

Study on effectiveness of celebrity endorsements in print & social media advertisements on the buying behaviour of consumers

Estudio sobre la efectividad de la utilización de celebridades en anuncios impresos y medios sociales sobre el comportamiento de compra de los consumidores

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Received: 06/10/2017 • Approved: 28/10/2017

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ABSTRACT:

The present study investigates the effectiveness of celebrity endorsements in print & social media advertisements (Twitter, Instagram & Facebook) on buying behaviour of consumer. For the study purpose, consumer participants (Students who are using social media mostly) were divided into two groups. One section was exposed to celebrity endorsements in print advertisements and the other is to social media advertisements. Participants were exposed to 5 advertisements, one of which contained a celebrity brand endorsement, then they are asked to respond 11 credibility belief statements & were tested on their memorability of the celebrity endorsed advertisements. For all collective social media advertisements all the variables strictly significant, which means, social media advertisement appears to be more important when compared to print ads. Interestingly, though consumers do trust social media advertisements more but they might not rely on celebrities in ads. This appears to be

RESUMEN:

El presente estudio investiga la efectividad de los endosos de celebridades en las publicidades de medios impresos y sociales (Twitter, Instagram & Facebook) sobre el comportamiento de compra de los consumidores. Para el propósito del estudio, los participantes del consumidor (estudiantes que utilizan medios sociales sobre todo) fueron divididos en dos grupos. Una sección fue expuesta a los endosos de la celebridad en anuncios de la impresión y la otra está a los anuncios de los medios sociales. Los participantes fueron expuestos a 5 anuncios, uno de los cuales contenía un endoso de marca de celebridades, entonces se les pide que respondan 11 declaraciones de creencia de credibilidad y fueron probados en su memorability de los anuncios de celebridades endosadas. Para todos los anuncios colectivos de medios sociales todas las variables son estrictamente significativas, lo que significa que la publicidad en los medios sociales parece ser más importante en comparación con los anuncios

rather more interesting finding in the study. Finally, the study could find very good evidence in support of the study model which proposes certain cause-and-effect relationships in between buying behavior, effectiveness of print and social media ads.

Keywords: Celebrity endorsements, social media ads, Credibility of celebrity endorsements, Memorability of celebrity endorsements

impresos. Curiosamente, aunque los consumidores confían más en los anuncios de medios sociales, pero es posible que no se basan en celebridades en los anuncios. Esto parece ser un hallazgo bastante más interesante en el estudio. Finalmente, el estudio podría encontrar pruebas muy buenas en apoyo del modelo de estudio que propone ciertas relaciones de causa y efecto entre el comportamiento de compra, la efectividad de los anuncios impresos y los medios sociales

Palabras clave: Endosos de la celebridad, anuncios de los medios sociales, credibilidad de los endosos de la celebridad, memorability de endosos de la celebridad.

1. Introduction

Celebrities appear in advertisements to promote a variety of different things, including perfume, fast food, vehicles, clothing, and charities. There are many advantages that come with enlisting celebrities as advertisers. For example, when consumers see their favorite actress/actor, musician, or athlete endorsing a particular product they may be influenced to purchase that product. Celebrity endorsements were mostly seen in print media as well as television commercials (multi media). However, in recent years, the inception of social media as a popular source of daily media consumption has provided another venue for celebrities to endorse different items on an even more personal level. Now consumers follow celebrities over Twitter, Facebook & Instagram. Many users "follow" these celebrity accounts; users are able to view each message posted by the celebrity. The result is that average, every day people are welcomed to the celebrity's thoughts and daily activities; this kind of access may make that person feel a connection to that celebrity. Many celebrities on Twitter or Instagram take advantage of the fact that they can directly reach their fans instantly by simply sending out a tweet or post. Celebrity accounts may post about upcoming movie debuts, athletic events, music concerts, new product endorsements and so forth. And most importantly, celebrities use tweeting as a source for more endorsements with their hashtags. Many celebrities will "re-tweet" or post a small excerpt from a brand or product they endorse over TV, or post a comment themselves about "their" brand directly on Facebook. Fans that follow celebrity accounts can then circulate that post which lets all their followers see the celebrity's message as well, even if they do not follow that celebrity themselves over various social media sites. These as many celebrities have thousands and some millions of followers, companies looking for celebrity endorsers should make note of the advantages of using Twitter, Instagram & Facebook to promote their brands. Because the medium allows all of the celebrity's followers to instantly receive a post related to an endorsement and for those followers to have the ability to then share that news with their own followers, celebrity social media endorsements have the possibility to be more effective than in past media. Celebrity endorsements have been effective in print and television media as they help consumers recall and recognize the brand and generate a greater likelihood that the consumer will buy the product (Agrawal & Kamakura, 1995). Now, with all the social media available, a celebrity can post about a brand or charity and their fans will see the message immediately. The ability of social media to make fans feel close to these celebrities may ultimately enhance the effectiveness of the endorsement. Celebrity endorsements are used to increase brand awareness and recall (Dhotre & Bhola, 2010). The personal connection fans feel toward the celebrity via social media may have an advantage over the traditional use of celebrity endorsements that were used in print and television. This advantage begs the question of whether or not celebrity endorsements are more or less effective in social media, and how they might affect consumer purchase behavior.

2. Review of literature

Celebrity endorsements are a popular form of advertising used to entice consumers to

remember and potentially purchase a particular brand. A celebrity endorser is "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement" (McCracken, 1989, p. 310). Celebrities are used in a variety of ways and across media to sell products. Celebrity endorsements have been used for many years in traditional media; however, advancements in new media have opened new doors for this type of marketing strategy. Social media has become a new platform where celebrities endorse themselves, brands, and charities. Sites such as Twitter, Instagram & Facebook collectively allow celebrities to reach their fans instantaneously. For this reason, differences may be present in how audiences view the credibility of a celebrity-endorsed ad between a traditional print ad and an ad presented by a celebrity on social media.

Many studies have been conducted on the subject of celebrity-endorsements presented via print advertisements, typically those appearing in magazines and newspapers. Much of the research surrounds the audience's attitudes and perceptions of the ads. Researchers have suggested that general attitudes to advertising need to be studied since these attitudes should have an impact on how consumers respond to advertising (Mehta, 2000). Attitude toward advertisements has a direct impact on the attitude towards the brand. Advertisers try to create positive attitudes by evoking a favorable or positive emotional state in the consumer. An emotional appeal increases the advertisement's ability to draw attention, and enhances the attractiveness of the product. Along with attitude, the consumer's level of involvement with the product, as well as the familiarity with the brand, has a positive effect on remembering an advertisement (Mai & Schoeller, 2009). According to Schmitt and Tavassoli (1993), there are three ad components that are interrelated and jointly contribute to an ad's memorability: the brand name, the copy, and the picture (p. 55). These three components influence consumer attitude towards the advertisement. Whether consumers remember a brand name, a brand image, or a benefit conveyed in an ad depends on several factors, including attitude, which marketers need to consider in developing their marketing and communication strategies (Schmitt & Tavassoli, 1993).

A study done by Mehta (2000) showed that one of the factors that influences how much attention will be paid to an advertisement, whether it will be remembered, and to what extent the customers will be persuaded by it, is the person's attitude toward the advertising in general (p. 71). Overall, a consumer will decide how much time to spend on one specific advertisement and may simply choose to turn the page. In print advertising, the consumer decides the pace and amount of time spent looking at one particular ad. During the time the consumer is reading the ad there are a number of factors that affect that consumer's attitude towards it. Some of those attitudes include liking to look at advertising, the perception regarding advertising being more manipulative than informational, models and their celebrity status (likability), and credibility of the product endorsers (Mehta, 2000; Petty, Cacioppo & Schumann, 1983). The amount of attention paid to a specific magazine ad, measured by the recall of the brand the day after exposure, is influenced by how much they like to look at advertising, believe advertising helps them stay informed about developments in the marketplace, and see it as not being manipulative. After brand recall, consumers measure their buying interest on a number of factors that include liking to look at the ad, the value advertising has for the brand being advertised, and how informative or truthful the advertising was perceived (Mehta, 2000). Mehta's (2000) study showed that respondents with more favorable attitudes toward advertising recalled a higher number of advertisements the day after exposure and were more persuaded by them (p. 67).

One particular trend was present in Mehta's (2000) study of attitudes toward advertising: Most respondents were more likely to favor the ad, recall the ad/brand, and have a high intention of buying the brand/product if they liked the look of the advertisement (p. 70-71). This factor is important in the study of celebrity endorsements. Advertisers generally use celebrities to attract consumers and increase brand recall. Thus, the study of attractiveness in celebrity-endorsed advertising is important. Wei and Lu (2012) say that advertisers often employ

celebrities to endorse a product in order to enhance audience attractiveness, add glamour and desirability to the product, and make the advertisement more memorable and credible (p. 193). Advertisers assume that using a celebrity to endorse a brand results in increased consumer recall of the brand. Millions of dollars are spent annually on celebrity endorsement contracts with the hope that the celebrity's image plays an important role in persuasive communication (Tripp, Jensen, & Carlson, 1994). A model with an appropriate image becomes identified with the product he or she uses and transfers the glamour to the product (Marshall, Na, State, & Deuskar, 2008). Advertisers believe that using a celebrity endorser fosters a match or connection between the celebrity endorser and the brand. Generally, the success of the endorsement depends on the strength of the match between the celebrity and the brand. The strength of the match depends on four factors: (1) trustworthiness or credibility of the celebrity, (2) likeability of the celebrity, (3) similarity between the celebrity and the target audience, and (4) expertise of the celebrity in the subject matter of the product

(Feinman, 2011). An advertiser's primary goals are to persuade their audience and to induce an attitude change toward their offerings (Walley, 1987). This can be done in a variety of ways; one being using a celebrity spokesperson. The question is does the attractiveness of that spokesperson make a difference? A number of studies have found that attractive, as opposed to unattractive, communicators are consistently liked more and have a positive impact on products with which they are associated. This increases the communicator's attractiveness and enhances positive attitude change (Joseph, 1982; Simon, Berkowitz, & Moyer, 1970; Kahle & Homer, 1985). Advertisers have long recognized the value of using physically attractive models and actors in advertising. Advertisers believe that consumers will consider physically attractive celebrities to be more credible. A reason for this could be that attractive sources are perceived to have a focus on control, are not easily influenced or manipulated by others, and they are independent thinkers, which would mean there would be no greater source of credibility (Joseph, 1982). Studies show that consumers will be more favorable to ads, as well as the product being advertised, when attractive spokespeople (celebrities) are used in the ad (Baker & Churchill Jr., 1977; Smith & Engel, 1968). No doubt some advertisers believe that using celebrities is worth the money and that audiences will respond positively to the advertisements featuring celebrities. What advertisers need to be careful of is the image and character of the celebrity to ensure both match the product and the ad's target audience. If the celebrity receives bad publicity after the advertisement is released, the product can suffer bad publicity as well. The selection of a celebrity is crucial, difficult, and risky for the advertiser (Pornpitakpan, 2008). Ohanian (1991) found that of the three credibility dimensions, only celebrities' perceived expertise with respect to the product was significantly related to purchase intention (p. 48). Pornpitakpan's (2008) survey found that expertise, attractiveness, and trustworthiness were positively related to purchase intention (p. 68). Likeableness is the most important characteristic of a celebrity endorser in determining the success of a testimonial advertisement (Freidman, Santeramo, & Traina, 1978).

Research on the topic of celebrity endorsements rests on two general models: source credibility model and source attractiveness model. Source credibility model is a term used to imply a communicator's positive characteristics that affect the receiver's acceptance of a message. Source attractiveness model argues that the effectiveness of a message depends on the source's "familiarity," "likability," "similarity," and "attractiveness" to the respondent (Ohanian, 1990). These two models help to understand how individuals measure and perceive spokespeople such as celebrity endorsers. Endorsers who are perceived to be knowledgeable, reliable, and attractive are considered credible, and, in turn, induce consumers' positive attitudinal and behavioral responses to the brand and the product (Ohanian, 1991). For the consumer to find the ad credible they would have to assume that the spokesperson is an "expert." Expertise can be described as "the extent to which a communicator is perceived to be a source of valid assertions." For the receiver of the message to be able to believe the spokesperson is an expert, they must be able to "trust" that spokesperson. Trust can be described as the degree of confidence in the communicator's intent to communicate the

assertions he considers most valid (Hovland, Janis, & Kelley, 1953). Expertness and trust of the communicator's (celebrity's) message are important constructs in persuasion and attitude-change research. Research that has investigated expertise in persuasive communication has found that generally the source's perceived expertise has a positive impact on attitude change (Horai, Nacari, & Fatoullah, 1974; Maddux & Rogers, 1980; Mills & Harvey, 1972; Ross, 1973). An experiment of expertise found that subjects exposed to an expert source exhibited more agreement with the advocated position than did those exposed to a low-expertise source (Crano, 1970). Other studies of source credibility and source-attractiveness have found evidence to support the idea that credible sources are more persuasive than are sources of low-credibility (Ohanian, 1990). All this research has shown that those spokespeople perceived to be credible would have the potential to improve brand recall and possible memorability of advertisements. Beyond the initial purchase, companies also try to build lasting relationships with their customers that will result in a steady stream of revenue. Repeat purchase is central to the marketing concept and supports the practice of celebrity endorsement (Marshall et al., 2008). Advertisers assume that using a celebrity to endorse a brand results in an increase in consumer recall of the brand (Costanzo & Goodnight, 2006). Given the high costs associated with using celebrity endorsements, marketers have relied on rating systems to evaluate the potential value added of celebrity endorsers (Costanzo & Goodnight, 2006). There is a high financial commitment to secure big name endorsers. Pepsi paid Shaquille O'Neal \$25 million to endorse the popular soda product; Tiger Woods received \$40 million to support Nike's youth marketing campaign. Consumer perceptions of the celebrity and the endorsed products can be affected if negative information is spread about the celebrity. Brands, including Hertz, Kodak, Pepsi, Toyota, and Nike, have been badly affected by negative publicity from celebrities' misdeeds (Seitz, Razzouk, & Eamsobhan, 2007). Costanzo and Goodnight's (2008) survey also found that celebrity endorsed advertisements in magazines did not result in higher brand recall (p. 55). Another study done in 1994 found that a magazine advertisement did not affect attitude toward the ad, attitude toward the brand, or purchase intention. These ads also did not affect the celebrity's trustworthiness, expertise, or likability (Tripp et al., 1994). These results demonstrate the limits of print advertising and a possible open door for advancements in advertising. Advertisers now attempt to connect with consumers through social media, reality television, and other non-traditional forms of advertising. Americans receive more than 3,000 commercial images every day. A person's subconscious can record approximately 150 images, and only about 30 will reach the person's conscious mind; advertisers are willing to go to extremes to find ways to cut through the clutter. Advertisers look for new, non-traditional ways to combine the credibility of word-of-mouth recommendations with the celebrity recognition. Social networks, a very old and pervasive mechanism for mediating interactions among people, have become prevalent in the age of the web. Social media sites allow people to follow the lives of others. The number of people on social networks has grown exponentially since the turn of the century (Huberman, Romero, & Wu, 2008). Commercial enterprises have begun to see the marketing advantages of social media platforms, as they provide a ready-made medium for propagating recommendations through people with similar interests (Leskovec, Adamic, & Huberman, 2007). The brand found that the method created a meaningful association between their food product, the celebrity, and the Super Bowl (Feinman, 2011).

There are more than 200 million people using social networks such as Facebook, MySpace and Bebo but it's becoming increasingly apparent that social networks as an advertising platform are not useful. According to [eMarketer](#), ad spending in the U.S. on social networks will be \$1.17-billion this year, and only grow to \$1.64-billion by 2013. In India also social media needs to go a long way in order to become an effective advertising vehicle.

The reason for social networks failed as advertising vehicles is probably due to the way people are using social networks. Mostly multi-tasking, multi-dimensional, fast moving demographic uses the social networking sites like Orkut, Facebook, MySpace, etc. as an entertainment/communications tool and this audience pays little or no attention to advertising even if it's innovative or viral.

Perhaps social network users are online so much and exposed to so much advertising that when they use social Networking, the last thing they want to do is engage with advertising. All they really want to do is use the service and communicate with friends. There are a number of factors affecting advertising effectiveness. One important factor among these besides Media there are a number of other factors as well that affect advertising effectiveness and next section of this chapter deals with this only. Basically advertising effectiveness depends upon user's response towards an ad and on their attitude towards advertising. Advertising's effectiveness lies in its capability to help to maintain sales. Advertising obviously depends on both the quality of the product being advertised and the quality of the ad itself. But the third and equally important factor is the medium in which the ad appears. Any consideration of the quality of the medium itself as something that might affect reactions to an ad, if considered at all, is typically based on subjective judgments of alternative, and otherwise comparable, media buys.

3. Objectives & research methodology

3.1. Objectives

There is lot of gap in the existing body of literature. There is abundant of research in this area of knowledge. However, finding a study which verify cause-and-effect relationships in between buying behavior and it dependency on print and social media advertisements is still a lacuna. This study tries to fill this gap by finding the relationships and evaluating them through a model. The model in this study comprised of three constructs (latent variables) namely buying behavior, effectiveness of print ads and effectiveness of social media ads. The effectiveness of ads was measure by gathering data related to consumer predisposition to the same as a matter of their behavior. So, the study seeks to evaluate these influences with the help of or by assuming cause-and-effect relationships in between these study constructs. Given this idea, the study seeks to realize the following objectives.

1. To find that if there exist any relationship between buying behavior of consumers and effectiveness or consumer behavior towards print ads.
2. To find that if there exist any relationship between buying behavior of consumers and effectiveness or consumer behavior towards social media ads.
3. To find and verify if the presence of celebrities is effectives in influencing buying behavior.

The primary aim of this study is to analyze the relationships between shopping behavior of survey respondents who are very active in social media in mainly urban area and its dependability on both print and social media advertisements.

So, there are three study constructs in the study namely shopping behavior, individual response or perception towards print ads and social media ads. The *shopping behavior* is expressed through four variables viz. mode of shopping, frequency of purchase, type of goods purchased and amount of money spent on goods purchased. The second and third constructs viz. respondents' perception towards each of print and social media ads were expressed through eleven variables. Table 1 show the description to study constructs and variables respectively.

Table 1
Study constructs and variables

Construct	Variable	Number
Shopping	mode_of_shopping	4
	frequency_of_purchase	

behavior	type_of_goods_purchased	
	amount_spent_on_goods_purchased	
Print Advertisements	print_advertisements_help_in_recollecting_brands	11
	print_ads_with_celebrities_help_recollect	
	I_dont_buy_thorough_print_advertisements	
	I_am_influenced_by_celebs_with_print_ads	
	belief_in_celebs_in_print_ads	
	celebs_are_not_effective_spokesperson	
	celebs_are_not_trust_worthy_spokespersons	
	belief_in_information_in_print_ads	
	belief_in_print_ads_with_celebs	
	trust_in_print_ads	
	trust_in_print_ads_with_celebs	
Social media Advertisements	Social media_ads_help_recollection	11
	Social media_ads_with_celebs_helps_recollection	
	I_dont_by_prods_from_social media_ads	
	endorsed_by_a_celebs_in_social media_ads_helps_sales	
	belief_in_product_endorsed_in_a_social media_ads	
	dont_believe_celebs_are_credible_spokespersons_for_product	
	celebs_are_not_trustworthy_spokesperson	
	belief_in_info_I_see_in_social media_advertisements	
	belief_in_info_in_celebrity_endorsed_social media_ads	
	I_trust_social media_advertisements	
	I_trust_social media_advertisements_with_celebrities	

3.2. Measurement and data set

The data set has 26 variables out of which four variables for shopping behavior. 11 variables for print advertisements and other 11 variables for SOCIAL MEDIA advertisements. All the variables are ordinal in nature. Likert scale with 5 anchors used for measurement. So the data set is 300 X 25 order data matrix.

3.3. Sampling procedure

To measure differences in credibility and memorability between print and social media, a questionnaire was instructed with a convenience sample from a population of students at a university. The purpose of the experiment was to assess whether there were differences present in self-reported brand name memorability and credibility between print and social media in terms of celebrity endorsements.

The experiment consisted of two groups of consumers in two separate retail stores at Bhubaneswar, chosen by convenience. Both groups were designated titles based on the treatments they were given, one group being the "Print group" and the other the "Social media group." Both groups were administered paper copies of advertisements for brands such as Axis Bank, One Plus, Addidas, HRX and a line of clothing at WROGN by cricketer Virat Kohli. The print group received print advertisements for these brands, while the social media group received print outs of the brands' social media feeds. These advertisements were administered at the beginning of interaction and the consumers were asked to review either the print ads or the social media feeds for five minutes and then hand them back. During the last ten minutes of interaction the consumers were then administered a short survey to compare the credibility of the celebrity-endorsed ads between print and social media and their memorability of the celebrity.

In order to measure each of the variables presented in the research questions through 11 were belief statements where respondents were asked to judge the strength of their beliefs using an agreement scale. The 11 belief statements were presented to measure the differences in brand name credibility between print and social media. Not all of the belief statements pertained specifically to credibility, but to other categories that consumers would use in their judgments of credibility, such as the belief that celebrities are trustworthy spokespeople and if they were likely to purchase a brand endorsed by a celebrity. These questions are to judge how they believe the credibility of the brands & how they recall the celebrity associated with it.

3.4. Hypotheses

The study assumes that there exists certain cause and effect relationships between study constructs such as shopping behavior depends on respondents' perception of print ads and social media ads. This particular observation does give rise to three propositions.

Proposition 1: *the shopping behavior do depend on perception of printing ads*

Proposition 2: *the shopping behavior do depend on perception of social media ads*

Proposition 3: *there might be interdependency between respondents' perception of print ads and social media ads*

A proposition is only an assumption that further gives rise to a set of hypotheses. Since, hypothesis as tentative proposition all above statements esoteric. However, to prove or disprove a hypothesis needs to be translated to be rational to a certain technique in the study. For instance, the very first proposition has two study constructs viz. shopping behavior and perception of print ads. So the study might need a statistical technique might need certain statistical technique like SEM which depends on certain other statistics and related probabilities. For instance, in SEM the fitness of the structure need to be evaluated through chi-square statistic that in turn need to interpreted through respective probability values. In SEM χ^2 is realized based on $(N - 1)(S - C)$ where S is sample covariance matrix and C is implied covariance matrix. The C is realized through following expression (Fugard, A., 2008)

$$C = F \cdot (I - A)^{-1} \cdot S \cdot (I - A)^{-1'} \cdot F'$$

Where A contains symmetric path estimates and S contains sample covariance. F is known as filter matrix used to represents manifest variables. As it was mentioned before, one of the essential statistics in SEM is χ^2 the expression of which is as follows:

$$tr(SC^{-1}) + \log(|C|) - \log(|S|) - n$$

The above expression clearly shows that the χ^2 is the ratio of sample covariance matrix to that of implied covariance matrix. Ideally the value needs to be one. So the null hypothesis for which obviously appears to be $\Sigma_{\text{sample}} = \Sigma_{\text{implied}}$, where Σ is covariance matrix. In other words, the proposed model which is also known as alternative model need to be identical with null model. This leads to a more simple statement that the difference (D) is not significant (H_0).

$$H_0: D=0$$

That is, the model proposed by the study has fitness. Given such observation, the study hypothesis eventually turns to be the relationships in between study constructs i.e. buying behavior, and its dependability over Print Ads and Social media Ads are not only valid but significant. This is, in fact, known as study hypothesis (H_a).

The support for hypotheses for current study arises from literature review. There are few studies that are in support of study assumptions. Though there exist so many studies in this area of knowledge, but there are certain gaps in the existing body of knowledge. For instance, first there isn't common agreement among the existing research is across those studies. Different studies do show different level of evidence in support of respective propositions. Second, there are very few studies which used certain sophisticated techniques like Structural Equation Modeling (SEM), however the realization of facts are dubious and seems to be unrealistic. The third, no study tries to summarize the results as to benefit the body of knowledge either though suggesting strategy or a model. So, give above facts, there needs a study that does address all of the above gaps.

4. Results & its analysis

The study was done using three statistical techniques namely descriptive statistics, MANOVA and Structural Equation Modeling (SEM). The first technique helps in identifying most reasonable group with required characteristics. The second helps in evaluating study hypothesis. The third helps in testing study model. The study proposes three hypotheses in order to assess the impact of print and SOCIAL MEDIA commercials over buying behavior. Subsequently, the study also proposes a model in relation to hypotheses. The following table shows the summary statistics for the sample respondents.

Table 2
Summary statistics of sample respondents

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Variables	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gender	300	1	2	1.433	0.4964	0.27	0.141	-1.94	0.281
Age	300	1	7	3.93	1.9471	0.053	0.141	-1.163	0.281
Education	300	1	5	3.421	1.1649	-0.298	0.141	-0.742	0.281
Marital Status	300	1	2	1.657	0.4756	-0.663	0.141	-1.571	0.281
Residence	300	1	2	1.593	0.492	-0.382	0.141	-1.867	0.281
Occupation	300	1	6	3.825	1.4576	-0.55	0.141	-0.542	0.281
Monthly Income	300	1	5	1.917	0.9003	1.019	0.141	0.936	0.281
Mode of Shopping	300	1	2	1.333	0.4722	0.711	0.141	-1.505	0.281
Freq. of Purchase	300	1	5	2.243	0.9202	0.606	0.141	0.251	0.281
Types of Goods Purchased	300	1	5	2.754	1.3015	0.329	0.141	-0.95	0.281
Avg. Spending on Goods	300	1	5	2.117	1.064	0.909	0.141	0.246	0.281

The above table shows the summary statistics of variables related to purchasing behavior of sample respondents. This particular table helps in identifying groups of respondents with most significant characteristics. The data is ordinal. Very few variables such as gender, marital status, and residence are dichotomous. The mode of the variable for gender appears to be 2 which represent "female". In the same fashion the mode values for other variables are "35 and above" for Age, "Other" for education, "married" for marital status, "Urban" for Residence, "others" for Occupation, "75000 and above" for Income, "Online" for mode of shopping, "very often" for frequency of purchase, "Gifts" for type of goods purchased, and "5000 and above" for Spending. From this it is clear that the study is characterized by the individuals, who are:

1. Female,
2. Aged 35 and above,
3. Married and also lives in urban areas,
4. Whose income is "75000 and above",
5. Most of them buy gifts online very often,
6. The respondents spend usually 5000 and above when they involve in buying.

It is highly likely that that the outcomes of the study are influenced by the respondents whose properties are mentioned above.

4.1. Structural Equation Modeling (SEM)

Structural equation modeling (SEM) helps in testing models that were proposed by the study. This study tries proposes a model in which there are three constructs with their respective manifest variables. More description for these constructs is provided in research methods. The following table is the output obtained in support of the model with the help of IBM SPSS AMOS.

Table 3
SEM output for study model

Relationship			Estimate	Std. Error	T Statistic	P Value
print_ads	<---	shopping_beh	6.7093	8.1102	0.827266898	0.004173876
Social media_ads	<---	shopping_beh	0.4448	1.5122	0.294140987	0.007715379
mode_of_shopping	<---	shopping_beh	8.7749	1.9564	4.48522797	2.03678E-06
frequency_of_purchase	<---	shopping_beh	6.5024	9.0283	0.720224184	0.004793276
type_of_goods_purchased	<---	shopping_beh	6.0722	3.0868	1.967150447	0.000625169
amount_spent_on_goods_purchased	<---	shopping_beh	6.655	2.9513	2.254938502	0.000349369
print_advertisements_help_in_recollecting_brands	<---	print_ads	3.2829	3.0387	1.080363313	0.002922323
print_ads_with_celebrities_help_recollect	<---	print_ads	9.9656	4.7407	2.102136815	0.000477819
I_dont_buy_thorough_print_advertisements	<---	print_ads	5.1091	0.9266	5.513813943	1.80073E-07
I_am_influenced_by_celebs_with_print_ads	<---	print_ads	4.2732	6.7969	0.628698377	0.005363257
belief_in_celebs_in_print_ads	<---	print_ads	6.8605	0.0245	280.0204082	5.33106E-41
celebs_are_not_effective_spokesperson	<---	print_ads	5.4825	8.3045	0.660184237	0.005163122
celebs_are_not_trust_worthy_spokespersons	<---	print_ads	6.6649	3.7678	1.768910239	0.000914324
belief_in_information_in_print_ads	<---	print_ads	9.3356	2.672	3.493862275	2.16343E-05
belief_in_print_ads_with_celebs	<---	print_ads	0.8259	1.8612	0.44374597	0.006617647
trust_in_print_ads	<---	print_ads	9.1964	4.279	2.149193737	0.000434316
trust_in_print_ads_with_celebs	<---	print_ads	1.1764	1.2682	0.927613941	0.003641474
Social media_ads_help_recollection	<---	Social media_ads	2.7692	7.093	0.390413083	0.007001632
Social media_ads_with_celebs_helps_recollection	<---	Social media_ads	3.0073	2.6485	1.135472909	0.002689709
I_dont_by_prods_from_social media_ads	<---	Social media_ads	9.6091	9.1457	1.05066862	0.00305352
endorsed_by_a_celebs_in_social media_ads_helps_sales	<---	Social media_ads	0.7197	4.1889	0.171811215	0.008652309
belief_in_product_endorsed_in_a_social media_ads	<---	Social media_ads	0.1988	5.1131	0.038880523	0.009693529
dont_believe_celebs_are_credible_spokespersons_for_product	<---	Social media_ads	7.3489	8.5886	0.855657499	0.00401845
celebs_are_not_trustworthy_spokesperson	<---	Social media_ads	7.0328	7.5879	0.926844054	0.003645378
belief_in_info_I_see_in_social media_advertisements	<---	Social media_ads	7.1486	3.5512	2.013009687	0.000571102
belief_in_info_in_celebrity_endorsed_social media_ads	<---	social media ads	4.94	4.3222	1.142936468	0.002659283
I_trust_social media_advertisements	<---	Social media_ads	6.9849	4.5446	1.53696695	0.001392328
I_trust_social media_advertisements_with_celebrities	<---	Social media_ads	4.6774	3.0635	1.526815734	0.001417287

The above table shows the estimates for study constructs along with their P Values. All variances are significant, at 5 percent significance level, as their P Values are less than 0.05. However, these are not very important for the study. The study needs estimates for study constructs. As it was mentioned before there exist three constructs in the study namely "Shopping Behavior", "Print Ads Behavior" and "Social media Ads Behavior". Each of the construct is explained by their respective variables. For instance Shopping Behavior is explained through four manifest variables viz. *Preferred Mode of Purchase, Frequency of Purchase, Type of Goods Purchased* and *Amount of Money Spent on Goods Purchased*. The second construct

i.e. respondents behavior towards print advertisements is explained by eleven of the variables. The following is the list of manifest variables for respondent’s behavior towards print ads.

1. Print advertisements help me to recollect the brand or product
2. Print advertisements with celebrities help me to recollect the brand or product
3. I am not likely to buy a product I have seen & remembered in a print advertisement
4. I will prefer to purchase a product endorsed by a celebrity in a print advertisement
5. I believe a celebrity uses the product endorsed in a print advertisement
6. I do not believe celebrities are believable spokesperson to promote a brand or product
7. I do not believe celebrities are trustworthy spokesperson to promote a brand or product
8. I believe all information I see & read in print advertisement
9. I believe all information I see in celebrity endorsed print advertisements.
10. I trust print advertisements
11. I trust print advertisements with celebrities

The following are list of manifest variables for second third construct i.e. Social media Advertisements.

1. Social media advertisements help in recollecting the brand or product
2. I am not likely to buy a product I have seen & remembered in a social media advertisement
3. I prefer to purchase a product endorsed by a celebrity in social media advertisements
4. I believe a celebrity uses the product endorsed in a social media advertisement
5. I do not believe celebrities are credible spokespersons to promote a brand or product
6. I do not believe celebrities are trustworthy spokesperson to promote a brand or product
7. I do not believe celebrities are trustworthy spokesperson to promote a brand or product
8. I believe all information I see in social media advertisements
9. I believe all information I see & listen in celebrity endorsed social media advertisements
10. I trust social media advertisements
11. I trust social media advertisements with celebrities

The table 3 shows the details for all of the above manifest variables of the study. All manifest variables fit significantly with their corresponding latent variable i.e. study construct. For instance, all the estimates for manifest variables for the first construct “Shopping Behavior” have significant with their P Values being 2.036e-06, 0.004, 0.0006, 0.0003 respectively.

While coming to the second construct i.e. “respondent’s behavior towards print advertisements” has all estimates significant. Few of the variables namely respondents’ belief in celebrities, information appears to be highly significant because respondents believe what they are reading and experiencing tangibly. It is also interesting to note that the print advertisements don’t seem to influence consumer’s purchase or buying behavior because in most of the retail purchase consumers are bit apprehensive of the celebrity involvement in the product. While coming to the third construct i.e. “Respondent’s behavior towards social media advertisements”, all estimates appear to be significant. Moreover, there is no doubt that social media advertisements don’t influence consumer buying behavior. Consumers do trust social media ads and these Ads found to have influence on their buying behavior due to the fact that they trust these advertisements. There are two variables that deal with consumers trust over social media advertisements. The P Values for these variables found to be 0.0013, 0.0014 and both of them are significant at 5 percent significance level. More interestingly, consumers don’t believe that celebrities help as effective spokesperson in spite of the fact that they do trust social media ads.

Table 4
SEM fit measures

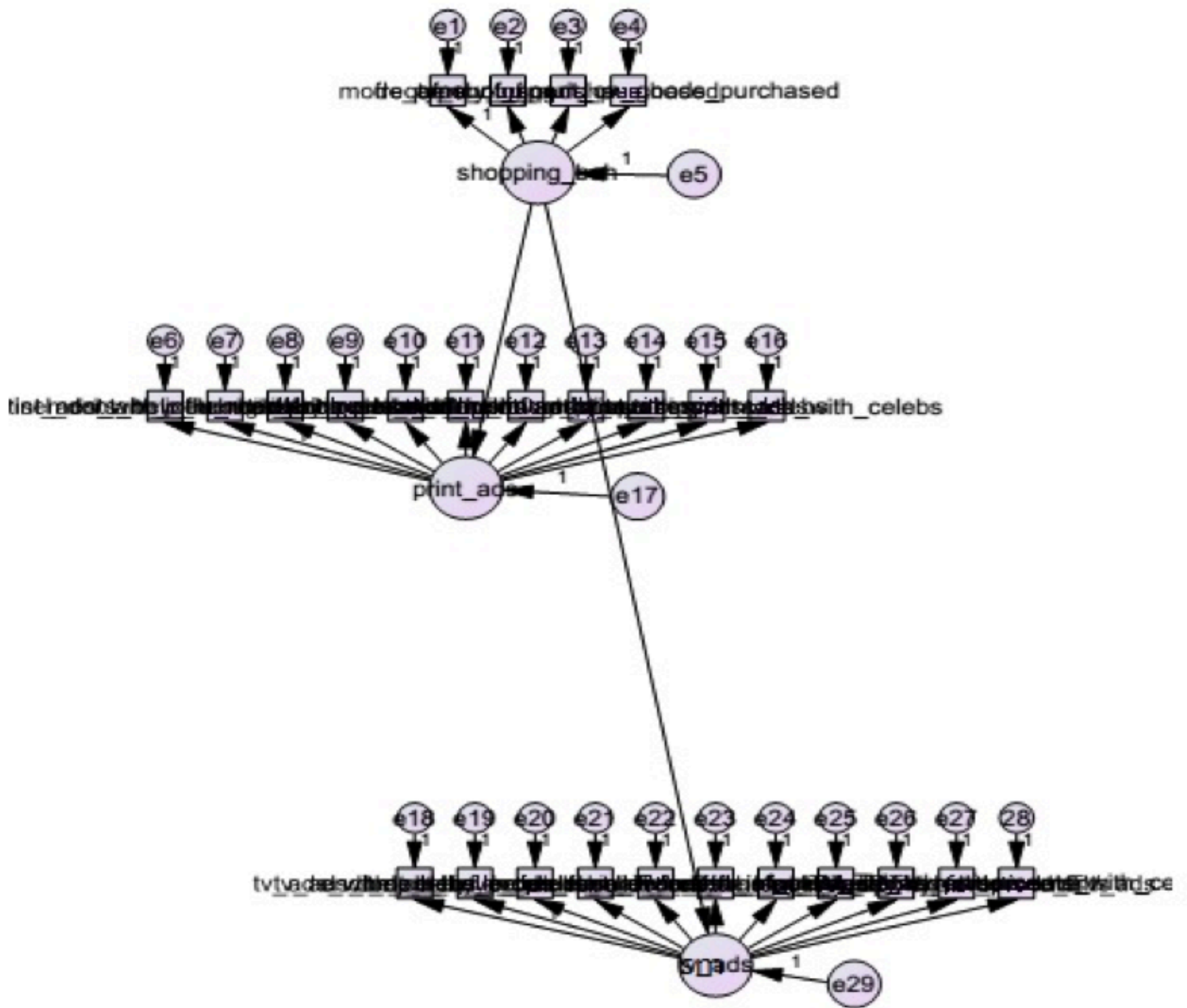
Measure	Value
Observed Statistics	325

Estimated Parameters	25
Restricted Degrees of Freedom	300
Non-Missing Ratio	1
Number of Observations	300
Minus Two Log Likelihood	27005.12
Log Likelihood	-13502.6
χ^2	1926.824
AIC	27105.12
AICc	27125.12
BIC	27290.31
Kulback-Leibler to Saturated	6.423
RMSEA (classic)	0.134
SRMR (covariances only)	0.158
CFI (to independent model)	0.966
TLI (to independent model)	0.999

Table 4 shows the fit measures for SEM done on the model proposed by the study. All the measures are in support of the model. In addition to that, from the SEM output it is also clear that consumer behavior at Print Advertisements and social media advertisement influence their Shopping Behavior. The P Values for these estimates, i.e. 0.004, 0.007, of these relationships are observed as 0.004, 0.007. Both of them are significant at 5 percent significance level. So, there is abundant of evidence in support of the claim that there exist certain cause-and-effect relationships among consumers "shopping behavior" and its dependability over their behavior towards "print advertisements" and "social media advertisements".

While coming to hypothesis there exist certain level of evidence that consumer behavior of print ads influences shopping behavior (P Value = 0.041) and it is also influenced by social media ads (P Value = 0.0077). There is also certain level of evidence in support of the hypothesis that there exist certain cause-and-effect relations in between shopping behavior, consumer perception or behavior of print ads and consumer perception or behavior of social media ads. The χ^2 value is 1926.824 with RMSEA as 0.134, CFI and TLI as 0.966 and 0.999 respectively. The Figure 1 adds visualization to the SEM analysis provided in Analysis.

Figure 1
Study model



4.2. Conclusion

The aim of this study is to find and evaluate cause-and-effect relationships in between buying behavior of goods and their behavior at both Print Ads and Social media Ads. The study proposes three hypotheses in order to verify if consumer buying behavior really depends on their perception of Print and SOCIAL MEDIA advertisements. The study used Structural Equation Modeling (SEM) to evaluate if these hypotheses are true or not. The analysis shows that there exists certain level of evidence in support of all the three hypotheses. Apart from this there are also certain interesting finding such as though consumers don't think that the print ads that use celebrities might not influence their buying behavior and consumers also don't think the information provided in print ads is really helpful. However, the print advertisements as a latent variable appears to be important in understanding buying behavior. While coming to social media advertisements all the variables are strictly significant, which means, social media advertisement appears to be more important when compared to print ads. Interestingly, though consumers do trust social media advertisements more but they might not rely on celebrities in ads. This appears to be a rather more interesting finding in the study. Finally, the study could find very good evidence in support of the study model which proposes certain cause-and-effect relationships in between buying behavior, effectiveness of print and social media ads.

Bibliographic references

- Agrawal, J., & Kamakura, W. A. (1995). The economic worth of celebrity endorsers: An event study analysis. *The Journal of Marketing*, 56-62.
- Baker, M.J. and Churchill Jr., G.A. (1977). The Impact of Physically Attractive Models on Advertising Evaluations. *Journal of Marketing Research*, 14, 538-555.
- Costanzo, P. J., & Goodnight, J. E. (2006). Celebrity endorsements. *Journal of Promotion Management*, 11(4), 49-62.
- Crano, W. (1970). Effects of Sex, Response Order, and Expertise in Conformity: A Dispositional Approach. *Sociometry*, 33, 239-252.
- Dhotre, M., & Bhola, S. (2010). Analytical study of association between celebrity advertising and brand recall. *The IUP Journal of Brand Management*, 7(1), 25-50.
- Feinman, L. (2011). Celebrity Endorsements in Non-Traditional Advertising: How the FTC Regulations Fail to Keep Up with the Kardashians. *Fordham Intellectual Property, Media & Entertainment Law Journal*, 22(1).
- Friedman, H. H., Santeramo, M. J., & Traina, A. (1978). Correlates of trustworthiness for celebrities. *Journal of the Academy of Marketing Science*, 6(4), 291-299.
- Fugard, A., 2008. Chi-square in SEM. Available at <https://figuraleffect.wordpress.com/2008/05/11/chi-square-in-sem/>
- Horai, J., Nacari, N., and Fatoullah, E. (1974). The Effects of Expertise and Physical Attractiveness Upon Opinion Agreement and Liking. *Sociometry*, 37 (4), 601-606.
- Hovland, C., Janis, K., and Kelley, H. (1953). *Communication and Persuasion*. New Haven CT: Yale University Press.
- Huberman, B., Romero, D., & Wu, F. (2008). *Social networks that matter: Twitter under the microscope*.
- Joseph, W. B. (1982). The credibility of physically attractive communicators: A review. *Journal of Advertising*, 11(3), 15-24.
- Kahle, L.R. and Homer, P.M. (1985). Physical Attractiveness of the Celebrity Endorser: A Social Adaptation Perspective. *Journal of Consumer Research*, 11, 954-961.
- Leskovec, J., Adamic L. A., and Huberman, B. A. (2007). The dynamics of viral marketing. *ACM Transactions on the Web*, 1(1).
- Maddux, J., and Rogers, R. (1980). Effects of Source Expertness, Physical Attractiveness and Supporting Arguments of Persuasion: A Case of Brains Over Beauty. *Journal of Personality and Social Psychology*, 39(2), 235-244.
- Mai, L. W., & Schoeller, G. (2009). Emotions, attitudes and memorability associated with TV commercials. *Journal of Targeting, Measurement and Analysis for Marketing*, 17(1), 55- 63.
- Marshall, R., Na, W., State, G., & Deuskar, S. (2008). Endorsement Theory: How Consumers Relate to Celebrity Models. *Journal of Advertising Research*, 48(4), 564.
- McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research*, 310-321.
- Mehta, A. (2000). Advertising attitudes and advertising effectiveness. *Journal of Advertising Research*, 40(3), 67-71.
- Mills, J., and Harvey, J. (1972). Opinion Change as a Function of When Information About the Communicator is Received and Whether He is Attractive or Expert. *Journal of Personality and Social Psychology*, 21(1), 52-55.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39- 52.

- Ohanian, R. (1991). The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. *Journal of Advertising Research*, 31(1), 36-52.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10(2), 135.
- Pornpitakpan, D. C. (2004). The Effect of Celebrity Endorsers' Perceived Credibility on Product Purchase Intention. *Journal of International Consumer Marketing*, 16(2), 55-74.
- Ross, J. (1973). Influence of Expert and Peer Upon Negro Mothers of Low Socioeconomic Status. *The Journal of Social Psychology*, 89, 79-84.
- Seitz, V. A., Razzouk, N., & Eamsobhan, S. (2007). Celebrity Endorsements in US and Thai Magazines: A Content Analysis Comparative Assessment. *Journal of Promotion Management*, 13(3-4), 383-398.
- Simon, H.W., Berkowitz, N.N., and Moyer, J.R. (1970). Similarity, Credibility, and Attitude Change: A Review and a Theory. *Psychological Bulletin*, 73(1), 1-6.
- Smith, G.H. and Engel, R. (1968). Influence of Female Model on Perceived Characteristics of an Automobile. *Proceedings of the 76th Annual Convention of the American Psychological Association*, 3, 681-682.
- Tripp, C., Jensen, T. D., & Carlson, L. (1994). The effects of multiple product endorsements by celebrities on consumers' attitudes and intentions. *Journal of Consumer Research*, 535-547.
- Walley, W. (1987). Actors Set Contract Talks. *Advertising Age*, 21, 4.
- Wei, P. S., & Lu, H. P. (2012). An examination of the celebrity endorsements and online customer reviews influence female consumers' shopping behavior. *Computers in Human Behavior*, 193-201.

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Revista ESPACIOS. ISSN 0798 1015
Vol. 39 (Nº 06) Año 2018

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