A Study of Determinants of Brand Loyalty in Cosmetics for **Women Consumers of Pune City Using Path Analysis via** Regression

* Mukta Srivastava

Abstract

With increasing competition in the cosmetic sector, nowadays, consumers are repeatedly flooded with information on different brands in the same product category of cosmetics. In such a situation, it might be a very costly affair for a company to ensure brand loyalty amongst existing customers. As a result, it has become imperative for the marketers to have a greater knowledge of the determinants of brand loyalty, that is, the factors that influence consumers to become and remain loyal to a particular brand of cosmetics. In the present article, an attempt has been made to determine the various determinants of brand loyalty in cosmetics for women consumers of Pune city. This study is important, as it will allow the marketers of cosmetic brands in Pune city to focus on the major determinants that will enable them to win and retain loval customers rather than trying to take care of all the influencing factors. The research paper is based on primary data, which was collected from 597 women (aged between 18-58 years through personal administered survey and questionnaire answered through web-based survey). Data were analyzed using computer softwares like SPSS and Microsoft Excel. Various statistical techniques like chisquare test, factor analysis, multiple regression analysis, path analysis via regression (with correlation matrix input), and so forth were used for analyzing the data.

Keywords: brand loyalty, cosmetics, brand trust, brand reputation, brand endorser, brand personality

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rands are at the heart of marketing and business strategy. Successful brands create wealth by attracting and retaining customers (Doyle & Stern, 2006). Brand loyalty is an essential element of strategic marketing. It is usually known as an asset for any brand (Wernerfelt, 1991) as certain loyal consumers may be willing to pay more for a brand (Jacoby & Chestnut, 1978; Pessemier, 1959). Often, companies plan marketing strategies to win more brand loyal customers who will help them not only to build a strong market share, but also gain higher profits. Brand loyalty can also lead to other marketing advantages such as developing favorable responses by word of mouth and also providing greater resistance against brands of the competitors (Dick & Basu, 1994).

With the ever growing competition in the cosmetic sector, consumers are continuously swamped with an enormous amount of information on a diverse number of brands in the same product category of cosmetics. In such a situation, creating and maintaining brand loyalty amongst existing customers becomes a really costly affair for the marketers. Brand switching, therefore, is the major concern for most of today's marketing managers. Reasons such as consumer's dissatisfaction, constant availability of new products, and an increased concern with price may lead to decline in their loyalty towards a brand (Schiffman & Kanuk, 1997). So, it has become severely important

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^{*}Assistant Professor, Allana Institute of Management Sciences, Pune - 411 001. E-mail: muktassrivastava78@gmail.com

for the marketers to have an in-depth knowledge of the determinants of brand loyalty, that is, the factors which are responsible to make consumers loyal and remain loyal towards a particular brand.

Literature Review

Brand loyalty is considered as one of the most important tools of survival and growth for any business (Bennett & Rundle-Thiele, 2005; Howard & Sheth, 1969; Oliver, 1980; Runyon, 1980; Reichheld & Sasser, 1990; Reichheld & Detrick, 2003). Today, every organization is trying to achieve customer satisfaction and establish a long-term relationship with customers in an attempt to achieve greater market share. The twenty first century is an era of information overload. Today's consumers are in fact COMsumers who have access to enormous number of products and services on their fingertips. Therefore, there is an immense probability that the customers might look for other options. To this end, it can be acknowledged that one of the biggest challenges that today's marketers are facing is making customers loyal. Hence, it has become more important for marketers to have a greater knowledge of the determinants of brand loyalty, that is, the factors that influence consumers to become and remain loyal to a particular brand, and in the case of the present study, a particular brand of cosmetics.

The Determinants of Brand Loyalty: Some studies have been conducted so far in order to determine the determinants of brand loyalty in various contexts, settings, and for different products (Azuizkulov, 2013; Joachim, Oyeniyi, & Osibanjo, 2015; Khraim, 2011; Krystallis, 2013; Leelakulthanit & Hongcharu, 2011; Maheshwari, Lodorfos, & Jacobsen, 2014; Malik, Asif, & Malik, 2012; Shirin & Puth, 2011).

For example, Leelakulthanit and Hongcharu (2011) aimed at finding the determinants of brand loyalty in the online and offline banking sectors, and found that for offline customers, functional value of quality, the corporate value of reputation, and switching costs determined the brand loyalty; while for online customers, functional value of service variety, the functional value of convenience, the functional value of the Internet, the emotional value of trust, and the corporate value of reputation were the major determinants of loyalty.

While some of the researchers have identified customer satisfaction as one of the determinants of brand loyalty (Joachim et al., 2015; Shirin & Puth, 2011), others accounted other factors such as brand knowledge; brand social responsibility image; service involvement and perceived service quality (Malik et al., 2012); brand experience and brand commitment (Maheshwari et al., 2014); differentiation attributes (Krystallis, 2013); perceived value, trust, and variety seeking (Shirin & Puth, 2011); and switching costs (Joachim et al., 2012) as the major determinants.

Whilst the above-mentioned studies were conducted in a variety of sectors, that is, healthcare sector, online and offline banking sectors, automotive sector, tobacco industry, and mobile sector, there are very few evidences of any significant study being carried out in the cosmetics sector. Two such studies have been identified (Azuizkulov, 2013; Khraim, 2011). On the one hand, Khraim (2011), in his study conducted in UAE, found seven factors as the determinants of brand loyalty which are brand name, product quality, price, design, promotion, service quality, and store environment. On the other hand, Azuizkulov (2013) concluded that brand name, style, and price were the key brand factors which can distinguish hard-core loyal consumers and brand switchers. Brand name and price have more influence on the brand loyalty of hard-core loyal consumers.

Hence, one can find a huge gap which exists in the literature with respect to the determinants of brand loyalty in case of cosmetics, and that too in the Indian context. Factors such as brand personality, brand reputation, brand endorser, brand trust, and so forth, which do influence loyalty need to be explored more.

In the light of the above, a detailed discussion is needed about the various determinants of brand loyalty:

(i) Product Features: Product features such as price and quality have been accounted as key determinants of loyalty in various product categories such as yoghurt, cosmetics, shampoos, food-items, and other non-durable

consumer packaged goods and even for Airlines (Allender & Richards, 2012; Azuizkulov, 2013; Chen & Tseng, 2010; Datta, 2003; Empen, Loy, & Weiss, 2015; Ferencic & Wölfling, 2015; Schwarze, 2000; Nguyen, Barrett, & Miller, 2011).

(ii) Brand Personality: Aaker (1997) defined brand personality as the set of human characteristics that consumers attribute to a brand. Several studies have been conducted so far, which have talked about the impact of brand personality on brand loyalty. For example, the studies of Kumar, Luthra, Datta (2006); Kuenzel and Halliday (2010); Long-Yi (2010); Fang, Jianyao, Mizerski, and Huangting (2012); Aghazadeh, Gholipour, and Bakhshizadeh (2014); Das, 2014; Kim and Monica (2014); Lada, Sidin, and Cheng (2014); Ramaseshan and Stein (2014); Venkateswaran, Binith, Geetha, and Ananthi (2014); and Kim, Lee, and Suh (2015).

Kumar et al. (2006), in their study on consumable (toothpaste) and durable (car) categories conducted in India, found that brands with a clearly communicated consistent personality had a bigger set of loyal customers. While Kuenzel and Halliday (2010), in a study carried out in Germany on car ownership, found that brand personality congruence (BPC) did influence brand loyalty both directly and indirectly. However, Fang et al. (2012), on the other hand, established that BPC had no significant effect on brand loyalty in case of luxury fashion brands for Australian consumers. Some researchers (Aghazadeh et al., 2014; Venkateswaran et al., 2011) found that not all the five components of BP {as suggested by Aaker (1997)} influenced loyalty. Others confirmed the influence of brand personality on brand trust (Ahmad & Thyagaraj, 2015; Didier & Lombart, 2010; Sung & Kim, 2010; Yongjun, Jooyoung, & Jong-Hyuok, 2010).

(iii) Brand Reputation: Specifically, if we take the case of cosmetic users, they are much more concerned about the trustworthiness and the reputation of a brand. For instance, Siu and Wong (2002), in their study regarding color cosmetic products, found that more popular cosmetic brands (i.e. as an indicator of brand reputation) were perceived to be much safer than the strange brands. With respect to a non-durable consumer goods study, Lau and Sook (1999) found that the reputation of a brand is indispensable for building consumers' trust in a brand. Additionally, Selnes (1993) concluded that brand reputation has a strong influence on loyalty. A study conducted by Gournaris and Stathakopoulos (2004) with reference to whiskey brands claimed that brand reputation was notably associated to both "premium loyalty" and "covetous loyalty". At the same time, a "non loyalty" group illustrated a negative relationship with brand reputation. Some other studies can also be quoted here which have talked about the effect of brand reputation on loyalty (Azuizkulov, 2013; Kuenzel & Halliday, 2010; Srivastava, 2007).

(iv) Brand Endorser: Consumers are encircled by all sorts of marketing gimmicks that, in one way or other, affect their buying behavior (Solomon, Bamossy, Askegaard, & Hogg, 2006). Specifically, in the cosmetic industry, heavy advertising with famous models and actors is repeatedly used to draw consumers to purchase various products.

As per Solomon et al. (2006), for illustration, L'Oréal, the French cosmetics giant persuades millions of women to purchase its products by associating their products with sexy celebrities and spokeswomen. In other words, cosmetics companies leave no stone unturned to sell a brand to consumers by creating an image that is associated with certain characteristics or qualities.

Celebrity advertising can be used to transfer the loyalty that people exhibit towards the endorser to a brand/product (Braunstein & Zhang, 2005). Famous celebrity endorsers personify the brand for a consumer and create the relationship between the consumer and the brand (Braunstein & Zhang, 2005).

Though brand endorser seems to be a well explored area (Carison & Donavan, 2008; Rodriguez, 2008; Sallam, 2011; Spry, Pappu, & Cornwell, 2011; Yeh & Lin, 2010), very few researchers have, in fact, tried to establish a relationship specifically between a brand endorser and brand loyalty (Lazarevic, 2012; Um, 2013).

(v) Brand Trust: Brand trust seems to be a popular concept in marketing (Chaudhuri & Holbrook, 2001; Chi, Yeh, & Chiou, 2009; He, Li, & Harris, 2012; Li, Zhou, Kashyap, & Yang, 2008; Yongjun et al., 2010). There are enough evidences in the literature which have talked about the impact of brand trust on loyalty (Alhaddad, 2015; Chandio, Qureshi, & Ahmed, 2015; Chaudhuri & Holbrook, 2001; Chiou & Droge, 2006; Chi et. al., 2009; Delgado - Ballester & Munuera-Alemán, 2001; Geçti & Zengin, 2013; He et al., 2012; Lin & Lee, 2012; Matzler, Grabner-Kräuter, & Bidmon, 2008; Mirzaee, Rad, & Molavi, 2013; Monfared, 2015; Paulssen, Roulet, & Wilke, 2014; Shirazi, Lorestani, & Mazidi, 2013; Sung & Kim, 2010; Upamannyu & Mathur, 2013; Veloutsou, 2015; Won-Moo et. al., 2011; Yongjun et. al., 2010).

Most of the studies have examined the influence of brand trust along with brand affect on brand loyalty. (Chaudhuri & Holbrook, 2001; Geçti & Zengin, 2013; Lin & Lee, 2012; Matzler et al., 2008; Upamannyu & Mathur, 2013; Won-Moo, Kwang-Ho, & Minsung, 2011). Similarly, other researchers tried to study the relationship between trust, satisfaction, and loyalty (Chandio et al., 2015; Chiou & Droge, 2006; Delgado-Ballester & Munuera-Alemán, 2001; Kuikka & Laukkanen, 2012; Mirzaee et al., 2013; Monfared, 2015; Paulssen et al., 2014; Veloutsou, 2015). Some researchers also studied the impact of brand personality on brand trust (Didier & Lombart, 2010; Sung & Kim, 2010; Yongjun et al., 2010).

Few researchers like He et al. (2012) and Shirazi et al. (2013) revealed that both brand identity and brand identification had an indirect effect on brand loyalty through perceived value, trust, and satisfaction. Afzal, Khan, Rehman, Ali, and Wajahat (2010) found that brand reputation, predictability, and competency had a positive impact on trust. Similarly, Panda, Swar, and Mukerjee's (2014) findings indicated that the retail consumer brand trust in India is influenced by four factors - Customer Commitment, Reliability, Reputation, and Retail Environment. Moreover, Choudhry (2007) found that there was a positive relationship between brand trust and perceived product quality. When most of the studies treat brand trust exclusively as a first-order factor, in a very significant study carried out by Li et al. (2008), brand trust was specified as a second-order factor that was determined by first-order factors of competence and benevolence.

Hence, based on the above discussions, it can be concluded that brand trust, which should be considered as a second-order factor, may be treated as a mediating variable while studying the relationship of various variables with brand loyalty.

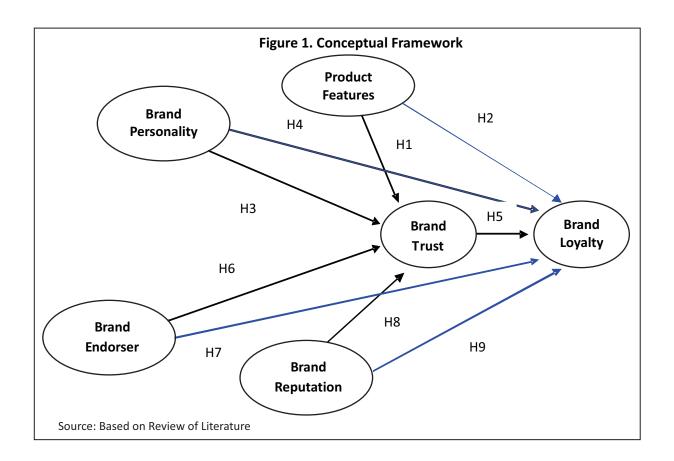
A huge gap can be observed in the literature as none of the studies tried to ascertain the relationship between brand trust and brand loyalty in case of cosmetics; also, the impact of some of the critical factors such as product features, brand endorser {which do influence loyalty (Datta, 2003; Empen et al., 2015; Um, 2013)} on brand trust has not been well researched.

Moreover, it will be interesting to see how brand trust influences loyalty in case of cosmetics as the study by Kuikka and Laukkanen (2012) posed a challenge where brand trust was found to be the least significant factor for brand loyalty in the chocolate market. Furthermore, factors like brand reputation, brand personality, product quality, price, brand endorser, and so forth might be considered as first-order factors and their impact on brand loyalty through the mediation effect of brand trust can be studied. Hence, the conceptual frame (Figure 1) can be proposed.

Objectives of the Study

The objectives of the study are:

- (1) To study the impact of product features on brand trust and brand loyalty.
- (2) To study the impact of brand personality on brand trust and brand loyalty.
- (3) To study the impact of brand trust on brand loyalty.



- (4) To study the impact of brand endorser on brand trust and brand loyalty.
- (5) To study the impact of brand reputation on brand trust and brand loyalty.

Methodology

- (1) Sample Design: The universe of the study are the women of Pune city (aged between 18-58 years). Sample size was 600 women which were selected from three categories, that is, students (200), working women (200), and home makers (200) using the quota sampling method.
- (2) Data Collection: The study is conclusive in type and quantitative in nature. Data was gathered using a structured questionnaire consisting of scales and questions based on all the four levels of measurement, that is, nominal, ordinal, interval, and ratio. The scales used to measure subjective properties mentioned in the study are 5 point Likert scale and 7 point scale as well. Primary information was collected through personal administered survey and the questionnaire was also answered using a web-based survey. More than 1000 questionnaires were sent, out of which 597 completely filled questionnaires were finally received. Secondary data was collected through published sources like newspaper articles, journal articles, Internet, and so forth. The time dimension involves cross sectional design. The data was collected in the months of December 2014-January 2015.
- (3) Data Analysis: Data were analyzed using computer softwares like SPSS and Microsoft Excel. Various statistical techniques like chi-square test, factor analysis, multiple regression analysis, path analysis via regression (with correlation matrix input), and so forth were used for analyzing the data.

Hypotheses

The following hypotheses are proposed based on the review of literature:

- \$\Bar{\tau}\$ **H1:** Product features (PF) have no effect on brand trust (BT).
- \$\Bar{\tau}\$ **H2:** Product features (PF) have a positive effect on brand loyalty (BL).
- \$\Brand \text{ H3:} Brand personality (BP) has a positive effect on brand trust (BT).
- \$\Brand \text{ H4:} Brand personality (BP) has a positive effect on brand loyalty (BL).
- \$\Brand \trust(BT) \text{ has a positive effect on brand loyalty (BL).}
- ♥ **H6:** Brand endorser (BE) has no effect on brand trust (BT).
- 🖔 **H7:** Brand endorser (BE) has no effect on brand loyalty (BL).
- **H8:** Brand reputation (BR) has a positive effect on brand trust (BT).
- \$\Brand\text{ H9: Brand reputation (BR) has a positive effect on brand loyalty (BL).}

The Figure 1 (conceptual frame) represents the diagrammatical depiction of these hypotheses.

Data Analysis and Interpretation

- **(1) Chi-Square Test:** Six chi-square tests were conducted (Table 1) in order to determine the association between the sub-components of brand endorser, brand reputation, brand trust, brand personality, product features, and brand loyalty with the scales (viz. 5-Extremely Agree, 4-Agree, 3-Neither Agree Nor Disagree, 2-Disagree, 1-Extremely Disagree or 7=best......1=worst/7=High......1=Low). The chi-square tests indicate that there is a strong association between the two. Since they are related, factor analysis was practically required to find out the overlapping and relationship.
- **(2) Factor Analysis for Brand Personality**: Exploratory factor analysis was performed on 15 items of brand personality. The Kaiser-Meyer-Olkin (KMO) value is 0.91 (Table 2), indicating that the present data was suitable for principal component analysis. Similarly the Bartlett's test of Sphericity is significant (<0.001), indicating sufficient correlation between the variables to proceed with the analysis (Table 2).

A total of three factors having Eigen value > 1 cumulatively accounted for 53.57% of the variance. Rotation method was selected since factors correlated with each other. The rotation method Oblimin resulted in three factors.

- (i) Variables up-to-date, trendy, young, imaginative, cheerful, and reliable are highly correlated with each other and loaded on Factor 1. This factor is named as Excitement (BP_{α}) .
- (ii) Variables down-to-earth, sincere, and original correlated highly with each other and loaded on Factor 2. This factor is named as Sincerity (BP_b) .
- (iii) Variables Western, tough, upper-class, charming, intelligent, and successful correlated highly with each other and loaded on Factor 3. This factor is named as Flamboyance (BP_a).
- (3) Factor Analysis for Product Features: Exploratory factor analysis was performed on 11 items of product features. The Kaiser-Meyer-Olkin (KMO) value is 0.928 (Table 2), indicating that the present data was suitable for

Table 1. Chi-Square Tests

		•	
S. No.	Variables	Chi-Square Value	Conclusion
1	Brand Endorser (BE)	0.0000	Reject the Null
2	Brand Reputation (BR)	0.0208	Reject the Null
3	Brand Trust (BT)	0.0000	Reject the Null
4	Brand Personality (BP)	0.0000	Reject the Null
5	Product Features (PF)	0.0000	Reject the Null
6	Brand Loyalty (BL)	0.0000	Reject the Null

Source: Microsoft Excel Output

Table 2. KMO &Bartlett's Test

S. No.	Factors	KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity Sig.**
1	Brand Personality	0.91	.000
2	Product Features	0.928	.000
3	Brand Endorser	0.641	.000
4	Brand Reputation	0.655	.000
5	Brand Trust	0.693	.000
6	Brand Loyalty	0.764	.000

Note: **p - value<0.05

principal component analysis. Similarly, the Bartlett's test of Sphericity is significant (<0.001), indicating sufficient correlation between the variables to proceed with the analysis (Table 2).

A total of two factors have Eigen value > 1, and cumulatively accounted for 67.23% of the variance. Rotation method was selected since factors correlated with each other. The rotation method Oblimin resulted in two factors:

- (i) Variables performance, durability, reliability, best in class, quality standards, and consistency in quality correlated highly with each other and loaded on Factor 1. This factor is named as Quality (PF_a).
- (ii) Variables value for money, price in comparison with other competing brands, price consistency, cost effectiveness, and last purchase price correlated highly with each other and loaded on Factor 2. This factor is named as Price (PF_b) .
- (4) Factor Analysis for Brand Endorser: Exploratory factor analysis was performed on three items of brand endorser. The Kaiser-Meyer-Olkin (KMO) value is 0.641 (Table 2), indicating that the present data was suitable for principal component analysis. Similarly, the Bartlett's test of Sphericity is significant (<0.001), indicating sufficient correlation between the variables to proceed with the analysis (Table 2).

A total of one factor has Eigen value > 1, and cumulatively accounted for 67.54% of the variance. Only one component was extracted; hence, the solution cannot be rotated. The factor is named as Brand Endorser (BE).

(5) Factor Analysis for Brand Reputation: Exploratory factor analysis was performed on three items of brand reputation. The Kaiser-Meyer-Olkin (KMO) value is 0.655 (Table 2), indicating that the present data was suitable for principal component analysis. Similarly, the Bartlett's test of Sphericity is significant (<0.001), indicating sufficient correlation between the variables to proceed with the analysis (Table 2).

A total of one factor has Eigen value > 1, and cumulatively accounted for 62.855% of the variance. Only one component was extracted; hence, the solution cannot be rotated. The factor is named as Brand Reputation (BR).

Table 3. Multiple Regression Analyses

S. No.	Factors	Coefficients	Standard Error	t - Stat	P-value**
1	PF_a	0.34679762	0.048027234	7.220853	1.6E-12
2	$PF_{\scriptscriptstyle b}$	-0.07712523	0.042320839	-1.82239	0.068902
3	BP_a	0.00329582	0.041924058	0.078614	0.937366
4	$BP_{\scriptscriptstyle b}$	0.05866698	0.037673616	1.557243	0.11995
5	BP_c	-0.05588807	0.039404581	-1.41831	0.156628
6	BE	0.14775624	0.035600183	4.150435	3.81E-05
7	BR	0.10739798	0.041898302	2.563302	0.010615
8	ВТ	0.21499445	0.045121276	4.764813	2.38E-06

Note: **p-value<0.05

(6) Factor Analysis for Brand Trust : An exploratory factor analysis was performed on four items of brand trust. The Kaiser-Meyer-Olkin (KMO) value is 0.693 (Table 2), indicating that the present data was suitable for principal component analysis. Similarly, the Bartlett's test of sphericity is significant (<0.001), indicating sufficient correlation between the variables to proceed with the analysis (Table 2).

A total of one factor has Eigen value > 1, and cumulatively accounted for 51.439 % of the variance. Only one component was extracted; hence, the solution cannot be rotated. The factor is named as Brand Trust (BT).

(7) Factor Analysis for Brand Loyalty: An exploratory factor analysis was performed on four items of brand loyalty. The Kaiser-Meyer-Olkin (KMO) value is 0.764 (Table 2), indicating that the present data was suitable for principal component analysis. Similarly, the Bartlett's Test of Sphericity is significant (<0.001), indicating sufficient correlation between the variables to proceed with the analysis (Table 2).

A total of one factor has Eigen value > 1, and it cumulatively accounted for 59.175% of the variance. Only one component was extracted; hence, the solution cannot be rotated. The factor is named as Brand Loyalty (BL).

(8) Multiple Regression Analysis : With the help of factor analysis, I was able to convert all the variables, that is, Product Features ($PF_a \& PF_b$), Brand Personality (BP_a , BP_b , & BP_b), Brand Trust (BT), Brand Reputation (BR), Brand Endorsee (BE), and Brand Loyalty (BL) into scale variables. Hence, the same is suitable for multiple regression analysis. Both Excel and SPSS were used to conduct the multiple regression analysis.

Based on the t value found through Excel computations, it is found that PF_a , BE, BR, & BT (values > 1.96) have a significant effect on BL; while PF_b , BP_a , BP_b , & BP_c (values < 1.96) have an insignificant impact on BL (Table 3). Nevertheless, I feel that Price (PF_b) , and Brand Personality (BP_a, BP_b, BP_c) cannot be insignificant in explaining the Brand Loyalty, that is, there must be some indirect effect of these factors on Brand Loyalty. Hence to find out the same, it was decided to conduct the path analysis via regression (with correlation matrix input), for which the beta (β) values had to be found through SPSS.

- **(9) Path Analysis via Regression (with Correlation Matrix Input) :** Certainly, the three most important sets of decisions leading to a path analysis are :
- (i) Which causal variables to include in the model?
- (ii) How to order the causal chain of those variables?
- (iii) Which paths are not "important" to the model? the only part that is statistically tested.

Table 4. Model Summary b

Model	R	R Square
1	.716°	.512

Table 5. Coefficients ^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	-8.779E-008	.029		.000	1.000
	PF_a	.172	.043	.172	3.981	.000
	PF_{b}	.092	.038	.092	2.393	.017
	BP_a	.158	.038	.158	4.180	.000
	$BP_{\scriptscriptstyle b}$.182	.034	.182	5.427	.000
	BP_c	.029	.036	.029	.801	.424
	BE	.224	.031	.224	7.185	.000
	BR	.234	.037	.234	6.310	.000

a.Predictors: (Constant), BR, BE, BP, BP, BP, PF, BP, PF, b. Dependent Variable: BT

Getting the "Second Layer" multiple regression for the full model

Table 6. Model Summary

Model	R	R Square
1	.644ª	.415

Table 7. Coefficients^a

Mc	del	Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	3.368E-007	.032		.000	1.000
	PF_a	.347	.048	.347	7.215	.000
	$PF_{\scriptscriptstyle b}$	077	.042	077	-1.821	.069
	BP_a	.003	.042	.003	.079	.937
	$BP_{\scriptscriptstyle b}$.059	.038	.059	1.556	.120
	BP_c	056	.039	056	-1.417	.157
	BE	.148	.036	.148	4.147	.000
	BR	.107	.042	.107	2.561	.011
	ВТ	.215	.045	.215	4.761	.000

a. Dependent Variable: BL, b. Predictors: (Constant), BT, BP_c, BE, BP_b, PF_b, BR, BP_a, PF_a

Usually, a path analysis involves the analysis and comparison of two models – a "full model" with all of the possible paths included, and a "reduced model" which has some of the paths deleted, because they are hypothesized to not contribute to the model.

The path coefficients for the full model (with all the arrows) are derived from a series of "layered" multiple regression analyses. For each multiple regression, the criterion is the variable in the box (all boxes after the leftmost layer) and the predictors are all the variables that have arrows leading to that box. For the full model, we will need two "layers" of multiple regressions:

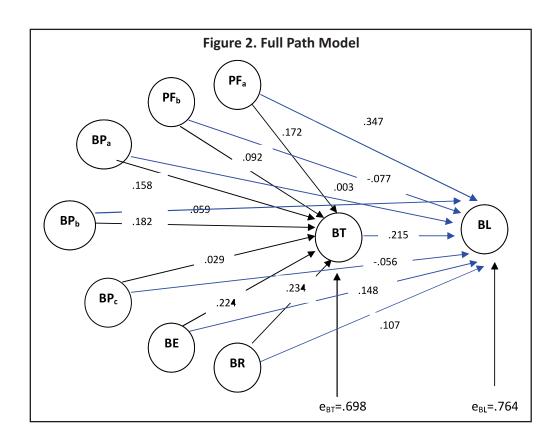


Table 8. Model Summary^b

Model	R	R Square
1	.715a	.512

Table 9. Coefficients^a

Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	-9.520E-008	.029		.000	1.000
	PF_a	.167	.043	.167	3.908	.000
	PF_{b}	.087	.038	.087	2.301	.022
	BP_a	.149	.036	.149	4.119	.000
	$BP_{\scriptscriptstyle b}$.181	.034	.181	5.403	.000
	BE	.225	.031	.225	7.226	.000
	BR	.230	.037	.230	6.262	.000

a. Dependent Variable: BT, b. Predictors: (Constant), BR, BE, BP_{ν} , PF_{ν} , BP_{σ} , PF_{a}

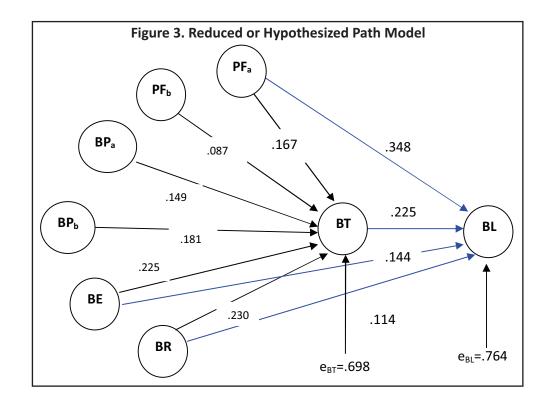
Table 10. Model Summarv^b

Model	R	R Square
1	.639°	.408

Table 11. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	3.552E-007	.032		.000	1.000
	PF_{σ}	.348	.040	.348	8.650	.000
	BE	.144	.036	.144	4.059	.000
	BR	.114	.041	.114	2.768	.006
	ВТ	.225	.043	.225	5.235	.000

a. Dependent Variable: BL b. Predictors: (Constant), BT, BE, PF, BR



- (i) With BT as the criterion and all other independent variables as the predictors (Table 4 and Table 5).
- (ii) With BL as the criterion and all other independent variables as the predictors (Table 6 and Table 7).

For getting the "first layer" multiple regression for the full model, refer to Table 4 and Table 5. For getting the "second layer" multiple regression for the full model, refer to Table 6 and Table 7.

Portraying the full path model (Figure 2):

- (i) The path coefficients are the β weights from the multiple regression analyses.
- (ii) The "e" values (roughly error variance) are computed as $\sqrt{(1-R^2)}$ (e.g., $e_{BT} = \sqrt{(1-.512)} = .698$). Examining this model, we note:
- (i) BT influences BL.

- (ii) PF_b , BP_a , BP_b , and BP_c have no direct effect upon BL, but except BP_c , all other variables have an indirect effect on BL through BT.
- (iii) PF_a , BE, & BR have a direct impact on BL in addition to the indirect impact through BT.
- (iv) BP_c has no impact either on BR or BL; hence, this variable can be dropped from the model.

Once again, two multiple regression models would be used to obtain the path coefficients (Table 8 and Table 9). For the first layer, we would use the analysis of Table 8 and Table 9. For the second layer, we would use the analysis of Table 10 and Table 11. The reduced hypothesized path model is depicted in the Figure 3.

Discussion and Conclusion

It can be concluded that all our hypotheses except H2 and H4 hold true (Figure 1). While H4 is rejected completely, H2 can be partially accepted as Quality does have a direct influence on *BL* while Price does not. While Quality, Brand Trust, Brand Endorser, and Brand Reputation affect the Brand Loyalty directly; Price, Excitement, and Sincerity have an indirect impact on Brand Loyalty through Brand Trust. Quality, Brand Endorser, and Brand Reputation have both a direct as well as an indirect effect on Brand Loyalty. The third sub component of Brand Personality named as Flamboyance has to be dropped from the model due to its negligible impact both in a direct and indirect way.

The current study, therefore, is the first of its kind to find out that factors such as Product Features, Brand Personality, Brand Endorser, Brand Reputation, and Brand Trust are the major determinants of Brand Loyalty unlike other studies carried out so far with variables such as brand knowledge; brand image; perceived quality (Malik et al., 2012); brand experience and commitment (Maheshwari et al., 2014); differentiation attributes (Krystallis, 2013); customer satisfaction, perceived value, trust, and variety seeking (Shirin & Puth, 2011); customers' satisfaction, switching costs (Joachim et al., 2012); brand name, product quality, price, design, promotion, service quality, and store environment (Khraim, 2011); country of origin, students' demography, brand reputation, purchase behavior, and cosmetic brands (Azuizkulov, 2013).

So far, as the impact of brand trust on loyalty is concerned, the results seem to be consistent with those of Delgado-Ballester and Munuera-Alemán (2001) and Paulssen et al. (2014). Since cosmetics are high involvement products with high perceived risk, brand trust highly influences loyalty. The results are also falling in line with the findings of Chandio et al. (2015) as brand trust mediates between quality and loyalty. Also, the present results are in contradiction to Kuikka and Laukkanen's (2012) conclusion that brand trust is the least significant factor for brand loyalty. The reason may be because their study was carried out in the chocolate market {which is a low involvement product with low perceived risk, and hence supports the findings of Delgado-Ballester and Munuera-Alemán (2001) and Paulssen et al. (2014)}. The results are quite consistent with those of Sung & Kim's (2010) study, which suggests that Sincerity dimension of BP is more prone to influence the level of brand trust.

Moreover, while most of the researchers have considered price to be a major determinant of loyalty (Azuizkulov, 2013; Datta, 2003; Khraim, 2011), in the present study, price influences loyalty only through the mediation effect of brand trust. An argument here is that because in case of make-up cosmetics, which have a direct impact on one's skin, quality becomes more crucial and price takes the back seat.

Suggestions

Based on the findings of the study, the following suggestions can be made to the manufacturers and marketers of cosmetics:

- (1) Since Brand Trust is the mediating factor and has a strong influence on Brand Loyalty, the marketers should try to build customers' trust around their brands, which will, in turn, increase their loyalty towards the brand.
- (2) Further, given that Brand loyalty also directly depends upon Quality, Brand Endorser, and Brand Reputation, the manufacturer of cosmetics should not compromise as far as the quality of cosmetics is concerned. At the same time, the marketers should try to use attractive, experienced, and trustworthy celebrities to enhance the reputation of their brands. Moreover, one should not forget that these three variables, that is, Quality, Brand Endorser, and Brand Reputation also have a vital role in building Brand Trust as shown in the findings of the study. Therefore, extra care should be taken by the cosmetics manufacturers and marketers while dealing with these factors.
- (3) Although factors like Price, Excitement, and Sincerity of the brand do not have any direct impact on Brand Loyalty; still, they influence Brand Trust which, in turn, persuades Brand Loyalty. Hence, the marketers should be careful enough in deciding the prices for their cosmetics. They should also try to inculcate the Brand Personality factors, that is, Excitement as well as Sincerity into their brands.

Limitations of the Study

The study is limited to Pune city. Further research can be conducted to observe similar relationships in other geographical locations and with respect to various categories of cosmetics. The interrelationship of factors could have been studied with the help of advanced techniques such as structural equation modeling or confirmatory factor analysis.

Implications and Scope for Future Research

With the help of the present research paper, both the marketers as well as the manufacturers will get an opportunity to know about the psyche of female customers of cosmetics in more detail such as what determines their loyalty, what factors are responsible to make them loyal towards a brand, and so forth. Since the study was carried out in Pune city, the major beneficiary of the case will be those retailers, marketers, and manufacturers who operate in this area. The paper also opens up the door for future researchers as well since it shows the way how brand loyalty can be measured for cosmetics based on its various determinants. Similar studies can be carried out to understand the determinants of brand loyalty for different product categories as well.

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