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Does Celebrity Image Congruence Influences Brand Attitude and Purchase Intention?

Justin Paul^a and Shailja Bhakar^b

^aGraduate School of Business Administration, University of Puerto Rico, San Juan, PR, USA; ^bPrestige Institute of Management, Gwalior, MP, India

ABSTRACT

We examine whether image congruence (IC) of celebrities have significant effect on purchase intention (PI) and whether attitude towards brand and attitude towards advertisement mediate the relationships in a developing country, based on sample data from India. The data was collected using a Likert Scale of 1 to 7. Structural Equation Modeling (SEM) was employed to test the recursive model incorporating endorser-brand IC, advertising effectiveness (AE), attitude toward advertisement (ATA), attitude towards brand (ATB), and purchase intention (PI). It was found that the celebrity image congruence (IC) has a negative significant effect on ATB and positive significant effect on ATA whereas advertising effectiveness (AE) had significant effect on both attitude towards brand and attitude towards advertisement. Finally AE and ATA both had significant positive effect on PI. Drawing on research on moral reasoning associated with celebrity endorsement, we provide strong theoretical as well as empirical evidence that celebrity (endorser-brand) IC is not a strong predictor of PI in a developing country. Spending huge resources on endorsers for IC does not always provide the desired benefits in countries like India. Findings would be useful for both multinational firms engaged in international marketing as well as local firms.

KEYWORDS

advertising; celebrity endorsement; image congruence; purchase intention; structural equation modeling

Introduction

Advertising effort is one of the most important factors of overall marketing work (Kirmani & Wright, 1989). The key objective of an advertisement is to change or influence the consumers attitude toward the advertised product (Cox, 2010; Watkins et al., 2016). Advertisements are widely accepted as tools for organizations to attract customers toward their products and services (Delpalmies, Ryan, & Ververde, 2016). It is the best method for organizations to communicate about their new products, provide information about the product's utility, price, and

CONTACT Justin Paul  justin.paul@upr.edu  Graduate School of Business Administration, University of Puerto Rico, San Juan, PR USA, PO Box 23332, ZIP code 00931.

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availability (Ranjbarian et al., 2011). Advertising is a crucial and versatile tool used to create the image of the organizations' products and services in the mind of the consumers (Ariztia, 2015), particularly in developed countries where brand building is a critical step for success. Organizations all over the world dedicate a lot of time, effort, and money into creating advertisements that have the ability to persuade customers to purchase their products (Erdogan, 1999). The most important decisions organizations make regarding the advertisements' ability to gain the attention of the customers are: the medium, storyline, aesthetics, and the endorser (Hemamalini & Kurup, 2014).

Celebrities frequently endorse products, brands and political campaigns (Knoll & Matthes, 2017). An individual's concern with moral norms of the target celebrity's personal conduct has detrimental effects on celebrity endorsements (Zhou & Whitla, 2013). Consumers' brand-benefit beliefs and PI show evidence of a dilution effect when consumers perceive a mismatch between the celebrity and brand. Interestingly, not only the relevant celebrity characteristics associated with the brand but also the irrelevant information provided by the celebrity in the advertisement influence perceptions of match-up or congruence (Illicic & Webster, 2013). Bergkvist, Hjäimmarson, and Magi (2015) show that if consumers perceive that the celebrity was motivated to endorse the brand only for money then that will have a negative effect on ATB and PI. Growing attention among the marketing professionals and researchers has led to the confirmation of causal relationships between IC, ATA and ATB as independent variables, as well as PI as a dependent variable (Korchia & Fleck, 2006; Niazi et al., 2010; Ranjbarian et al., 2011; Bhakar et al., 2015).

The celebrity industry has expanded as a complete commercial sector charging millions beyond its original goals, crossing the ethical boundaries in developed countries (Hyde, 2009; Choi & Berger, 2010). The endorser-brand IC has been extensively studied along with its effect on brand image and PI; however, its effect on ATA has not been studied that extensively in the context of developing countries. Similarly, AE has been extensively studied to evaluate its impact on ATB, ATA and in turn the PI of customers. Soneji, Riedel and Martin (2015) examined how a consumer's self-concept clarity (SCC) interacts with their perception that a celebrity endorser possesses. They show that consumers with a clear sense of who they are (high-SCC consumers) are more influenced by an ad featuring a celebrity high in meaning, whereas low-SCC consumers are influenced to slightly higher levels by a celebrity with lower levels of celebrity meaning based on an experiment comparing fictional ads endorsed by different celebrities.

We seek to combine both these streams of research studies into a single model to be tested using structural equation modeling (SEM) approach; making this study a novel one in the context of a developing country. Thus, we examine whether a celebrity endorsement and image congruence (IC) have significant effect on purchase intention (PI) and attitude toward brand (ATB) in a developing country, based on sample data from India. By doing so, we respond to

the call for future research in this area outlined by Knoll and Matthes (2017). Additionally, the customers in emerging/developing countries, by and large, fall in the category of 'Value-for-Money' (Paul, 2015) emphasizing more on price. Therefore, IC may not affect PI of customers in such countries. In this context, we examine the endorser-brand to analyze the link between image and ATB in the second fastest growing market, India which has not been studied for its effect on PI in Indian context. Through this paper we attempt to test a model using IC and AE as independent variables; and ATA and ATB as mediating variables. Therefore, the main objective of this study is to identify the relationship between IC, AE, ATA, ATB, and PI in a developing country and compare that with the findings of the studies conducted in developed countries. Additionally, we intend to identify the role of brand and gender in all (aforementioned) variables included in the study.

Literature review

Advertisements with celebrities as endorsers have been found to be more effective compared to advertisements with non-celebrity endorsers (Martin-Santana & Beerli-Palacio, 2013; Cronin, 2003; Dix et al., 2010; Yoon & Choi et al., 2005; Stafford et al., 2002; Walker et al., 1992). Advertising agencies' selection of celebrity endorsers for different brands is normally based on a number of elements such as the match between the celebrity and the brand, celebrity's credibility, image of the celebrity among the masses, etc. The importance of each element depends on the product type (Erdogan et al., 2001; Friedman & Friedman, 1979; Frieden, 1984). IC between the celebrity and the brand being advertised is one of the most important criteria that improve the celebrities' trustworthiness, product evaluations by customers, and other aspects of advertisement and communication effectiveness (Lynch & Schuler, 1994).

Celebrities are widely preferred by organizations to promote their products in advertisements (Shimp, 2000) as celebrity endorsement helps generate awareness of the brand (Um & Lee, 2015). Celebrity endorsement is considered an effective promotional tool by marketers worldwide and it has positive impact on the attention and exposure of consumers (Biswas, Hussain & O'Donnel, 2009; Spry, Pappu & Cornwell, 2011). The influence of celebrities in the 21st century extends far beyond the simple product endorsements. Image congruence (IC) has been defined as a similarity between the image of celebrity, public figure, sports personality, or other endorser, and the image of the brand being endorsed (Kamins & Gupta, 1994). Organizations select an endorser based on factors such as the credibility, personality, popularity, profession, and budget; and IC is considered the most important factor while choosing the endorser (Kahle & Homer, 1985; Spielman, 1981; Dwivedi, McDonald & Johnson, 2014; Dwivedi, Johnson & McDonald, 2015) (Kahle & Homer, 1985; Spielman, 1981). A good match will lead to advertising effectiveness (AE), which is the intended result for the product being advertised

(Hawkins, Best & Coney, 1983). A large number of research studies have been conducted to identify the impact of AE on PI. Results from these studies indicate a significant impact of AE on PI (Nikhashemi et al., 2013; Siddiqui, 2014). Researchers and practitioners have put much emphasis on IC between the celebrity and the brand as it has been proven to increase AE and has a significant impact on PI (Koo et al., 2013; Tseng & Lee, 2013; Wang, 2012; Hemamalini & Kurup, 2014; Bhatnagar & Mittal, 2012; Jalkumar & Sahay, 2015).

Knoll and Matthes (2017) conducted a meta-analysis of celebrity endorsements in the context of for-profit and non-profit marketing and their findings revealed strong positive and negative effects. The most positive attitudinal effect appeared for male actors and the most negative effect was found for female models with an explicitly endorsed subject. Rossiter and Smidt (2012) demonstrate that some celebrity-product pairings have a good fit and persuasive quality whereas others have no effect or represent such an obviously poor fit that they dissuade consumers from buying the product. Secondly, they suggest that good fit, and thus persuasion, for celebrity presenters, depends on the audience immediately perceiving that the celebrity is an expert user of the product (for all products) and thus, is a positive role model (for high-risk products). Similarly, there are some studies highlighting the neutral or negative effect of celebrity IC on PI highlighting the issues such as celebrity mismatch, moral reputation etc. (Illicic & Webster, 2013; Zhou & Whitla, 2013).

It has been stated in multiple studies that similarity between the celebrity image and the brand image increases PI toward that brand (Atay, 2011; Bejaoui et al., 2012; Farhat & Khan, 2011; Hemamalini & Kurup, 2014; Koo et al., 2013; Korchia and Fleck, 2006; Šeimienė & Jankovič, 2014; Lynch & Schuler, 1994; Illicic, 2015; Liu et al., 2007; Chan et al., 2013; Balasubramanian et al., 2014). IC between the celebrity and the product being advertised increases the brand recall and advertisement recall, while negative image of the celebrity can adversely affect brands being endorsed by that celebrity (White et al., 2009; Till & Shimp, 1998; Friedman & Friedman, 1979). Celebrities expertise is one of the factors that generate IC between the celebrity and the brand, while selecting an athlete as an endorser means that the image of the celebrity as well as the image of the sport that the celebrity plays are both important for producing a positive response from a consumer (Till & Busler, 1998; Martin, 1996). Hence, the effect of Image Congruence IC can be tested through the following hypotheses.

H_{1a}: Image Congruence (IC) has positive relationship with Attitude towards Brand (ATB)

H_{1b}: Image Congruence (IC) has positive relationship with Attitude towards Advertisement (ATA)

Consumers attitude plays an important role in purchasing any product or brand. Consumers see various advertisements of products, which help them in developing ATA, in turn helping them shape their ATB. Cronin (2003) discusses how individual ATB and PI are more favorably inclined toward advertisements with celebrities

in a developed country. Celebrity endorsements improve credibility of the advertisements as well as consumer ATA (Kamins, 1990; Micu et al., 2009). Attractive celebrities help generate a positive ATB (Till & Busler, 1998; Hung, 2014) as well as positive ATA itself (Felix & Borges, 2014). A trustworthy spokesperson can also help generate a positive ATB (Garretson & Neidrich, 2004). Liu et al. (2007) indicate that celebrity attractiveness plays an important role in purchase intentions toward the product. Kahle and Homer (1985) and Amos et al. (2008) found that attractive celebrities can substantially alter the attitudes and purchase intentions of consumers.

Endorser image congruity is defined as the degree of match between accessible endorser associations and attributes associated with the brand (Kirmani & Shiv, 1998). They propose that this kind of source congruity (endorser IC) affects ATB positively, as consumers seek brand-relevant information to form attitudes when the level of issue-relevant elaboration is high. Literature also indicates that IC between celebrity and the brand significantly affects ATA and ATB (Sheinin et al., 2011; Choi & Rifon, 2012; Chiosa, 2013; Wang, 2012; Kamins & Gupta, 1994; Illicic & Webster, 2011; Illicic, 2015).

Homer (1990) and Brown and Stayman (1992) stated that ATA and ATB are related concepts; several researchers have observed a significant relationship between these variables (Bhakar et al., 2015; Ranjbarian et al., 2011; Wahid & Ahmed, 2011). Feiz et al. (2013) indicate that ATA affects ATB (Mitchell, 1986). Biehal et al (1992) found that ATA alters brand choices of customers. A causal relationship between ATA and ATB (as independent variables) and PI (as a dependent variable) has also been tested. Choi and Rifon (2012) discuss that the relationship between IC (independent variable) and PI (dependent variable) is mediated by the ATA and the ATB (Atay, 2011; Wang, 2012; Tseng & Lee, 2013; Chiosa, 2013; Sallam & Wahid, 2012).

In addition to celebrity endorsers, AE is also a variable that affects PI (Nikhashemi et al., 2013; Sheinin et al., 2011). Several authors have proposed different elements by which AE can be evaluated; such as Sheinin et al. (2011), who proposed that creativity, novelty, and usefulness are elements of AE. Siddiqui (2014) indicated quality of the advertisement, content credibility, and celebrity appeal as elements of AE. Martin et al. (2002) added some more elements such as celebrities, demonstration of the product, testimonials, comparisons, use of experts, models related to target market, etc., to make advertisements more effective. Furthermore, in online shopping, website quality is considered a major element of AE (Nikhashemi et al., 2013). Concentrating only on the information part of the advertisement and ignoring the execution part reduces AE (Homer, 1990). Siddiqui (2014) indicates that both IC and AE together affect PI.

Mehta (2000) studied the existence of the causal relationship between AE, ATA, and PI. Olney et al. (1991) in their study indicated that AE improves the viewers' ATA and it also increases the viewing time. Thorson et al. (1992) and Mackenzie et al. (1986) identified in their study that the impact of AE on PI is mediated by

ATA and ATB. Edell and Burke (1987) identified in their study that AE formed on the basis of feelings and judgment also significantly effects ATB and PI. Additionally, Amos et al. (2008) indicated that a celebrity with a positive image can increase the AE and generate positive ATA and ATB, thereby leading to a higher level of PI toward the brand. Prior research has also explored the factors influencing the recall of outdoor advertising and the impact of advertising efficiency on generating sales (Donthu, Cherian, & Bhargava, 1993; Bhargava & Donthu, 1999; Luo & Donthu, 2001; Luo & Donthu, 2005).

There are several studies examining the role and influence of advertisement and celebrities on ATA, AE and PI based on the data collected using print, television, online and other advertisements (Cartwright, McCormick, & Warnaby, 2016; Cocker, Banister, & Piaontini, 2015; Fillis, 2014). Most of them are in the context of developed countries and support the hypothesis that celebrity IC influences the consumer decision-making process, ATA, AE and PI. However, all the studies do not validate the same propositions or hypotheses as they get mixed results.

Researchers have tested the causal relationship between IC and ATA, ATB, and PI, mostly in the context of developed countries. We added one more variable to the model, which is AE, a very close construct to IC. In fact, some research studies consider IC to be one of the elements contributing to the effectiveness of an advertisement (Kirmani & Shiv, 1998). Also, a model indicating these causal relationships was tested using SEM method. Dual mediation was tested based upon the Dual Mediation Hypothesis (DMH) proposed by prior researchers (Yoon et al., 1998; Lutz et al., 1983). In the first stage, the impact of two independent variables (IC and AE) is tested on two mediating variables: ATA and ATB. In the second stage, the combined effect of ATA and ATB is examined on PI. The effect of Advertising Effectiveness on Attitude towards Brand and Attitude towards Advertisement are tested through hypotheses H2a and H2b respectively and the effect of Attitude towards Brand and Attitude towards Advertisement on Purchase Intention (PI) are tested through hypotheses H3a and H3b respectively.

H_{2a}: Advertising Effectiveness (AE) positively affects Attitude towards Brand (ATB)

H_{2b}: Advertising Effectiveness (AE) positively affects Attitude towards Advertisement (ATA)

H_{3a}: Attitude towards Advertisement (ATA) positively affects Purchase Intention (PI)

H_{3b}: Attitude towards Brand (ATB) positively affects Purchase Intention (PI)

In this study shampoo brands were identified to test hypotheses H₀₁ to H₀₃. The brand images of shampoo brands are likely to be gender specific and therefore, the category variable gender is likely to affect the Attitude towards advertisement for these brands and also Attitude towards Brands. Therefore, gender is likely to confound the relationship of IC and AE on ATA and ATB. The relationship between IC and AE with PI is also likely to be confounded by gender. The confounding effect of gender on the relationship of IC and AE on ATA, ATB and PI was tested using hypotheses H₀₄.

H_{4a}. Respondent's Gender does not confound the relationships between IC and AE as exogenous variable on ATB

H_{4b}. Respondent Gender does not confound relationship between IC and AE as exogenous variables and ATA as endogenous variable.

H_{4c}. Respondent Gender does not confound relationship between IC and AE as exogenous variables and ATA as endogenous variable.

Attitude of customers towards different brands are likely to be different based on their experiences of those brands. Similarly the attitude of customers towards advertisement of different brands is also likely to be different based on ad features and brand ambassadors used in those ads. Thus, the brand is likely to confound the relationship between IC and AE as Exogenous variables and ATA and ATB as endogenous variables. Similarly brand may confound the relationship between the exogenous variables IC and AE with the endogenous variable PI. The confounding effect of brand on the relationship of the exogenous variables IC and AE with the endogenous variables ATA, ATB and PI was tested using hypotheses H₅.

H_{5a}. Brand does not confound the relationships between IC and AE as exogenous variable on ATB as endogenous variable.

H_{5b}. Brand does not confound relationship between IC and AE as exogenous variables and ATA as endogenous variable.

H_{5c}. Brand does not confound relationship between IC and AE as exogenous variables and ATA as endogenous variable.

Analysis of the mediating/controlling effect of category variables in SEM models is possible as finite mixture modeling (Muthen, 2002 and McLachlan & Peel, 2000).

The SEM model for the current study has direct causal relation of IC on PI without mediation and another one through ATB and ATA indicating the ATB and ATA may be mediating the effect of IC on PI. The following two hypotheses (H₆ and H₇) tested the mediating role of ATB and ATA on IC-PI relationship

H₆: ATB mediates the relationship between IC and PI

H₇: ATA mediates the relationship between IC and PI

The SEM model also has direct causal relationship line between AE and PI and another one through ATB and ATA indicating that ATB and ATA may be mediating the effect of AE on PI. The following two hypotheses (H₈ and H₉) tested the mediating role of ATB and ATA on AE-PI relationship

H₈: ATB mediates the relationship between AE and PI

H₉: ATA mediates the relationship between AE and PI

Method

Sample selection

A sample size of 280 respondents consists of the users of brands 'Clear Anti-Dandruff Shampoo' and 'Head and Shoulders'. They were chosen using non-probability quota sampling technique. The advertisements shown have similarity with reference to visual appeal of advertisements, the story line, and the aesthetics. Survey was conducted on customers of these two shampoo brands. Print advertisements (one advertisement of each shampoo) endorsed by famous Bollywood actors/actresses were selected as sample advertisements. The respondents were invited to assemble in a hall in two groups of 140 respondents and 'Clear Ante-Dandruff Shampoo' ad was shown to the first batch of respondents and 'Head and Shoulders' ad was shown to the second batch of respondents. The respondents were asked to fill in the questionnaires on IC, AE, ATA, ATB, and PI. The groups were invited after a gap of seven days again and this time the ads were swapped for the groups, i.e., the first batch was shown the 'Head and Shoulders' ad and the second group was shown the 'Clear Ante-Dandruff Shampoo' advertisement.

Survey method and tools used for analysis

Following Palmatier (2016), we devoted extra efforts to ensure that the data and method are robust enough. Accordingly, the data were collected through a standardized questionnaire having twelve statements on IC, designed by Sirgy et al. (1997). Additionally, we developed four closed-ended questionnaires based on standardized questionnaires as indicated in front of each variable to evaluate AE (self-designed, 4 statements), ATA (Holbrook & Batra, 1987; Goldsmith et al., 1999 and 2002 – 4 statements), ATB (Holbrook and Batra, 1987 – 6 statements), and PI (Goldsmith et al., 1999 and 2002, 3 statements). A seven-point Likert scale was used for data collection. Questionnaire standardizing tools such as reliability and principle component factor analysis were applied using software PASW Version 18. Principle Component Analysis was applied to differentiate data from the confirmatory factor analysis. Confirmatory Factor Analysis (CFA) was carried out on total sample size of 280 respondents to confirm the factors that emerged through exploratory factor analysis (EFA). Direct causal relationships between independent variables, IC, AE, and dependent variable PI were evaluated along with and without mediating variables, ATA and ATB, using SEM in AMOS 18.

Results

Total 280 questionnaires were distributed in the initial stage. After collecting data, the respondents were divided on the basis of 2×2 factorial design based upon gender and brand.

Since the respondents were assembled in a hall for data collection; questionnaires filled in by all the 280 respondents were collected using paper and pencil

Brands/Gender	Males	Females	Total
Clear Anti Dandruff Shampoo	70	70	140
Head and Shoulders Anti Dandruff Shampoo	70	70	140
Total	140	140	280

survey method. However, 20 filled in questionnaires were found to have missing values on multiple statements and were, therefore removed from further study. Finally, 260 questionnaires with usable responses (yielding a usable response rate of 92.86%) were used for further data analysis. The sample was taken was adequate and was determined using thumb rule based on the number of variables/statements used in the questionnaire multiplied by 5 or 10 for SEM (Nunnally, 1967; Bentler & Chou, 1987; Bollen, 1989), the size should not be smaller than 100 or 200 (Boomsma, 1982, 1985). Sample size requirements for factor analysis are also similar. The questionnaire used to collect data for all the five variables contains 27 statements (12 statements for IC, 4 each for ADA, ADB and AE and 3 statements for PI). Thus, the minimum sample size requirement was 135 or 270. The final sample size used in SEM was 260.

Cronbach's alpha (measure of reliability) was calculated using PASW 18 for all the measures of the study—that is: IC, AE, ATA, ATB, and PI. Summated scales are a combination of interrelated items, therefore, before applying any test it becomes necessary to know whether the questionnaire used in current study would yield similar results every time it is used in future on the same respondents, even if the language is changed (Santos, 1999). Table 1 displays Cronbach's alpha values for all the measures.

Cronbach's alpha coefficient value was higher than 0.7 for all the measures of the study, indicating that the measures used for collecting data on the IC (0.861), AE (0.926), ATA (0.941), ATB (0.750), and PI (0.928), were highly reliable.

The following sub-sections explain and discuss different tests conducted as part of our study.

Exploratory factor analysis (EFA)

Principle Axis Factoring (PAC) method with Kaiser's Criterion was used for factor extraction as PAC is considered better method for factor extraction than Principle Component Analysis (PCA), Field (2000). Oblimin rotation method was applied on the data collected using IC, AE, ATA, ATB, and PI measures. Tabachnick and

Table 1. Reliability test results.

S No.	Factor name	Cronbach alpha	No. of items
1	Image Congruence	0.861	12
2	Ad Effectiveness	0.926	4
3	Ad Attitude	0.941	4
4	Brand Attitude	0.750	4
5	Purchase Intention	0.928	3

Table 2. KMO and Bartlett's test results.

S No.	Factor name	Kaiser–Meyer–Olkin measure of sampling adequacy	Bartlett's test of sphericity	Sig
1	Image Congruence	.842	666.001	.000
2	Ad Effectiveness	.805	474.119	.000
3	Ad Attitude	.838	558.717	.000
4	Brand Attitude	.711	140.076	.000
5	Purchase Intention	.765	350.941	.000

Fiddell (2007, p. 646) and Brown (2009b) argued that oblimin method should be selected as rotation method for EFA initially and should be changed to one of the orthogonal methods only if the factor correlations are smaller than 0.32 or simpler factor structure is not identified (Kline, 2002, p. 66). The factor correlations between F1–F2, F1–F13, and F2–F3 were .359, .679, .410, respectively, therefore oblimin was the correct method of rotation. The EFA converged on single factors for the four measures, AE, ATA, ATB, and purchases intention, whereas for IC, EFA converged on three factors which were further confirmed using CFA through AMOS software.

The sampling adequacy test Kaiser–Meyer–Olkin (KMO), as well as the test for sphericity that is Bartlett's test of sphericity, were both applied on all the measures using PASW. The results are given in Table 2.

The KMO measure of sampling adequacy index was used to identify whether the data was suitable for EFA. A calculated value of KMO between 0.5 and 1.0 is an indicator of suitability of the data for EFA. The KMO measure of sampling adequacy values were 0.842 for IC, 0.805 for AE, 0.838 for ATA, 0.711 for ATB, and 0.765 for PI measures, indicating normal distribution in the data, and appropriate size of the sample for EFA test.

Similarly, the Chi-Square value of Bartlett's test of Sphericity compares an inter-item correlation matrix with an identity matrix. Chi-Square values for all the variables were found to be significant for all the variables of the study: IC ($\chi^2 = 666.001$, $p < .001$), AE ($\chi^2 = 474.119$, $p < .001$), ATA ($\chi^2 = 558.717$, $p < .001$), ATB ($\chi^2 = 140.076$, $p < .001$) and PI ($\chi^2 = 350.941$, $p < .001$). These results indicate that the inter-item correlation matrices for all these measures were not identity matrices and hence the data collected using these measures were suitable for EFA.

Confirmatory factor analysis (CFA) of image congruence (IC)

CFA of Image Congruence (IC) was carried out as part of the analysis. The conceptual model, as shown in Figure 1, was tested using the following measures/tests.

Goodness of fit indices

The global goodness of fit index (GFI), Chi-Square/df (Cmin/df), for the model is 1.632 indicating that the conceptual model has a good fit with the data. In addition to the Chi-Square GFI, three sets of goodness of fit indices, and two absolute fit indices (RMSEA and RMR) also need to be evaluated. All goodness of fit indices

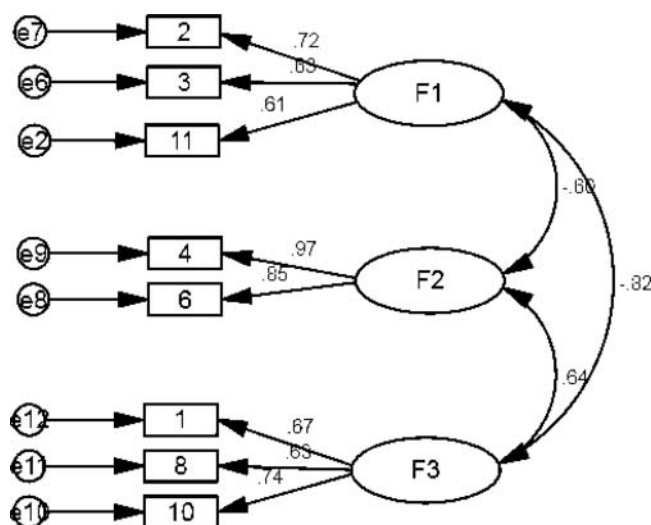


Figure 1. Final CFA model of Image Congruence (IC).

were above 0.9, indicating further that the model fits well with the data. The absolute fit index, Root Mean Squared Error Approximation (RMSEA), should be lower than 0.08. Table 3 indicates that the RMSEA value is 0.065, showing that the model is a good fit.

Convergent validity

There are three sets of indicators for evaluating convergent validity of the model. They are factor loadings, average variance extracted (AVE), and construct reliability. The results of the convergent validity test are reported in Table 4. From CFA, it is evident that the factor loadings of all observed variables were between 0.614 and 0.972, all above the recommended value of 0.5 (Hair et al., 2006; Byrne, 2010), thus confirming its construct validity. The AVEs for the three factors of IC were 0.497, 0.629 and 0.480, which are slightly less than the recommended value (two of the three factors having AVEs lower than 0.5). The construct reliabilities for the three factors were 0.825, 0.831 and 0.649, all three of them being close to or above the recommended value of 0.7. Thus, all the three criteria indicate high convergent validity for the IC measure.

Table 3. Model fitting indices.

	χ^2	df	p-value	χ^2/df	GFI	RMSEA	NFI	CFI	AGFI
Criterion	—	—	—	$1 < \chi^2/\text{df} < 2$	≥ 0.90	< 0.05	≥ 0.90	≥ 0.90	≥ 0.90
Obtained values	27.747	17	0.048	1.632	0.958	0.065	0.942	0.976	0.911
χ^2	Chi-square								
GFI	Goodness of Fit Index								
NFI	Normated Fit Index								
AGFI	Adjusted Goodness of Fit Index								

df. - degrees of freedom
RMSEA- Root Mean Square Error Approx.
CFI - Comparative Fit Index

Table 4. Convergent validity.

				Factor loading	Eigen value	AVE	Construct reliability
11	<–	F1	0.614				
3	<–	F1	0.63				
6	<–	F2	0.847		1.491305	0.497101667	0.824916033
4	<–	F2	0.972				
10	<–	F3	0.743				
8	<–	F3	0.625		1.887458	0.629152667	0.831129627
1	<–	F3	0.665				
2	<–	F1	0.72		0.960625	0.4803125	0.648574858

Discriminant validity

If the value of AVE is higher than the square of the inter-construct correlation, discriminant validity is achieved. The results are given in Table 5. The squares of inter-construct correlation values were lower than the AVEs for all the factors. Therefore, discriminant validity was established for the IC construct.

Structural equation modeling (SEM)

We conducted SEM analysis and the results are reported in Table 6.

The initial results indicated poor fit of the SEM model to data. Investigation of modification indices revealed very high values of MI for error term connected to –ATB (e8 & e9), ATA (e11) and PI (e15). Co-variances were drawn between IC, AE, Gender and Brand to improve the goodness of fit of the model. The model in Figure 2(a) indicated that gender and brand does not confound the relationship between the exogenous variables IC, AE and endogenous variables ATA, ATB and PI. Therefore the final model did not include gender and brand as control variables. The final model Figure 2(b) after all the improvement efforts indicated good fit to data.

Chi-Square value divided by degree of freedom (CMIN/DF = 1.316) indicates a good fit of the model to data.

Other goodness of fit statistics also support the overall goodness of fit. As can be seen in Table 6, the estimated value of GFI was 0.921; higher than the required value, and AGFI (Adjusted Goodness of Fit Index) was 0.878, which is very close to the desired value of 0.9 for good fit. The next set of goodness of fit statistics relate to improvement and, as indicated by the table, TLI (Tucker-Lewis), NFI (Normed Fit Index) and CFI (Comparative Fit Index) are above 0.9 indicating

Table 5. Discriminant validity.

	F1	F2	F3
F1	0.4971		
F2	0.3588	0.6292	
F3	0.364	0.4096	0.4803125

Table 6. Structural equation modeling.

	χ^2	df.	p-value	$\chi^2/df.$	GFI	RMSEA	NFI	CFI	AGFI
Criterion	—	—		$1 < \chi^2/df. < 2$	≥ 0.90	< 0.05	≥ 0.90	≥ 0.90	≥ 0.90
Obtained values	114.729	86	.021	1.334	0.913	0.047	0.933	0.982	0.862
χ^2	Chi-Square				df. - Degrees of Freedom				
GFI	Goodness of Fit Index				RMSEA - Root Mean Square Error Approx.				
NFI	Normated Fit Index				CFI - Comparative Fit Index				
AGFI	Adjusted Goodness of Fit Index								

Table 7. Regression weights.

Regression Weights: (Group number 1 - Default model) (See Table 7)						
			Estimate	S.E.	C.R.	p
BrAttitu	<-	ImCong	-.367	.080	-4.605	***
AdAttitu	<-	ImCong	.217	.094	2.308	.021
BrAttitu	<-	AdEffec	.127	.050	2.532	.011
AdAttitu	<-	AdEffec	.693	.097	7.111	***
PurIntent	<-	ImCong	-.296	.597	-.496	.620
PurIntent	<-	AdEffec	.779	.216	3.605	***
PurIntent	<-	AdAttitu	.173	.045	3.838	***
PurIntent	<-	BrAttitu	-.693	1.589	-.436	.663

good fit of the model. Values of TLI, NFI and CFI should be greater than 0.9 for the model to have good fit to the data (Byrne, 1994).

The value of badness of fit index RMSEA should be smaller than 0.08 (Browne & Cudeck, 1993) and ideally smaller than 0.05 (Stieger, 1990) for the model to fit the data adequately. The table above shows the value of RMSEA was 0.046 indicating good fit of model to the data.

Regression weights: (Group number 1 – Default model)

We report the results of the hypotheses H1a and H1b in this section.

H_{1a}: Image Congruence (IC) has positive relationship with Attitude towards Brand (ATB)

H_{1b}: Image Congruence (IC) has positive relationship with Attitude towards Advertisement (ATA)

The standardized regression weight between IC as an independent variable and ATB as a dependent variable is -0.827 with p -value of .000 percent. It supports hypothesis H_{1a}. Thus, IC has a negative significant effect on ATB. The standardized regression weight between IC as an independent variable and ATA as a dependent variable is 0.205, with a p -value of 0.021. It provides support to hypothesis H_{1b}. Thus, the cause and effect relationship between IC and ATA is positive and significant. Therefore, IC and ATA move in same direction and the causal effect of IC on ATA is significant.

H_{2a}: Advertising Effectiveness (AE) positively affects Attitude towards Brand (ATB)

H_{2b}: Advertising Effectiveness (AE) positively affects Attitude towards Advertisement

The results of the tests of following hypotheses (H_{2a} and H_{2b}) are given below.

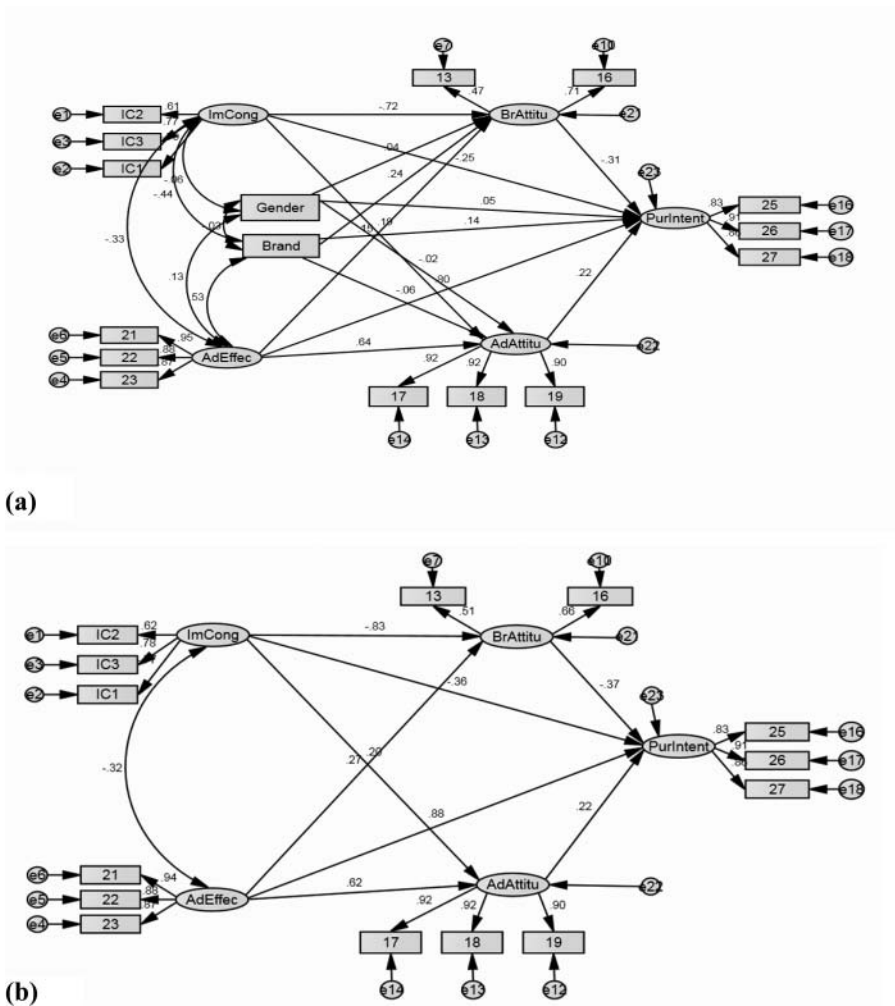


Figure 2. (a) SEM model with control variables Gender and Brand. (b) Final SEM model without control variable Gender and Brand.

AE has a significant positive cause and effect relationship with both, ATB and ATA, having r^2 value of 0.270 and 0.616 with p values 0.011 & 0.000 significant at 5% level of significance. The results provide support to both hypotheses H_{2a} and H_{2b} . This means that the higher the AE is, the higher the positive attitude consumers will form toward its advertisement and brand. Also, an increase in AE by a factor of one will improve ATB and ATA by a factor of 0.270 and 0.616, respectively.

Now, we turn to the results of next hypothesis (H_{3a} and H_{3b}) testing. The model indicates a positive cause and effect relationship between ATA as independent variable and PI as a dependent variable, with R^2 value of 0.221, with p value .000 significant at 5% level of significance providing support to the hypothesis H_{03a} . This means that the more positive attitudes consumers form towards an

advertisement (ATA), the higher their PI will be towards that brand, and an increase in ATA by 1%, will improve PI by a factor of 0.0.221.

Next we evaluated cause and effect relationship between ATB and PI, with R^2 values of -0.369 with p value of $.663$ not significant at 5% level of significance indicating no significant impact of ATB on PI therefore hypothesis H_{3b} was not supported.

Testing Hypothesis 4 and 5

Gender and Brand were considered as control variables that might confound the relationship between the exogenous variables (IC and AE) and the endogenous variables (ATA, ATB, PI) Lindberg (2012). The confounding effect of control variables are tested through Hypotheses H4 and H5.

H_{4a} H_{4b} and H_{4c} were not supported as the standardized regression values between Gender and endogenous variables ATA, ATB and PI were $-.018$, $.042$ and $.048$ with respective p -values $.809$, $.620$ and $.359$ not significant at 5% level of significance. The results indicate that Gender does not confound the relationship of IC and AE on ATA, ATB and PI.

H_{5a} H_{5b} and H_{5c} were not supported as the standardized regression values between Gender and endogenous variables ATA, ATB and PI were $.239$, $-.059$ and $.141$ with respective p -values $.520$, $.058$ and $.267$ not significant at 5% level of significance. The results indicate that Brand does not confound the relationship between IC and AE on ATA, ATB and PI.

Since category variables, gender and brand did not confound the relationship between the exogenous variables and the endogenous variables of the model, they were dropped from the final model.

Testing Mediation and Mediating Effect of ATB (Testing of Hypotheses H_6 and H_7).

The mediating effect of ATB on IC - PI relationship and AE-PI relationship was evaluated one by one by removing the causal line for the independent variable for which the mediating effect was not being evaluated (Table 8). The direct effect of IC and PI with ATB mediation was -0.917 significant at 0.000 level of significance. The direct effect between IC and PI without mediation was evaluated by removing the causal link between IC and ATB and was -0.318 significant at 0.002 level of

Table 8. Test of Mediation.

Brand attitude as mediator			
Relationship	Direct with mediation	Direct without mediation	Interpretation
IC - PI	-0.917 (0.000)	-0.318 (0.002)	No mediation
AE - PI	0.949 (0.000)	0.921 (0.000)	No mediation
Ad attitude as mediator			
IC - PI	-0.309 (0.000)	-0.318 (0.002)	No mediation
AE - PI	0.807 (0.000)	0.921 (0.000)	No mediation

significance. The relationship did not change in sign or magnitude and the level of significance remained smaller than .05 therefore hypothesis H_6 is not supported; no mediation of IC-PI by ATB (Baron-Kenny, 1986). Similarly the mediation of AE-PI relationship by ATB was evaluated by removing the regression line between IC and ATB. The direct effect of AE and PI with mediation by ATB was 0.949 significant at 0.000 level of significance. The direct effect between AE and PI without mediation was evaluated by removing the causal link between AE and ATB was 0.921 significant at 0.000 level of significance. Since the relationship did not change in sign and insignificant to significant or vice-a versa, the results do not provide support to hypothesis H_7 indicating that there was no mediation effect of ATB on AE-PI relationship (Baron-Kenny, 1986).

The direct effect of IC and PI with ATA mediation was 0.356 significant at 0.000 level of significance. The direct effect between IC and PI without mediation was evaluated by removing the causal link between IC and ATA and was -0.318 significant at 0.002 level of significance. The results do not provide support to hypothesis H_8 indicating that ATA does not mediate the IC-PI relationship. Similarly the mediation of AE-PI relationship by ATA was evaluated by removing the regression line between IC and ATA. The direct effect of AE and PI with mediation by ATA was 0.807 (significant at 0.000 level of significance). The direct effect between AE and PI without mediation by ATA was evaluated by removing the causal link between AE and ATA was 0.921 significant at 0.000 level of significance. Since the relationship did not change in sign and insignificant to significant or vice-a versa, hypothesis H_9 is not supported indicating that there was no mediation effect of ATA on AE-PI relationship.

Discussion

The factor analysis generated three factors for image congruency, which were confirmed through CFA test in AMOS 18. In all the other cases factor analysis converged on one factor only. SEM results indicated that IC has a significant positive effect on ATA. The model further indicates that AE significantly affects both ATB and ATA. ATB does not have a significant effect on PI whereas ATA significantly affect PI. The results indicated gender and brand do not confound the relationship between exogenous variables IC and AE with endogenous variables ATA, ATB and PI.

The results indicated significant effect of IC on ATA and significant negative effect of IC on ATB, whereas earlier researchers (Bejaoui et al., 2012; Korchia & Fleck, 2006; Tseng & Lee, 2013; Atay, 2011) indicated that celebrities help in generating a positive ATA as well as ATB. It is generally thought that shampoo products enhance beauty and can therefore be endorsed by popular celebrities. However, the current study was on anti-dandruff shampoo brands that were endorsed by well known Bollywood celebrities and people don't expect well-known celebrities to have such dandruff problems. Therefore, it can be said that there was a

mismatch between the celebrity image and the product image being endorsed in the print advertisement used for the purpose of our study.

The model further indicated that AE significantly affects both ATB and ATA (Nikhashemi et al., 2013). The respondents liked the overall appearances of the advertisements and therefore generated a positive ATA and ATB. Finally, the results indicated that ATA significantly affect PI, similar to the results of previous studies (Wahid & Ahmed, 2011; Niazi et al., 2010; Ranjbarian et al., 2011; Bhakar et al., 2015). Therefore, the results of the study indicate that a positive ATA would lead to an increased PI.

Gender and Brand were considered as control variables that might confound the relationship between the exogenous variables (IC and AE) and the endogenous variables (ATA, ATB, PI) Lindberg (2012). The confounding effect of control variables was also tested in SEM. The results indicated that gender and brand both does not act as control variables in the relationship between endogenous and exogenous variables.

We found that the advertisements of anti-dandruff shampoos with celebrities bring negative thoughts to the minds of the viewers, thus, creating a negative ATB. Also, anti-dandruff shampoos are considered more medicinal than general consumption products, leading to an significant negative relationship of celebrity-brand IC on ATB. The noteworthy results of the study are that celebrity and brand IC significantly affect ATA, AE could lead to ethical and positive ATA as well as ATB, leading to PI. Our findings corroborate with the results of Bergkvist et al. (2015). Besides, the findings of the present study are also in tune with the propositions and results of other researchers (Kirmani & Shiv, 1998; Rossitter & Smidth, 2012; Ilicic & Webster, 2013).

Limitations and directions for future research

There are some limitations to the study. The study was conducted with non-probability sampling technique on a single geographic region and also, the sample size was 260, which is relatively small, although we have established validity of our study using Hoelter tests, etc. Due to this, the results in the study could not be generalized to a larger population. Therefore, we suggest conducting this study with probability-sampling techniques in the future. Also, a probability-sampling technique would improve the internal as well as external validity of the study. However, the questionnaires on image congruency, AE, ATA, ATB, and PI, were standardized using Cronbach's Alpha reliability test and principle component factor analysis, and the scale was found to be reliable. However, composite reliability is below than required threshold since established scales are used in the study.

The data was collected using a lab experiment technique that consisted of showing two print ads of shampoo products to the respondents. As mentioned earlier, data was collected using print ads of two anti-dandruff shampoo brands that were endorsed by popular Bollywood celebrities. Generally, customers do not see

advertisements like this; there's always a clutter of advertisements, which may affect the customers' responses toward the advertisements. Therefore, it is recommended to carry out further research by collecting data in a real-time scenario using a field experiment. Besides, it is considered that television advertisements are more effective than print advertisement. Consequently, it's suggested that the researchers can carry out future research studies by using television advertisements. Also, the researchers could use an advertisement medium as a categorical variable and collect data on all the different mediums of communication, such as digital advertisements, radio, television, viral videos, print, online advertisements, banner etc. For this reason, it is recommended that researchers also study advertisements with lesser-known celebrities, as well as celebrities from different sectors such as sports, models, writers, etc.

The research was conducted on IC of celebrity, with the product and its impact on PI, whereas literature indicates that celebrities' attractiveness, expertise, trustworthiness etc., are also important factors in generating purchase intentions. Therefore, it is suggested that researchers can include these variables in future studies. A questionnaire on AE evaluated the overall effectiveness of the advertisements, while different researchers have different viewpoints about effectiveness of advertisement. For example, an advertisement may be effective if its story line is clear, if it includes celebrity attractiveness, or if the layout is effective. Therefore, an AE questionnaire could have different elements on which overall effectiveness of the advertisement may be evaluated. Also, in future studies, researchers could study IC as part of AE.

AE could generate positive ATA as well as positive ATB, which would lead to higher PI. However, we find that a mismatch between the celebrity endorser and product being advertised leads to no change in either the ATA or ATB. Researchers can extend this further on different brands that have congruence and mismatch between the celebrity and the product. Researchers can also examine the ethical dimensions of celebrity endorsements in detail in the future studies. They can include questions related to ethical or unethical elements in their survey. Our study is based on the assumption that celebrity endorsement creates biased influence in the mind of potential consumers and thus, it needs to be subject to ethical dimensions. Besides, we seek to create avenues for further research to test our hypothesis in different developing countries. It's also possible to carry out comparative studies in developing as well as developed country context.

Conclusion

The main objective of the study was to evaluate the causal effect of antecedents to PI. The literature review indicated that celebrity-brand IC, and AE, along with ATA, and ATB, act as antecedents to PI. We tested a conceptual model consisting of IC and AE as independent variables, PI as the dependent variable, and ATA and ATB as mediating variables. The results of the study indicated that AE can generate

positive ATA, as well as ATB and IC can generate positive ATA. The results of the study also indicated that a positive ATA lead to improved PI toward the advertised brand Attitude towards brand (ATB) does not contribute positively to purchase intention. The results are significantly different in terms of Image Congruence (IC) effect on purchase intention (IC) as IC has not been found to contribute significantly to purchase intention (PI). Therefore, we conclude that spending huge resources on endorsers for IC does not necessarily provide the desired benefits by improving purchase intention in a typical developing country like India. Based on our findings, we expect this study would lead to an academic debate on the influence of celebrity image congruence on brand attitude, purchase intention etc. in different countries. Firms engaged in global marketing would also find these insights useful for their decision-making.

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