
Analysis of mediation effect of country-of-origin image on brand equity

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Abstract: Marketers are required to study consumer psyche for the development of sustainable competitive advantage over other brands. One of the most significant challenges for marketing professionals is the ability to create, maintain and enhance brand equity, as it is the most critical indicator of the product performance. The purpose of this research is to investigate a theoretical framework in which brand's country-of-origin image is suggested to influence the level of brand equity of hair care products. It also studies the mediation effects of various dimensions of brand equity, which are brand loyalty, brand awareness, brand association and perceived quality. The study shows that in the absence of mediators the country-of-origin image has a positive and significant effect on brand equity. However, in the presence of mediators the relationship becomes insignificant, which confirms the mediation effect. The present study will be useful to create the right message for the target customers.

Keywords: country-of-origin image; brand equity; brand loyalty; brand awareness; brand association; perceived quality.

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1 Introduction

The marketing activities have been booming over the past decade due to the globalisation and market proliferation. Organisations should wisely evaluate the performance of their marketing strategies with a special reference to branding strategies (Cassia et al., 2017). Various brands have crossed boundaries, established themselves in the global markets and are being preferred by the worldwide consumers over the period. At the same time, the local, regional and national brands find the market highly competitive and are engrossed in marketing activities to sustain and grow in the market. In the current competitive environment, it is essential for the brand marketers to endeavour hard to stay in the relevant market (Hosseini and Saravi Moghadam, 2017). Building a brand stronger and stronger over time is a marketing challenge for the organisations (Bariar et al., 2016). Strong brands can sustain in the mind of the customers for a more extended period. Strong brands provide a competitive advantage to the firm by creating an identity in the marketplace (Aaker, 2012). It helps an organisation in the development of a sustainable brand equity and enjoys a brand advantage in the given market. Brand equity is one of the most important marketing concepts that study the strength of the brand. If properly assessed, brand equity can have a long-lasting impact on marketing decisions.

The consumer's changing lifestyle also adds on to the increased marketing opportunities for the brands. Consumer's growing emphasis on beauty and appearance boosted the growth of the entire personal care industry. In the development of the market and consumer demand, the hair care products also registered a substantial growth in the Indian market during the current decade. Hair care industry displayed current value growth of 8% in the previous year, with sales approximately INR 192.8 billion (Research and Markets, 2017). However, Indian consumers are gradually becoming conscious of the harmful effects of chemicals and are ready to spend more time and money to select their preferred brand. Currently, purchases are based on customer's perception of the haircare products that state the characteristics of the ingredients, such as, Chemicals, natural, herbal or Ayurveda. The hair care industry operating in India requires a comprehensive study to analyse the market at a national level to understand the customer purchase for a specific brand. There is a need to study the consumer purchase decision to select a particular brand among plenty of international brands available in the haircare market. The study of brand equity is required to be done to analyse the brand strength. Present study is sought to explore various dimensions that affect the consumer's purchase decisions based on brand equity of the haircare products in the Indian market.

In addition, with the advent of various international brands in the market, many times consumer gives importance to the country-of-origin image of the product as one of the attributes along with other brand equity dimensions for generating product preference. It is believed that brand's country-of-origin image is one of the sources of brand equity as it forms one of the reasons to influence the purchase decision. Present research primarily examines the relationships of the country-of-origin image with brand equity and its dimensions. It also attempts to understand the mediation effect of the country-of-origin image on brand equity. Findings of the study will certainly help the international brands to serve Indian hair care consumers from the point of the country-of-origin image and its effects on purchase decisions when mediated by dimensions of brand equity.

2 Literature review

In the era of a highly competitive environment, building strong brands turn out to be a marketing priority (Bassan and Kathuria, 2016). Branding has a tremendous significance for the marketers and consumers. Researchers consider the unbranded product as a commodity and the brand as a lens, which helps the consumers to form an opinion regarding the product and the organisation (Blythe, 2007). Consumer satisfaction depends on functional and emotional features offered by the brands (Hankinson and Cowking, 1996). Customers view the various attributes and benefits associated with a product through the branding strength, and thus brand becomes a critical variable in consumer purchase decisions. It builds consumer loyalty towards a particular brand that provides superior margins, better intermediary cooperation, brand extension prospects and is less vulnerable to the competitive situations (Ballester and Alemán, 2005). Branding has become the major concern and prime challenge in the business and marketing strategies in the highly competitive market (Opoku et al., 2006).

The country-of-origin image also has a significant impact in developing consumers' trust about attributes and influences the evaluation process of the brands (Lin and Chen, 2006). Srikatanyoo and Gnoth (2002) mentioned that consumers develop prevailing opinions regarding products originating from a particular country and relate it to the product attributes. The country-of-origin image represents the home country for a company or the country that consumer infers from the brand name (Mahyari et al., 2018). Companies should capitalise on this while deciding branding strategies as it leads to a significant positive impact on brand equity (Lee et al., 2014).

Therefore, it is essential to create a robust brand for the success of the business (Mutsikiwa et al., 2013). To measure the real worth of a brand, marketers, and researchers investigate the product's 'brand equity' (Aaker, 1991; Baldinger, 1990; Keller et al., 2011). Table 1 given includes some of the studies in the field of the country-of-origin image, brand equity, and its dimensions.

Table 1 literature suggests that a plethora of studies are available to measure the brand equity in terms of its dimensions. It is also evident that scholars have used different sets of brand equity dimensions for different product categories. However, the most accepted dimensions are brand awareness, perceived quality, brand association, and brand loyalty (Aaker, 1991). Findings of some the studies combine brand awareness and brand association as one dimension. Few of the studies highlight the direct and indirect effects of the country-of-origin image on brand equity.

Table 1 Previous studies

<i>Study</i>	<i>Causal variable</i>	<i>Dimensions</i>	<i>Relationship</i>	<i>Outcome</i>
Akhtar et al. (2016)		Brand awareness	Positive significant	Purchase intention
Skincare products		Perceived quality	Negative significant	
		Brand association	Negative significant	
		Brand loyalty	Positive significant	
Akkucuk and Esmaeili (2016)		Brand awareness	Positive significant	Brand equity
Smartphone		Perceived quality	Insignificant	
		Brand association	Insignificant	
Al-Aali et al. (2015)	Country of assembly	Price	Positive significant	Purchase intention
Theoretical model	Country of design	Quality	Positive significant	
	Country of parts	Brand loyalty	Positive significant	
Atilgan et al. (2005)		Brand awareness	Insignificant	Brand equity
Beverage industry		Perceived quality	Insignificant	
		Brand association	Insignificant	
		Brand loyalty	Positive significant	
Ayyildiz and Cengiz (2007)	Country image	Perceived quality	Positive significant	Word of mouth
Hot springs		Customer expectation	Positive significant	
		Perceived value	Positive significant	
		Customer satisfaction	Positive significant	
Azadi et al. (2015)	Country-of-origin image	Brand awareness/association	Positive significant	Brand equity
Sports apparel industry		Perceived quality	Positive significant	
		Brand loyalty	Positive significant	
Bahrinizadeh et al. (2014)	Country-of-origin image	Brand awareness	Positive significant	Brand equity
Pharmaceutical industry		Perceived quality	Insignificant	
		Brand image	Positive significant	
		Brand loyalty	Positive significant	
Buil et al. (2013)		Brand awareness	NA	Brand equity
Consumer goods		Perceived quality	Positive significant	
		Brand association	Positive significant	
		Brand loyalty	Positive significant	
Ballester and Alemán (2005)	Overall satisfaction	Brand reliability	Positive significant	Brand equity
Shampoo and beer		Brand intentions	Positive significant	

Table 1 Previous studies (continued)

<i>Study</i>	<i>Causal variable</i>	<i>Dimensions</i>	<i>Relationship</i>	<i>Outcome</i>
Shampoo and beer	Overall satisfaction	Brand loyalty	Positive significant	Brand equity
Hamzaoui and Merunka (2006)	Country of design image	Perceived quality	Positive significant	
Car and TV	Country of manufacture image		Positive significant	
Hilman and Hanaysha (2015)	Country-of-origin image	Brand trust	Positive significant	
Automotive industry		Brand commitment	Positive significant	
		Brand satisfaction	Positive significant	
		Overall quality	Positive significant	
Lassar et al. (1995)	Performance	NA	Brand equity	
TV and watches		Social image	NA	
		Value	NA	
		Trustworthiness	NA	
		Attachment	NA	
Mostafa (2015)	Country-of-origin	Brand awareness	Positive significant	Brand equity
Mobile phones	Country-of-manufacture	Perceived quality	Positive significant	
		Brand image	Positive significant	
		Brand loyalty	Positive significant	
Sanyal and Datta (2011)	Country-of-origin image	Brand strength	Positive significant	Brand equity
Generic drugs		Brand awareness	Positive significant	
Ngoc (2014)	Country-of-origin	Perceived quality	Positive significant	Brand equity
Cosmetic		Brand loyalty	Positive significant	
		Brand awareness/association	Insignificant	
Panda and Misra (2014)	Country-of-origin	Brand awareness	Positive significant	Brand equity
Durables		Brand loyalty	Positive significant	
		Brand distinctiveness	Positive significant	
Tong and Hawley (2009)		Brand awareness	Insignificant	Brand equity
Sportswear		Perceived quality	Insignificant	
		Brand association	Positive significant	
		Brand loyalty	Positive significant	
Yasin et al. (2007)	Country-of-origin image	Brand distinctiveness	Positive significant	Brand equity
Electrical appliances		Brand loyalty	Positive significant	
		Brand awareness/association	Positive significant	

2.1 Brand equity (BE)

Many researchers have mentioned brand equity as a treasured intangible asset that offers numerous benefits to the marketing organisations (Aaker, 1991, 1996, 2012; Keller, 1993; Keller et al., 2011). Yoo and Donthu (2001) defined the brand equity as the difference in the consumer preference amidst the branded and unbranded products. Atilgan et al. (2005) refined the definition by elucidating the word ‘difference’ as ‘the utility difference’ regarding a positive marketing effect, generated by a branded product as compared to that of the generic version of the similar product. Companies with positive and ethical brand equity can maximise the product life by applying brand extension strategies and minimise the chances of product failure (Datta and Mukherjee, 2017). Bello and Holbrook (1995) stated that the brand equity appears when consumers are willingly paying more for the similar quality of the appeal of the brand name attached to the product.

2.2 Brand equity dimensions

Increased marketing efforts add more dimensions to the brand equity. Shocker and Weitz (1988) recognised brand loyalty and brand image as two critical components for developing brand equity. On the other hand, Fathi et al. (2017) identified eight dimensions of brand equity. Aaker (1991) proposed a well-accepted model, which shows that brand equity comprises of four essential dimensions; brand loyalty, brand awareness, brand association, and perceived quality. Further, other researchers (Keller, 1993; Yoo and Donthu, 2001) studied the consumer based brand equity measures under the same dimensions and found that these dimensions collectively increase the brand equity.

2.2.1 Brand loyalty (BL)

Studies have shown that loyal consumers display more favourable responses to a brand than non-loyal or switching consumers do (Grover and Srinivasan, 1992; Rondán Cataluña et al., 2006). Haghghi et al. (2013) presented that when a brand attains customer loyalty, it offers several advantages, such as; cost saving, greater commercial power, protecting customers from switching brands, and higher profitability. Brand loyalty refers to the willingness of the customer to purchase the same brand repeatedly without any intention to switch to competitive brands (Hameed, 2013). Hence, brand loyalty becomes an essential determinant of developing brand equity. Aaker (1991) described brand loyalty as the level of attachment of the customer with the brand. Brand equity heavily depends upon the repurchase of a brand (Aaker, 1996) and therefore, higher brand loyalty leads to higher brand equity (Atilgan et al., 2005; Mostafa, 2015). Oliver (1997) explained that the brand loyalty is a strong commitment towards the repeat purchase of a favoured product for an extended period. Besides, the environmental and marketing influences for switching brand are not affecting it. Azadi et al. (2015) and Kumar et al. (2013) confirmed that brand loyalty is the core influencing factor in the forming brand equity of the product. Some of the previous studies (Bahriniazadeh et al., 2014; Hilman and Hanaysha, 2015; Panda and Misra, 2014; Sanyal and Datta, 2011) also suggested that the effect of the country-of-origin image on brand loyalty is significant. Based on the literature, the following hypotheses are formulated:

- H_{a1} Country-of-origin image has a significant positive effect on brand loyalty.
H_{b1} Brand loyalty has a significant positive effect on brand equity.

2.2.2 *Brand awareness and brand association (BA)*

Brand awareness plays a significant role in the consumer decision making (Keller, 1993). Consumers prefer to purchase a product that they know already. It leads to creating a positive brand equity and therefore, brand awareness is one of the essential determinants of building brand equity (Aaker, 1991). Buil et al. (2013) inferred that brand awareness is needed for the establishment of a brand that consumer must know that it exists. Chattopadhyay et al. (2008) connected brand awareness with consumer's memory because it is formed of brand recognition and brand recall. Aaker (1996) further extended brand awareness dimensions to six categories namely; recognition, recall, top of the mind recall, supremacy, knowledge, and opinion.

The consumer purchase behaviour significantly depends on the image associated with the brand (Belén del Río et al., 2001). The high level of brand association adds high value towards building positive brand equity. Therefore, Aaker (1991) considered brand association as an essential dimension of brand equity. Yoo et al. (2000) linked brand association with the memory; how well consumer relates the brand. Several studies (Buil et al., 2013; Kumar et al., 2013; Pappu et al., 2006; Tong and Hawley, 2009; Ye and Raaij, 2004) successfully tested the brand associations as a dimension of brand equity and found it suitable for various products in different markets.

Amiri and Maroofi (2016) witnessed that previous studies consider brand awareness and brand associations as a joint dimension of brand equity. Ngoc (2014) observed that brand awareness/association, which is an essential determinant in the purchase decisions, has a significant relationship with the country-of-origin image. The brands with the positive country-of-origin image are well recognised, which leads to purchasing intentions. Panda and Misra (2014) and Yasin et al. (2007) found linkage between country-of-origin image and brand equity through brand awareness/association. Based on the literature, the following hypotheses are formulated:

- H_{a2} Country-of-origin image has a significant positive effect on brand awareness/association.
H_{b2} Brand awareness/association has a significant positive effect on brand equity.

2.2.3 *Perceived quality (PQ)*

Zeithaml (1988) argued perceived quality as the assumption regarding the superiority of the quality of a product based on different factors. It becomes the primary reason for developing the brand preference and influencing purchase intentions. Hence, it is considered a significant determinant of the brand equity (Aaker, 1991; Keller et al., 2011). Higher perceived quality forms a basis for the price premium, provides price elasticity and increases brand usage (Aaker, 1996). Therefore, high-perceived quality influences the consumer's choice and leads to increased brand equity (Hanaysha et al., 2016). Steenkamp (1997) identified intrinsic and extrinsic attributes that influence quality perception. The country-of-origin image is considered as an extrinsic attribute of the product. Huber and McCann (1982) stated that in the case when the actual quality of the

brand is not judged clearly, the country-of-origin image influences perceived the quality of the product. Based on the literature, the following hypotheses are formulated:

H_{a3} Country-of-origin image has a significant positive effect on perceived quality.

H_{b3} Perceived quality has a significant positive effect on brand equity.

2.3 *Country-of-origin image (CO)*

Country-of-origin image of a product is considered a crucial aspect that influences customer's perception of the brand (Kim, 1995). Nagashima (1970) described the concept of country-of-origin as the image that consumers associate with the brands. Shahrokh and Azodi (2013) examined that customers incline towards that products or services of particular brands that are made in countries associated with positive images. The country-of-origin image is developed because of the national characteristics and perception of the particular country (Bilkey and Nes, 1982). Some studies interpret the country image as consumers' perceptions regarding the quality of the product made in that country (Parameswaran and Yaprak, 1987; Shahin et al., 2012). While other studies consider country-of-origin as the beliefs about a country's industrialisation and national quality standard (Hilman and Hanaysha, 2015; Srikatanyoo and Gnoth, 2002). The country-of-origin image is related to the attributes, such as reputation of brand name, product design, appearance, variety, durability, technical advancement, trustworthiness, workmanship and status symbol (Hamzaoui and Merunka, 2006). It provides extrinsic cues regarding the quality to the consumers (Cordell, 1992; Saydan, 2013; Thorelli et al., 1989).

Lin and Kao (2004) developed a model that links country-of-origin image effects to brand equity. Azadi et al. (2015), Yasin et al. (2007) and Yoo and Donthu (2001) examined that brand's country-of-origin image for various products has a substantial influence on brand equity dimensions. Further, Ayyildiz and Cengiz (2007) and Shahin et al. (2012) shown that country-of-origin image affects the brand awareness/association, brand loyalty, and brand image of a product. Yasin et al. (2007) on consumer goods and Panda and Misra (2014) on durable products concluded that country-of-origin image leads to improved brand equity. In addition, its determinants have mediating effects on the linkage between country-of-origin image and brand equity. Based on the literature, the following hypotheses are formulated:

H_c Country-of-origin image has a significant positive effect on brand equity in the absence of the mediators.

H_{c'} Country-of-origin image has an insignificant effect on brand equity in the presence of the mediators.

3 **Problem statement, research gap, and research model**

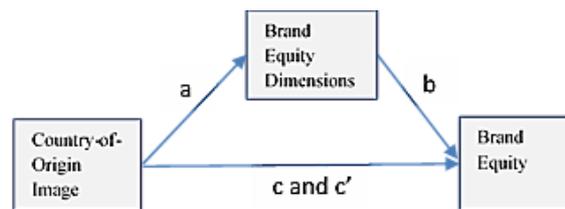
The results of the previous researches done in other markets build a framework to develop a constructive approach to the hair care companies in their marketing strategies. Review of the literature clearly highlights the relationships among country-of-origin image, brand equity dimensions and brand equity. It is also evident from the literature that these relationships vary for different products and markets. In this field, there is lack

of research that studies the hair care products, especially in the Indian market. This research analyses the relationships among country-of-origin image, brand equity dimensions and brand equity for hair care products in Indian market. The following are the main objectives of this research:

- 1 To determine the effect of the country-of-origin image on brand equity dimensions of hair care products.
- 2 To find out the link between brand equity and its dimensions of hair care products.
- 3 To establish the direct and indirect relations of the country-of-origin image on the formation of brand equity of hair care products.

With these three objectives, paper aims to study the relationship of the country-of-origin image in developing the brand equity of hair care products mediated by dimensions of brand equity. The present study is based on conceptual framework reflected in Figure 1, which explains the relationship among the country-of-origin image, brand equity dimensions and brand equity. Brand's country-of-origin image is suggested to influence the extent of brand equity, which is formed by its dimensions, namely; brand loyalty, brand awareness, brand associations, and perceived quality.

Figure 1 Conceptual framework (see online version for colours)



4 Research methodology

A survey was conducted in Mumbai (India) to understand consumers' perception towards the haircare brands. Mumbai, known as financial capital of India, is one of the suitable locations to conduct a research on branding. Present study is a causal research design that looks at the effect of the country-of-origin image on brand equity. It also investigates the mediation effect, where country-of-origin image is assumed as causal variable, brand equity as outcome and dimensions of brand equity as mediators. A questionnaire was designed that consists of various constructs of the conceptual model recognised in the literature review. After pretest, 30 items were identified to depict all constructs that were measured by a reflective five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). A convenience sampling method was undertaken where questionnaires were distributed among the colleagues, friends and relatives during August and September 2017. In the course of the initial screening of the collected data, it was observed that only 278 respondents completed the questionnaires. Present study incorporates three major tools to analyse the collected data. First, exploratory factor analysis (EFA) to identify all the factors and their items. Second, confirmatory factor analysis (CFA) to test whether

the data fit a hypothesised measurement model. Finally, multivariate analysis (Hayes, 2017) to examine the mediation effect.

5 Analysis and results

KMO and Bartlett's test (Table 2) of sampling adequacy was performed to check the suitability of factor analysis. KMO value for this study is 0.938 and has been found to be adequate. Bartlett's test of sphericity, which measures the multivariate normality of set of distributions, is significant (chi-square value = 8,390.204, $df = 435$, $sig. = .000$) therefore normal and acceptable for factor analysis.

Table 2 KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy.	.938	
Bartlett's test of sphericity	Approx. chi-square	8,390.204
	df	435
	Sig.	.000

The questionnaire items used to measure each construct along with descriptive statistics are shown in Table 3. Five constructs of hair care brands are identified with the help of factor analysis. Factor loadings of the items extracted from principal component analysis and rotated by varimax with Kaiser normalisation methods are well above the threshold value 0.6. The total variance explained by the model is approx. 78% and that is quite enough.

Table 3 Rotated component matrix

<i>Items</i>	<i>Construct</i>	<i>Factor loading</i>	<i>Variance explained</i>	<i>Mean</i>	<i>SD</i>
Brand X offers very good quality products.	PQ1	0.841	18.49%	3.324	1.056
Brand X offers products of consistent quality.	PQ3	0.828		3.345	1.066
Brand X offers very reliable products.	PQ5	0.814		3.194	1.040
Brand X offers products with excellent features.	PQ4	0.787		3.324	0.989
Brand X is good value for the money.	PQ2	0.762		3.086	1.078
Brand X has a personality.	PQ6	0.723		3.086	1.005
Brand X is interesting.	PQ7	0.717		3.241	1.053
Brands X is a renowned brand.	BE4	0.872	17.78%	3.716	0.872
Customers speak very high about brand X.	BE7	0.844		3.522	0.937
Brand X is a favourite brand among customers.	BE1	0.839		3.655	0.872
Brand X has a very good image.	BE2	0.819		3.723	0.840
It makes sense to buy brand X instead of others.	BE3	0.810		3.442	0.947
Brand X would be my first choice.	BE5	0.789		3.525	0.922

Table 3 Rotated component matrix (continued)

<i>Items</i>	<i>Construct</i>	<i>Factor loading</i>	<i>Variance explained</i>	<i>Mean</i>	<i>SD</i>
People buy brand X even if it is not different from other brands.	BE6	0.689	17.78%	3.475	0.953
If I am going to buy, I will choose brand X.	BL1	0.858	17.29%	3.896	0.832
I am willing to pay a premium (higher) price for brand X.	BL6	0.857		3.957	0.814
I will not buy other brands if brand X is not available at the store.	BL3	0.851		4.065	0.762
I will not buy other brands if it is almost the same like brand X.	BL4	0.816		3.968	0.803
I purchase my favourite brand X, regardless of its price.	BL5	0.808		4.014	0.765
I consider myself loyal to the brand X.	BL2	0.799		4.011	0.748
I will not buy other brands as good as X.	BL7	0.676		4.068	0.705
I have an opinion about brand X.	BA1	0.846	14.93%	2.633	1.125
I have no difficulties in imagining Brand X in my mind.	BA3	0.844		2.644	1.177
I associate brand X with innovativeness.	BA5	0.825		2.748	1.172
I recognise the symbol of Brand X.	BA2	0.817		2.676	1.203
I associate brand X with distinctiveness.	BA4	0.779		2.730	1.135
Country where brand X originated has an innovative approach.	CO2	0.784	9.49%	3.507	1.015
Country where brand X originated has technological advancement.	CO3	0.761		2.982	1.209
Country where brand X originated has originality in workmanship.	CO4	0.732		3.065	1.163
Country where brand X originated has creativity in designing.	CO1	0.684		3.058	1.151
	Total		77.97%		

Model reliability, validity and fit measures (Table 4) indicate that there are no issues of reliability ($CR > 0.7$), convergent validity ($AVE > 0.5$) and discriminant validity ($MSV < AVE$). Also, the square root of AVE (diagonal and bold values) greater than inter-construct correlations (Hu and Bentler, 1999). Model fit indices are also within the acceptable ranges (CMIN/DF between 1 and 3, CFI > 0.9 , SRMR < 0.08 , RMSEA < 0.08).

Based on Baron and Kenny (1986) approach, Table 5 represents the mediation model that includes four stages:

Step 1 The regression of the outcome (BE) on the independent variable (CO), in the absence of the mediators, is significant ($c = .3716^{***}$).

Step 2 The regression of the mediators (BA, BL, PQ) on the independent variable (CO) is significant ($a_1 = 1.0368^{***}$, $a_2 = .2417^{***}$, $a_3 = .8874^{***}$).

- Step 3 The regression of the outcome (BE) on the mediators (BA, BL, PQ), controlling for the independent variable (CO), is significant ($b_1 = -.1303^*$, $b_2 = .5012^{***}$, $b_3 = .2757^{***}$).
- Step 4 Regression of the outcome (BE) on the independent variable (CO) controlling for the mediators (BA, BL, PQ) is insignificant ($c' = .1409$).

Table 4 Model reliability, validity and fit measures

Items	CR	AVE	MSV	BD	BE	BL	BA	CO
PQ	0.949	0.729	0.504	0.854				
BE	0.947	0.719	0.333	0.456	0.848			
BL	0.936	0.680	0.333	0.304	0.577	0.824		
BA	0.964	0.842	0.525	0.710	0.305	0.256	0.918	
CO	0.889	0.668	0.525	0.690	0.357	0.228	0.724	0.817

CMIN/DF = 2.476, CFI = 0.930, SRMR = 0.058, RMSEA = 0.073

Table 5 Measurement model analysis (for structural model analysis, see Appendix)

	coeff	se	t	p	LLCI	ULCI	Remarks	Hypothesis
CO→BE (c)	.3716	.0539	6.8951	.0000	.2655	.4777	Significant positive	H _c : Accepted
CO→BA (a ₁)	1.0368	.0517	20.0536	.0000	.9350	1.1386	Significant positive	H _{a1} : Accepted
CO→BL (a ₂)	.2417	.0572	4.2224	.0000	.1290	.3544	Significant positive	H _{a2} : Accepted
CO→PQ (a ₃)	.8874	.0487	18.2268	.0000	.7915	.9832	Significant positive	H _{a3} : Accepted
BA→BE (b ₁)	-.1303	.0542	-2.4041	.0169	-.2370	-.0236	Significant negative	H _{b1} : Rejected
BL→BE (b ₂)	.5012	.0461	10.8737	.0000	.4104	.5919	Significant positive	H _{b2} : Accepted
PQ→BE (b ₃)	.2757	.0584	4.7193	.0000	.1607	.3907	Significant positive	H _{b3} : Accepted
CO→BE (c')	.1409	.0731	1.9267	.0551	-.0031	.2848	Insignificant t positive	H _{c'} : Accepted

6 Discussion

Branding has been one of the well-studied phenomena in marketing. Abundant literature is available on brand at product, company, industry and country levels. The effect of country of origin on brand equity happened where consumers observe substantial differences between the countries in terms of their product category-country relations. The present study is an attempt to measure the brand equity of hair care product in the Indian market. It also studies the mediation effect of determinants of brand equity between country-of-origin image and brand equity. The conceptual framework of the study is based on well-accepted work of Aaker (1991, 1996, 2012). According to this

model, brand equity consists of four dimensions (brand loyalty, brand awareness, brand association and perceived quality). The outcome of the factor analysis reveals that brand awareness and brand association are not isolated and can be used as one factor.

To understand the mediation effect, the concept of Baron and Kenny (1986) is incorporated. All four assumption of the concept are met, namely; independent variable has significant positive influence on outcome in the absence of mediator(s); independent variable has significant influence on each mediator; each mediator has significant influence on outcome; and independent variable has insignificant influence on outcome in the presence of mediator(s). To understand full/partial mediation effects, the recent submission of Kenny (2016) is useful. He argues,

“The steps are stated in terms of zero and nonzero coefficients, not in terms of statistical significance (Baron and Kenny, 1986)... The steps should not be defined in terms of statistical significance.... Another measure of mediation is the proportion of the effect that is mediated, or the indirect effect divided by the total effect or ab/c or equivalently $1 - c'/c$ I would advise only computing this measure if standardised c is at least $\pm .20$ One rule of thumb is that if one wants to claim complete mediation ab/c should be at least $.80$.”

Based on the above statement, present study on the hair care products determines that the dimensions of brand equity partially mediate the relationship between country-of-origin image and the brand equity ($1 - c'/c = .20 < .62 < .80$). It is consistent with the previous literature that states that brand equity dimensions could account for a significant amount of variance in the relationship between brand equity and country-of-origin image. Since the country-of-origin image is a positive predictor of brand equity, the model expects that higher country-of-origin image affects higher brand equity. In addition, higher country-of-origin image leads to higher brand equity dimensions.

7 Conclusions

The results of the present study concludes that findings are mostly consistent with the previous literature. Country-of-origin image as causal variable directly and positively influences the brand equity of hair care brands. It shows that if consumers are unaware of the attributes of the hair care brand, purchases are influenced according to the country-of-origin image. For example, if a new/unknown brand of the hair care product is launched, consumer will prefer ‘Made in France’ rather than ‘Made in China’. Country-of-origin image also positively influences the brand equity dimensions of hair care brands. It also demonstrates that better country-of-origin image will enhance the brand loyalty, brand awareness/association and perceived quality of the brand. In addition, these dimensions also significantly influence brand equity. Both brand loyalty and perceived quality of the hair care brands positively influence the brand equity. However, brand awareness/association shows a significant negative relationship with brand equity. It indicates that consumers have a negative awareness/association with brand equity of hair care brands. This outcome reflects that hair care product possesses a negative recognition/opinion due to its attributes, ingredients or side effects. The results of mediation analysis confirm the partial mediation of country-of-origin image on brand equity. It reveals that in the absence of any mediator, the brand equity of hair care brand

is significantly influence by its country-of-origin image. However, in the presence of mediators, the effect of country-of-origin image on brand equity diminishes.

8 Implications

If the attributes of the hair care product are unknown to the consumers, country-of-origin image plays an important role to create an opinion about the brand. Marketers should highlight the positive image of country-of-origin of the brand if either product is new in market or consumers have lack of sufficient product knowledge. Increased product knowledge tends to improve the brand equity dimensions, which reduces the impact of country-of-origin image on brand equity. Therefore, in case of negative image of country, marketers should emphasise in creating extensive brand image messages in terms of brand loyalty, awareness, association, and quality of their hair care products. These findings are helpful to the hair care industry specifically and other industries in general. Marketers will be able to get the critical insight of brand equity and its dimensions. It will also enhance the understanding of the relationship between country-of-origin image and brand equity with and without mediators. Researchers and academicians will be benefited to understand the various issues of branding and able to conduct further researches in other industries and markets. One of the future researches would be to study the images of various countries and its impact on brand equity of various products made in these countries. If the country's image is weak, researches can be done to improve brand equity to subside the effect of country-of-origin image.

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Appendix

Figure A1 Regression of the outcome on the independent variable, without the mediators (see online version for colours)

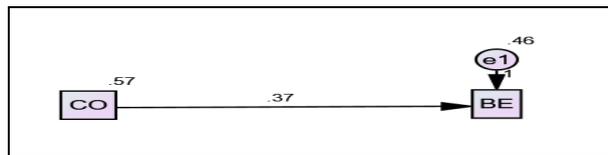
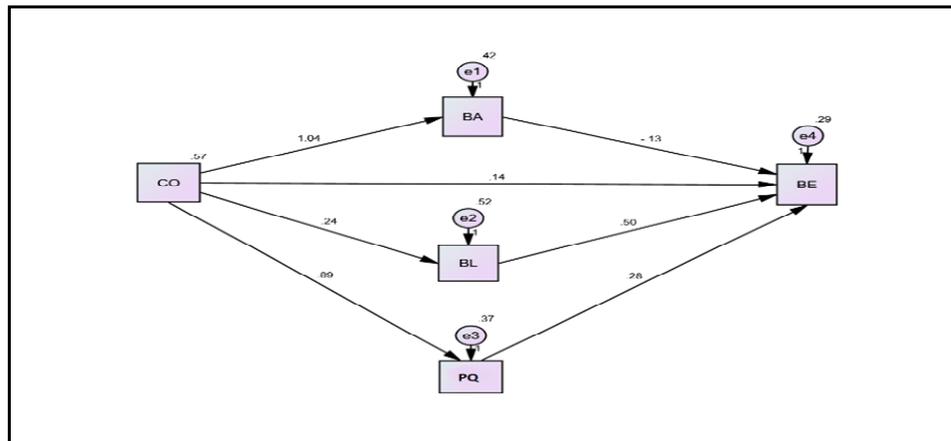


Figure A2 Regression of the outcome on the independent variable, with the mediators (see online version for colours)



***** PROCESS Procedure for SPSS Release 2.16.3 *****

Written by Andrew F. Hayes, Ph.D (<http://www.afhayes.com>)

Documentation available in Hayes (2013) (<http://www.guilford.com/p/hayes3>)

Model = 4

Y = BE

X = CO

M1 = BA

M2 = BL

M3 = PQ

Sample size = 278

Outcome: BA

Model summary

R	R-sq	MSE	F	df1	df2	p
.7701	.5930	.4251	402.1457	1.0000	276.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	-.0063	.1365	-.0464	.9630	-.2751	.2624
CO	1.0368	.0517	20.0536	.0000	.9350	1.1386

← a₁

Outcome: BL

Model summary

R	R-sq	MSE	F	df1	df2	p
.2463	0.607	.5211	17.8284	1.0000	276.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	3.6757	.1512	24.3171	.0000	3.3782	3.9733
CO	.2417	.0572	4.2224	.0000	.1290	.3544

← a₂

Outcome: PQ

Model summary

R	R-sq	MSE	F	df1	df2	p
.7391	.5462	.3769	332.2177	1.0000	276.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	1.0622	.1286	8.2932	.0000	.8131	1.3193
CO	.8874	.0487	18.2268	.0000	.7915	.9832

← a₃

Outcome: BE

Model summary

R	R-sq	MSE	F	df1	df2	p
.6839	.4677	.2913	59.7777	4.0000	273.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	.3983	.2040	1.9521	.0519	-.0034	.8000
BA	-.1303	.0542	-2.4041	.0169	-.2370	-.0236
BL	.5012	.0461	10.8737	.0000	.4104	.5919
PQ	.0584	4.7193	.0000	.1607	.3907	
CO	.1409	.0731	1.9267	0.551	.0031	.2848

← b₁
← b₂
← b₃
← c'

*****TOTAL EFFECT MODEL*****

Outcome: BE

Model summary

R	R-sq	MSE	F	df1	df2	p
.3833	.1469	.4619	47.5429	1.0000	276.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.5352	.1423	17.8146	.0000	2.2551	2.8154
CO	.3716	.0539	6.8951	.0000	.2655	.4777

← c

*****TOTAL, DIRECT, AND INDIRECT EFFECTS*****

Total effect of X on Y

Effect	SE	t	p	LLCI	ULCI
.3716	.0539	6.8951	.0000	.2655	.4777

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
.1409	.0731	1.9267	.0551	-.0031	.2848

← c'

Indirect effect of X on Y					
	Effect	Boot SE	BootLLCI	BootULCI	
TOTAL	.2307	.0702	.0861	.3643	← c-c'
BA	-.1351	.0598	-.2509	-.0151	← a ₁ *b ₁
BL	.1211	.0309	.0657	.1858	← a ₂ *b ₂
PQ	.2447	.0549	.1442	.3607	← a ₃ *b ₃

***** ANALYSIS NOTES AND WARNINGS *****

Number of bootstrap samples for bias corrected bootstrap confidence intervals: 5,000.

Level of confidence for all confidence intervals in output: 95.00.

----- END MATRIX -----