The Relative Effectiveness of Celebrity Endorsement for Beauty, High- and Low Involvement Product Print Advertisements

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1. Abstract
The paper consists of two research projects. In the first research project, the matches between the products concerned and a number of celebrities were analysed. In the second research project advertisements with the best and worst product-celebrity matches, respectively, are compared with advertisements with a picture of an anonymous person and advertisements without a celebrity or picture. The research results do not indicate that celebrity endorsement is effective. This result was also found for the advertisements with the endorsement of celebrities who were found to match best with the products at hand. These results, therefore, suggest that the considerable amounts invested in celebrity endorsement could better be allocated to other advertisement ends.

Key words
Celebrity endorsement, source credibility model, source attractiveness model, meaning transfer model

2. Introduction
For more than fifty years the advertising industry has been using celebrity endorsement, Marilyn Monroe and Marlène Dietrich are famous examples (Iddiols, 2002). Research has shown that the use of celebrities in advertisements can have a positive influence on the credibility, message recall, memory and likeability of the advertisements and finally on purchase intentions (Menon, 2001; Pornpitakpan, 2003; Pringle and Binet, 2005; Roy, 2006). Today – no doubt inspired by the declining effectiveness of the different marketing communications (Blondé and Roozen, 2006) - the advertising industry is willing to pay the increasing rewards the celebrities are asking (the costs of the spot with Nicole Kidman for Chanel V amount to 7.5 million Euro; David Beckham for Adidas $160 million; Gilette $68 million and Pepsi $25.5 million; Tiger Woods for Nike’s golf advertisements $18 million).
3. Review of the literature

According to McCracken's (1989) definition, a celebrity endorser is an individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement (marketing communication). Research has shown that in general celebrity endorsement influences the feelings of the consumers and can also influence the attitude consumers have towards the advertisement and attitude towards the brands, which can increase the purchase intentions and, consequently, increase sales.

A celebrity endorser used in an advertisement can be interpreted as a reference group. A reference group is defined as any person or group of persons that serves as a point of comparison (or reference) for an individual by communicating values, attitudes and providing a specific guide for behaviour (Shiffman and Kanuk, 2006). An aspiration group is a derivative of the reference group: in this case, the consumer does not belong to the group but is willing to be associated with it. To become 'associated' with this group, consumers are willing to behave like members of the aspiration group. This means that consumers are trying to behave in the same manner, e.g. try to use the same symbolic meanings – of the aspiration group. This means that a celebrity endorser can be interpreted as the 'personality' of the reference group. The reference group 'rich and famous', which often correspond with the way the ‘celebrities’ live, is frequently indicated as an aspiration group of which consumers like to be part (De Pelsmacker et al. 2004).

Companies invest large sums of money to align their brands and themselves with celebrity endorsers. Research has shown that because of the fame of celebrities, they do not only create and maintain attention of the consumers but they also achieve high message recall (Ohanian, 1991; O'Mahony and Meenaghan, 1997). However, companies have limited control over the celebrity's persona which can also result in high risk and “no gain” situations (e.g. the “scandals” surrounding celebrities like Michael Jackson, Kate Moss, Britney Spears, Paris Hilton). As a result, companies build characters (using people who are not celebrities) which are congruent with their brands and target-audiences, and ensure that these characters are endorsing only one particular product. Tom et al. (1992) found that created endorsers were more effective in creating a link to the product than celebrity endorsers. Mehta (1994) has found that there were no significant differences for the concepts ‘attitudes towards the advertisement’, ‘attitude towards the brand’ and ‘intentions to purchase endorsed brands’ between celebrity and non-celebrity endorsement advertisements. When confronted with non-
celebrity endorsers, consumers were significantly more focused on the brand and its features, whereas with celebrity endorsers the subjects were significantly more concentrated on the celebrity in the advertisement. However, Atkin and Block (1983) and Petty et al. (1983) have found the opposite results of Mehta (1994).

Potential advantages of utilising celebrity endorsers are that it can increase attention, polish the image of the brand, especially when a brand will be introduced in the market or a repositioning of a brand will take place. However, pre-testing and careful planning is very important and the life-cycle stage of the celebrity has also be taken into account (De Pelsmacker, 2004). Celebrity endorsing has a potential advantage when a global campaign will be organised and celebrities who are appropriate for a global target audience can be used; however this can be also be very expensive. In general, potential hazards of celebrity endorsement are the costs and that the possibility that the celebrity overshadows the brand, or that it can change the image, that overexposure of the celebrity takes place (especially when a celebrity become an endorser for many different products) (Zafer Erdogan, 1999).

In the literature, two general models are often used to analyse celebrity endorsement: the source credibility model and the source attractiveness model. Both models will be described below. Furthermore, a description of the endorsed brands and the match between the celebrity and the product is given.

**Source credibility and source attractiveness model**

Source credibility is used to imply a communicator's positive characteristics to affect the receiver's acceptance of a message. The source credibility model of Hovland et al. (1953) analyses the factors leading to the perceived credibility of the communicator. Hovland et al. (1953) concluded that the two factors trustworthiness and expertise underscore the concept of source credibility. Trustworthiness is defined as the degree of confidence in the communicator's intent to communicate the assertions he considers most valid. Research shows that when a communicator is perceived to be highly trustworthy, an opinionated message is more effective than a non-opinionated communication in producing attitude change (Ohanion, 1990). Expertise is defined as the extent to which a communicator is perceived to be a source of valid assertions (Hovland, et al. 1953). Already in the early eighties, research results have indicated that in a selling context, an expert salesperson induced a significantly higher number of customers to purchase than did a non-expert salesperson (Woodside and Davenport, 1974).
The source attractiveness model is a component of the 'source valence' model of McGuire (1985). The attractiveness model contends that the effectiveness of a message depends on source's 'familiarity', 'likeability', 'similarity' and 'attractiveness' to the respondent. Attractiveness has become an important factor through the increasing use of celebrities as endorsers for products, services and/or social causes (Patzer, 1983; Ohanion, 1990). Most television and print ads use physically attractive people. Already in the eighties, research has shown that psychically attractive communicators are more successful in changing beliefs than unattractive communicators (Chaiken, 1979).

**Endorsed brands**

By analysing the influence of celebrity endorsement on the brands and or products shown in the advertisements, it is important to make a classification between high and low involvement of the advertisement. The Elaboration Likelihood theory (Petty et al. 1981) shows that attitudes change through different routes. Under conditions of high involvement, where elaboration is likely, the attitude change travels trough a 'central route' in which a person exercises 'diligent' consideration of information that (s)he feels is central to the true merits of a particular attitudinal position. For low involvement, low elaboration likelihood, the attitude change travels through a 'peripheral route' in which various simple cues associated with the issue, object, or context exert optimal influence. This means that under conditions of high involvement, arguments but not celebrities influence attitudes, whereas under conditions of low involvement, celebrities but not arguments influence attitudes. However, Kahle and Homer (1985) have shown that the involvement effect is sensitive to variation and that the physical attractiveness of a celebrity affects the attitude change process. A psychically of physically attractive model exudes sensuality, can increase arousal which can affect information processing. For example, in the case of a stunningly attractive person who claims to use a beauty product the product in question may be assumed to be an element of the person’s beauty formula. Information concerning attractiveness is conveyed more quickly than other information, even if it is not highly probative.

The categorisation of products into low and high involvement is based on the risk perceptions consumers have when purchasing products (which is significantly higher for high involvement products). Risk perceptions can be classified into four categories (Friedman and Friedman, 1979): (1) Psychological risk, the fit between product image and self image. (2)
Financial risk is associated with the price of the brands/products. (3) Social risk. The fear of not belonging or not taking part to/in a reference group as a result of purchasing the ‘wrong’ product/brand. (4) Operational risk. The risk of buying a product that does not operate the way it should do. Celebrity endorsers have been found to be more effective in promoting products with high psychological and/or social risk than products with high financial and performance risks (Mehulkumar, 2005).

In most celebrity endorsement research, the products which were investigated were classified in different product categories (Kamins, 1990; Ohanian, 1990, Walker et al. 1992), fictitious brands (Till and Busler 1998, 2000), or unknown brands (Atkin and Block 1983; Kamins et al. 1989). In practice, celebrity endorsement is used for existing brands, which means that it can influence the brand image.

**Match between celebrity and brand / product**

Research has shown that not only the classification of the product, source credibility and source attractiveness can influence the effectiveness of the celebrity endorser but also the match between the brand and or product with the celebrity. There should be congruence between the celebrity and the product in terms of characteristics such as image, expertise (Till and Busler, 1998, 2000) or attractiveness (Baker and Churchill, 1977; Kahle and Homer, 1985). The celebrity-product match model states that attractive endorsers are more effective when promoting products used to enhance one's attractiveness (Kamins, 1990) and that the impact will be not significant in the case of a product that is unrelated to “attractiveness”. Kahle and Homer (1985) found that in the case of attractiveness related products the use of physically attractive celebrities increased message recall, product attributes, and purchase intention. Till and Busler (1998, 2000) have examined attractiveness versus expertise as a match-up factor and found a general attractiveness effect on brand attitude and purchase intention but no match-up effect was found based on attractiveness. They proposed that expertise is more appropriate for matching products with celebrity endorsers than attractiveness.

McCracken (1989) has addressed the endorsement process from a cultural perspective. In this “meaning transfer model” the symbolic properties of the celebrity endorser serve the endorsement process by taking on the meanings that then carry from ad to ad. The source models (attractive and credibility) do not explain why a celebrity fails as an endorser for one
brand while being successful for another brand. In the meaning transfer model from McCracken (1986, 1989) cultural meanings - start as something inherent and resident in the culturally constituted, psychical, and social world and then move through a conventional path (advertising and fashion systems) to individual consumers where it is transferred through the efforts of the consumer. In the meaning transfer model, the celebrity is a persuasive communicator with a set of fictional roles and when consumers respond to celebrity specific characteristics they are responding to the particular set of meanings of the celebrity. The effectiveness of the celebrity depends upon the meanings the celebrity brings to the endorsement process. The role of the celebrity is not only being attractive or credible but also the celebrity has to make up certain meanings the consumer finds compelling and useful (McCracken, 1989). In the initial stage of the model of McCracken (1989), the meanings generated from political campaigns, athletic achievements and performances and/or distant movie performances, reside in celebrities themselves. In the second stage, meanings are transferred to the product through advertisement and the endorsement process. In the last stage, the meanings are transferred from the product to the consumer where the properties of the product become the properties of the consumer. Walker et al. (1992) later concluded that meanings and images transfer from the celebrity endorsers to the product. In Figure 1 the meaning transfer model of McCracken (1989) is summarised.

(Please insert Figure 1 about here)

On the basis of this model, Mehulkumar (2005) proposes the CATLEF model. The CATLEF model examines the interaction between celebrity characteristics and product characteristics at a brand level for different countries. The perceived celebrity endorser image has to be summarized in a multicultural setting with an international celebrity measuring with the following variables: Credibility (C), Attractiveness (A), Trustworthiness (T), Likeability (L), Expertise (E) and Familiarity (F). The product characteristics which have to be measured in this model are: attractiveness related/unrelated product, expertise related/unrelated and high low involvement product.

On the basis of the literature one can conclude that an attractive celebrity is more effective in endorsing attractiveness related products and or brands. An attractive celebrity will be also more effective for low involvement products (products low in financial and performance risk), than for high involvement products (Baker and Churchill, 1977). For technical products the expertise factor of the celebrity is a significantly more important factor (Till and Busler, 1998,
2000). However, congruency between the celebrity and the product in terms of characteristics such as image, expertise (Till and Busler, 1998, 2000) or attractiveness (Baker and Churchill, 1977) plays an important role for the effectiveness of the advertisement (Kahle and Homer, 1985) and an optimal match between the celebrity endorser and the product is therefore crucial.

Previous research has suggested that the greater the congruity between the human characteristics that consistently and distinctively describe an individual's actual or ideal self and those that describes a brand, the greater the preference for the brand (Malhotra, 1988; Sirgy, 1982). The research of Aaker (1997) confirms this by measuring the brand personality dimensions.

Alternatively, companies can create endorsers themselves using not so well known individuals. This gives them great control over the process since they have developed the public characters of the endorsers for specific brands and/or products. The association between the created spokesperson and the brand is also stronger since it is unique which can be a great advantage compared to celebrity endorsers. However, research has shown that created spokespersons are often not significantly more effective (Mehta, 1994; Atkin and Block, 1983; Petty et al. 1983). Other studies emphasise the effectiveness of the use of celebrity endorsers (Agrawal and Kamakura, 1995; Mathur et al. 1997). Zafer Erdogan (1999) concludes is that in the light of academic findings and company reports, celebrity endorsers are more effective than non-celebrity endorsers for influencing attitudes towards advertising, attitude towards the endorsed brand, intentions to purchase and actual sales. However, companies have to use celebrities whose public personae match with the brands and target audiences and who have not endorsed products and or brands previously.

4. Research Design
On the basis of the review of the literature the conclusion can be drawn that celebrity endorsement can be effective, but only under well defined conditions. Celebrity endorsers are, however, typically expensive and there is a risk that the celebrity and or his/her unexpected behaviour overshadows the product. This suggests that the use of anonymous models or even no celebrity (no picture) is still an option that should be investigated seriously. Moreover, on the basis of research results, it is not always significantly less effective (Tom et al. 1992). The review of the literature has also shown that the match between the brand and or product and
the celebrity has to be optimal. When a brand and/or product is endorsed by a celebrity endorser, the perceived celebrity image and the perceived brand image will interact with each other and images will be transferred from the endorsed brand to the celebrity endorser and vice versa. This raises the following questions:

1. What meanings does the celebrity endorser bring to the product and, in the end to the consumer for different product categories?
2. To what extent do these effects vary across different product categories?

This study tries to analyse both questions for a number of female international celebrity endorsers in respect of three product categories (high -, low involvement - and beauty product). The research is based on written questionnaires obtained from a sample of Belgian students. These limitations obviously imply that the study can only provide some pointers two these research questions at hand relevant to Belgian students. The analysis would have to be replicated in different countries and across different population segments to analyse whether the results can be generalised. The study is articulated along two separate, but linked, research phases.

The first research phase attempts to analyse the congruency between the celebrity endorser and the product’s image. The main research question is which ‘meanings’ affect the match between the celebrity and the product most strongly? On the basis of the review of the literature a classification of the products, which are shown in the advertisements, is made into: high -, low involvement - and beauty product.

In the second research phase the different congruencies between the product and celebrity endorsers are further investigated. The ‘best’ match and the ‘worst’ match between a celebrity and a product (based on the research results of research I) are compared with an advertisement of the same product with an anonymous model (“non-celebrity endorsement”) and with an advertisement of the product without a model (no picture – or “non endorsement”), respectively. The main objective of the second research phase is to analyse the relative effectiveness of celebrity endorsement compared to “non-celebrity” endorsement and “non-endorsement”. This objective is analysed on the basis of the following research questions: (1) What is the influence of the endorser towards the brand? (2) What is the influence of the celebrity endorser towards the advertisement? and (3) What is the influence of the endorser towards the purchase intentions of the brand?
5. Research results: First research phase

The choice of a celebrity by a company’s marketing department is normally based on a sophisticated marketing plan. The marketing / advertising firm would determine the symbolic properties sought for the product which in fact are based on the symbolic meanings sought by the consumer. By taking into account budget and availability constraints the celebrity will be chosen who best represents the appropriate symbolic properties. In this research the celebrities under investigation were chosen from a list of persons with similar demographic characteristics. Only young female celebrities were taken into account to reduce variation on the grounds of age and gender. The age of the celebrity females was between 20 and 35 years old (to fit with the reference group of the sample used in this research). On the basis of desk research in which also the pictures of the celebrity females must be bear resemblance, 13 female celebrities\(^2\) (in the same pose on the picture) were selected. The different occupations which are represented are athletes, actresses, singers and models. 2 out of 13 female celebrities have a dark skin colour.

**Measurement instruments**

In the questionnaire, the reliable and valid scales of Ohanion (1990) were used to measure the constructs: source trustworthiness (credibility), source attractiveness and source expertise. The three scales were all 7 point semantic differential consisting of five items. To evaluate the match between the celebrity and the product, the subjects were asked to score 4 additional statements about the relationship between the celebrity and the product on a 7 point Likert scale of Macinnes and Park (1991) and later also used by Sengupta et al. (1997)\(^3\). As mentioned above, three product categories were analysed with fictive names: a high involvement product ‘a lap top computer’, a low involvement product ‘a candy bar’ and a beauty product ‘a beauty cream’. The three products are day –to-day items for the subjects of the sample used in the research.

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\(^2\) Kim Gevaert, Athlete from Belgium; Maria Sharapova: Tennis player from Russia; Jennifer Aniston: Actress from US; Kate Moss: Model from UK; Gwen Stefani: songwriter from US and fashion designer; Naomi Campbell: Model from US; Scarlett Johanson: Actress from US; Kim Clijsters: Tennis player from Belgium; Paris Hilton: daughter of and singer; Mariah Carey: singer from US; Angelina Jolie: American actress; Beyoncé Knowles: American singer; Sarah Jessica Parker: American actress

\(^3\) If I think of X as endorser, I think almost directly of product Y; The idea that X as endorser works for Y, is according to me an optimal fit; I think that X is a relevant endorser for Y; I think that X is a suitable endorser for Y.
In the first research phase, the 13 different celebrities were analysed for the three different products separately. However, subjects were only allowed to fill out the questions in respect of a given celebrity, if they knew the celebrity (this was verified in the first question of the written questionnaire after seeing a picture of the celebrity (13 pictures of the celebrities were included in the questionnaire). If the subject knew the celebrity (s)he was asked to answer the questions about the celebrity. In the second question they were asked to score the celebrity for credibility and attractiveness generally - without linking this to a product. In the third question the subject was asked to evaluate the celebrity for her expertise towards the three different products separately. Subsequently, the subject was asked to score the 4 additional statements about the relationship between the celebrity and the product per product category. Finally, the subject was asked to score the celebrity on a 10 point score taking personality, reputation and her appearance into account again without linking this to a product. The written questionnaire was in total 26 pages and the average time to fill out the questionnaire was half an hour.

Sample
The experimental subjects were 28 student volunteers from third bachelor at a large urban university in Brussels, Belgium. 48% of the subjects were female, the age of the subjects was between 21 and 25 (average age was 22 years). The subjects were not informed about the objective of the research.

Research results
Most of the celebrities were recognised by the subjects, Kim Clijsters, Kim Gevaert and Jennifer Aniston were recognised by 100% of the sample, Kate Moss had with 57% the lowest score for recognition. On average, 82% of the celebrities were recognised.

The average scores could be measured for the constructs ‘trustworthiness’, ‘attractiveness’ and ‘expertise’ because of the sufficient high scores for Cronbach’s alpha. The Cronbach’s alpha scores for source trustworthiness (credibility) is 0.978, for source attractiveness is 0.881 and for source expertise-candy bars is 0.961, source expertise-beauty products is 0.975 and source expertise-laptop computers is 0.971. Also an explorative factor analyses for the different items of the constructs separately shows that the items of the construct load on one

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factor with sufficient high scores on ‘total variation explained’ (72.5% and higher for the five different constructs separately).

In Table 1, the scores for the constructs ‘trustworthiness’, ‘attractiveness’ and ‘expertise’ are given. The results of Table 1 shows that the celebrity Paris Hilton has the lowest score on attractiveness, trustworthiness and expertise with the lap top computer, her general score on 10 points is also significant lower than the other celebrities. For beauty products the expertise score of the Belgian tennis player Kim Clijster is the lowest whereas Naomi Campell has the highest expertise score for this product. Naomi Campell has the lowest score for expertise with the candy bar, for this product the expertise score is the highest for Gwen Stefani.

(Please insert Table 1 about here)

Interestingly, the celebrities are considered to have the highest expertise for beauty products with much lower scores for candy bars and lap-tops.

In Table 2 the match scores of the different celebrities with the products are given. Table 2 shows that for candy bars the celebrity Gwen Stefani has for all the 4 items on average the highest scores for this product. Also the results of Table 1 indicate that Gwen Stefani has the best match with the candy bar. For the celebrity Naomi Campbell the opposite result for candy bars is found. For the high involvement product, the lap top computer, Paris Hilton has the worst match whereas Angelina Jolie has the best. The results of the explorative research suggests that celebrity Naomi Campell would be suitable for promoting a line of beauty products and the worst match is found for the Belgian tennis player Kim Klijsters. As in Table 1, the scores are on average highest for beauty products, followed by the scores for candy bars and lap-tops.

(Please insert Table 2 about here)

On the basis of the research results of Table 1 and Table 2 the best and the worst match between the products and the celebrities are selected and used for the research design of research II where the attitude towards the brand, attitude towards the advertisement and the
purchase intention of the different advertisement are investigated for the different celebrity product combinations.

6. Research results for the second research phase

For research II, a 3x4 factorial design is formulated on the basis of the research results of research I. For every product category the best- and worst match between the product and the celebrity is used, and an advertisement with an anonymous model (non-celebrity endorser) and one with no model (non endorsement) is analysed. In Figure 2, an example of the 4 advertisements of the high involvement product ‘the lap top’ with the name ‘Powertop Q12’ is shown (these products are not sold in Belgium).

(Please insert Figure 2 about here)

The first advertisement is, according to the results of research I, the advertisement with the best match between the product and the celebrity. The advertisement to the right, has the worst match between the celebrity and the product. The written text used in the advertisement is the same for all the advertisements. It is clear that the position of the anonymous model on the picture is different from the position of the celebrities. The literature has shown that for technical products the expertise factor of the celebrity is a significantly more important factor than the attractiveness factor (Till and Busler, 1998, 2000; Kamins, 1990; Bower and Landreth, 2001). In Figure 3 an overview of the research design of the second research phase is given.

(Please insert Figure 3 about here)

Measurement instruments

For all the three advertisements in the questionnaire the subjects were asked to score the following constructs:

- Brand attitude (Ab) - a semantic differential scale of 10 items measured on 7 point (Spears and Singh, 2004);
- Attitude towards the advertisement (AAD), a semantic differential with 9 items measuring the ‘affective’ components and 4 items measuring the ‘cognitive’
components of the attitude towards the advertisement on a 7-point scale (Spears and Singh, 2004). The different components of AAD are taken into account because of the important value of ‘attractiveness’ and ‘expertise’ within the research of celebrity endorsement. For beauty products a higher value for the affective component is expected whereas for high involvement products a higher value for the cognitive component for the best match is expected.

- Purchase intention (PI) 4 items on a 7 point Likert scale (Jamieson and Bass, 1989 and Putrevu, 1994).

Sample

The experimental subjects were 200 student volunteers from a large urban university in Brussels Belgium who were not involved in the first research phase. The subjects were not informed about the objective of the research. They were asked to participate in a pre-test of different advertisements for a foreign company who would like to launch three of their products in Belgium. In total 200 subjects - for every written questionnaire 50 - participated. The age of the subjects was between 18 and 25 (average age 20 years, standard deviation of 10 months). 63% of the subjects were female. No significant differences for age and gender were found between the four different experimental groups.

Research results

Average scores for the constructs ‘brand attitude (Ab)’, ‘attitude towards the advertisement (AAD)’ for the affective and cognitive component, and ‘purchase intention (PI)’ could be determined because of the sufficiently high scores of Cronbach’s alpha. The Cronbach’s alpha scores for ‘brand attitude’ is 0.899 (and higher for the other products), for purchase intention the score is 0.84 and higher and for attitude towards the advertisement affective component the score is 0.90 and higher, and for the cognitive component the attitude towards the advertisement is 0.76 and higher. Also the results of an explorative factor analyses for the different constructs separately shows that the items of the constructs load on one factor with sufficiently high scores for the total variation explained’ (67.5% and higher for the four different constructs separately for the different products).
In Table 3 the average scores for the different advertisements for the different constructs Ab, AAd (affective- and cognitive component) and PI are given.

(Please insert Table 3 about here)

The research results of Table 3 indicate that for high-, low involvement and beauty products the advertisements with an anonymous model have 7 out of the 12 highest average scores for the four different constructs, while the advertisements with no-model has for 5 out of the 12 the highest average score. This means that irrespective of the product, the best match between the celebrity and the product does not automatically result in a significantly higher score on one of the measured constructs. However, the overall research results do confirm that a bad match between a celebrity and a product almost automatically leads to low scores on attitude towards the brand, attitude towards the advertisement for the affective and cognitive component and purchase intention (the “worst match” has the lowest or the second lowest score on all 12 construct-product combinations).

For the low involvement product ‘candy bar’, the scores of the attitude towards the brand, the attitude towards the advertisement (for both components) and purchase intention are in all cases the highest for the advertisement with no model (no picture). The advertisement with the best match between the celebrity and the candy bar has the second highest score for all the measured constructs. This is in contrast with the results found in the review of the literature where an attractive celebrity is typically an effective endorser for low involvement products (products low in financial and performance risk).

For the beauty product the anonymous model has the highest scores for the different constructs. It should be underlined that the anonymous model used for this product had a different position than the two celebrities. Moreover, a close-up of the face of the anonymous model and part of her breast was shown whereas for the celebrities the picture shows more or less the ‘whole person’ (see Figure 2). It is possible, therefore, (also see Figure 2) that in the picture shown the anonymous model is considered to be more attractive than the best match celebrity. This is consistent with the finding that especially the affective component of the attitude towards the advertisement has a significantly higher score. This, in turn, may suggest that for beauty products very attractive ‘sexy’ anonymous models could be at least as effective as very expensive celebrities like Naomi Campell. This result corresponds with the
celebrity-product match-up model which states that attractive endorsers are more effective when promoting products used to enhance one's attractiveness (Kamins, 1990).

For the high involvement product, the lap top, the results of Table 3 suggest that for the cognitive component of the attitude towards the advertisement, the advertisement with no picture is most effective. Research has shown that for technical products the expertise factor of the celebrity is a significantly more important factor (Till and Busler, 1998, 2000). However, our analysis suggests that for technical products focusing only on the product without using (non-) celebrity endorsers is the most effective manner to underscore the cognitive aspects of the product. The results for purchase intentions are broadly similar for all four advertisements, except for the worst match celebrity endorser. The relatively high scores for the (non-) celebrity endorsers are surprising, the literature review suggests that attractive celebrities are more effective in endorsing an attractiveness related product or a low involvement product (products low in financial and performance risk). One possible explanation may be that lap tops in reality are a “cross-over” product, combining features of high involvement products with those of attractiveness/life-style related products. The considerable emphasis that some lap top manufacturers put in design features (e.g. Apple, iPod, …) also points in this direction (Wikipedia, 2007).

7. Discussion
The research results confirm some of the key findings reported in the literature, but also contain some significant differences with what other researchers have found. This may be due to the sample used (consisted of students with an average age of 20) and the fact that only three products of the three product categories were analysed. However, most of the literature on this subject dates to the 1990s and significant cultural changes and developments in consumer product categories have occurred since.

Bearing this in mind, however, the results suggest tentatively that the use of attractive non-celebrity endorsers could be as effective in influencing attitudes and purchase intentions as the use of celebrity endorsers across very different products. A poorly matched-up celebrity endorser, on the other hand, is in nearly all cases amongst the least effective advertisements. Another feature of the research results reported in this study is that no-endorsement advertisements (not using pictures of (non-) celebrities) may be relatively effective. Given the very high cost of using celebrity endorsers, it would be useful to extend and deepen this research.
There are various ways in which this could be undertaken:

First, a larger number of products should be analysed. Moreover, in light of the findings in this research, it would be interesting to explicitly analyse the perceived nature (e.g. low involvement) of the products since this may differ from standard categories found in the literature of the 1980s and 1990s which may not be fully relevant to today’s product mix and young generations.

Secondly, it would be interesting to analyse to what extent generational and cultural differences affect the relative effectiveness of different advertisements. Extending the research to other age groups, introducing regional variation (city vs. country-side) and covering nationals in more countries would be necessary to obtain results that can be more easily generalised.

Thirdly, there are some indications in this research that the nature of the pictures used for endorsers (revealing, sexy, close-up vs. full frontal) may have a significant effect. Given that such variations can be easily obtained at low cost in designing real life advertisement campaigns, this extension could be highly relevant.

Finally, this analysis has limited itself to young female celebrity endorsers, leaving open the question whether older and/or male (non-)celebrities are perceived differently for some product categories. This again, should be addressed in follow up research.

**Bibliography**


Figure 1. Meaning-transfer model of McCracken.
Table 1 Average score of the celebrities for their attractiveness, trustworthiness, expertise on 7 points and their general score on 10 points.

<table>
<thead>
<tr>
<th>Celebrity</th>
<th>Attractiveness (on 7 points)</th>
<th>Trustworthiness (on 7 points)</th>
<th>Expertise (on 7 points)</th>
<th>Avg. score On 10</th>
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</thead>
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<td>5.13</td>
<td>6.32</td>
<td>Beauty products</td>
<td>3.25</td>
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<td>Maria Sharapova</td>
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<td>3.80</td>
<td>Candy bar</td>
<td>5.29</td>
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<td>Jennifer Aniston</td>
<td>5.96</td>
<td>5.36</td>
<td>lap top</td>
<td>6.16</td>
</tr>
<tr>
<td>Kate Moss</td>
<td>5.06</td>
<td>3.40</td>
<td>On 10</td>
<td>5.96</td>
</tr>
<tr>
<td>Gwen Stefani</td>
<td>4.77</td>
<td>4.94</td>
<td>Beauty products</td>
<td>5.13</td>
</tr>
<tr>
<td>Naomi Campbell</td>
<td>5.27</td>
<td>3.31</td>
<td>Candy bar</td>
<td>6.42</td>
</tr>
<tr>
<td>Scarlett Johanson</td>
<td>6.18</td>
<td>5.39</td>
<td>lap top</td>
<td>5.67</td>
</tr>
<tr>
<td>Kim Clijsters</td>
<td>4.28</td>
<td>6.54</td>
<td>On 10</td>
<td>2.58</td>
</tr>
<tr>
<td>Paris Hilton</td>
<td>3.89</td>
<td>2.85</td>
<td>Beauty products</td>
<td>5.39</td>
</tr>
<tr>
<td>Mariah Carey</td>
<td>4.17</td>
<td>3.72</td>
<td>Candy bar</td>
<td>5.74</td>
</tr>
<tr>
<td>Angelina Jolie</td>
<td>5.87</td>
<td>5.24</td>
<td>lap top</td>
<td>5.00</td>
</tr>
<tr>
<td>Beyoncé</td>
<td>5.82</td>
<td>5.16</td>
<td>On 10</td>
<td>6.38</td>
</tr>
<tr>
<td>Sarah J. Parker</td>
<td>5.55</td>
<td>5.43</td>
<td>Beauty products</td>
<td>5.90</td>
</tr>
<tr>
<td>Total avg. score</td>
<td>5.17</td>
<td>4.84</td>
<td>Candy bar</td>
<td>5.23</td>
</tr>
</tbody>
</table>
Table 2. The average scores on the matches between the celebrities and products

<table>
<thead>
<tr>
<th>Celebrity (X)</th>
<th>Candy bar (Y)</th>
<th>Lap top</th>
<th>Beauty product</th>
<th>Candy bar (Y)</th>
<th>Lap top</th>
<th>Beauty product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim Gevaert</td>
<td>2.04</td>
<td>3.00</td>
<td>1.96</td>
<td>1.93</td>
<td>2.59</td>
<td>2.67</td>
</tr>
<tr>
<td>Maria Sharapova</td>
<td>2.50</td>
<td>2.28</td>
<td>2.56</td>
<td>2.61</td>
<td>2.22</td>
<td>2.17</td>
</tr>
<tr>
<td>Jennifer Aniston</td>
<td>2.86</td>
<td>3.21</td>
<td>2.54</td>
<td>2.50</td>
<td>2.64</td>
<td>2.82</td>
</tr>
<tr>
<td>Kate Moss</td>
<td>1.75</td>
<td>2.19</td>
<td>1.88</td>
<td>1.56</td>
<td>1.69</td>
<td>1.94</td>
</tr>
<tr>
<td>Gwen Stefani</td>
<td>3.37</td>
<td>3.81</td>
<td>3.33</td>
<td>3.33</td>
<td>2.63</td>
<td>2.89</td>
</tr>
<tr>
<td>Naomi Campbell</td>
<td>1.77</td>
<td>1.77</td>
<td>1.96</td>
<td>1.85</td>
<td>1.62</td>
<td>1.92</td>
</tr>
<tr>
<td>Scarlett Johanson</td>
<td>2.94</td>
<td>3.59</td>
<td>3.29</td>
<td>2.94</td>
<td>2.00</td>
<td>2.94</td>
</tr>
<tr>
<td>Kim Clijsters</td>
<td>3.39</td>
<td>3.68</td>
<td>3.11</td>
<td>3.11</td>
<td>2.82</td>
<td>3.00</td>
</tr>
<tr>
<td>Paris Hilton</td>
<td>2.50</td>
<td>2.56</td>
<td>2.39</td>
<td>2.39</td>
<td>1.17</td>
<td>1.61</td>
</tr>
<tr>
<td>Mariah Carey</td>
<td>2.88</td>
<td>3.17</td>
<td>3.04</td>
<td>2.96</td>
<td>1.63</td>
<td>1.67</td>
</tr>
<tr>
<td>Angelina Jolie</td>
<td>2.40</td>
<td>3.00</td>
<td>2.48</td>
<td>2.24</td>
<td>2.88</td>
<td>3.28</td>
</tr>
<tr>
<td>Beyoncé</td>
<td>2.84</td>
<td>3.16</td>
<td>2.88</td>
<td>2.64</td>
<td>1.88</td>
<td>2.16</td>
</tr>
<tr>
<td>Sarah Jessica Parker</td>
<td>2.67</td>
<td>2.95</td>
<td>2.62</td>
<td>2.76</td>
<td>2.62</td>
<td>3.00</td>
</tr>
<tr>
<td>Avg. Score</td>
<td>2.64</td>
<td>2.99</td>
<td>2.63</td>
<td>2.54</td>
<td>2.24</td>
<td>2.50</td>
</tr>
</tbody>
</table>

*) If I think of X as endorser, I think almost directly of product Y; **) The idea that X as endorser works for Y, is according to me an optimal fit; ***) I think that X is a relevant endorser for Y; ****) I think that X is a suitable endorser for Y.
Figure 2. An example of the laptop advertisements.
Figure 3. Research design of the advertisements used in the questionnaire

<table>
<thead>
<tr>
<th>Questionnaire I</th>
<th>Questionnaire II</th>
<th>Questionnaire III</th>
<th>Questionnaire IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy bar &amp; anonymous model</td>
<td>Candy bar &amp; no picture</td>
<td>Candy bar &amp; Gwen Stefani (pos. fit)</td>
<td>Candy bar &amp; Naomi Campell (neg. fit)</td>
</tr>
<tr>
<td>Beauty product &amp; Naomi Campell (pos. fit)</td>
<td>Beauty product &amp; Kim Clijsters (neg. fit)</td>
<td>Beauty product &amp; anonymous model</td>
<td>Beauty product &amp; no picture</td>
</tr>
<tr>
<td>Lap top &amp; Paris Hilton (neg. fit)</td>
<td>Lap top &amp; Angeline Jolie (pos. fit)</td>
<td>Lap top &amp; no picture</td>
<td>Lap top &amp; anonymous model</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. Average scores for Ab, AAD-affective and AAD-cognitive, and PI for the different advertisements used for the different products

<table>
<thead>
<tr>
<th></th>
<th>Candy bar</th>
<th>Beauty Product</th>
<th>Lap top</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Best match</td>
<td>3.86</td>
<td>4.16</td>
<td>4.34</td>
</tr>
<tr>
<td>2 Worst match</td>
<td>3.60</td>
<td>4.15</td>
<td>3.51</td>
</tr>
<tr>
<td>3 Anonymous model</td>
<td>3.52</td>
<td>4.51</td>
<td>4.46</td>
</tr>
<tr>
<td>4 No-model</td>
<td>4.07</td>
<td>4.07</td>
<td>4.41</td>
</tr>
<tr>
<td>F-value (p-value)</td>
<td>3.00 (0.32)</td>
<td>2.36 (0.073)</td>
<td>7.36 (&lt;0.001)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AAd-affective</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Best match</td>
<td>3.76</td>
<td>3.96</td>
<td>4.06</td>
</tr>
<tr>
<td>2 Worst match</td>
<td>3.66</td>
<td>3.81</td>
<td>3.48</td>
</tr>
<tr>
<td>3 Anonymous model</td>
<td>3.69</td>
<td>4.50</td>
<td>4.55</td>
</tr>
<tr>
<td>4 No-model</td>
<td>3.88</td>
<td>3.90</td>
<td>4.23</td>
</tr>
<tr>
<td>F-value (p-value)</td>
<td>3.89 (0.761)</td>
<td>4.19 (0.007)</td>
<td>6.10 (0.001)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AAd-cognitive</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Best match</td>
<td>3.48</td>
<td>3.71</td>
<td>3.79</td>
</tr>
<tr>
<td>2 Worst match</td>
<td>3.17</td>
<td>3.72</td>
<td>3.18</td>
</tr>
<tr>
<td>3 Anonymous model</td>
<td>3.31</td>
<td>4.22</td>
<td>3.86</td>
</tr>
<tr>
<td>4 No-model</td>
<td>3.75</td>
<td>3.95</td>
<td>4.22</td>
</tr>
<tr>
<td>F-value (p-value)</td>
<td>2.37 (0.072)</td>
<td>2.03 (0.111)</td>
<td>6.68 (&lt;0.001)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PI</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Best match</td>
<td>3.33</td>
<td>3.18</td>
<td>3.57</td>
</tr>
<tr>
<td>2 Worst match</td>
<td>2.57</td>
<td>2.82</td>
<td>2.93</td>
</tr>
<tr>
<td>3 Anonymous model</td>
<td>2.99</td>
<td>3.62</td>
<td>3.87</td>
</tr>
<tr>
<td>4 No-model</td>
<td>3.48</td>
<td>3.00</td>
<td>3.86</td>
</tr>
<tr>
<td>F-value (p-value)</td>
<td>5.90 (0.001)</td>
<td>4.66 (0.004)</td>
<td>5.18 (0.002)</td>
</tr>
</tbody>
</table>

1) The Bonferroni post hoc test indicates that advertisement 3 ‘anonymous model’ differs significantly from advertisement 4 ‘no-model’

2) ANOVA test results indicate that no significant difference could be found (p-value of 0.32) between the different ad for candy bars and their scores on Attitude towards the Brand. Significant differences were marked.