Paradigms Print ISSN 1996-2800, Online ISSN 2410-0854 2020, Vol. 14, No. 1 Page 66-72 DOI: 10.24312/1930140110

Effects of Celebrity Endorsement, Promotional activities, Packaging of products, and Brand image, on Green Consumer buying behavior

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Cite this paper: Waqas, M. Qalati, S. A. Hafeez, S. Rana, L. T. & Farhan, S. M. (2020). Effects of celebrity endorement, promotional activities, packaging of product, and brand image on green consumer buying behavior. *Paradigms*, 14(1), 66-72.

In today's world, the demand for cosmetic products is increasing at a faster rate than before, and companies have begun to manufacture cosmetic products to cater to the needs of local and international users. This paper aims to explore the relationship between celebrity endorsement, promotional activities, packaging, brand image and green consumer buying behavior in the cosmetic industry of Pakistan. It also examines the mediating role of the brand image between celebrity endorsement and green consumer buying behavior. The data was collected primarily through 5 Likert scale questionnaires from the females of the four renowned Universities of Pakistan. The Partial least square structural equation modeling (PLS-SEM) using ADANCO 2.0.1, used for data analysis, and the sample size contained 190 respondents. The findings revealed a significant direct relationship between celebrity endorsement, promotional activities, packaging of a product, and brand image with the green consumer buying behavior (Green CBB). Partial mediation was found between celebrity endorsement and green consumer buying behavior. This study has implications for practitioners and researchers interested in investing in green consumption in Pakistan.

Keywords: celebrity endorsement, promotional activities, packaging of products, brand image, cosmetic industry, green consumer buying behavior.

INTRODUCTION

Green Consumer buying behavior refers to the "concerns for the environment, and about population, willingness to recycle, and to pay more for environmentally friendly products form this behavior." (Kaufmann and Panni 2017, p. 63). According to Ottman and Humphrey (1993), all those consumers who seek and support those products having fewer effects on the environment called green consumers. Globally, the increasing trend shown towards the green products consumption, as it enables individuals to participate in environmental sustainability (Sun et al. 2019). Nowadays, organizations are motivated to find efficient communications strategies and design innovative marketing activities that energize consumers to buy environmentally friendly products and adopt green consumption buying behavior (Amatulli et al. 2019). However, people's concerns extended from the food industry to the cosmetic industry. Consumers have shown increasing interest in the sustainable packaging, natural ingredients and other green factors of cosmetics. Therefore, the cosmetic industry needs to be investigated; also, green cosmetics is considered an emerging trend in the beauty industry (Lin et al. 2018).

Nowadays, cosmetic products are considered as essential as other daily products especially women, are more likely to attract. When companies use harsh chemicals in their products, not only consumers but also the environment faces an adverse effect (Amberg and Fogarassy 2019). The cosmetic industry is one of those industries in Pakistan which uses a massive amount of chemicals and artificial materials that cause consumers and the environment to suffer a lot (Jamil et al. 2017). Nevertheless, with time, consumers are getting aware of the situations and adverse effects. So the demand for organic or green cosmetic items is increasing, and customers prefer green cosmetic products to accomplish consumption sustainability (Ali 2017). Indeed, green products and green buying behavior have taken all the lame light because of the environmental degradation where the consumption is also increasing (Taufique and Vaithianathan 2018). The resultant of which cosmetics companies have started considering different factors that affect their sales revenue and consumers (Wang and Uslay 2018).

There are several factors that influence the buying behavior of customers such as packaging, promotional activities, brand image. Moreover, endorsements are done by the favorite celebrities of the consumers which also influence their buying behavior and help to promote products. There are many other factors too, which affect consumer buying behavior in a cosmetic product, but this study focuses on four factors only which are; celebrity endorsement, promotions, packaging and brand image and its relationship on women's behavior to buy such products.

Byrne et al. (2003), defined celebrity endorsement as "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement (p. 290). It is a popular form of advertising through which companies promote their products or services and create awareness (Chekima et al. 2018).

Moreover, marketers' hope that the fame and status of endorses would create a distinct and positive image in the minds of customers; also, it will attract customers to buy a product. According to Adam and Hussain (2017), celebrities positively impact the Green Consumer buying behavior and transfer the meaning to the product and consumers readily accept the endorsed products and make them feel classy and consider it as a symbol of status. This process is mainly used by fashion or beauty brands. Promotional activities refer to those set of activities that communicate the product, service or brand to the end-user (Shallu and Gupta 2013). The main idea is to aware of people and makes them buy a product in preference over the other brands. More profoundly, promotional activities not only include advertising but also used to attract customers to buy and try the products (Mullin 2018). Promotional activities are playing a vital role in changing the consumer's perception of a brand. Also, to attract and invite customers to purchase a product or service and even to switch to other brands (Khare 2015).

Packaging refers to the overall designing, evaluating, and producing the container for a product to keep or store it against the damages and to attract the customers to a product. According to Salem (2018), it is one of the essential element through which companies communicate to the consumers by providing the necessary information on the packages and Prakash and Pathak (2017), considers packaging as one of the essential tools to attract the green consumers, and also affects their purchase decision. However, the connecting mechanisms between all the above discussed factors and green consumer buying behaviors need further clarifications (Chen et al. 2020).

It has been observed that all the above discussed factors influence brand image in a positive manner for the green consumers (Mullin 2018), and therefore brand image about green products would help increase green buying behavior.

Brand image refers to an image a customer has in his mind regarding a brand. It plays a vital role in boosting up any business or company performance, and it is now considered as an asset. It is developed with time by company quality service/product given to its customers and by customers direct interaction and experience (N. Jin et al. 2015). Chen et al. (2020), proposed that brand image should be focused and increased to improve green consumer buying behavior.

The objectives of the study are to investigate the effects of celebrity endorsement, promotional activities, packaging, and brand image on the green consumer buying behavior and mediating role of brand image in the cosmetic industry of Pakistan.

LITERATURE REVIEW

Globally, celebrity endorsement in Asian countries is higher than the United States and European countries. In China and South Korea, it ranged from 25 to 61 percentage, while just 15 percent in European countries (Chekima et al. 2018). Today's era of celebrity endorsement shifted from traditional towards celebrity 2.0, where celebrity endorses the products via using Facebook profile and other e-media. It also faster the process of reach (S. V. Jin 2018). This social, technological change was the most useful to reduce the adverse environmental effect and speed up the process to achieve sustainable consumption.

The prior scholars confirmed that celebrities could influence green buying behavior (Kumar and Tripathi 2019). Industries are growing with time along with that the sales of goods and services also shooting up, but when we see their impact on the environment, it is getting worse. So sustainable consumption is one of the ways to reduce it. The environmentally friendly products which we also call green products, can help to accomplish sustainable consumption (de Medeiros and Ribeiro 2017). Therefore, we proposed the following hypothesis **H1:** There is a significant relationship between celebrity endorsement and green consumer buying behavior.

The promotion of green purchase and environmentally friendly behavior is considered a significant medium to lessen the adverse effects on the environment and its sustainability. The promotional activities especially change in prices, can influence green purchase behavior (Liobikienė et al. 2017). Promotional activities are one of the dominant factors in green marketing to impact green consumption. However, Codini et al. (2018), the study confirmed that promotional activities rather than prevention influence people towards green buying behavior. Khare (2015), proposed that social organizations, government, and firms should establish green promotional activities that focus on environmental prevention, green identity and social image of individuals linked with green buying behavior. Henceforth, we develop the following hypothesis

H2: There is a significant relationship between promotional activities and green consumer buying behavior.

Nowadays, green packaging play key role in the sustainability of environmental and consider as a solution for numerous environmental issues. There are increasing concerns related to environmental prevention among green consumers which are forcing producers to develop environmentally friendly products (Mishra et al. 2017). As most the individuals aware of the influence of packaging on the atmosphere, they prefer to buy eco-friendly products due to environmental prevention, feeling of being responsible and recycle. (Orzan et al. 2018), the study confirmed that the eco-friendly packaging leads to green buying. More particularly, young consumers showed a positive attitude towards eco-friendly packaging and are willing to pay high prices for green products (Prakash and Pathak 2017). According to Ghosh (2016), in a competitive market environment packaging play a crucial role and is become a tool of differentiating the product. Moreover, it has significant impacts on consumer buying behavior (Simmonds and Spence 2017). H3: There is a significant relationship between packaging of products and green consumer buying behavior.

Celebrity endorsement is one of common advertising strategy for developing brand image (recall and recognition) (Chan et al. 2013). Due to increasing competition, and advertising clutter, marketer prefer celebrity endorse into marketing communication strategies to receive consumer attention, develop interest, increase desire, and motivate them towards the purchase action and also strengthen the bonding with firms bands (Ateke et al. 2015). According to Ford (2018), organizations have realized the celebrity endorsement can improve the brand image, brand awareness as well as advertisement credibility, liking and buying behavior. Therefore, we proposed following hypothesis;

H4: There is a significant relationship between celebrity endorsement and brand image.

A body of literature on brand image and eco-friendly consumers has developed over the years. In general, consumers are influenced by social, personal and psychological factors that impacts their perception of brand. Brand image is powerful tool to influence more consumers and motivate them to buy green products (Suki 2016). Indeed, the benefits of waste reduction and environmental prevention for several green products may resonate more efficiently with consumers. This behavior, hopes to generate both a positive brand image and a higher rate of acceptation of green consumption (Royne et al. 2016). The Consumers incline to observe higher quality and brand image of firms when it dues to offer eco-friendly products (Ng et al. 2014). Durrani et al. (2015), studied the relationship between impacts of brand image on teenagers buying behavior in the context of Pakistan. Besides, (Nagar and Rana 2015), found the significant relationship between brand image and green purchase intention. Hence, we proposed following hypothesis;

H5: There is a significant relationship between brand image and green consumer buying behavior.

Mediating role of brand image

According to (Gill and Dawra 2010), proposition brand image can mediate the relationship between the proposed construct. Tariq et al. (2017), confirmed the mediating role of brand image and found full mediation between the electronic word of mouth and purchase intention, and partial mediation between brand awareness and purchase intention. Moreover, the green brand attitude and positioning receive strong bonding with green consumer and green value-driven activities of the firms (Suki 2016). Marketers believe that celebrity endorsement impacts advertising effectiveness, brand recognition, and also purchase decision and follow-through (Spry et al. 2011). Likewise, Chan et al. (2013), found the mediating role of a brand image between celebrity endorsement and purchase intention. Moreover, the brand image also mediates the relationship between corporate social responsibility and purchase intention (Ramesh et al. 2019). Thus, we proposed the following hypothesis;

H6: Brand image has a mediation effect on celebrity endorsement and green consumer buying behavior



METHODOLOGY Sampling and data collection

This study used a quantitative method to collect data, as the field is becoming increasingly quantitative (Groeneveld et al. 2015). A technique of convenience random sampling used to select the respondent as it is considered one of a fast, simple, and less costly approach of collecting data (Salganik and Heckathorn 2004). The closed-ended questionnaire used to record the respondent's answers. An independent sample t-test was administered to ensure non-response bias following (Armstrong and Overton 1977). The data source of the study is 'primary'; this data is collected directly from the respondents. The

respondents are only females from different universities of Pakistan (SZABIST Islamabad, Shah Abdul Latif University Khairpur, UMT Lahore, and IQRA Karachi) as they mostly use the cosmetics products (Singhal and Malik 2018). The reason behind the selection of female students includes, they are more inclined towards beauty products and have higher possessiveness towards environments (Yousaf et al. 2012). Also, because, according to (Weiss 2012), a suggestion, the respondents of the study should possess similar characteristics. In the present study, 200 questionnaires were distributed resulting in 190 valid responses with a 95% response rate.

Measures of the study

This study used five-point Likert scales (1="strongly disagree"; 5="strongly agree") to record participants' responses. Celebrity endorsement was measured using four items adapted from (Gauns et al. 2018). Promotion activities were assessed using four items borrowed from. Packaging of products was evaluated using three items adapted from (Silayoi and Speece 2004). The brand image was measured using four items taken from Ng et al. (2014). Green consumer buying behavior was assessed using four items taken adapted from Khare (2015).

Data analytical tool

This study used ADANCO 2.0.1, partial least squares structural equation modeling (PLS-SEM) to build, execute and validate hypothesized model and the mediating effect of brand image (J Henseler and Dijkstra 2018), given its widespread application in business management and related disciplines (Fassott et al. 2016), and it being considered fastest and newest fully developed and comprehensive system of variance (Jörg Henseler 2018). In contrast, we used PLS-SEM over covariance-based structural equation modeling (CB-SEM) because CB-SEM requires data to be normally distributed. Whiles PLS-SEM holds no assumption about distributions of data. Thus, the overall results of a statistical test are not contradicted by nonnormal data (Goodhue et al. 2012), hence the use of PLS-SEM **RESULTS ANALYSIS**

The measured indicators have minimum loadings (coefficients) approximately 0.5 and maximum loadings of approximately 0.9. According to Bagozzi and Yi (1988), a loading above a threshold of 0.6 is the best measurement of a latent variable under study, therefore factor loadings which were all greater than 0.6 (see table 1). According to Hair et al. (2017), it is imperative to take inspiration from the PLS-SEM literature; the constructs' reliabilities were assessed thoroughly using Dijkstra-Henseler's rho along with Cronbach's alpha coefficients. As indicated in Table 1, all the values exceeded the threshold of 0.5 indicating strong coefficients of construct's reliability as suggested by Bagozzi and Yi (1988). The software ADANCO 2.1 version (Dijkstra and Henseler 2015) was used to evaluate the psychometric properties of the constructs and their underlying items. Using the Jöreskog's rho (pc) with a threshold of 0.7 and Dijkstra-Henseler's rho (ρA) with a threshold of 0.8 as a composite reliability determinant, our analysis fulfills those requirements. Therefore, composite reliability (CR) of the study constructs are presented by Dijkstra-Henseler's rho (pA) with a minimum reliability coefficient 0.8388 and a maximum of 0.9608, while convergent validity, was presented by average variance extracted (AVE) which also exceeded the minimum threshold of 0.5 (Fornell and Larcker 1981) (see table 1). The standard root mean square residuals defines "quantifies how strongly the empirical correlation matrix differs from the model-implied correlation matrix"(Jörg Henseler 2017, p. 23). Hu and Bentler (1999), proposed 0.08 cut-off value, according to Byrne (2013), if value is less than 0.05 it reflects an acceptable and perfect fit.

Table 1: Measurement model

Item code	Loading	rho (ρA)	rho (pc)	CA	AVE
CE1: You are likely to purchase celebrity	0.767	0.838	0.890	0.835	0.670
endorsed cosmetics	0.007				
	0.837				
products					
CE3: You buy a product if a celebrity is endorsing it	f 0.867				
CE4: Presence of	0.800				
cosmetics					
PA1: Promotions are	0.941	0.960	0.970	0.959	0.892
PA2: Looking at the	0.947				
promotions your					
PA3: Promotional	0.946				
activities motivates you,					
PA4: Promotional	0.944				
activities have long					
PoP1: Packaging of the	0.917	0.891	0.929	0.886	0.815
cosmetic products is					
	0.805				
products based solely on	0.895				
what they look like					
product before I buy					
BI1: Cosmetics Brand	0.882	0.912	0.926	0.908	0.785
	0.879				
products from brands that					
	0.892				
about brand image while					
going through new					
	0.889				
increases towards that					
cosmetic brand after					
good brand image					
GCBB1: Quality of	0.840	0.885	0.918	0.881	0.738
	0.889				
well-known brands of the					
cosmetics	0.992				
GCBB3: I feel excited shopping cosmetic	0.885				
11 0					
products					
products GCBB4: I think of myself as cosmetic loyal	0.822				
	CE1: You are likely to purchase celebrity endorsed cosmetics CE2: You are likely to try celebrity endorsed products CE3: You buy a product if a celebrity is endorsing it CE4: Presence of celebrities in ad encourages you to buy cosmetics PA1: Promotions are necessary to attract customers PA2: Looking at the promotions your purchasing pattern changes PA3: Promotional activities motivates you, to shift from one brand to another PA4: Promotional activities motivates you, to shift from one brand to another PA4: Promotional activities have long lasting impact in terms of cosmetics PoP1: Packaging of the cosmetic products is important to me PoP2: I choose cosmetic products based solely on what they look like PoP3: I always consider the packaging of cosmetic products fore I buy products from brands that have good image in the market BI3: You are conscious about brand image while going through new cosmetic products makes bH4: Your loyalty increases towards that cosmetic products makes you loyal to the brand GCBB1: Quality of cosmetic products makes you loyal to the brand GCBB2: I prefer to buy well-known brands of the cosmetics	CE1: You are likely to 0.767 purchase celebrity endorsed cosmetics CE2: You are likely to try 0.837 celebrity endorsed products CE3: You buy a product if 0.867 a celebrity is endorsing it CE4: Presence of 0.800 celebrities in ad encourages you to buy cosmetics PA1: Promotions are 0.941 necessary to attract customers PA2: Looking at the 0.947 promotions your purchasing pattern changes PA3: Promotional 0.946 activities motivates you, to shift from one brand to another PA4: Promotional 0.944 activities have long lasting impact in terms of cosmetics POP1: Packaging of the 0.917 cosmetics POP1: Packaging of the products based solely on what they look like POP3: I always consider products based solely on what they look like POP3: I always consider B12: You prefer to buy B11: Cosmetics Brand agaifects your buying behavior B12: You prefer to buy about brand image while going through new cosmetic products B14: Your loyalty 0.889 increases towards that cosmetic products B14: Your loyalty 0.889 B14: Hough and image GCBB1: Quality of 0.840 cosmetice products makes you loyal to the brand GCBB2: I prefer to buy 0.889 well-known brands of the cosmetics GCBB3: I feel excited 0.883	CE1: You are likely to 0.767 0.838 purchase celebrity endorsed cosmetics 0.838 CE2: You are likely to try 0.837 celebrity endorsed products CE3: You buy a product if 0.867 a celebrity is endorsing it CE3: You buy a product if 0.867 a celebrity is endorsing it 0.941 CE4: Presence of 0.800 celebrities in ad encourages you to buy cosmetics PA1: Promotions are 0.941 0.960 necessary to attract customers PA2: Looking at the 0.947 promotions your purchasing pattern changes PA3: Promotional 0.946 activities motivates you, to shift from one brand to another PA4: Promotional 0.944 activities have long lasting impact in terms of cosmetics products based solely on what they look like PO91: Packaging of the 0.917 0.891 products based solely on what they look like PO92: I choose cosmetic 0.896 the packaging of cosmetic products based solely on what they look like 0.912 products forder I buy BI1: Cosmetics Brand 0.882 0.912 image affects your buying behavior 0.892 about brand image while	CE1: You are likely to0.7670.8380.890purchase celebrity endorsed cosmetics0.8000.8130.890CE2: You are likely to try0.8370.8010.813celebrity endorsed productsCE3: You buy a product if 0.867 a celebritis in ad encourages you to buy cosmetics0.8000.9600.970RCE3: You buy a product if 0.867 a celebritis in ad encourages you to buy cosmetics0.9410.9600.970PA1: Promotions are0.9410.9600.9700.970precessary to attract customers0.9410.9600.970PA2: Looking at the0.9470.9600.970promotions your purchasing pattern changes0.9460.947promotional activities motivates you, to shift from one brand to another0.9440.944PA4: Promotional activities have long lasting impact in terms of 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Source: Authors' processing from ADANCO 2.1 Version

Furthermore, to establish the discriminant validity, on the other hand, (Fornell and Larcker 1981) criterion was used to assess the presence of discriminant validity among the latent variables. Findings from Fornell-Lacker's criterion indicated that constructs satisfy both underlying and stringent assumptions and this, therefore, establishes discriminant validity. It is worth to note that the values in the diagonal (in bold) of the Fornell-Lacker's table (see table 2) indicate AVE's of the measured constructs and must greater than 0.5. At the same time, each construct's AVE should be of higher value (coefficient) at both column and row position over other constructs.

Table 2: Discriminant Validity

Construct	1	2	3	4	5
Green CBB	0.7383				
Celebrity endorsement	0.4483	0.6705			
Promotional activities	0.3631	0.3584	0.8927		
Packaging of products	0.3995	0.4925	0.3182	0.8153	
Brand Image	0.4409	0.3046	0.3186	0.1925	0.7852

Squared correlations; AVE in the diagonal.

The Heterotrait-Monotrait ratio is used to assess factors discriminant validity. According to (Voorhees et al. 2016), proposition it would be better if the value of constructs is below 0.85 (see table 3), 0.8142 become maximum value retained.

 Table 3: Discriminant Validity: Heterotrait-Monotrait Ratio

 of Correlations (HTMT)

Construct	1	2	3	4	5
Green CBB					
Celebrity endorsement	0.7766				
Promotional activities	0.6536	0.6688			
Packaging of products	0.7115	0.8142	0.6087		
Brand Image	0.7382	0.6318	0.6027	0.4838	

Source: Authors' processing from ADANCO 2.1 Version

This study used PLS bootstrapping with 999 bootstraps and 190 cases to reflects the path coefficients and their significance (Jörg Henseler et al. 2009). Figure 2 displayed the comprehensive picture of assessments from the structural model. According to (Wong 2013), structural model should be deployed to evaluate the liner regression effects of the dependent variables on one another. A structural equation model used path coefficient and indicator of the level of significance as well as the coefficient of determination. According to (Cohen 1998), R² values of 0.60, 0.33, and 0.19 are, respectively, substantial, moderate, and weak. As shown in Table 4, the estimated R^2 of the brand image showed the construct celebrity endorsement explains 30.46% of the variation in the brand image. Again, the R^2 of green consumer buying behavior (0.6207) showed a 62.07% variation in the construct green consumer buying behavior is explained by the construct's celebrity endorsement, promotional activities, packaging of product and brand image.

Table 4: Path coefficient, hypothesis testing and coefficient of determination (**R**²)

Hypothesis	Effect	Original	Standard	bootstrap	results		Decision
		coefficient	Mean	Standard	t-value	p-value	
		(β)	value	error		(2-sided)	
Direct effec	t:						
H1	Celebrity endorsemen → Green CBB	t0.2204	0.2214	0.0816	2.71017	0.0070	Supported
H2	Promotional activities \rightarrow Green CBB	0.1268	0.1242	0.0603	2.1035	0.0357	Supported
H3	Packaging of products → Green CBB	0.2468	0.2496	0.0652	3.7833	0.0002	Supported
H4	Celebrity endorsemen → Brand image	t0.5519	0.5537	0.0617	8.9511	0.0000	Supported
H5	Brand image \rightarrow Green CBB	10.3625	0.3624	0.0703	5.1593	0.0000	Supported
Indirect effe	ect:						
H6	Celebrity endorsemen \rightarrow Brand image \rightarrow	t0.2000	0.2001	0.0430	4.693	0.0000	Supported
n 1.	Green CBB					CDMD	
Dependent variable: Coefficient		of determination (R^2)			SRMR		
Brand image 0.3046		0.3046					



Figure 2. Structural equation modeling. DISCUSSION

Our survey shows that celebrity endorsement and green consumer buying behavior have a positive and statistically relationship (β =0.2204, *p*=0.0070); hence, hypothesis 1 supported. This research finding consistent with (Chekima et al. 2018), who found positive impacts of celebrity endorsement on consumer purchase decisions through using expertise, attractiveness, and trustworthiness characteristics of celebrity endorsement.

Promotional activities have a positive and statistically significant relationship with green consumer buying behavior (β =0.1268, *p*=0.0357); thus hypothesis 2 supported. The findings of the study consistent with (Codini et al. 2018), who conclude that consumers under a state of promotional activities intend to buy green products.

The positive and statistically significant relationship found between the packaging of products and green consumer buying behavior (β =0.2468, *p*=0.0002); therefore, hypothesis 3 supported. This finding of study consistent with the work of (Orzan et al. 2018); the author found the positive effects of eco-friendly packaging on consumers sustainable behavior.

Celebrity endorsement has a positive and statistically significant relationship with brand image (β =0.5519, p=0.0000); hence, hypothesis 4 supported. These findings of the study consistent with work of (Ford 2018), who proposed that celebrity endorsement improve the credibility of advertisings, linking of advertisement and also enhance the purchase behavior, brand awareness and brand image.

Brand image has a positive and statistically significant relationship with green consumer buying behavior (β =0.3625, p=0.0000), henceforth, hypothesis 5 supported. This result of the study consistent with (Ng et al. 2014), who found the significant effects of brand image on green product buying intention.

The brand image significantly mediates a positive relationship between celebrity endorsement and green consumer buying behavior (β =0.2000, p=0.0000), thus, indirect hypothesis 6 supported. This findings of the study consistent with Chan et al. (2013) and Ramesh et al. (2019), who found positive mediation of brand image between proposed construct. According to (MacKinnon et al. (2002), Z mediates the link between X and Y if the direct path between X to Z and Z to Y are significant. If the direct and indirect effects are substantial there is partial mediation (MATTHEWS et al. 2018). Hence, this study confirmed the partial mediation of brand image between celebrity endorsement and green consumer buying behavior in cosmetic industry of Pakistan.

Conclusion and implications

This study aims to investigate the relationship between consumers buying behavior and celebrity endorsement while purchasing the cosmetics products in Pakistan, from results it has been concluded that independent variables have significant relationship with dependent variable green consumers buying behavior, so cosmetic companies/brands should focus on these factors to increase their sales and their shares in the market. As well as the government and environment friendly organization should motivate public and private firms to promote green consumption of products.

Limitations and future recommendation

The limitations of the study include that we had only 190 respondents. This study focused on females only; this can be extended to males' as well. Because of the limitation of time, only a few variables are studied other variables can also be considered to study the behavior of green consumers. This study can be extended with mediation of brand image and moderation of gender. Also, this study can be used in other developing countries and industries.

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