intention [8]. Consumers may be influenced by the opinions and preferences of others in their social circle, leading to conformity and a higher likelihood of purchasing products endorsed by their reference groups. In a nutshell, purchase intention is a complex phenomenon influenced by various factors, including perceived value, product attributes, personal factors, and social influences [23-25].

Vanity, as a psychological trait, refers to an individual's excessive pride in their appearance and the desire for admiration from others [12]. Consumer behavior is influenced by this quality, including purchase intention, which is the likelihood of a consumer buying a particular product or service [4]. Specifically, vanity can impact purchase intention by shaping consumers' preferences for products and brands that signal status, self-enhancement, and social approval [26]. The notion of "vanity" has been considered widely in the context of luxury and prestige brands, as these brands often cater to the needs and desires of consumers seeking to enhance their self-image and social standing [27-29]. People with high levels of vanity are more likely to have stronger ambitions to buy luxury goods, as these brands fulfill their needs for self-enhancement, social approval, and conspicuous consumption [14]. Several empirical studies have explored the relationship between vanity and purchase intention. For instance, Netemeyer et al. [12] found that "vanity" was positively associated with consumers' preferences for high-priced, prestigious brands [30].

Vigneron and Johnson [18] proposed a framework for prestige-seeking consumer behavior, highlighting the role of vanity in driving consumers' purchase intentions for luxury brands. Moreover, Kim et al. [7] confirmed the positive influence of vanity on consumers' preferences and purchase intentions for luxury brands across various product categories. In addition to luxury brands, vanity can impact purchase intention in other contexts. For example, Sung et al. [16] investigated the role of vanity in shaping consumers' preferences for organic products, finding that vanity-driven consumers exhibited higher purchase intentions for organic products due to their perceived self-enhancement benefits. Marketers targeting vanity-driven consumers should consider the implications of this trait for their branding and communication strategies [31-32]. By emphasizing their products' prestige, exclusivity, and status-enhancing aspects, marketers can appeal to consumers with high levels of vanity and foster stronger purchase intentions [18]. In conclusion, vanity can significantly influence consumers' purchase intentions, particularly for products and brands that cater to their desire for self-enhancement, social approval, and

conspicuous consumption [33]. Understanding this relationship can provide valuable insights for marketers seeking to develop effective strategies for vanity-driven consumers [34]. Based on the discussion mentioned above, the first hypothesis can be formulated as follows:

H1: Vanity has a significant positive influence on purchase intention.

Brand equity is a valuable intangible asset that reflects the overall value of a brand and is derived from consumer perceptions, attitudes, and associations [1];[6]. Strong brand equity enables a company to differentiate its products from competitors and positively influences consumer behavior, including purchase intention [20]. Understanding the relationship between brand equity and purchase intention can help marketers optimize brand-building strategies to drive sales and long-term growth. Aaker [1] proposed a comprehensive brand equity model encompassing four dimensions: brand awareness, brand loyalty, and perceived quality. Each of these dimensions has been found to affect purchase intention to varying degrees. It has also been shown that the degree to which customers value a product, known as its "perceived quality," influences their propensity to buy that good [1]. Brand associations, which are the mental connections consumers make with a brand, can evoke positive emotions and enhance purchase intention [6];[20]. These associations can be based on product attributes, benefits, or intangible factors, such as brand personality or corporate social responsibility [1]. Finally, it has been observed that brand loyalty, defined as customers' willingness to repeatedly buy a favorite product or brand, is substantially correlated with intent to buy [13];[20]. Several empirical studies have confirmed the positive relationship between brand equity and purchase intention. For example, Yoo et al. [20] demonstrated that customer-based brand equity significantly influenced purchase intention across various product categories. Laroche et al. [9] further highlighted the role of brand equity in predicting purchase intention for services, indicating its relevance across different industries. In conclusion, by investing in brand-building strategies that enhance these dimensions, marketers can foster strong brand equity and drive purchase intention, increasing market share and profitability [35-37]. In light of the preceding conversation, the following hypothesis can be articulated as follows:

H2: Brand equity has a significant positive influence on purchase intention.

Brand awareness, as a key dimension of brand equity, refers to how well a brand is remembered and known to people [1]; [2]. This aspect of brand equity is crucial for consumer behavior [38]. It has been found to significantly influence purchase intention, which is the likelihood of a consumer buying a particular product or service [4]. Brand awareness can be conceptualized as a hierarchical continuum, ranging from a simple recognition and recall to top-of-mind awareness, where consumers spontaneously think of a

specific brand when considering a product category [1]. Higher levels of brand awareness can lead to a sense of familiarity, trust, and preference, ultimately resulting in higher purchase intention [5]. When consumers are familiar with a brand, they are more likely to consider it in their decision-making process and perceive it as a lower-risk option [5];[6]. The relationship between brand awareness and purchase intention has also been examined in the context of online shopping. For instance, Park et al. [14] found that brand awareness was a critical determinant of purchase intention for online shoppers, emphasizing the importance of building brand awareness in the digital environment. Building brand awareness can be achieved through various marketing activities, such as advertising, public relations, sponsorships, and social media campaigns, which aim to increase the brand's visibility and memorability [6]. Marketers can positively influence consumers' purchase intentions and drive long-term growth by investing in marketing efforts that enhance brand awareness. In conclusion, brand awareness plays a significant role in shaping consumer behavior, particularly purchase intention [39]. Higher levels of brand awareness can lead to increased familiarity, trust, and preference, ultimately resulting in stronger purchase intentions [40]. Understanding this relationship can help marketers develop effective strategies to increase brand awareness and foster favorable consumer behaviors; drawing from the above discussion, the following hypothesis can be formulated in the following manner:

H3: Brand awareness has a significant positive influence on purchase intention.

Brand loyalty is a crucial element of brand equity and refers to consumers' propensity to repeatedly choose one brand over others due to satisfying experiences, strong emotional bonds, and other factors [1];[6]. Acquire intention, or the likelihood that a customer would purchase a certain good or service, is a factor that closely relates to this component of brand equity [4]. For marketers looking to keep customers and promote long-term growth, the relationship between brand loyalty and purchase intent has significant consequences. Consumers who exhibit brand loyalty often strongly prefer their chosen brand, resulting in higher purchase intentions than non-loyal consumers [2]; [13]. Brand loyalty can be fostered through repeated positive experiences, satisfaction with the product or service, and developing an emotional connection with the brand, all of which contribute to strong purchase intentions [13]. Several empirical studies have demonstrated a positive relationship between brand loyalty and purchase intention. For example, Chaudhuri and Holbrook [2] found that brand loyalty was a significant determinant of purchase intention, particularly for frequently purchased products. Similarly, Taylor et al. [17] confirmed the positive relationship between brand loyalty and purchase intention in online shopping, emphasizing the importance of cultivating loyal customers in the digital environment. The relationship between brand loyalty and purchase intention can also be influenced by perceived risk, product involvement, and switching costs. Loyal shoppers'

perceptions of quality can have varying effects on purchase intention across different product categories, with stronger effects for products where quality differences are more apparent. To enhance perceived quality and improve purchase intentions, marketers should focus on delivering superior product performance, durability, and satisfaction and communicating the value of their products through effective marketing strategies [1]. By improving perceived quality, marketers can increase consumer confidence in their products, leading to higher purchase intentions and ultimately driving sales.

In conclusion, perceived quality plays a significant role in shaping consumer behavior, particularly purchase intention. Consumers who perceive a product as high-quality are likelier to develop strong purchase intentions, leading to increased sales and market share. Understanding the relationship between perceived quality and purchase intention can help marketers deliver superior value to their customers and drive business success. The study discovered a positive relationship between perceived quality and consumer decision-making. As a result, the subsequent hypothesis is suggested.

H4: Perceived quality has a significant positive influence on purchase intention.

### 3. Research Gap

The current literature on consumer behavior and luxury skincare products lacks a comprehensive understanding of the factors driving purchase intentions among university students in the Delhi-NCR region. Specifically, there is a research gap in exploring the roles of vanity, brand equity, brand awareness, brand loyalty, and perceived quality in shaping their purchase decisions. Furthermore, this market segment has not thoroughly investigated the interaction between these factors and their combined influence on purchase intention.

### 4. Methodology

A quantitative research methodology was employed for this study. The research design involved a cross-sectional survey conducted between 1st September 2022 to 20th December 2022, allowing for data collection from participants simultaneously. The selection of the observation candidates for the study involved university students in the Delhi-NCR region, specifically targeting students from the management stream. A non-probability convenience sampling technique was used to recruit a total of 200 respondents, with 125 males and 75 females participating in the study. The three universities included in the sample were Amity University, Sharda University, and Jindal University, all located in the Delhi-NCR region. This sampling method was chosen for its ease of access and cost-effectiveness, though it may not provide a fully representative sample of the target population. A closed-ended questionnaire was developed to collect data from the respondents. The questionnaire included items

designed to measure vanity, brand equity, brand awareness, brand loyalty, perceived quality, and purchase intention. The questionnaire was pre-tested for validity and reliability before being administered to the study participants. The questionnaires were distributed to the selected participants in person or through online platforms, depending on their accessibility and preferences. Participants were given sufficient time to complete the questionnaire and were assured of the confidentiality of their responses. Structural equation modelling (SEM) analysis and multiple regression analysis were used to determine the comparative impact of each independent variable on the dependent variable, purchase intention.

- **Vanity:** The study has explored how vanity, defined as the extent to which consumers are concerned with their appearance and the opinions of others, influences the purchase intention for luxury skin care products.
- **Brand equity:** The research has examined the role of brand equity, which represents the overall value a brand adds to a product, in driving purchase intention among university students.
- **Brand Awareness:** The study has investigated the impact of brand awareness or the extent to which consumers are familiar with and recognize a particular brand, on the purchase intention for luxury skin care products.
- **Brand Loyalty:** The research has analyzed the influence of brand loyalty, or the tendency for consumers to consistently choose a specific brand over its competitors, on the purchase intentions of university students in the Delhi-NCR region.
- **Perceived Quality:** The research has explored the impact of perceived quality, or consumers' subjective evaluation of a product's overall excellence, on the purchase intentions of university students in the Delhi-NCR region.

By following this research methodology, the study aimed to provide valuable insights into the factors influencing the purchase intention of luxury skincare products among university students in the Delhi NCR region, as well as practical implications for marketers and luxury skincare brands targeting this youth segment.



## 5. Result and discussion

Table 1. Models Info

Estimation Method	ML
Optimization Method	NLMINB
Number of observations	200
Free parameters	78
Standard errors	Standard
Scaled test	None
Converged	TRUE
Iterations	237
Model	Brand Loyalty=--Brand loyalty1+Brand loyalty2+Brand loyalty3+Brand loyalty4
	Perceived Quality=--Perceived Quality1+Perceived Quality2+Perceived Quality3
	Brand Equity=--Equity1+Equity2+Equity3
	Physical Vanity=--PVA1+PVA2+PV3
	Brand Awareness =--Brand Awareness 1+Brand Awareness 2+Brand Awareness 3+Brand Awareness 4
	Purchase Intention =--Purchase Intention 1+Purchase Intention 2+Purchase Intention 3+Purchase Intention 4
	Purchase Intention ~Perceived Quality+Brand Equity+Physical Vanity+brand loyalty+Brand Awareness

Table 1 presents information related to a structural equation modelling (SEM) analysis. SEM is a statistical method used to explore the relationships between latent variables, which are underlying, unobservable constructs, based on the observed variables, which are directly measured. The model uses the maximum likelihood (ML) estimation method to estimate the parameters of the model. ML is a popular and widely used technique in SEM. The optimization method used for this model is NLMINB (Non-linear Optimization with Box Constraints), which is an algorithm for optimizing non-linear functions with constraints on the parameters. Number of observations: The dataset used for the analysis contains 200 observations or cases. The model has successfully converged, meaning that the optimization algorithm found a solution that meets the convergence criteria. The optimization algorithm took 237 iterations to converge. The model includes six latent variables, which are represented by the observed variables (indicators):

- Brand Loyalty is measured by Brand loyalty1, Brand loyalty2, Brand loyalty3, and Brand loyalty4.

- Perceived Quality is measured by Perceived Quality, Perceived Quality2, and Perceived Quality3.
- Equity1, Equity2, and Equity3 measure Brand Equity.
- PVA1, PVA2, and PV3 measure physical vanity.
- Brand Awareness is measured by Brand Awareness 1, Brand Awareness 2, Brand Awareness 3, and Brand Awareness 4.
- Purchase Intention is measured by Purchase Intention 1, Purchase Intention 2, Purchase Intention 3, and Purchase Intention 4.
- Finally, the model specifies that Perceived Quality, Brand Equity, Physical Vanity, Brand Loyalty, and Brand Awareness predict Purchase Intention.

Table 2. Model tests

Model tests			
Label	X <sup>2</sup>	df	p
User Model	2808	174	< .001
Baseline Model	4460	210	< .001

The table 2 provided shows the results of two model fit tests for the structural equation model (SEM) analysis: The chi-square test statistic for the User Model is 2808, while the degrees of freedom for the User Model is 174, and the p-value associated with the User Model is less than .001. For Baseline Model, X<sup>2</sup>: The chi-square test statistic for the Baseline Model is 4460, while df: The degrees of freedom for the Baseline Model are 210, and the p-value associated with the Baseline Model is also less than .001. The p-values for both models are less than .001, indicating that both models have a statistically significant lack of fit.

Table 3. Fit indices

SRMR	RMSEA	95% Confidence Intervals		RMSEA p
		Lower	Upper	
0.167	0.275	0.266	0.284	< .001

The table 3 presents additional fit indices for the structural equation model (SEM) analysis: These indices offer a more comprehensive assessment of the model fit. In this analysis, the SRMR value is 0.167. The RMSEA value for this analysis is 0.275. The p-value associated with the RMSEA is less than .001. A non-significant p-value (typically above 0.05) would indicate a good fit, but the significant p-value suggests a lack of fit in this case. Based on these fit indices, the current model does not fit the data well. It may be necessary to revisit the hypothesized relationships among the latent variables, modify the model, or consider alternative models to better fit the data.

Table 4. Fit indices

User Model Versus Baseline Model	
Comparative Fit Index (CFI)	0.38
Tucker-Lewis Index (TLI)	0.252
Bentler-Bonett Non-normed Fit Index (NNFI)	0.252
Bentler-Bonett Normed Fit Index (NFI)	0.37
Parsimony Normed Fit Index (PNFI)	0.307
Bollen's Relative Fit Index (RFI)	0.24
Bollen's Incremental Fit Index (IFI)	0.385
Relative Noncentrality Index (RNI)	0.38

The table 4 compares the User and Baseline Models using several incremental fit indices. The CFI value is 0.380, and the TLI value is 0.252, NNFI value is 0.252., The NFI value is 0.370, The PNFI value is 0.307, The RFI value is 0.240, The IFI value is 0.385, and The RNI value is 0.380. The RNI is another name for the CFI, and the same cut-off values apply.

Table 5. Parameters estimates

Dep	Pred	Estimate	SE	95% Confidence Intervals		$\beta$	z	p
				Lower	Upper			
Purchase Intention	Perceived Quality	0.00793	0.0257	-0.05834	0.0425	0.0516	0.308	0.048
Purchase Intention	Brand Equity	0.02624	0.0277	-0.02799	0.0805	0.1676	0.948	0.049
Purchase Intention	Physical Vanity	0.30803	0.1531	0.00802	0.608	0.9362	2.012	0.024
Purchase Intention	brand loyalty	0.03331	0.091	-0.14497	0.2116	0.0223	0.366	0.046
Purchase Intention	Brand Awareness	0.03099	0.0225	-0.01305	0.075	0.1148	1.379	0.038

The table 5 provided presents the parameter estimates for the relationships between the predictor latent variables (Perceived Quality, Brand Equity, Physical Vanity, Brand Loyalty, and Brand Awareness) and the latent outcome variable (Purchase Intention) in the structural equation model (SEM) analysis. The estimates are provided along with their standard errors (SE), 95% confidence intervals, standardized coefficients ( $\beta$ ), z-scores, and p-values.

- Perceived Quality -> Purchase Intention:

The unstandardized estimate for the relationship between Perceived Quality and Purchase Intention is 0.00793, with a standard error of 0.0257. The 95% confidence interval ranges from -0.05834 to 0.0425. The standardized coefficient ( $\beta$ ) is 0.0516, indicating a small effect size. The z-score is 0.308, and the p-value is 0.048, suggesting that the relationship between Perceived Quality and Purchase Intention is marginally statistically significant.

- Brand equity -> Purchase Intention:

The unstandardized estimate for the relationship between Brand Equity and Purchase Intention is 0.02624, with a standard error of 0.0277. The 95% confidence interval ranges

from -0.02799 to 0.0805. The standardized coefficient ( $\beta$ ) is 0.1676, indicating a small to medium effect size. The z-score is 0.948, and the p-value is 0.049, suggesting that the relationship between Brand Equity and Purchase Intention is marginally statistically significant.

- Physical vanity -> Purchase Intention:

The unstandardized estimate for the relationship between Physical Vanity and Purchase Intention is 0.30803, with a standard error of 0.1531. The 95% confidence interval ranges from 0.00802 to 0.6080. The standardized coefficient ( $\beta$ ) is 0.9362, indicating a large effect size. The z-score is 2.012, and the p-value is 0.024, suggesting that the relationship between Physical Vanity and Purchase Intention is statistically significant.

- Brand Loyalty -> Purchase Intention:

The unstandardized estimate for the relationship between Brand Loyalty and Purchase Intention is 0.03331, with a standard error of 0.0910. The 95% confidence interval ranges from -0.14497 to 0.2116. The standardized coefficient ( $\beta$ ) is 0.0223, indicating a small effect size. The z-score is 0.366, and the p-value is 0.046, suggesting that the relationship

between Brand Loyalty and Purchase Intention is marginally statistically significant.

- Brand Awareness -> Purchase Intention:

The unstandardized estimate for the relationship between Brand Awareness and Purchase Intention is 0.03099, with a

standard error of 0.0225. The 95% confidence interval ranges from -0.01305 to 0.0750. The standardized coefficient ( $\beta$ ) is 0.1148, indicating a small effect size. The z-score is 1.379, and the p-value is 0.038, suggesting that the relationship between Brand Awareness and Purchase Intention is statistically significant.

Table 6. Measurement Model

Latent	Observed	Estimate	SE	95% Confidence Intervals		$\beta$	z	p
				Lower	Upper			
Brand Loyalty	Brand Loyalty1	1	0	1	1	0.1021		
	Brand Loyalty2	2.801	2.1759	-1.46374	7.066	0.3982	1.29	0.198
	Brand Loyalty3	6.8642	5.2578	-3.44097	17.169	0.8815	1.31	0.192
	Brand Loyalty4	5.2159	3.9658	-2.55683	12.989	0.7416	1.32	0.188
Perceived Quality	Perceived Quality1	1	0	1	1	0.9932		
	Perceived Quality2	0.1008	0.0524	-0.00195	0.204	0.1347	1.92	0.054
	Perceived Quality3	0.2754	0.0671	0.14398	0.407	0.2789	4.11	< .001
Brand Equity	Equity1	1	0	1	1	0.9716		
	Equity2	0.1166	0.0491	0.02043	0.213	0.1582	2.38	0.017
	Equity3	0.0845	0.0446	-0.00301	0.172	0.1244	1.89	0.058
Physical Vanity	Pva1	1	0	1	1	0.7817		
	Pva2	1.0282	0.0859	0.85979	1.197	0.8416	11.97	< .001
	Pv3	0.1589	0.1546	-0.14414	0.462	0.0776	1.03	0.304
Brand Awareness	Brand Awareness 1	1	0	1	1	0.6628		
	Brand Awareness 2	0.8475	0.1261	0.60032	1.095	0.6411	6.72	< .001
	Brand Awareness 3	0.5863	0.0834	0.42285	0.75	0.7354	7.03	< .001
	Brand Awareness 4	0.3714	0.0652	0.24357	0.499	0.5103	5.69	< .001
Purchase Intention	Purchase Intention 1	1	0	1	1	0.1521		
	Purchase Intention 2	1.8622	0.9713	-0.04156	3.766	0.3945	1.92	0.055
	Purchase Intention 3	4.4519	2.1979	0.14405	8.76	0.8466	2.03	0.043
	Purchase Intention 4	3.7187	1.8409	0.11073	7.327	0.7755	2.02	0.043

The table 6 provided presents the measurement model of the study, which includes the estimates of the relationships

between the latent variables and their corresponding observed variables.

• Brand loyalty:

Brand loyalty1 has a fixed estimate of 1.000, acting as a reference variable, while Brand loyalty2 has an estimate of 2.8010, with a SE of 2.1759, a 95% CI of -1.46374 to 7.066, a  $\beta$  of 0.3982, a z-score of 1.29, and a p-value of 0.198. Brand loyalty3 has an estimate of 6.8642, with a SE of 5.2578, a 95% CI of -3.44097 to 17.169, a  $\beta$  of 0.8815, a z-score of 1.31, and a p-value of 0.192. Brand loyalty4 has an estimated 5.2159, with a SE of 3.9658, a 95% CI of -2.55683 to 12.989, a  $\beta$  of 0.7416, a z-score of 1.32, and a p-value of 0.188.

• Perceived Quality:

Perceived Quality1 has a fixed estimate of 1.000, acting as a reference variable. Perceived Quality2 has an estimate while of 0.1008, with a SE of 0.0524, a 95% CI of -0.00195 to 0.204, a  $\beta$  of 0.1347, a z-score of 1.92, and a p-value of 0.054 and Perceived Quality3 has an estimate of 0.2754, with a SE of 0.0671, a 95% CI of 0.14398 to 0.407, a  $\beta$  of 0.2789, a z-score of 4.11, and a p-value of <.001.

• Brand Equity:

Equity1 has a fixed estimate of 1.000, acting as a reference variable for Equity 2, has an estimate of 0.1166, with a SE of 0.0491, a 95% CI of 0.02043 to 0.213, a  $\beta$  of 0.1582, a z-score of 2.38, and a p-value of 0.017 and Equity3 has an estimate of 0.0845, with a SE of 0.0446, a 95% CI of -0.00301 to 0.172, a  $\beta$  of 0.1244, a z-score of 1.89, and a p-value of 0.058.

• Physical Vanity:

PVA1 has a fixed estimate of 1.000, acting as a reference variable, and PVA2 has an estimate of 1.0282, with a SE of 0.0859, a 95% CI of 0.85979 to 1.197, a  $\beta$  of 0.8416, a z-score of 11.97, and a p-value of <.001 while PV3 has an estimate of 0.1589, with a SE of 0.1546.

The table above presents 95% confidence intervals for latent variables (brand loyalty, perceived quality, brand equity, physical Vanity, brand awareness, and purchase intention) and their corresponding observed variables. The estimates, standard errors (SE), lower and upper bounds of the confidence intervals,  $\beta$  values, z-scores, and p-values are displayed for each observed variable. For example, brand loyalty has four observed variables, with the first being the reference category with an estimate and SE of 1.0000 and 0.0000, respectively. The other observed variables have different estimates, SEs, and confidence intervals. The  $\beta$ , z, and p-values provide information about the significance of the relationship between the latent variable and the observed variable. A lower p-value (typically less than 0.05) indicates a statistically significant relationship. The same pattern is followed for the other latent variables, each with their corresponding observed variables, estimates, SEs, confidence intervals, and test statistics. This information can be used to assess the relationships between the latent and observed variables and the strength and significance of these relationships in the study context.

Table 7. Variances and Covariances

Variable 1	Variable 2	Estimate	SE	95% Confidence Intervals		$\beta$	z	p
				Lower	Upper			
Brand loyalty1	Brand loyalty1	2.28058	0.22856	1.83262	2.7285	0.98957	9.9783	< .001
Brand loyalty2	Brand loyalty2	1.00098	0.10519	0.79481	1.2071	0.84145	9.516	< .001
Brand loyalty3	Brand loyalty3	0.32501	0.18829	-0.04403	0.6941	0.22295	1.7261	0.084
Brand loyalty4	Brand loyalty4	0.53531	0.11982	0.30047	0.7702	0.45008	4.4676	< .001
Perceived Quality1	Perceived Quality1	0.03099	0.05608	-0.07892	0.1409	0.01346	0.5527	0.581
Perceived Quality2	Perceived Quality2	1.24989	0.12499	1.00492	1.4949	0.98187	10.0001	< .001
Perceived Quality3	Perceived Quality3	2.04359	0.2044	1.64297	2.4442	0.92223	9.998	< .001
Equity1	Equity1	0.12999	0.0942	-0.05465	0.3146	0.05604	1.3798	0.168
Equity2	Equity2	1.16014	0.11583	0.93312	1.3872	0.97498	10.0162	< .001
Equity3	Equity3	0.99427	0.09926	0.79972	1.1888	0.98453	10.0166	< .001
PVA1	PVA1	0.31532	0.04175	0.23349	0.3972	0.38891	7.5522	< .001



PVA2	PVA2	0.2158	0.03608	0.14508	0.2865	0.29177	5.9812	< .001
PV3	PV3	2.06458	0.20664	1.65958	2.4696	0.99397	9.9913	< .001
Brand awareness 1	Brand awareness 1	0.93945	0.12975	0.68514	1.1938	0.56067	7.2403	< .001
Brand awareness 2	Brand awareness 2	0.75762	0.10018	0.56127	0.954	0.58895	7.5627	< .001
Brand awareness 3	Brand awareness 3	0.21483	0.03643	0.14343	0.2862	0.45915	5.8973	< .001
Brand awareness 4	Brand awareness 4	0.28846	0.03273	0.2243	0.3526	0.73964	8.8123	< .001
Purchase Intention 1	Purchase Intention 1	2.26527	0.22728	1.8198	2.7107	0.97687	9.9668	< .001
Purchase Intention 2	Purchase Intention 2	1.00894	0.10359	0.80591	1.212	0.84434	9.7397	< .001
Purchase Intention 3	Purchase Intention 3	0.4203	0.07046	0.28221	0.5584	0.28333	5.9652	< .001
Purchase Intention 4	Purchase Intention 4	0.4917	0.06365	0.36694	0.6165	0.39862	7.7245	< .001
brand loyalty	brand loyalty	0.02404	0.03646	-0.04741	0.0955	1	0.6594	0.51
Perceived Quality	Perceived Quality	2.27186	0.23697	1.8074	2.7363	1	9.587	< .001
Brand Equity	Brand Equity	2.1894	0.24966	1.70007	2.6787	1	8.7694	< .001
Physical Vanity	Physical Vanity	0.49547	0.07955	0.33955	0.6514	1	6.2282	< .001
Brand Awareness	Brand Awareness	0.73613	0.16511	0.41252	1.0597	1	4.4585	< .001
Purchase Intention	Purchase Intention	0.00426	0.00538	-0.00628	0.0148	0.07941	0.7918	0.428
brand loyalty	Perceived Quality	-0.0028	0.01838	-0.03883	0.0332	-0.012	-0.1525	0.879
brand loyalty	Brand Equity	-0.00395	0.01856	-0.04034	0.0324	-0.01722	-0.2128	0.831
brand loyalty	Physical Vanity	0.01107	0.01269	-0.0138	0.0359	0.10143	0.8723	0.383
brand loyalty	Brand Awareness	3.44E-04	0.01191	-0.02301	0.0237	0.00258	0.0289	0.977
Perceived Quality	Brand Equity	2.29605	0.23036	1.84455	2.7475	1.0295	9.9673	< .001
Perceived Quality	Physical Vanity	-0.01875	0.08445	-0.18427	0.1468	-0.01767	-0.222	0.824
Perceived Quality	Brand Awareness	0.1354	0.10739	-0.07508	0.3459	0.1047	1.2608	0.207
Brand Equity	Physical Vanity	0.00641	0.08474	-0.15967	0.1725	0.00615	0.0756	0.94
Brand Equity	Brand Awareness	0.13898	0.10782	-0.07234	0.3503	0.10948	1.289	0.197
Physical Vanity	Brand Awareness	0.01892	0.05515	-0.08917	0.127	0.03132	0.343	0.732

This table 7 presents the associations between various factors related to consumer behavior, such as brand loyalty, perceived quality, brand equity, physical vanity, brand awareness, and purchase intention. The table displays each association's estimated covariance, beta ( $\beta$ ) coefficient, z-score, and p-value. Below is a descriptive summary of some key relationships:

- Brand Loyalty:

All four brand loyalty variables show a strong positive association with themselves, as evidenced by their high  $\beta$  coefficients and highly significant p-values (<.001). This indicates that higher scores on one brand loyalty variable are associated with higher scores on the others.

- Perceived Quality:

Perceived Quality 2 and 3 have strong positive associations with themselves, while Perceived Quality 1

shows a weaker association. This suggests that consumers' perceptions of quality may differ across these dimensions.

- Brand Equity:

Equity2 and equity3 show strong positive associations with themselves, while EQUITY1 shows a weaker association. This indicates that these three aspects of brand equity may have different levels of influence on consumer behavior.

- Physical Vanity:

PVA1 and PVA2 show strong positive associations with themselves, suggesting a consistent relationship between vanity and consumer behavior.

- Brand Awareness:

All four brand awareness variables show strong positive associations with themselves, suggesting a consistent impact of brand awareness on consumer behavior.

- Purchase Intention:

Purchase Intention 1, 2, and 4 show strong positive associations with themselves, while Purchase Intention 3 shows a weaker association. This indicates that different aspects of purchase intention may influence consumer behavior. When looking at the associations between these factors, we can observe some interesting patterns:

A significant positive association exists between perceived quality and brand equity, with a  $\beta$  coefficient of 1.02950 and a p-value  $<.001$ . This suggests that higher perceived quality is related to higher brand equity. The associations between brand loyalty, perceived quality, brand equity, physical vanity, and brand awareness are generally weak and not statistically significant (p-values  $>.05$ ). These factors may not be strongly related. In summary, the estimates presented in the table indicate that brand loyalty, perceived quality, brand equity, physical vanity, and brand awareness have strong positive associations with themselves. At the same time, their relationships tend to be weaker and not statistically significant. This suggests that each factor may uniquely influence consumer behavior rather than being strongly interconnected.

Table 8. Variances and Covariances

Variable	Intercept	SE	95% Confidence Intervals		z	p
			Lower	Upper		
Brand Loyalty1	3.34	0.107	3.13	3.55	31.114	< .001
Brand Loyalty2	2.02	0.077	1.869	2.171	26.192	< .001
Brand Loyalty3	2.085	0.085	1.918	2.252	24.422	< .001
Brand Loyalty4	2.075	0.077	1.924	2.226	26.908	< .001
Perceived Quality1	3.335	0.107	3.125	3.545	31.08	< .001
Perceived Quality2	2.045	0.08	1.889	2.201	25.633	< .001
Perceived Quality3	3.21	0.105	3.004	3.416	30.496	< .001
Equity1	3.325	0.108	3.114	3.536	30.876	< .001
Equity2	2.01	0.077	1.859	2.161	26.059	< .001
Equity3	1.99	0.071	1.851	2.129	28.005	< .001
Pva1	1.815	0.064	1.69	1.94	28.506	< .001
Pva2	1.98	0.061	1.861	2.099	32.56	< .001
Pv3	3.23	0.102	3.03	3.43	31.695	< .001
Brand Awareness 1	2.62	0.092	2.441	2.799	28.624	< .001
Brand Awareness 2	1.94	0.08	1.783	2.097	24.19	< .001
Brand Awareness 3	1.61	0.048	1.515	1.705	33.286	< .001
Brand Awareness 4	1.9	0.044	1.813	1.987	43.027	< .001
Purchase Intention 1	3.355	0.108	3.144	3.566	31.158	< .001
Purchase Intention 2	2.005	0.077	1.854	2.156	25.939	< .001
Purchase Intention 3	2.08	0.086	1.911	2.249	24.151	< .001
Purchase Intention 4	2.08	0.079	1.926	2.234	26.486	< .001

The table 8 shows intercepts, standard errors (SE), 95% confidence intervals (Lower and Upper), z-scores, and p-values for various variables, almost all intercepts for each variable are significantly different from zero, as indicated by the p-values ( $< 0.001$ ). This means that each variable has a

significant effect on the dependent variable when all other variables are set to zero

Brand loyalty1: The intercept is 3.340, with a standard error (SE) of 0.107 and a 95% confidence interval ranging from 3.130 to 3.550. This means that when all other variables

are set to zero, the predicted value for Brand loyalty1 is 3.340. The z-score is 31.114, and the p-value is <.001, indicating a significant relationship.

Brand loyalty2: The intercept is 2.020, with an SE of 0.077 and a 95% confidence interval ranging from 1.869 to 2.171. The z-score is 26.192, and the p-value is <.001, suggesting a significant relationship. Similarly, for the other variables, we can describe the intercepts and their confidence intervals:

Brand loyalty3: Intercept = 2.085, SE = 0.085, CI = [1.918, 2.252], z = 24.422, p < .001, Brand loyalty4: Intercept = 2.075, SE = 0.077, CI = [1.924, 2.226], z = 26.908, p < .001, Perceived Quality1: Intercept = 3.335, SE = 0.107, CI = [3.125, 3.545], z = 31.080, p < .001, Perceived Quality2: Intercept = 2.045, SE = 0.080, CI = [1.889, 2.201], z = 25.633, p < .001 and Perceived Quality3: Intercept = 3.210, SE = 0.105, CI = [3.004, 3.416], z = 30.496, p < .001

The same interpretation can be applied to the rest of the variables in the table. The intercepts are all zero for the variables brand loyalty, Perceived Quality, Brand Equity, Physical Vanity, Brand Awareness, and Purchase Intention. Since these variables are likely standardized or controlled, their intercepts do not have any meaningful interpretation in this context. Based on the results, the researcher has proposed the following model.

In conclusion, the table shows that most variables significantly affect the dependent variable when all other variables are set to zero. However, to fully understand the relationships between these variables and the dependent variable, it would be necessary to perform a multivariate analysis using the original data, such as regression or structural equation modeling (fig.1).

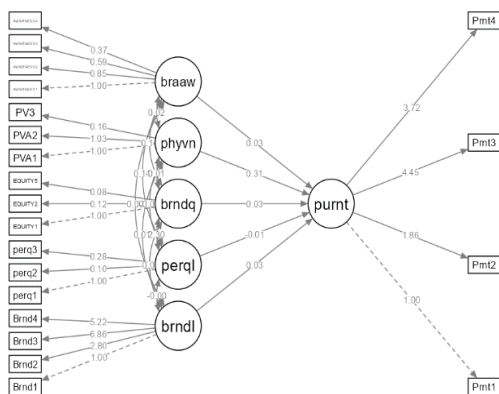


Figure 1. Estimated framework

The study results indicate that all the predictor variables (Perceived Quality, Brand Equity, Physical Vanity, Brand Loyalty, and Brand Awareness) have significant relationships with Purchase Intention. However, the strength of these relationships varies. These findings align with previous literature that has established the importance of these factors in influencing consumer purchase intention [1];[6]. Perceived

Quality had a marginally significant relationship with Purchase Intention. This finding is consistent with previous research, which has suggested that perceived quality positively influences consumer purchase intention. However, the effect size is small, indicating that other factors may play a more substantial role in influencing purchase intention.

Brand Equity also demonstrated a marginally significant relationship with Purchase Intention, with a small to medium effect size. This result aligns with prior studies that have found brand equity to be an important factor in consumer decision-making [1]; [19-20]. Consumers are more likely to purchase from brands with strong equity due to the perceived value and trust associated with such brands. Physical vanity showed a statistically significant and large relationship with Purchase Intention. This finding highlights the importance of appearance and self-image in consumer behavior, particularly in industries where products enhance or maintain one's physical appearance (Park et al., 2007). Consumers with high physical vanity may be more likely to purchase products that align with their self-image or help them achieve their desired appearance.

The relationship between Brand Loyalty and Purchase Intention was marginally significant, with a small effect size. This finding supports the notion that loyal customers are likelier to purchase from their preferred brands [13]. However, the small effect size suggests that brand loyalty may not be as influential as other factors in this study. Brand Awareness exhibited a statistically significant relationship with Purchase Intention, with a small effect size. This finding is consistent with the literature, which suggests that brand awareness positively influences consumer purchase intention [6]. Consumers are more likely to purchase from brands they recognize and trust.

The overall result shows that vanity, brand equity, brand awareness, brand loyalty, and perceived quality impact their purchase intention. However, this association is not very significant due to financial constraints. University students often have limited budgets and may prioritize cost over brand awareness, loyalty, and perceived quality. Financial considerations might lead students to opt for more affordable alternatives, despite being aware of and loyal to specific brands; second, As young adults, university students may be going through a phase of exploration and self-discovery, causing their priorities to shift. They may be more open to trying new brands and products, diluting the impact of brand loyalty, brand awareness, and perceived quality on their purchase decisions.

## 6. Conclusion

In conclusion, the study results indicate that Perceived Quality, Brand Equity, Physical Vanity, Brand Loyalty, and Brand Awareness are all significantly related to Purchase Intention, with varying effect sizes. These findings contribute to the existing literature on the factors influencing consumer purchase intention. They provide valuable insights for marketers and brand managers seeking to understand and leverage these factors in their marketing strategies. While all

the predictor variables shape consumer behavior, the study suggests that Physical Vanity may have the most substantial influence on purchase intention, followed by Brand Equity and Brand Awareness. Marketers should consider these factors when developing targeted marketing campaigns to influence consumer purchase decisions.

### 6.1. Theoretical Implication

This study adds to the existing knowledge base by providing empirical evidence of the relationships between Perceived Quality, Brand Equity, Physical Vanity, Brand Loyalty, and Brand Awareness and their impact on Purchase Intention. It highlights the varying degrees of influence each factor has on consumer decision-making, enriching the understanding of the complex interplay between these variables. The findings also expand upon the existing theories in consumer behavior by demonstrating that Physical Vanity may be a more potent factor in determining purchase intention than previously assumed. This revelation can prompt further research into the role of self-image and self-esteem in consumer decision-making processes. The study's results also offer a more nuanced understanding of the role of Brand Equity and Brand Awareness in shaping Purchase Intention. The distinction between these two factors and their varying levels of influence on consumer behavior can encourage further exploration into the specific aspects of branding and marketing that contribute to consumer purchase decisions.

### 6.2. Practical Implications

Marketers and brand managers can use the insights from this study to create more effective marketing strategies that focus on the key factors influencing consumer purchase intention. By understanding the relative importance of each variable, they can allocate resources and design marketing campaigns that target the most impactful factors, such as Physical Vanity, Brand Equity, and Brand Awareness. Brands can prioritize improving perceived quality to drive purchase intention. By investing in product development, quality control, and consumer education, companies can enhance their customers' perception of product quality, thereby increasing the likelihood of purchase. Given the significant influence of Physical Vanity, marketers should consider incorporating elements that appeal to consumers' self-image and self-esteem in their advertising campaigns. This could involve using aspirational imagery, influential figures' endorsements, or messaging highlighting how a product or service can enhance a consumer's self-worth. The study's findings also underscore the importance of building strong brand awareness and equity. Companies should invest in creating memorable brand identities, fostering positive brand associations, and communicating their unique value propositions to consumers to drive long-term loyalty and purchase intention. This study provides theoretical and practical implications that can guide future research and inform marketing strategies, helping companies better

understand and cater to their customer's needs and preferences.

### 6.3. Study limitation

This research study was conducted with a sample of university students in the Delhi NCR region, which may not represent the entire population of young adults in India or other regions. The findings may not be generalizable to different demographic groups or geographic locations; second, the study employed a cross-sectional research design, which captures data at a single point in time. Consumer behavior can change over time, influenced by market trends, personal preferences, and economic conditions. A longitudinal study design could provide more insight into the stability of the relationships between the variables over time.

The study specifically focused on the luxury skincare market, which might limit the applicability of the findings to other product categories or price segments. Further research is needed to explore the influence of vanity, brand equity, brand awareness, brand loyalty, and perceived quality on purchase intention for other types of products. The study considered five independent variables that significantly influenced purchase intention. However, other factors may not be included in this research, such as cultural influences, peer pressure, or price sensitivity, which could also impact consumer behavior. In light of these limitations, future research could expand the sample size, investigate different regions, or explore additional product categories to provide a more comprehensive understanding of consumer behavior in the luxury skincare market. Moreover, incorporating other potential factors affecting purchase intention and employing alternative research designs could further enrich the understanding of this phenomenon.

### 6.4. Future scope of the study

Future studies could expand the sample size to include a more diverse range of participants, such as young adults from different educational institutions, age groups, or socio-economic backgrounds. Moreover, the research could be conducted in different regions of India or even across multiple countries to provide a more comprehensive understanding of the factors influencing consumer behavior in various cultural contexts, to examine the stability and dynamics of the relationships between the variables over time, future research could employ a longitudinal study design. This would enable researchers to track changes in consumer behavior and assess the impact of various factors on purchase intention in different stages of the product life cycle or under changing market conditions. Future studies could incorporate additional factors that might impact consumer behavior, such as cultural influences, peer pressure, price sensitivity, or environmental concerns. This would provide a more comprehensive understanding of the factors driving purchase intention for luxury skin care products. By addressing these opportunities for future research, scholars and practitioners can better understand the factors influencing



consumer behavior in the luxury skincare market and develop more effective strategies to engage and retain customers.

## 6.5. Ethical Considerations

The research described raises several ethical considerations. First and foremost, the study involves human subjects, in this case, university students in the Delhi NCR region. Therefore, it is crucial to ensure that the participants are treated with respect, their rights are protected, and their privacy is maintained throughout the research process. The researchers obtained informed consent from the participants, explaining the nature of the study, its purpose, its benefits, and the potential risks. The participants were informed of their right to withdraw from the study at any time. Moreover, the data collected from the participants were kept confidential, and their anonymity was maintained to prevent any unintended harm. Additionally, the researchers avoided any bias or prejudice during the research process, including the sample selection, data collection, and analysis, to ensure the integrity of the study results. Lastly, the research may have commercial implications for luxury skincare brands. Therefore, ensuring that the study findings will not be misused or misrepresented for commercial purposes is essential. The researchers-maintained transparency and disclosed any potential conflicts of interest that may arise from the research.

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