“Causality effects between celebrity endorsement and the intentions to buy”

AUTHORS	Mehdi Zahaf James Anderson

ARTICLE INFO	Mehdi Zahaf and James Anderson (2008). Causality effects between celebrity endorsement and the intentions to buy. *Innovative Marketing* , *4*(4)
RELEASED ON	Tuesday, 30 December 2008
JOURNAL	"Innovative Marketing "
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES
0

NUMBER OF FIGURES
0

NUMBER OF TABLES
0

© The author(s) 2026. This publication is an open access article.

Mehdi Zahaf (Canada), James Anderson (Canada)

Causality effects between celebrity endorsement and the intentions to buy

Abstract

The study of celebrity endorsement is one that, in recent years, has gained a lot of attention. However, the combined effect of source and management based factors with the psychographic profile of a celebrity endorser on the consumer willingness to buy hasn't been investigated in the previous research. This paper has studied the possible relationship between having a celebrity endorser and the attributes that lead to willingness to buy. In different ways, the endorser can influence the willingness to buy. To investigate these relationships, a combination of regressions and experiments has been used. During the research, the experimental group was and the control group was not exposed to a celebrity endorser. In the end, the main result was that the celebrity factor, by itself, did not have a real effect on the intentions to buy. While the main attributes that influenced the willingness to buy could be complimented by having a celebrity, the celebrity inclusion on conditions that those factors were absent did not further encourage the purchase of the product.

Keywords: celebrity endorser, willingness to buy, advertisement.

Introduction

The study of celebrity endorsement (CE) has received great interest in recent years. While advertising has been shown to be effective, the use of CE has not always been successful. In fact, to date research examining CE has been limited and at times contradictory (O'Mahoney and Meenahen, 1997; 1998). Research has spanned a wide variety of topics such as: effectiveness of the CE; match-up between the product/brand and the endorser (Seno and Lucas, 2007; Till and Busler, 2000); positive and negative effects of CE (Till and Shimp, 1998); consumer's association with the endorser (Till and Busler, 2000; Daneshvary and Shwer, 2000); profitability of CE (Agrawal and Kamakura, 1995); CE and purchase intentions (Kamins et al., 1989); and celebrity attractiveness, credibility, and trustworthiness (Dean and Biswas, 2001; Seno and Lucas, 2007).

Current literature, however, lacks a clear understanding of the relationship between celebrity endorsement and buyer behavior. Some researches indicate that CE has a positive effect on buyer behavior; whereas others have found that some celebrity advertisement campaigns were not successful and hence had a negative result on willingness to buy. Further, there have been a number of studies that examined the celebrity-product congruence (e.g., Kamins et al., 1989; Ohanian, 1991; Tripp et al., 1994; Agrawal and Kamakura, 1995), and under what conditions, the match-up theory holds true (Kahle and Homer, 1985; Till and Busler, 2000), i.e., the match-up hypothesis predicts celebrity attractiveness by product-type interaction.

© Mehdi Zahaf, James Anderson, 2008.
Aknowledgment: The authors thank the anonymous reviewers and the editor for helpful and constructive comments on previous version.

In addition, other factors may influence the result of CE, such as, use of multiple celebrities, audience education, and whether the company is involved in retail or manufacturing. Moreover, the lack of knowledge regarding the effect of CE on buyer behavior is the fact that a majority of studies discussing CE have focused on end results, like sales and stock value, instead of seeking to understand how CE affects the consumer decision making process. It is with this gap in mind that this research study is being conducted.

For the purpose of the actual study, we used a local celebrity as a second best solution. Our pre-tests show that our local celebrity is well-known by the local public. We aim to revisit the correspondence between the celebrity psychographic characteristics and the willingness to buy the product. Since the objective here is to isolate the effect of the product-celebrity congruence, we selected a general product category: electronics, more specifically MP3 players. The purpose is to show that what matters are the credibility, trustworthiness, and similarity with the source, and not the match between the product and the celebrity.

The remainder of the paper is organized as follows: first, we describe the research methodology and present the results. Then, to summarize the paper, there will be a discussion of results finishing with some concluding remarks.

1. Conceptual framework

1.1. Celebrity endorsement. Celebrity endorser is defined by McCracken (1989) as "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement". Freidman and Freidman (1979) argue that celebrities are more effective than other forms of endorsers. Up until now, research has focused mainly on the celebrity-

brand congruence (Kamins et al., 1989; Ohanian, 1991; Tripp et al., 1994; Agrawal and Kamakura, 1995); celebrity and brand equity (Till, 1998; Seno and Lucas, 2007); and celebrity characteristics such as credibility (Ohanian, 1990; 1991), effectiveness (McCracken, 1989), and celebrity attractiveness (Till and Busler, 2000). It is important to note that the latter concept has been widely investigated.

Although there has not been a great deal of consistency in studies regarding the relationship between celebrity support and buyer behavior, authors agree that there are two sets of factors characterizing celebrity product endorsement (Seno and Lukas, 2007):

- source based factors such as celebrity credibility, attractiveness, expertise, and trustworthiness (related solely to the celebrity and controlled by the celebrity); and
- management based factors such as celebrity-product congruence, social desirability of the celebrity, and reverse effect of brand image (related to marketing the celebrity and are controlled by management).

Further, Tellis (1998) argues that familiarity with the endorser is an important component of the attractiveness of the endorser, i.e., attractiveness is composed of similarity, familiarity, and liking. All these factors are thoroughly, but not exhaustively, examined here and their net effect on the willingness to buy is determined. We aim to explore the net effects of the credibility and similarity of the endorser on purchase intent. The idea is to prove that the mediating effect of credibility and similarity on the willingness to buy is more important than the effect of celebrity attractiveness and/or the experience of the model. Credibility of the endorser is crucial as it strengthens the credibility of her/his claims. Further, similarity with the endorser is defined as the target market awareness of the celebrity, her/his friendliness, likeability and trustworthiness.

1.2. Credibility of the commercial and the endorser. CE is a crucial form of advertisement for many companies. Tellis (1998) shows that there are two reasons why advertisers use celebrity endorsers:

- attention: to capture the attention of the audience; and
- association: to have an association between the celebrity and the brand and/or the product.

Goldberg and Gorn (1987) explore what they call program-by-commercial and demonstrate that there is a positive interaction between television programs and commercials. This influences the commercial's effectiveness and consumer recall. Our aim is to isolate the effect of the endorser and measure the sole outcome of the commercial in terms of credibility, trustworthiness, and effectiveness (Biswas et al., 2006). For instance, if a consumer finds the commercial credible then she/he will most likely be more willing to purchase the product. This may or may not be with the assistance of the celebrity endorser, as the emphasis is on the message, not who is promoting it. Ultimately, our objective is to test for attention not association.

H1: Credibility in the claims of the commercial positively influences the willingness to buy, regardless of the endorser.

CE may improve trust, as a well match the endorser, who is seen as an authority, to the product, and thus improve the willingness to buy (Misra and Beatty, 1990). Up until now, researchers have looked at credibility and CE as separate entities. Credibility is seen here as the consumer's trust and belief in the celebrity. Further, credibility of the celebrity has been associated with expertness and trustworthiness (Hovlan and Weiss, 1951; Hovlan et al., 1953; Seno and Lukas, 2007). Trustworthiness is seen as an important drive of the credibility of the source and changes in consumers' attitudes (Ohanian, 1990). It has been shown that the endorser influences subject recall, product attitudes, and purchase intentions more than the endorser's likeability or the level of product involvement. There is a need to explore if the combination of a credible commercial and a credible endorser increases intent to purchase.

H2: A credible endorser positively moderates the effect of a credible television commercial on the willingness to buy. If the endorser is a celebrity then the effect is bigger than if the endorser is not a celebrity.

This hypothesis uncovers any change in the outcome of the moderating effect of the source credibility. The belief is that combining the two variables leads to a greater synergetic effect on the intent to buy than when they are taken as single entities.

1.3. Similarity and image of the endorser. While physical attractiveness of the endorser is assumed to have a positive effect on consumers, the level of expertise of the endorser has a larger influence on their behavior. Conversely, similarity is seen here as the image that the celebrity conveys in the message. This is translated into similarities in: preferences, values and believes, and taste.

H3a: Similarity, experience, and attractiveness with the celebrity moderate the relationship between the credibility of the endorser and willingness to buy.
H3b: The moderating effect described in Hypothesis 3a is higher when the endorser is a celebrity.

By measuring similarity, the research will show if the celebrity effect of the endorser has an influence on willingness to buy (Seno and Lukas, 2007). While previous research does not discuss similarity, recognition of the endorser is essential for it to carry any of the celebrity benefits. In the end, if the endorser is similar to respondents, then it will prove that celebrities have an effect.

1.4. Effectiveness of celebrity endorsement. McCracken (1989) states "celebrity effectiveness stems from the cultural meanings with which they are endowed. Meanings pass from celebrity to product and from product to consumer". Numerous studies have determined that celebrity endorsers do have an effect on buyer behavior (Atkin et al., 1984; Petty and Cacioppo, 1983). Solomon and Assael (1987) state that, from a theoretical perspective, celebrities are effective endorsers because of their symbolic aspiration reference group association. Byrne et al. (2003) claim that in a retail context, the celebrity endorser must be complemented by in-store advertising campaign in order to be effective. Further, multi-celebrity endorsement campaigns may be more effective than single endorser campaigns, because they appeal to a broader audience and are more able to maintain the viewer's attention (Hsu and McDonald, 2002).

Kahle and Homer (1985) conducted a study to determine how physical attractiveness of the celebrity endorser influences attitudes and purchase intentions toward advertised products. It is argued that an attractive model increases the willingness to buy. Attractiveness is based on whether the endorser is considered rather good-looking and if she/he conveys confidence (Kahle and Homer, 1985). Till and Busler (1998) find that attractiveness affects consumers attitudes toward a brand. Further, physical attractiveness has been used as the main factor to explain the match-up theory (Kahle and Homer, 1995; Kamins, 1990). Finally, the idea of a trustworthy model, and not just a trustworthy message, may be seen to help increase the intention of consumer purchase.

H4a: Similarity with and credibility of the endorser have a greater influence on willingness to buy than knowledge of the endorser.
H4b: Hypothesis 4a holds true if the endorser is a celebrity.

It must be made clear that CE is not always effective. It may not be beneficial for a company and its products/brands to use a CE. For instance, Levenson (2005) lists a couple of examples where the campaigns did not turn out to be successful. Some of the latest researchers on the subject claim that the support from a celebrity, by itself, is not enough to cause a relationship between buyer behavior, CE/endorser and the product. This is what has been called the match-up theory (cf. Till and Busler, 2000). The latest research suggests that celebrities must have certain qualities. Misra (1990) claims that the advertiser must match the personality of the celebrity with the product and the target market.

1.5. Product-celebrity congruence. Forkan (1980) and Kamins (1990) argue that the messages conveyed by the celebrity image should be congruent with the message of the product. If this is not the case, consumers will be less likely to purchase the product (cf. Till and Busler, 1998). Since electronics will be used in this study, we looked into the literature on electronics. A study by Galloway and Kinnear (2001) was conducted to determine the impact of MP3s on sales of prerecorded music, and to determine whether this relatively new distribution mechanism could possibly provide reasonable profits. The results of the study showed that 47% of the respondents owned more that fifty MP3 files and that MP3s are very popular among university students. Finally, personal characteristics of age and income are stronger predictors of new-product ownership in the consumer electronics category than innate consumer innovativeness (Bayus and Mason, 2003). This study is not focused on the relationship between the product and the endorser.

2. Methodology

2.1. Sample and data collection. This research aims to understand, analyze and describe the link between celebrity endorsement, the psychographic profile of consumers, and their willingness to purchase an MP3 player. Hence, sampling university students is a good choice for the purpose of this research. The history of buyer behavior in university students reveals many patterns. This includes the different purchasing habits and levels of financial knowledge for males and females, compulsive buying habits of university students, levels of epistemological development and how it affects university students' buyer behavior, the effect of demographics on buyer behavior of university students, and the role of Internet purchases in a university student's buying behavior.

By means of regressions and experimentation, we want to show first, the cause and effect of the main manipulation (endorsement: celebrity versus non-celebrity), and second, to explore and analyze the variables influencing buyer behavior and relate them to celebrity endorsement.

A total of 198 students were selected to take part in the study. Participation was on a volunteer basis only. Further, the subjects were selected from different classes with the permission of the session's

professor. Students were selected based on the following criteria:

- all of them had to be full-time students; and
- they are interested in buying an MP3 player.

2.2. Experimental design and regression. Hypotheses 2, 3b, 4b have been tested using a pre-test/post-test control group design. There are 2 groups of respondents: the experimental group (celebrity respondents) and control group (non-celebrity respondents). The main treatment is composed of two levels: commercial with a celebrity versus celebrity-free commercial. Hence, the independent variable is celebrity/non-celebrity and the dependent variables are represented by all psychographic measures, e.g., attitudes, knowledge, etc. Subjects in the experimental groups were exposed to a 54-second TV commercial about an MP3 player (no brand selected). The message in the commercial is conveyed in a neutral and controlled environment by an endorser (celebrity versus non-celebrity). In the commercial, the endorser describes the product and its features, and promotes its performances. Care was taken when selecting the endorser, as we did not want to have a direct link between the endorser and the product. Respondents in both groups (experimental group and control group) were asked to answer a 20-minute pre-test survey (same for both groups). Afterward, both groups are shown the commercial, and are given the same post-test survey.

In order to test research hypotheses 1, 2, 3a, and 4b, we used a combination of simple regressions and t-test for independent and dependent samples. The idea here is simple: to evaluate the degree of association between the variables, and then to measure the changes that happen after giving the respondents the treatment, i.e., endorsement (celebrity versus non-celebrity). The intention to buy is the dependent variable, while all psychographic measures are used as independent variables.

2.3. Measurement and reliability. To test the abovementioned hypotheses, a structured questionnaire was designed to gather data relative to the variables used in this research. Prior to administering the survey, a pre-test was performed and minor modifications were made. There are two questionnaires: a pre-test questionnaire and a post-test questionnaire. The same pre-test and post-test surveys have been used for both the experimental group and control group. The pre-test survey is structured into two main sections. Section 1 deals with consumers' general perceptions of the benefits of buying an MP3 player (Murray and Schlacter, 1990), consumers' involvement with the product, knowledge of the product (Lichtenstein, Netemeyer, and Burton, 1990), attitude towards the product (Beltramini and Stafford, 1993), and innovativeness (Goldsmith and Hofacker, 1991). Section 2 measures consumers' intentions to buy (Srinivasan, 1987). Conversely, the post-test survey is composed of four sections. Our aim is to explore the effects of the commercial and the endorser on consumers' willingness to buy an MP3 player. Section 1 is related to the credibility of the commercial while Section 2 relates to the endorser. More specifically, we looked into:

- the perception of the endorser in terms of attractiveness, experience, and similarity;
- credibility of the endorser; and
- knowledge of the endorser (Feick and Higie, 1992).

Next, Section 3 deals with consumers' purchase intentions (Dodds, Monroe, and Grewal, 1991). Lastly, socio-demographic questions were asked to help profile consumers. The respondents had to provide information about their gender, age, income, place of residence, Internet access, etc.

All variables were tested to check their internal consistency. All reliability tests were coupled to a series of factor analyses to determine the structure of the data. Moreover, factor analysis helped testing if the items were measuring the correct constructs. Results show that Cronbach's alphas were in the range of 0.704 to 0.952 (cf. Table 1) while factor loadings were in the 0.587 to 0.941, which is good for an exploratory study (Hair et al., 2006).

Table 1. Scales internal consistency

	Pre-test non-celebrity	Pre-test celebrity
Benefits of buying an MP3 player	0.798	0.762
Involvement with the product	0.794	0.794
Knowledge of the product	0.792	0.784
Attitude towards the product	0.833	0.791
Innovativeness	0.755	0.723
Intentions to buy	0.872	0.903
	Post-test non-celebrity	Post-test celebrity
Credibility of the commercial	0.782	0.948
Perception of the endorser	0.907	0.821
Credibility of the endorser	0.832	0.763
Knowledge of the endorser	0.704	0.806
Intentions to buy	0.913	0.952

Further to this, the question measuring the perception of the endorser in the post-test survey is composed of 3 factors: attractiveness of the endorser, experience of the endorser, and similarity with the endorser. The scale was split into three dimensions accordingly.

3. Results

3.1. General profile of consumers. To gain a better understanding of the general profile for the respondents, a cross-tab analysis was performed. The first interesting result is that those who are willing to pay

more for an MP3 player tend to own one. These consumers are willing to spend between $201 and $300 for an MP3 player. It should also be noted that those who have access to the Internet tend to have higher MP3 ownership; 60.4% of respondents have both the Internet and own an MP3 player. This is not a complete surprise, as those who have a player would gain the most advantage with it if they have Internet access. Finally, it was found that males tend to purchase less music on-line than their females counterparts, i.e., 74.2% of all those who buy music on-line are female. Further tests found that those who own an MP3 player feel more strongly toward the product. In fact, 65% of those who marked that they agree or strongly agree to liking MP3 players, also own one. It was also discovered that males tend to have a clearer idea of what they want in an MP3 player.

3.2. Psychographic profile of the respondents. T-tests have been run to test if there is a difference between the experimental group and the control group before and after giving them the treatment. This ensures that there is no substantial difference in their behavior that might bias the results. Note that all variables have been measured using 7-point Likert scales with a median of 4.

3.2.1. Pre-test survey. It is readily seen in Table 2 that there are no differences between the experimental group and the control group except for the involvement with the product. In reviewing the means for each group of respondents, it is evident that non-celebrity respondents are relatively more involved with the product than celebrity ones. This simply means that those respondents are slightly more attracted to the product than their celebrity counterpart. However, it is important to note that both groups are moderately involved with the product, as the average score is 3.99 for the experimental group and 4.36 for the control group (the median being 4). Lastly, both groups of respondents do not show any difference in terms of attitudes towards the product and knowledge of the product.

Table 2. T-test for celebrity and non-celebrity groups before treatment

Variables	Means		Significance of the t-test
	Celebrity	Non-celebrity	
Benefits of buying an MP3 player	3.85	3.59	0.121
Involvement with the product	3.99	4.36	0.042*
Knowledge of the product	4.45	4.40	0.814
Attitude towards the product	5.35	5.27	0.588
Innovativeness	3.73	3.62	0.461
Intention to buy an MP3 player	3.30	3.34	0.580

Note: * Sig. at 5%.

Further, celebrity and non-celebrity respondents have positive attitudes and a relatively basic of knowledge of MP3 players. This is why these respondents have the same high level of intentions to buy an MP3. Conversely their level of innovativeness is relatively moderate. Finally, they do perceive benefits from buying an MP3 player.

3.2.2. Post-test survey. Results from t-tests show that there are differences between celebrity and non-celebrity respondents in the post-test setting (cf. Table 3).

Table 3. T-test for celebrity and non-celebrity groups after treatment

Variables	Means		Significance of the t-test
	Celebrity	Non-celebrity	
Credibility of the commercial	4.40	3.89	0.002*
Attractiveness	3.51	3.98	0.049*
Experience	3.58	3.99	0.086
Similarity	4.01	3.71	0.001*
Credibility of the endorser	4.92	3.43	0.000*
Knowledge of the endorser	3.12	1.59	0.000*
Intention to buy an MP3 player	4.34	4.39	0.088

Note: * Sig. at 5%.

Nevertheless, celebrity and non-celebrity respondents do not show any difference in their intentions to buy after being exposed to the commercial. This means that celebrity endorsement is not effective as both groups of respondents have the same level of intentions to buy. This is due to one major drawback: the knowledge of the endorser. Even though – on average – celebrity respondents were more familiar with the celebrity endorser, they are still scoring low on the knowledge variable, i.e., below the median (cf. Table 3 for more details). Further, it is obvious that the celebrity endorser is more credible, more similar, and relatively more attractive than the non-celebrity endorser. Finally, respondents feel that there is no difference between the celebrity endorser and the non-celebrity endorser in terms of experience. Both are perceived as having the same level of experience. This is related to what has been said above; we tried to keep the endorser/celebrity separate from the product.

3.2.3. Comparing results. T-tests for paired samples show that consumers in both samples have a higher willingness to buy after watching the commercial.

Table 4. T-test for paired samples for intentions to buy

Intention to buy	Means		Significance of the t-test
	Celebrity	Non-celebrity	
Pre-test	3.30	3.34	0.000*
Post-test	4.34	4.39	0.045*

Note: * Sig. at 5%.

Table 4 shows that there is a significant difference between the pre-test and post-test settings. Consumers score higher in the post-test setting than during the pre-test. Combining these results with the results of Table 2 and Table 3 leads to the conclusion that the commercial is very effective while CE is not.

3.3. Credibility of the commercial and the endorser. Both the experimental group and the control group show that credibility of the source is a determinant of the intention to buy the product. Regression results show that there is a positive linear relationship between the credibility of the source and the intentions to buy (cf. Table 5). This relationship is stronger for celebrity respondents (R^2 = 20.7%) than non-celebrity respondents (R^2 = 15.7%); both regressions were significant at 5%.

According to Table 3, celebrity respondents perceive the commercial to be more credible than their non-celebrity counterpart. The same rationale holds true for the credibility of the endorser. Using a CE leads to higher variances explained than if the endorser is not a celebrity. Hence, Hypothesis 1 is accepted .

Table 5. Estimation for the credibility of the commercial and the endorser

Independent variable	Groups	R^2	B	t	Significance
Credibility of the commercial	Non-celebrity group	15.7%	0.604	4.279	0.000*
	Celebrity group	20.7%	0.655	4.792	0.000*
Credibility of the endorser	Non-celebrity group	7.7%	0.278	2.840	0.006*
	Celebrity group	14.7%	0.383	3.887	0.000*

Note: * Sig. at 5%.

An additional linear regression has been run to assess if the credibility of the endorser moderates the effect of the credibility of the commercial on the willingness to buy the product (cf. Table 6).

Table 6. Estimations for the moderating effect of the credibility of the endorser

Independent variables	Groups	R^2	B	t	Significance
Credibility of the commercial × Credibility of the endorser	Non-celebrity group	17.4%	0.092	4.494	0.000*
	Celebrity group	22.7%	0.086	5.024	0.000*

Note: * Sig. at 5%.

Hence, the credibility of the endorser/celebrity positively moderates the relationship between the credibility of the commercial and willingness to buy. Further, when the endorser is a celebrity then the effect is more important (R^2 = 22.7%) than if the endorser is not a celebrity (R^2 = 17.4%). This result was somehow expected as Table 3 shows a significant difference between the celebrity group and non-celebrity group in terms of credibility of the endorsers. Therefore, if the endorser is a celebrity then this will add, but will not be a major factor, to the effect of the commercial on the intentions to buy. Therefore, Hypothesis 2 is accepted.

3.4. Similarity, attractiveness, experience, and knowledge of the celebrity. We measure here the direct and moderating effect of the attractiveness, experience, similarity, and trustworthiness of the endorser on the willingness to buy an MP3. Regression results show that respondents are more willing to buy the product when the credibility of the endorser (celebrity and non-celebrity) is moderated either by similarity with the endorser, attractiveness of the endorser, or experience of the endorser with the product. This holds true for both the experimental group and the control group (cf. Table 7).

Table 7. Estimations for similarity, credibility, and knowledge of the endorser

Independent variables	Groups	R^2	B	t	Significance
Attractiveness × Credibility of the endorser	Non-celebrity group	7.6%	0.046	2.806	0.006*
	Celebrity group	10.8%	0.048	3.251	0.002*
Similarity × Credibility of the endorser	Non-celebrity group	17.6%	0.095	4.461	0.000*
	Celebrity group	25.4%	0.088	5.436	0.000*
Experience × Credibility of the endorser	Non-celebrity group	12.5%	0.072	3.682	0.000*
	Celebrity group	19.4%	0.082	4.552	0.000*

Note: * Sig. at 5%.

Combining the results from Table 5, Table 6, and Table 7 leads to the following conclusion: attractiveness, similarity, and experience moderate the effect of the credibility of the endorser on the willingness to buy. Further, attractiveness does not have a major moderating effect as the R^2 is lower when combining credibility and attractiveness than when credibility is used by itself. On the other hand, combining credibility with

similarity or experience leads to better results, i.e., higher R^2. Lastly, the variance of the intentions to buy explained in the experimental group is higher than in the control group. Thus, Hypotheses 3a and 3b are accepted. Hypothesis 4 is now tested. A simple linear regression has been run to test whether knowledge of the endorser/celebrity is important. The results are depicted in Table 8.

Table 8. Estimations of the moderating effect of the similarity, attractiveness, and experience

Independent variables	Groups	R^2	B	t	Significance
Knowledge of the endorser	Non-celebrity group	2%	0.142	1.410	0.162
	Celebrity group	12.7%	0.357	3.601	0.001*

Note: * Sig. at 5%.

Knowledge of the endorser does not seem to be a crucial factor as long as the respondents see some similarities with the endorser. Hence, we can conclude that in a purchase situation, the most important factor that influences consumers is their perception of the similarities between them and the endorser, the experience that endorser has with the product, the trustworthiness of the endorser as this amplifies the effect of the credibility of the commercial, and the knowledge of the endorser. This holds true whether the endorser is a celebrity or not.

4. Discussion and managerial implications

This study contributes to the actual body of literature in many ways. First, the use of CE is important but not sufficient. We revisited the role of trustworthiness of the commercial and the endorser as major determinants of the intentions to buy. Credibility of the commercial and the endorser/celebrity are both important factors intervening in the consumer assessment process. Our study shows that there is a positive and strong relationship between the credibility of the commercial, the credibility of the endorser/celebrity, and the intentions to buy. Further, the credibility of the endorser/celebrity is an important moderator for the credibility of the commercial. This mediating effect is more significant when the endorser is a celebrity. This is in line with the findings of Misra and Betty (1990); but unlike Seno and Lucas (2007), Forkan (1980), and Kamins (1990) our results show that credibility of the endorser/celebrity is not necessarily related to her/his expertness and attractiveness. Second, the product-celebrity congruence is not always a prerequisite to increase consumers' willingness to buy. There is no clear indication that the endorser experience with the product is a crucial element in consumers' assessment process. Further, this is in line with the findings of Tellis (1998). In fact, the celebrity endorser captured the attention of the respondents, but no association between the product and the endorser was determined. This is an important result as companies do not have to look for a celebrity that is directly related to the product or a celebrity who is an expert. Companies should look for a credible celebrity with high similarities with the target market. Third, while personality traits are not found to have the same impact on consumers' willingness to buy, i.e., same level of intentions to buy for the control group and the experimental group; they effectively mediate the credibility of the commercial, i.e., intentions to buy in the pre-test are lower than in the post-test setting for both groups. Consumers who feel they are "similar" to the celebrity will be more willing to buy the product. However, similarity here does not mean knowledge of the celebrity. Our results clearly show that knowledge of the celebrity is not as important as similarity. Furthermore, consumers give more importance to similarity than experience and attractiveness. This contradicts the findings of Kahle and Homer (1995) as knowledge and attractiveness of the celebrity are not crucial in determining the intentions to buy.

To recapitulate, consumers' willingness to buy is determined by the credibility of endorser/celebrity and the commercial. If a celebrity is well known, but is perceived as not very credible, then this will not have any effect on consumers' willingness to buy. Conversely, if the celebrity is perceived to be very similar to consumers, and is also perceived as a credible source then the effect on the intentions to buy will be greater. It is clear that when a business designs its promotional strategy, the company should not just hire a celebrity for the sake of having a celebrity endorser. The study clearly indicates that the effect that will be gained from making that move will be marginal to non-existent. Therefore, it is the utmost of importance that if a business does decide to use a celebrity endorser, that the company researches how its target market feels toward that person.

Finally, it is important to note that these results are based on a specific research setting. First, there was only one treatment. This does not fully limit the effects of the extraneous variables in the experiment. Second, respondents fitted within a given profile: all have access to the Internet, they are knowledgeable about the product, most of them own an MP3 player, they were involved with the product, and had positive attitudes toward the product. Third, using a local celebrity does not necessarily lead to the same results as a national celebrity. Finally, the use of pre-purchase variables

may have limited the outcomes of the research. Hence, future research should incorporate these limitations to confirm the robustness of the findings.

Conclusion

Through the research, credibility; attractiveness, experience, and similarity; credibility of the commercial; and knowledge of the endorser were all higher in the celebrity control group. The effectiveness of the celebrity endorser on willingness to buy, however, did not exist. This is interesting, because the study confirmed that credibility of the commercial and endorser increases willingness to buy. With that said, it brings to question if being a celebrity increases credibility, and for that the answer is no. The fact is that credibility, amongst other variables, increases willingness to buy, but the celebrity factor by itself does not. On the other hand, it does not mean that a celebrity cannot bring credibility to the product and to the commercial. If the celebrity is seen as trustworthy, similar, and credible then that effect may be transferred over to the willingness to buy. Thus, some credible celebrities may have an influence, but the celebrity status by itself will not.

References

1. Agrawal, J., W.A. Kamakura. The economic worth of celebrity endorsers: An event study analysis // *Journal of Marketing*, 1995. – №59 (3). – pp. 56-62.
2. Atkin, C., Hocking, J., M. Block. Media effects on the young teenage drinking: Does advertising make a difference? // *Journal of Communication* (Pre-1986), 1984. – №34 (2). – pp. 157-167.
3. Bayus, S., Mason, C. An empirical study of innate Consumer Innovativeness, Personal Characteristics, and New-Product Adoption Behavior // *Journal of the Academy of Marketing Science*, 2003. – №1 (31). – pp. 61-73.
4. Beltramini, R.F., E.R. Stafford. Comprehension and perceived believability of seals of approval information in advertising // *Journal of Advertising*, 1993. – №22 (3). – pp. 3-31.
5. Biswas, D., A., Biswas, Das, N. The differential effects of celebrity and expert endorsements on consumer risk perceptions. The role of consumer knowledge, perceived congruency and product technology orientation // *Journal of Advertising*, 2006. – №2 (35). – pp. 17-31.
6. Byrne, A., Whitehead, M., S. Breen. The naked truth of celebrity endorsement // *British Food Journal*, 2003. – №105 (4/5). – pp. 288-296.
7. Daneshvary, R., Schwer, K. The Association Endorsement And Consumers' Intention To Purchase // *Journal of Consumer Marketing*, 2000. – №3 (17). – pp. 203-213.
8. Dean, D.H., Biswas, A. Third-party organization endorsement of products: an advertising cue affecting consumer repurchase evaluation of goods and services // *Journal of Advertising*, 2001. – №4 (30). – pp. 41-57.
9. Dodds, W.B., Monroe, K.B., D. Grewal. Effects of Price, Brand, and Store Information on Buyers' Product Evaluations // *Journal of Marketing Research*, 1991. – №28 (August). – pp. 307-319.
10. Feick, L., R.A. Higie. The effect of preference heterogeneity and source characteristics on ad processing and judgments about endorsers // *Journal of Advertising*, 1992. – №21 (2). – pp. 9-24.
11. Forkan, J. (1980). Product matchup key to effective star presentations // *Advertising Age*, 1980. – №51. – pp. 42-58.
12. Friedman, H.H., L. Friedman. Endorsers effectiveness by product type // *Journal of Advertising Research*, 1979. – №19 (5). – pp. 63-71.
13. Gallaway, T., Kinnear, D. Unchained Melody: A Price Discrimination-Based Policy Proposal for Addressing the MP3 Revolution // *Journal of Economic Issues*, 2001. – №2 (35). – pp. 279-287.
14. Goldberg, M.E., G.J. Gorn. Happy and sad TV programs: How they affect reactions to commercials // *Journal of Consumer Research*, 1987. – №14 (December). – pp. 387-403.
15. Goldsmith, R.E., Hofacker, C.F. Measuring consumer innovativeness // *Academy of Marketing Science*, 1991. – №19. – pp. 209-221.
16. Hair, J.F., Black, B., Babin, B., Anderson, R.E., R.L. Tatham. Multivariate Data Analysis, 6/E. Prentice Hall, 2006.
17. Hovland, C.I., W. Weiss. The influence of source credibility on communication effectiveness // *Public Opinion Quarterly*, 1951. – №15. – pp. 635-650.
18. Hovland, C.I., Irving, L.J., H.H. Kelly. Communication and Persuasion. New Haven: Yale Uni. Press, 1953.
19. Hsu, C., D. McDonald. An examination on multiple celebrity endorsers in advertising // *The Journal of Product and Brand Management*, 2002. – №11 (1). – pp. 19-29.
20. Kahle, L.R., P.M. Homer. Physical attractiveness of the celebrity endorser: A social adaptation perspective // *Journal of Consumer Research* (Pre-1986), 1985. – №11 (4). – pp. 954-961.
21. Kamins, M.A., Brand, M.J., Hoeke, S.A., J.C. Moe. Two-sided versus one-sided celebrity endorsements: the impact on advertising effectiveness and credibility // *Journal of Advertising*, 1989. – №18 (2). – pp. 4-10.
22. Kamins, M.A. An investigation into the "match-up" hypothesis in celebrity advertising: When beauty may only be skin deep // *Journal of Advertising*, 1990. – №19 (1). – pp. 4-13.
23. Levenson, E. When celebrity endorsement attack // *Fortune*, 2005. – №152 (8). – Retrieved September 16, 2008, from: http://money.cnn.com/magazines/fortune/fortune_archive/2005/10/17/8358063/index.htm
24. Lichtenstein, D.R., Netemeyer, R.G., S. Burton. Distinguishing coupon proneness from value conscious: An acquisition-transaction utility theory perspective // *Journal of Marketing*, 1990. – №54. – pp. 54-67.

25. McCracken, G. Who is the celebrity endorser? Cultural foundations of the Endorsement Process // *Journal of Consumer Research*, 1989. – №16 (3). – pp. 310-321.
26. Murray, K.B., J.L. Schlacter. The impact of services versus goods on consumers' assessment of perceived risk and variability // *Academy of Marketing Science*, 1990. – №18 (1). – pp. 51-66.
27. Misra, S. Celebrity spokesperson and brand congruence. An assessment of research and effect // *Journal of Business Research*, 1990. – №21 (September). – pp. 159-173.
28. Misra, S., S.E. Beatty. Celebrity spokesperson and brand congruence: An assessment of recall and affect // *Journal of Business Research*, 1990. – №21 (2). – pp. 159-173.
29. Ohanian, R. Construction and validation of a scale to measure celebrity credibility // *Journal of Advertising*, 1990. – №19 (3). – pp. 39-52.
30. Ohanian, R. The impact of celebrity spokespersons' perceived image on intention to purchase // *Journal of Advertising Research*, 1991. – №31. (1). – pp. 46-54.
31. O'Mahony, S., T. Meenahan. The impact of celebrity endorsements on consumers // *Irish Marketing Review*, 1997/1998. – №10 (2). – pp. 15-24.
32. Petty, R.E., J.T. Cacioppo. Central and peripheral routes to persuasion. Application to advertising in Advertising and Consumer Pyschology, eds., L. Percy and A.G. Woodsite, Lexington, MA: Lexington Books, 1990. – pp. 3-23.
33. Seno, D., B.A. Lukas. The equity effect of product endorsement by celebrities: A conceptual framework from a co-branding perspective // *European Journal of Marketing*, 2007. – №41 (1/2). – pp. 121-134.
34. Silvera, D.H., B. Austad. Factors predicting the effectiveness of celebrity endorsement advertisements // *European Journal of Marketing*, 2004. – №38 (11/12). – pp. 1509-1526.
35. Solomon, M.R., H. Assael. The forest or the trees? A gestalt approach to symbolic consumption // in Umiker-Seboek, J. (Eds). Marketing and Semiotics: New Directions in the Study of Signs for Sale, Mounton de Gruyter, Berlin, 1987. – pp. 189-218.
36. Srinivasan, T.C. An Integrative Approach to Consumer Choice // in M. Wallendorf and P. Anderson (Eds.), Advances in Consumer Research, Provo, U.T.: Association for Consumer Research, 1987.
37. Tellis, G.J. Advertising and Sales Promotion Strategy. Reading: Addison-Wesley Educational Publishers Inc., 1998.
38. Till, B.D. Using celebrity endorsers effectively: Lessons from associative learning // *The Journal of Product and Brand Management*, 1998. – №7 (5). – pp. 400-409.
39. Till, B.D., M. Busler. Matching products with endorsers: attractiveness versus Expertise // *Journal of Consumer Marketing*, 1998. – №15 (6). – pp. 576-579.
40. Till, B.D., M. Busler. The match-up hypothesis: Physical attractiveness, expertise, and the role of fit on brand attitude, purchase intent, and brand beliefs // *Journal of Advertising*, 2000. – №29 (3). – pp. 1-14.
41. Till, B.D., T.A. Shimp. Endorsers in advertising: The case of negative celebrity information // *Journal of Advertising*, 1998. – №27 (1). – pp. 67-75.
42. Tripp, C., Jensen, T.D., L. Carlson. The effect of multiple product endorsements by celebrities on consumer attitudes and intentions // *Journal of Consumer Research*, 1994. – №20 (4). – pp. 535-547.