Attitude towards celebrity endorsement – a case study of adolescent students using personal care products

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Abstract: In advertisements, exploring the influence of celebrity endorsers on the consumer’s perception towards the brands/products is an interesting and active area of research. The objective of this paper is to investigate the impact of celebrity endorsement on students in terms of their purchase intention with reference to personal care products. The input variables included attitude towards celebrity endorsers, relationship between celebrity endorser and consumer and purchase intention was considered as the output variable. The study used a survey instrument to collect data from 300 students undergoing their Bachelor of Engineering degree course in five reputed colleges in Chennai, Tamil Nadu. Overall, results show that attitude towards celebrity, relationship with celebrity endorser are positively impacting the purchase intention toward personal care products. Variables like attractiveness, expertise, endorser effect, celebrity trap, negative events, product information and consumer manipulation are found to have significantly impacted the consumers purchase intention towards personal care products.

Keywords: celebrity endorsement; consumer attitude; personal care products; purchase intention; advertisement.


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Jayasree Krishnan is Professor and Head of the Department of MBA at St. Joseph’s College of Engineering Chennai, India. She holds a Doctoral in Management from Jawaharlal Nehru Technological University Hyderabad, India. She has published more than 40 papers in referred journals and 30 conference papers in the area of marketing and human resource management. Her area of research interest is entrepreneurship, human resource management and life style studies.
1 Introduction

Organisations around the world have long been using celebrity endorsement as the major tool in advertising their product, brand or service. Celebrities are often referred to plays people who adore public recognition and are well known to large chunk of certain group of people. Endorsement is recognised as a mode of brand communication in which a celebrity plays the role of organisation’s spokesperson to certify the product/brand. Celebrity endorser uses his/her popularity, personality, stature in the society or expertise in the field to popularise the brand. Celebrity endorsement has been proved as the successful trend in the brand building and product marketing.

It is popularly believed that celebrities are skilful in breaking through media clutter and hold viewers attention (Dyson and Turco, 1998; Erdogan and Baker, 1999). Studies have echoed that celebrity endorsed advertisements have higher degree of appeal, attention, recall and encourage consumers for purchasing the products (Cooper, 1984; Dean and Biswas, 2001). Conversely, several research findings are doubtful about the conception that consumers are more likely to purchase the products endorsed by celebrities (Agrawal and Kamakura, 1995; Dyson and Turco, 1998; Erdogan and Kitchen, 1998).

2 Personal care industry in India

Personal care industry in India is one of the fastest growing market segments with an annual growth rate of over 13%. Estimated to be around 4 billion USD (approx. Rs. 20,000 crore), personal care industry includes bath and shower products, hair care, skin care, cosmetics, fragrances and deodorants. Figure 1 presents the classification of personal care industry in India.

Figure 1 Classification of personal care industry

3 Review of literature

Several works in the literature have mentioned about the models of celebrity endorsement. For example, source credibility model (Hovland and Weiss, 1951), source attractiveness model (Kahle and Homer, 1985), product match-up model (Kamins and Gupta, 1994; Lynch and Schuler, 1994) and meaning-transfer model (McCracken, 1989) are prominent models that guide the development of this paper.
According to source credibility model, trustworthiness and expertise of the celebrity endorsers are the important factors determining the effectiveness of the endorser in popularising the brand (Lafferty and Goldsmith, 2004; Ohanian, 1991). The attractiveness model posits that physically attractive celebrity endorsers can modify the beliefs and purchase intentions of consumers (Baker and Churchill, 1977). The credibility, attractiveness and matchup are the critical factors for selecting the celebrities (Mohammad and Mohammad, 2011). A celebrity endorser is expected to score well on the dimensions such as trustworthiness, believability, persuasiveness and likeability (Freiden, 1984). Credibility of the information presented in the advertisements using celebrity endorsers positively influences the purchase intention of consumers (Dholakia and Sternthal, 1977).

At times celebrity endorsers appearing for advertisement fail to create much impression on the audiences. The negative event involving celebrity and unwanted information about celebrity can affect the product they endorse (Miciak and Shanklin, 1994; Louie and Obermiller, 2002). The fit between the celebrity and the brand/product they endorse is critical to the effectiveness of the advertisement (Till and Shimp, 1998). Overshadowing effect in which the audience tends to remember the celebrity more than the brand can detrimentally affect the advertisement (Evans, 1988). Multiple endorsements also negatively affect the advertisement (Tripp et al., 1994). One of the interesting fields of research has long been identifying the factors to measure the effectiveness of celebrity endorsement.

### 3.1 Theoretical models – celebrity endorsement

Some of the prominent theoretical models related to the celebrity endorsement are the source credibility model, source attractiveness model, and meaning transfer model.

#### 3.1.1 Source credibility model

Source credibility model proposes that the effectiveness of transferring message using celebrity endorser depends on the endorser’s perceived credibility. Credibility combines both expertise (e.g., skills such as athletic ability) and trustworthiness (honesty/integrity/believability). Through the process of internalisation, credible sources influence consumer beliefs, attitudes and/or behaviour (Ohanian, 1991; Erdogan et al., 2001).

#### 3.1.2 Source attractiveness model

Source attractiveness model proposes that message effectiveness depends on the similarity between source and receiver, source likeability (e.g., physical appearance/behaviour/personality/athletic ability) and source familiarity through repeated media exposure (Shilbury et al., 1998). Information from an attractive source is accepted because of the consumer desire to identify with that source (Erdogan, 1999; Shank, 2002). According to Ewen (1988, p.96), with celebrities and professional athletes “people not only find a piece of themselves, but also a piece of what they strive for”.

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**Attitude towards celebrity endorsement**

3
3.1.3 Product match-up model

Product match-up model asserts that effective advertising results are obtained when the messages conveyed by celebrity image are compatible with product image (Kamins, 1990; Pornpitakpan, 2003). Selecting a celebrity, who has a high product congruent image, leads to greater endorser believability (Van Hoecke et al., 2000; Erdogan et al., 2001).

3.1.4 Meaning transfer model

Meaning transfer model maintains that celebrity endorsers bring their own symbolic meanings to the endorsement process, and cultural meanings that are attached to the celebrity such as status, class and lifestyle transfer to products (McCracken, 1989). According to this model, the celebrity image developed independently transfers first from celebrity to product and then product to consumer. Advertisers hire celebrities or athletes under the assumption that people first ‘consume’ the images of celebrities and then ‘consume’ products associated with those celebrities (Erdogan, 1999).

3.2 Attitude towards celebrity endorser

3.2.1 Attitude towards celebrity endorser (positive)

Three constructs namely Attractiveness, Expertise and Trustworthiness are used to measure the Attitude towards celebrity endorser (positive). The items for the constructs are adapted from McCracken (1989) and Ohanian (1990).

![Variables in attitude towards celebrity (positive) scale](image)

3.2.2 Attitude towards celebrity endorser (negative)

Four constructs namely Overshadowing (Erdogan, 1999; Belch and Belch, 2001), Celebrity trap (Till and Shimp, 1998; Erdogan, 1999; Belch and Belch, 2001), Negative events (Till and Shimp, 1998; Erdogan, 1999; Belch and Belch, 2001), Mismatch (Friedman, 1978; Friedman and Friedman, 1979; Kahle and Homer, 1985) is used to measure attitude towards celebrity endorser (negative).
3.3 Relationship with celebrity-endorser

Two constructs namely endorser effect (McCracken, 1989; Ohanian, 1990) and consumer celebrity perception (Spears and Singh, 2004) are used to measure the attitude towards relationship with celebrity-endorser.

3.4 Purchase intention

An eight items scale developed by the researcher was used to measure the purchase intention.

4 Research methodology

The study used descriptive research method and quantitative questionnaire was used to collect data from the respondents (Churchill et al., 2004). In the present study, it is proposed to use self-administered survey instrument to gather the responses from sample of respondents.

4.1 Sample and setting

The study was conducted with the random sample of students studying Bachelor of Engineering degree course. A sample of 375 students studying in final year degree course from five engineering colleges in Chennai, Tamil Nadu was contacted to participate in the study. The choice of number of sample was based on the calculation done by Krejcie and Morgan (1970). It was calculated that 10000 students would be studying in final year engineering in Chennai and based on that overall sample size was determined to be 370. The questionnaires were administered to 375 students. However, only 300 responses were considered for final analysis as few questionnaires were not completed in all aspects and a few questionnaires were not returned at all. The return percentage was around 81%. The study focused on the attitude towards celebrity endorsements, relationship with celebrity endorser and purchase intention towards personal care products. In terms of demographic findings, 62% (N = 188) of the respondents were female students and the remaining 37% (N = 112) were male students.
4.2 Details of survey instruments

The survey instruments consist of four parts. The first part measures the demographic details of the respondents. The remaining three parts measures the attitude towards celebrity endorsement in personal care products, relationship with celebrity endorser and purchase intention toward personal care products. The attitude towards celebrity in turn has two components – positive and negative.

Attitude towards celebrity (positive) was measured using three constructs namely Attractiveness (5 items), Expertise (3 items) and Trustworthiness (5 items). Thus, totally 13 items are used to measure Attitude towards celebrity (positive).

Attitude towards celebrity (negative) was measured using four constructs namely Overshadowing (3 items), Celebrity trap (3 items), Negative events (3 items), Mismatch (3 items). Thus, totally 12 items are used to measure attitude towards celebrity (negative).

Relationship between celebrity-endorser and consumer was measured using two constructs namely endorser effect (5) and consumer celebrity perception (5). Thus, totally 10 items are used to measure relationship between celebrity-endorser and consumer.

Finally, the dependent variable purchase intention was measured using eight items.

All the items in the questionnaire from part 2 to part 4 are measured using five-point Likert scale. The scale values are: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly agree.

4.3 Framework of the study

The objective of the paper is to investigate the factors influencing purchase intention towards celebrity-endorsed personal care products. The independent variables are attitude towards celebrity and relationship between celebrity endorser and consumer. The dependent variable is purchase intention towards personal care products. The conceptual framework of the study is shown in Figure 4.

Figure 4  Conceptual framework of the study
4.4 Research hypothesis

The hypotheses framed for the study are given below:

H1 Attitude (positive and negative) towards celebrity endorsement influences the purchase intention of consumers towards personal care products.
   H1.1 Attractiveness of celebrity endorsers positively influences the purchase intention of consumers towards personal care products.
   H1.2 Expertise nature of celebrity endorsers positively influences the purchase intention of consumers towards personal care products.
   H1.3 Trustworthiness of celebrity endorsers positively influences the purchase intention of consumers towards personal care products.
   H1.4 Overshadowing of celebrity-endorsers in advertisements negatively influences the purchase intention of consumers towards personal care products.
   H1.5 Celebrity trap negatively influences the purchase intention of consumers towards personal care products.
   H1.6 Negative events negatively influence the purchase intention of consumers towards personal care products.
   H1.7 Mismatch negatively influences the purchase intention of consumers towards personal care products.

H2 The perceived relationship between celebrity-endorser and consumers affects the purchase intention of consumers towards personal care products.
   H2.1 Endorser effect influences the purchase intention of consumers towards personal care products.
   H2.2 Consumer celebrity perception influences the purchase intention of consumers towards personal care products.

5 Data analysis and findings

5.1 Descriptive statistics

The descriptive statistics of the constructs and items are shown in Table 1. Table 1 shows the number of items used to measure each variable, minimum and maximum values, mean and standard deviation and reliability coefficient using Cronbach’s alpha. The reliability coefficient obtained from the construct and scale values are higher than the minimum cut-off value of 0.6 (Nunnally et al., 1967).
Table 1  Descriptive and reliability statistics (N = 300)

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of items</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness (ATT)</td>
<td>5</td>
<td>2.4</td>
<td>5.0</td>
<td>3.37</td>
<td>0.47</td>
<td>0.858</td>
</tr>
<tr>
<td>Expertise (EX)</td>
<td>3</td>
<td>2.0</td>
<td>5.0</td>
<td>3.38</td>
<td>0.84</td>
<td>0.863</td>
</tr>
<tr>
<td>Trustworthiness (TR)</td>
<td>5</td>
<td>2.0</td>
<td>5.0</td>
<td>3.17</td>
<td>0.85</td>
<td>0.859</td>
</tr>
<tr>
<td>Attitude towards celebrity (positive)</td>
<td>13</td>
<td>2.1</td>
<td>4.6</td>
<td>3.29</td>
<td>0.49</td>
<td>0.854</td>
</tr>
<tr>
<td>Overshadowing (OS)</td>
<td>3</td>
<td>1.0</td>
<td>5.0</td>
<td>3.03</td>
<td>0.87</td>
<td>0.853</td>
</tr>
<tr>
<td>Celebrity trap (CT)</td>
<td>3</td>
<td>1.0</td>
<td>5.0</td>
<td>3.19</td>
<td>0.97</td>
<td>0.858</td>
</tr>
<tr>
<td>Negative events (NE)</td>
<td>3</td>
<td>1.0</td>
<td>5.0</td>
<td>3.07</td>
<td>0.88</td>
<td>0.857</td>
</tr>
<tr>
<td>Mismatch (MM)</td>
<td>3</td>
<td>1.0</td>
<td>5.0</td>
<td>3.13</td>
<td>0.90</td>
<td>0.856</td>
</tr>
<tr>
<td>Attitude towards celebrity (negative)</td>
<td>12</td>
<td>1.0</td>
<td>5.0</td>
<td>3.10</td>
<td>0.68</td>
<td>0.848</td>
</tr>
<tr>
<td>Endorser effect (EE)</td>
<td>5</td>
<td>1.0</td>
<td>5.0</td>
<td>3.07</td>
<td>0.93</td>
<td>0.856</td>
</tr>
<tr>
<td>Consumer celebrity perception (CCP)</td>
<td>5</td>
<td>1.6</td>
<td>5.0</td>
<td>3.10</td>
<td>0.71</td>
<td>0.855</td>
</tr>
<tr>
<td>Relationship between celebrity-endorser and consumer</td>
<td>10</td>
<td>1.5</td>
<td>4.8</td>
<td>3.09</td>
<td>0.70</td>
<td>0.851</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>8</td>
<td>2.0</td>
<td>5.0</td>
<td>3.26</td>
<td>0.46</td>
<td>0.857</td>
</tr>
</tbody>
</table>

5.2 Correlation analysis

Pearson bivariate correlation analysis was conducted to study the association between the variables. It can be seen from Table 2 that there are significant correlation between the variables of the study. The level of significance is 0.01.

Table 2  Pearson correlation bivariate correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Attitude towards celebrity endorser (positive)</th>
<th>Attitude towards celebrity endorser (negative)</th>
<th>Celebrity endorser and consumer relationship</th>
<th>Purchase intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards celebrity endorser (positive)</td>
<td>1</td>
<td>.497**</td>
<td>.530**</td>
<td>.466**</td>
</tr>
<tr>
<td>Attitude towards celebrity endorser (negative)</td>
<td>.497**</td>
<td>1</td>
<td>.488**</td>
<td>.420**</td>
</tr>
<tr>
<td>Celebrity endorser and consumer relationship</td>
<td>.530**</td>
<td>.488**</td>
<td>1</td>
<td>.496**</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>.466**</td>
<td>.420**</td>
<td>.496**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: ** Correlation is significant at the 0.01 level (two-tailed).

5.3 Multiple regression analysis

Regression analysis was conducted to test relationship between the dependent variable and independent variables of the study. The predictor variables namely, attitude towards celebrity (positive and negative factors), celebrity-endorser and consumer relationship...
were entered simultaneously in the regression model to study their impact on the purchase intention of personal care products. The variable entry method chosen was ‘Enter’.

5.3.1 Regression results of attitude toward celebrity endorsed advertisement (positive factors) and purchase intention

The regression results show that the predictor variables – attractiveness, expertise and trustworthiness accounts for 24.4% of variance in the purchase intention (dependent variable). The change in $R^2$ is 0.244 and it is highly significant ($p < 0.001$).

Table 3  Model summary

<table>
<thead>
<tr>
<th>R</th>
<th>R-square</th>
<th>Adjusted R-square</th>
<th>Std. error of the estimate</th>
<th>Change statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>.494</td>
<td>.244</td>
<td>.236</td>
<td>.41061</td>
<td>.244 31.782 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>296 .000</td>
</tr>
</tbody>
</table>

Note: Predictors: (constant), attractiveness, expertise, trustworthiness.

Table 4 reports on ANOVA, which assesses the overall significance of the model. As the reported $p < 0.001$, is highly significant therefore the model was valid. Thus, it can be said that the model suggested by the study, i.e., attractiveness, expertise and trustworthiness impacts the purchase intention is validated.

Table 4  ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>16.075</td>
<td>3</td>
<td>5.358</td>
<td>31.782</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>49.906</td>
<td>296</td>
<td>.169</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.982</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Predictors: (constant), attractiveness, expertise, trustworthiness. Dependent variable: purchase intention.

The standardised $\beta$ coefficients give a measure of the contribution of each variable to the model.

A larger value indicates that a unit change in this predictor variable has a larger effect on the criterion variable. The values of $\beta$ as shown in Table 5 indicate that attractiveness ($\beta = 0.282$) has higher impact on purchase intention when compared to expertise ($\beta = 0.253$). Trustworthiness showed least impact on the purchase intention ($\beta = 0.170$).

The ‘t’ and significance (p) values give a rough indication of the impact of each predictor variable; a big absolute t-value and small p-value suggests that a predictor variable is having a large impact on the criterion variable. The values obtained in this study indicate that attractiveness has a larger impact on purchase intention as compared to expertise. The ‘t-value’ obtained for attractiveness is 5.155 which is greater than the ‘t-value’ obtained for expertise (t-value = 4.9) and trustworthiness (t-value = 3.148). In addition, the p-value for attractiveness, expertise and trustworthiness are significant ($p < 0.01$).
Table 5  Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.827</td>
<td>.214</td>
<td>8.522</td>
<td>.000</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>.294</td>
<td>.063</td>
<td>4.628</td>
<td>.000</td>
</tr>
<tr>
<td>Expertise</td>
<td>.101</td>
<td>.033</td>
<td>3.014</td>
<td>.003</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>.037</td>
<td>.037</td>
<td>.978</td>
<td>.329</td>
</tr>
</tbody>
</table>

Note: Dependent variable: purchase intention.

5.3.1.1 Hypothesis testing

Based on the regression analysis, hypothesis (H1.1), ‘Attractiveness of celebrity endorsers positively influences the purchase intention of consumers towards personal care products’ is accepted.

The hypothesis (H1.2), ‘Expertise nature of celebrity endorsers positively influences the purchase intention of consumers towards personal care products’ is accepted.

The hypothesis (H1.3), ‘Trustworthiness of celebrity endorsers positively influences the purchase intention of consumers towards personal care product’ is accepted (P > 0.05).

5.3.2 Regression results of attitude towards celebrity endorsed advertisement (negative factors) and purchase intention

Multiple regression analysis was conducted on the data to analyse the contribution of each of the independent variable (Overshadowing celebrity trap, Negative events and Mismatch) on the dependent variable purchase intention of personal care products.

The regression results showed that the predictor variables – overshadowing celebrity trap, negative events and mismatch accounted for only 18.8% of variance in the purchase intention (dependent variable). The change in $R^2$ was 0.188 and it is highly significant ($p < 0.001$).

Table 6  Model summary

<table>
<thead>
<tr>
<th>R</th>
<th>R-square</th>
<th>Adjusted R-square</th>
<th>Std. error of the estimate</th>
<th>Change statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>.433</td>
<td>.188</td>
<td>.177</td>
<td>.42623</td>
<td>.188</td>
</tr>
</tbody>
</table>

Table 7 reports on ANOVA, which assesses the overall significance of the model. As the reported $p < 0.001$ is highly significant the model construct is validated. Thus, it can be said that the model suggested by the study, i.e., overshadowing celebrity trap, negative events and mismatch influence the purchase intention is validated.
Attitude towards celebrity endorsement

Table 7  ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>12.388</td>
<td>4</td>
<td>3.097</td>
<td>17.046</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>53.594</td>
<td>295</td>
<td>.182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.982</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Predictors: (constant), overshadowing celebrity trap, negative events, mismatch. Dependent variable: purchase intention.

The values of $\beta$ as shown in Table 8 indicates that celebrity trap ($\beta = 0.195$) has higher impact on purchase intention when compared to negative events ($\beta = 0.181$) and overshadowing ($\beta = 0.171$). Mismatch showed least impact on the purchase intention ($\beta = 0.013$).

The ‘t’ values obtained in this study indicate that celebrity trap has a larger impact on purchase intention as compared to overshadowing and negative events. The ‘t-value’ obtained for celebrity trap was 3.065 which is greater than the ‘t-value’ obtained for Overshadowing (t-value = 2.955) and negative events (t-value = 2.693). In addition, the p-value for overshadowing, celebrity trap and negative events are significant (p < 0.05). However, mismatch did not produce any significant p-value.

Table 8  Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.372</td>
<td>.114</td>
<td>20.743</td>
<td>.000</td>
</tr>
<tr>
<td>Overshadowing</td>
<td>.105</td>
<td>.035</td>
<td>.195</td>
<td>2.955</td>
</tr>
<tr>
<td>Celebrity trap</td>
<td>.087</td>
<td>.028</td>
<td>.181</td>
<td>3.065</td>
</tr>
<tr>
<td>Negative events</td>
<td>.091</td>
<td>.034</td>
<td>.171</td>
<td>2.693</td>
</tr>
<tr>
<td>Mismatch</td>
<td>.007</td>
<td>.034</td>
<td>.013</td>
<td>.198</td>
</tr>
</tbody>
</table>

Note: Dependent variable: purchase intention.

5.3.2.1 Hypothesis testing

Based on the regression analysis it can be inferred that:

The hypothesis H1.4, ‘overshadowing of celebrity-endorser in advertisements negatively influences the purchase intention of consumers towards personal care products’, is accepted.

The hypothesis H1.5, ‘celebrity trap negatively influences the purchase intention of consumers towards personal care products’, is accepted.

The hypothesis H1.6, ‘negative events negatively influence the purchase intention of consumers towards personal care products’, is accepted.

The hypothesis H1.7, ‘mismatch negatively influences the purchase intention of consumers towards personal care products’, is rejected (p > 0.05).
5.3.3 Regression results of attitude toward celebrity endorser and consumer relationship and purchase intention

Multiple regression analysis was conducted on the data to analyse the contribution of each of the variables of celebrity endorsement effect on the purchase intention (dependent variable). The predictor variables, namely, endorser effect and consumer celebrity perception were entered simultaneously in the regression modelling to study their impact on the purchase intention of personal care products. The variable entry method chosen was ‘Enter’.

The regression result shows that the predictor variables – mismatch and endorser effect accounted for only 24.6% of variance in the purchase intention (dependent variable). The change in $R^2$ is 0.246 and it is highly significant ($p < 0.001$).

Table 9  Model summary

<table>
<thead>
<tr>
<th>$R$</th>
<th>$R$-square</th>
<th>Adjusted $R$-square</th>
<th>Std. error of the estimate</th>
<th>Change statistics</th>
</tr>
</thead>
</table>
| .496 | .246       | .241                | .40919                    | $R^2$ change  
|      |            |                     |                           | $F$ change     
|      |            |                     |                           | $df1$          
|      |            |                     |                           | $df2$          
|      |            |                     |                           | Sig. $F$ change |

Note: Predictors: (constant), endorser effect, consumer celebrity perception.

Table 10 reports on ANOVA, which assesses the overall significance of the model. As the reported $p < 0.001$, is highly significant therefore the model construct is validated. Thus it can be said that the model suggested by the study, i.e., endorser effect and consumer celebrity perception impacts the purchase intention is validated.

Table 10  ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>16.252</td>
<td>2</td>
<td>8.126</td>
<td>48.532</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>49.729</td>
<td>297</td>
<td>.167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.982</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Predictors: (constant), endorser effect, consumer celebrity perception. 
Dependent variable: purchase intention.

The values of $\beta$ as shown in Table 11 indicates that endorser effect ($\beta = 0.312$) has higher impact on purchase intention when compared to consumer celebrity perception ($\beta = .273$). The ‘$t$’ values of the variables indicate that endorser effect has higher impact on purchase intention as compared to consumer celebrity perception. The ‘$t$-value’ for endorser effect is 5.576 and the p-value for endorser effect is significant ($p < 0.000$).

Table 11  Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.372</td>
<td>.114</td>
<td></td>
<td>20.743</td>
</tr>
<tr>
<td>Endorser effect</td>
<td>.105</td>
<td>.035</td>
<td>.195</td>
<td>2.955</td>
</tr>
<tr>
<td>Consumer celebrity perception</td>
<td>.087</td>
<td>.028</td>
<td>.181</td>
<td>3.065</td>
</tr>
</tbody>
</table>

Note: Dependent variable: purchase intention.
Based on the regression analysis it can be inferred that the hypothesis H2.1 that ‘Endorser effect influences the purchase intention of consumers towards personal care products’ is accepted. Similarly, the hypothesis H2.2 that ‘Consumer celebrity perception influences the purchase intention of consumers towards personal care products’ is accepted.

5.3.4 Overall regression results between independent variables (attitude towards celebrity (positive), attitude towards celebrity (negative), celebrity-endorser and consumer relationship and attitude towards advertisement) and dependent variable (purchase intention)

Multiple regression analysis was conducted to analyse the contribution of each of the independent Attitude towards celebrity (positive), attitude towards celebrity (negative), celebrity-endorser and consumer relationship and attitude towards advertisement on the dependent variable – purchase intention. The dependent variables were entered simultaneously in the regression modelling to study their impact on the purchase intention of personal care products. The variable entry method chosen was ‘Enter’.

The regression results shows that the predictor variables – attitude towards celebrity (positive), attitude towards celebrity (negative), celebrity-endorser and consumer relationship and attitude towards advertisement accounts for 32.1% of variance in the purchase intention (dependent variable). The change in $R^2$ is 0.321 and it was highly significant ($p < 0.001$).

Table 12  Model summary

<table>
<thead>
<tr>
<th>$R$</th>
<th>R-square</th>
<th>Adjusted R-square</th>
<th>Std. error of the estimate</th>
<th>Change statistics</th>
<th>R-square change</th>
<th>F change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>.567</td>
<td>.321</td>
<td>.314</td>
<td>.38905</td>
<td>.321</td>
<td>46.643</td>
<td>3</td>
<td>296</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Predictors: (constant), attitude towards celebrity (positive), attitude towards celebrity (negative), celebrity-endorser and consumer relationship.
Dependent variable: purchase intention.

Table 13 reports on ANOVA, which assesses the overall significance of the model. As the reported $p < 0.001$, is highly significant, the model construct is validated. Thus, it can be said that the model suggested by the study, i.e., attitude towards celebrity (positive), attitude towards celebrity (negative), celebrity-endorser and consumer relationship and attitude towards advertisement impacts the purchase intention is validated.

Table 13  ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>21.180</td>
<td>3</td>
<td>7.060</td>
<td>46.643</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>44.802</td>
<td>296</td>
<td>.151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.982</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Predictors: (constant), attitude towards celebrity (positive), attitude towards celebrity (negative), celebrity-endorser and consumer relationship.
Dependent variable: purchase intention.
The values of $\beta$ as shown in Table 14 indicates that celebrity-endorser and consumer relationship ($\beta = 0.295$) and attitude towards celebrity (positive) ($\beta = 0.228$) has a larger effect on the purchase intention as compared to attitude towards celebrity (negative) ($\beta = 0.163$). Attitude towards celebrity (positive) has the lowest $\beta$-value. The ‘t’ values obtained in this study indicate that celebrity-endorser and consumer relationship has a larger impact on purchase intention as compared to attitude toward advertisement and attitude towards celebrity.

**Table 14  Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.602</td>
<td>.155</td>
<td>10.370</td>
<td>.000</td>
</tr>
<tr>
<td>Attitude towards celebrity (positive)</td>
<td>.215</td>
<td>.056</td>
<td>.228</td>
<td>3.821</td>
</tr>
<tr>
<td>Attitude towards celebrity (negative)</td>
<td>.111</td>
<td>.040</td>
<td>.163</td>
<td>2.808</td>
</tr>
<tr>
<td>Celebrity-endorser and consumer relationship</td>
<td>.198</td>
<td>.040</td>
<td>.295</td>
<td>4.979</td>
</tr>
</tbody>
</table>

Note: Dependent variable: purchase intention.

Based on the regression analysis it can be inferred that the hypothesis H1 which states that ‘attitude (positive and negative) towards celebrity endorsement influences the purchase intention of consumers towards personal care products’ is accepted. Similarly, the hypothesis H2, ‘The perceived relationship between celebrity-endorser and consumers affect the purchase intention of consumers towards personal care products’ is also accepted.

### 6 Major findings

The results revealed that the respondents of the study hold more positive attitude toward celebrity endorsement. It is evidenced in the study that attractiveness and expertise influences the purchase intention of the consumers. The results of the study are partially consistent with the study by Ohanian (1991). He empirically showed that the intent to purchase was influenced by the expertise of the celebrity and not by their physical attractiveness and trustworthiness. However, in the present study, attractiveness is also found to be a significant factor in the purchase intention of consumers. The reason could be that it is believed that the use of personal care products mainly enhances ones appearance and appeal thus attractiveness is also an important component that people expect from the endorsers. However, the trustworthiness fails to significantly impact the purchase intention.

Contrary to other studies, the negative attitude factors towards celebrity endorsers did not produce significant evidence to detrimentally affect the purchase intention. Negative factors like overshadowing, celebrity trap and negative events do not influence the purchase intention of the consumers. The reason could be that students worship their celebrities.
Attitude towards celebrity endorsement

However, mismatch between celebrity and products affects the purchase intention significantly. In terms of attitude towards relationship with celebrity-endorser, endorser effect and consumer celebrity perception are strongly associated with the purchase intention of the consumers.

7 Limitations and research

The study has limitations. First, the effect of demographic variables has not been considered as the study was conducted only with specific population (final year engineering students). Hence, future studies may concentrate on inclusion of diverse set of samples and analyse the effect of demographics on the attitude toward celebrity endorsement and purchase intention. Secondly, the sample size was limited and included only final year students of engineering colleges. Considering the time and cost constraints the sample size was restricted to 300. Hence, utmost should be exercised, when the findings of the study is interpreted for larger sample size including students from all years of engineering and all streams of study. It may be recommended that the future studies may involve larger sample sizes with representation from students of other years and other stream of studies, including more number of colleges. The study used cross sectional approach in which the net effect of predictor variable on the criterion variable was considered at a specific point in time (Cavana et al., 2001). The major limitation of cross-sectional study has been the findings could not ‘explain why the observed patterns are there’ [Easterby-Smith et al., (2003), p.45]. Moreover, the perception of students is subjected to change over time and they are dependent on several factors. It is proposed to conduct a longitudinal study as an extension of this paper to observe changes in patterns of perception of students towards celerity endorsement.

References


