INTRODUCTION
Marketing literature is replete with evidence of the positive effects of using attractive communicators and models on opinion change, product evaluation, and brand perception and recall (Baker and Churchill, 1977; Joseph, 1982). It has been demonstrated that physically attractive communicators are more liked than plain or unattractive communicators. By extension, if a person has a positive attitude toward a communicator, she or he will evaluate that communicator’s message in positive terms (Joseph, 1982).

The use of attractive communicators to increase advertising effectiveness seems to be appropriate. It appears, however, that many marketers have decided to apply this idea at its extreme. Often, models in advertising represent highly idealized images of physical attractiveness.

This is especially true when considering the models’ body-mass index given increasing obesity in Western societies (Chandon and Wansink, 2007). In a March 2010 issue, the Guardian asked, “Why Are Models Still So Thin?” Some runway models presenting Riccardo Tisci, Dolce & Gabbana—and others representing Prada’s Miu Miu autumn/winter ready-to-wear collection—looked skeletal. Yet, models are a mirror for many young women and, most agree, should project an image of beauty and health rather than offer the perception of encouraging eating disorders.

Moreover, it recently seems that not all marketers have agreed that such idealized images of physical attractiveness are the best way to increase advertising effectiveness. In 2004, Unilever was widely praised after the launch of their Dove campaign (Jeffers, 2005). The novel concept was to feature actual women—not models—in Dove’s firming cream advertisements under the themeline “Real Women Have Curves.”

The idea of using “nonidealized” images of physical attractiveness came from a global report commissioned by Dove and conducted...
by StrategyOne entitled “The Real Truth About Beauty.” Some 3,200 women from 10 different countries were surveyed; results showed that only 2 percent of women described themselves as “beautiful,” and more than 68 percent of women strongly agreed that “the media and advertising set an unrealistic standard of beauty that most women can’t ever achieve” (StrategyOne, 2004).

To offset the unrealistically thin, unhealthy archetypal images associated with modeling, Dove decided to focus on promoting real, natural beauty (Media Awareness Network, 2004). Driven by much of the same awareness, in 2005 Revlon Inc. and J. C. Penney began adding fuller-figured women and older actresses into their fifties to their cast of youthful, thinner models.

Some high-end marketers—notably, Charles Revson, the founder of Revlon—believed that too much realism actually could compromise their brands. And, for some, the positive results of the Dove campaign may merely have been the consequence of its provocative nature.

In fact, certain levels of provocation in advertising may be a valid strategy to attract potential consumers (Vézina and Paul, 1997). In the present paper, the authors seek to deepen further the understanding of the effects of Dove-like campaigns by examining to what extent exposure to nonidealized—as compared to idealized—models in advertisements affect consumers’ attitude and purchase intention of products promoted in these ads.

The authors’ research was executed in the context of cosmetics ads. They contend that two types of processes may play a crucial role in the effects of exposure to idealized (i.e., overly thin) as compared to nonidealized (i.e., heavier) advertising models on brand evaluations and purchase intentions:

- a self-evaluation process (evaluation of the self in terms of self-esteem) and
- a model-evaluation process (the trustworthiness of the model).

Both processes can be affected by the type of models featured in the advertisements and are key factors driving the viewers’ brand attitudes and purchase intentions (Zinkhan and Hong, 1991; Deshpandé and Stayman, 1994). Previous research demonstrated that consumers’ self-esteem—via a process of social comparison—can shift in function of exposure to models in advertising (Mussweiler, 2003; Richins, 1991; Smeesters and Mandel, 2006; Smeesters, Mussweiler, and Mandel, 2010).

At this point, however, it has not been demonstrated whether self-esteem also can play an important role in studying the effects of idealized versus nonidealized advertising on responses to brands. Next to a personal-evaluation process, consumers also might engage a judgment process of the model. For instance, can the way a model is portrayed (idealized or nonidealized) affect the trustworthiness of the source? This is unknown at this point.

Hence, the authors have examined the possible mediating role of trustworthiness on the effect on brand responses of idealized versus nonidealized advertising.

The present research examined what effect the different idealized and nonidealized images in advertisements had on advertising effectiveness. To do so, the authors have measured respondents’ brand responses. Importantly, the authors have examined the underlying role of self-esteem and trustworthiness in displaying these results. To that end, they investigated the reactions of an effective sample of 347 French women after exposure to two cosmetics advertisements—one displaying nonidealized images of physical attractiveness and the other more-traditional idealized images.

**HYPOTHESES DEVELOPMENT**

**Body Images, Self-Esteem, and Model Trustworthiness**

When exposed to advertising models (more specifically, body images), consumers might engage in two simultaneous processes.

For one, they might begin a model-evaluation process in which they judge the trustworthiness of the model. A primary factor in an advertisement’s effectiveness is the trustworthiness of the source. And, in fact, consumers have strong intentions to judge the trustworthiness of advertising sources (Priester and Petty, 2003). This might be a conscious process, as consumers probably are aware that they are judging the trustworthiness of a model.

At the same time, however, it can be expected that consumers who view an advertisement also engage in a self-evaluation process. And, in those cases, comparing oneself with a model in an advertisement might affect a woman’s self-esteem. Past research has shown that advertising models do function as strong comparison standards for females, who tend to compare themselves with these models in a fairly automatic fashion (Richins, 1991; Mussweiler, 2003; Smeesters and Mandel, 2006; Smeesters et al., 2010).

Social comparison is a central feature of human social life, as people have a natural drive to evaluate their own attributes by comparing themselves to others (Festinger, 1954). Research has shown that this kind of automatic social comparison also takes place when people are exposed to persons portrayed in advertisements—more specifically, when female consumers compare themselves with female models (Bower, 2001; Bower and Landreth, 2001; Richins, 1991; Smeesters and Mandel, 2006; Smeesters et al., 2010).

Comparing oneself to a model can affect one’s self-esteem. In the marketing and advertising literature, self-esteem appears
as a recurrent and important individual factor (Hong and Zinkhan, 1995; Lee and Shrum, 2007; Zinkhan and Hong, 1991) because it is one of the strongest psychological needs (Durgee, 1986). The effects of female models on self-esteem occur mainly for women, as they generally are more concerned than men are about their own appearance (beauty, body image)—a consideration that some evolutionary psychologists argue is due to competition with other females for male attention (Ward and Voracek, 2004).

Researchers repeatedly have shown that women who view the “ideal” thin images in the lab experience lower self-esteem and higher body dissatisfaction than do women who view neutral images (see Grabe, Ward, and Hyde, 2008 for an extensive overview and meta-analysis). These findings have been replicated for women exposed to thin ideal women in print ads, television commercials, and music videos (Bower, 2001; Bower and Landreth, 2001; Halliwell and Dittmar, 2004; Hargreaves and Tiggemann, 2004; Pollay, 1986; Richins, 1991; Tiggemann and Slater, 2003). Positive assimilation effects of thin models on females’ self-esteem are rarely published (Grabe et al., 2008; but see Smeesters and Mandel, 2006).

If idealized images of models reduce self-esteem, the natural question is: Does the use of nonidealized images increase self-esteem? One piece of recent research demonstrated that using nonidealized images of physical attractiveness in advertisements could have a positive impact on viewers’ self-esteem (Smeesters and Mandel, 2006). Particularly, participants with an average body-mass index reported higher self-esteem after viewing advertisements that featured extremely heavy models—a confidence resulting from feelings of dissimilarity with the models that actually caused them to feel thin (see Smeesters et al., 2010).

Nonetheless, exposure to extremely thin models often caused lower self-esteem, again due to a feeling of dissimilarity with the thin models that caused them to feel heavy. This recent research, however, used very different models (i.e., different people) in the different comparison conditions. A cleaner way to look at comparison processes is to use models who are close to identical to the women featured in the advertisement and then manipulate idealization levels based on weight, a prominent physical attribute of importance in Western societies (Chandon and Wansink, 2007).

Under these conditions, confounding factors such as differences in facial expressions, hair style and color, age, clothing style, and so on are better controlled. Further, Smeesters and Mandel’s research used advertisements with respect to clothing, which is a product that is very much related to the weight of the model. This might have induced very strong comparison tendencies with respect to the weight-dimension. It is, therefore, important to test their hypothesis using advertisements in which the product is not weight-related, such as cosmetics.

One of the aims of the current research is to demonstrate that exposure to nonidealized advertising, in fact, can increase women’s self-esteem (as opposed to exposure to idealized advertising). In addition, the authors have examined to what extent the articulated differences in self-esteem were related to such factors as age, socio-professional category, and place of residence.

Given that previous research in advertising demonstrated that the advertised product can have an influence on the viewer’s perception of the advertisement and its content (Brown and Stayman, 1992), the authors first seek to confirm the following hypothesis for cosmetics ads:

H1: Self-esteem will be significantly higher after exposure to a nonidealized model compared to an idealized model.

In addition to comparing one’s self-image to a model in the ad, consumers also might engage in another—often simultaneous—process in which they simply evaluate the model in the advertisement. The goal of advertising is to present information to consumers, which is often reached by presenting favorably evaluated models in an ad to also induce more favorable attitudes toward the advertised product. One of the main factors in the effectiveness of an advertisement is the trustworthiness of various sources of information in an advertisement, even including the featured model.

In 2003, J. R. Priester and R. E. Petty, writing in the Journal of Consumer Psychology (“The Influence of Spokesperson Trustworthiness on Message Elaboration, Attitudes Strength and Advertising Effectiveness”), observed, “A trustworthy endorser is one whom consumers believe to be honest and sincere, whereas an untrustworthy endorser is one about whom consumers feel skepticism and suspicion” (2003, p. 408). More precisely: a source can be perceived as trustworthy based on verbal cues demonstrating the expertise, credibility, and even friendliness of a source and nonverbal cues such as physical attributes that are congruent to those of the viewer or the buyer (Wood, Boles, Johnston, and Bellenger, 2008).

Higher trustworthiness, attained by nonverbal cues in print ads, generally has positive effects on the attitude toward an advertised product (Priester and Petty, 2003). Not quite so clear is whether idealized or nonidealized advertising has the strongest effects on the trustworthy attributes of the model.

TAKE YOUR PICK: KATE MOSS OR THE GIRL NEXT DOOR?
There is evidence to suggest that the more similar to the individual the model is, the more the individual will self-reference (i.e., process information in an advertisement) by relating it to some aspect of oneself (Kwai-Choi, Fernandez, and Martin, 2002). Prior literature also suggested that when individuals perceive similarities between themselves and a model in an advertisement (i.e., self-reference), they tend to perceive the model as trustworthy (Deshpandé and Stayman, 1994).

Nonidealized models, in fact, are a better representation of the real world (Food Standards Agency, 2004) and, therefore, it can be expected that consumers will self-reference more in case of nonidealized images compared to idealized images. Hence, when an individual perceives some similarity between her- or himself and another person, she or he may perceive that other person as more trustworthy (cf. Deshpandé and Stayman, 1994; O’Keefe, 1990). In the current study, the authors examined to what extent differences in trustworthiness are related to socio-demographic factors such as age, profession, and place of residence.

H2: Model trustworthiness will be significantly higher in the case of exposure to a nonidealized model compared to an idealized model.

**Self-Esteem and Brand Responses**

The authors posit that the impact of self-esteem on the advertising effectiveness of cosmetics needs to be nuanced in a comparison of advertisements that use idealized and nonidealized images. More specifically, in addition to the understanding that self-esteem may be affected by a model’s image, the current study poses that self-esteem also might act as a moderator of the effect of model image on the attitude toward the brand.

In other words: exposure to an ideal model may (on average) lead to lower self-esteem compared to exposure to a nonideal model; the degree to which participants actually reflect lower (versus higher) levels of self-esteem might moderate the impact of model image on the attitude toward the brand.

This typically might occur in case of variables related to the self (such as self-esteem, anxiety, and emotional stability) because the scores on these variables show meaningful variability among individuals (Preacher, Rucker, and Hayes, 2007). For instance, previous research has found that public situations led to higher anxiety in individuals compared to private situations (Lambert et al., 2003). Anxiety, however, also moderated the effect of public versus private situations on perceived control in these situations, with the result that even though high-anxiety individuals reported lower control in public situations compared to private situations, low-anxiety individuals reported no difference.

Alternatively, consumers might have preexisting levels—some higher than others—of self-esteem. Exposure to idealized models may shift consumers’ preexisting levels of self-esteem down, whereas exposure to nonidealized models may shift all consumers’ preexisting levels up. In either case, a consumer’s self-esteem still can function as a moderator of the impact of advertising models on the responses to the advertised brand.

Earlier research demonstrated that, when individuals face negative feelings toward themselves, they often experience these negative feelings toward objects related to themselves (Bower, 2001; Gawronski, Bodenhausen, and Becker, 2007; Lundstrom et al., 1999). In 2007, one study found that participants in the experiment(s) showed implicit positivity or negativity toward objects (color print pictures) when their implicit self-evaluation was respectively positive or negative (Gawronski et al., 2007). A comparable finding should result when a low self-esteem consumer is exposed to a source (an idealized model) that may lower her or his self-esteem even more. In such instances, these consumers should report more negative attitudes to the brand when exposed to an idealized model compared to a nonidealized model.

The authors expect that consumers with a high level of self-esteem will be less negatively affected in their attitudes toward the brand when exposed to idealized models. High self-esteem consumers have more positive feelings about themselves. Even if their self-esteem is temporarily lowered due to exposure to idealized advertising, their relatively higher level of self-esteem may buffer them against negative feelings (Mandel and Smesters, 2008).

High self-esteem individuals even may implicitly engage in self-affirmation as a way to enhance self-integrity and protect themselves against such ego threats. Therefore, exposure to idealized images might work, even inspiring high self-esteem consumers to further bolster their self-esteem (Lockwood and Kunda, 1997). They, therefore, may have a more positive brand attitude when exposed to an idealized model compared to the nonidealized model.

H3: The authors expect self-esteem to moderate the relationship between model image and responses to the brand (i.e., attitude toward the brand, purchase intention of the brand), such that

- for consumers with a low self-esteem, brand responses should be lower after exposure to idealized models than after exposure to nonidealized models and,
- for consumers with a high self-esteem, brand responses should be
higher after exposure to idealized models than after exposure to non-idealized models.

**Model Trustworthiness and Brand Responses**

One of the determinants of an effective advertisement is the source of the message, including the model who endorses the product (Kwai-Choi et al., 2002; Solomon, 2007). There is evidence to suggest that the more similar to the individual the model is, the more the individual will self-reference and, hence, the model should be perceived as more trustworthy. For thoroughness, we should note that, in addition to self-referencing mechanisms activated by models unknown to the viewers, model trustworthiness also can be achieved by displaying familiar models to the viewers (e.g., a celebrity, a sportswoman) (Priester and Petty, 2003).

The authors expect that trustworthiness will have a direct link with the attitude toward (and the purchase intention of) the brand (i.e., brand responses) but that it will not moderate the effect of body image on the attitude toward (and the purchase intention of) the brand.

Previous research has indicated that individuals generate more positive attitudes toward advertised brands that are endorsed by a trustworthy source (Priester and Petty, 2003). Therefore, the more viewers trust a model (independent of whether the model is or is not idealized), the more positive their attitudes and purchase intentions should be.

There are two reasons for positing the absence of a moderating effect of trustworthiness between body images and advertising effectiveness:

- To process the model’s body image, recipients do not need to engage in complex information elaboration (Smith and Shaffer, 1995), which has been demonstrated to interact with model trustworthiness on the resulting attitude strengths (Priester and Petty, 2003).
- In contrast to self-esteem, trustworthiness is not an intrapersonal variable but rather an interpersonal factor (i.e., evaluation of the model) that varies less among participants (Lambert et al., 2003). Trustworthiness de facto should solely play a mediating role between the exposure to the models and the responses to the advertised brand (See Figure 1).

H4a: The higher the model trustworthiness, the higher the brand responses will be.

H4b: Trustworthiness will mediate the effect of exposure to idealized versus nonidealized models on brand responses.

**METHOD**

**Participants**

The current study focused essentially on female subjects between the ages of 18 and 65. Existing literature had endorsed the ideas that women are

- more prone to react to advertising images and
- more vulnerable to those images than men are (Baird and Grieve, 2006).

In total, 347 Caucasian French women participated in this study and were randomly assigned to either the idealized model condition or the nonidealized model condition. The sample is diverse in terms of age, socio-professional category, or place of residence (urban or rural zone). The majority of the respondents (41.8 percent) were women between the ages of 18 and 24. Participants younger than 18 accounted for 16.7 percent of the sample, and those between 25 and 34 represented 22.2 percent of the sample. The segments of women whose ages ranged from 35 to 44 and 45 to 65 accounted for, respectively, 8.6 percent and 10.7 percent of the sample.

Participants were selected by posting invitations on Web-site forums that asked volunteers to fill out a questionnaire and

![Figure 1](image-url)  

**Figure 1** Effects of Self-Esteem and Model Trustworthiness on the Effectiveness of Cosmetics Advertising.
linked participants to the online survey page. Rather than randomly distributing surveys to potential female consumers of beauty products, the invitations were posted on women-magazine forums such as

- www.marie-claire.fr
- www.topsante.fr
- www.versionfemina.fr
- www.prima.fr
- www.famili.fr
- www.glamourparis.com
- www.20ans.fr

The study also included such Web-site forums as

- www.aufeminin.com
- www.femmesplus.fr
- www.plurielles.fr
- www.absolufeminin.fr
- www.pourtouteslesbeautes.fr
- www.pulpeclub.com
- www.lycosfemmes.fr
- www.fluctuat.net
- www.ado.fr

The motivation for posting the invitations on women-magazine and Web-site forums was to target female consumers who had, a priori, a higher probability of being exposed to such print ads. Although such parameters made data collection more difficult, the authors believed it was important to narrow the range of the female respondents. No significant differences regarding the age (Z = -1.18; p = 0.24), socio-professional category (Z = -1.47; p = 0.14), or the place of residence (Z = -0.40; p = 0.69) were observed between participants in the two model conditions.

Procedure

Participants on the online questionnaire were exposed to a body-cream advertisement with an idealized or nonidealized model.

The survey team explained to the participants that the goal of the research was to gather impressions of an advertisement. The participants simply were asked to observe the advertisement, then respond to the questionnaire.

In their preview, the researchers insisted that there was no “right” or “wrong” answer and that all answers would remain anonymous.

The idealized image was created by cutting and pasting a photograph from Vogue/UK January 1998 magazine. This photograph was chosen, first of all, because Vogue is known to picture idealized images of physical attractiveness. Furthermore, the photograph presented two very thin (body-mass Index < 19), attractive models. Moreover, the models were wearing underwear, which is realistic for cosmetics advertisements.

The nonidealized advertising that was contained was created by photographing two normal women, reproducing the Vogue photograph. The nonprofessional models were selected for the color of their hair and their “normal” body size (19 < body-mass index < 25; Smeesters and Mandel, 2006). Using this photograph, the authors created a second advertisement for the same body-cream brand (See Appendix 1).

A pre-test carried out with 179 respondents who randomly rated the weight of the idealized (M = 3.08; SD = 0.99) or the nonidealized image (M = 4.86; SD = 1.13) on a 7-point scale with endpoints “very thin” (1) and “very heavy” (7) confirmed that the research team successfully had manipulated the body image (F(1, 178) = 123.96; p < 0.001).

The questionnaire took participants approximately 10 minutes to complete and was accessible for a period of 3 weeks. Respondents first were asked to rate their perceived current level of beauty using a single-item measure.

The authors later verified the sampling distribution and observed that female consumers fully satisfied with their beauty were underrepresented (28 respondents of 347). This fully represents reality (StrategyOne, 2004) and conferred face validity to the study.

After the exposure to one of the two model ads, participants had to complete several multi-item measurement scales, including a self-esteem scale (Martin and Gentry, 1997) and a trustworthiness scale (Ohanian, 1990):

- Self-esteem was measured using a 5-point scale, with endpoints of “not at all” (1) and “very much so” (5).
- Trustworthiness was measured using a 5-point scale with endpoints dishonest/honest, unreliable/reliable, not dependable/dependable, and not trustworthy/trustworthy.

Participants then were asked to complete measures related to the attitude toward the brand (Leclerc, Schmitt, and Dube, 1994) and the purchase intention of the brand (Bruner, Hensel, and James, 2005). The latter two scales were scored on a 5-point scale, with endpoints such as “dislike/like,” “bad/good,” or “disapprove/approve” for the attitude toward the brand and “totally disagree” (1) and “totally agree” (5) for the purchase intention.

The specific items are presented in Appendix 2. All scales in this study were translated professionally into French and then back-translated into English (Brislin, 1980).

1 For legal reasons related to the right to one’s own image, the authors could not manipulate the weight of the Vogue models and had to ask nonprofessional models with the same hair color and (approximately) the same height to strike as precisely as possible the pose taken by the Vogue models.
RESULTS
From the original sample of 347 French women, 176 effectively viewed the idealized advertisement, and 171 effectively viewed the nonidealized advertisement.

PLS-Graph Version 3.0 (Chin, 2001) was used to assess the psychometric properties of the measures (Chin, 1998; Hulland, 1999). To do so, the research team tested a measurement model without structural paths in PLS-Graph Version 3.0 (Chin, 2001), which is analogous to confirmatory factor analysis in covariance-based SEM.

The authors found that two indicators for self-esteem did not display standardized loading exceeding 0.50. Measures were purified to reach convergent validity (Tenenhaus, Vinzi, Chatelin, and Lauro, 2005). Further, they assessed reliability with composite reliability and average variance extracted (AVE; Chin, 1998). Composite scale reliability ranged between 0.823 and 0.962, well in excess of the cutoff value of 0.70 suggested by Nunally and Bernstein (1994). The AVE ranged between 0.542 and 0.895 and thus exceeded the 0.50 cutoff value proposed by Fornell and Larcker (1981; Appendix 3). Finally, the authors assessed discriminant validity by examining whether each construct shared more variance with its measures than with other constructs in the model (Barclay, Higgins, and Thompson, 1995; Chin, 1998). Therefore, the square root of the AVE should exceed the construct intercorrelations in the model. This was the case.

Because the data were collected using survey questionnaires, the current study verified for common method variance (CMV) because (1) the measures for the dependent and independent measures were obtained from the same person at the same point in time, and (2) “experimental studies that can demonstrate that the relationships observed between the variables of interests are significant after controlling for method biases provide more compelling evidence than those who do not” (Podsakoff, MacKenzie, Lee, and Podsakoff 2003, p. 899).

The authors also posited that the smallest correlation with a theoretically unrelated variable was a judicious estimate of common method variance (Lindell and Brandt, 2000; Lindell and Whitney, 2001). Then, for all bi-variate correlations, the effect of the smallest correlation (r) needed to be partialled out to remove the effect of CMV. The survey questionnaire, however, did not contain such a theoretically unrelated construct. The authors, therefore, took a slightly different approach by selecting the smallest correlation among our theoretical variables (Lindell and Whitney, 2001; See Tables 1 and 2). This is the correlation between “model trustworthiness” and “self-esteem” (|r| = 0.062) for the nonidealized questionnaire and the correlation between the “attitude toward the brand” and “self-esteem” (|r| = 0.13) for the idealized one.

From the application of that procedure, the research team concluded that, for all existing significant effects at the 0.05 level, the corresponding bivariate correlation coefficients remained statistically significant at p < 0.05 after adjusting for CMV; except for the correlation between self-esteem and model trustworthiness in the idealized context, which became nonsignificant similarly to the nonidealized context. It, therefore, is possible to conclude that the effects due to CMV are negligible in the current study.

Body Images and Self-Esteem
H1, which stated that self-esteem will be significantly higher after exposure to a nonidealized model (M = 3.15; SD = 0.84) compared to an idealized model (M = 2.93; SD = 0.85), was confirmed ($F(1, 345) = 4.92; p < 0.05$).

### TABLE 1
Correlations for the Nonidealized Advertisement

<table>
<thead>
<tr>
<th></th>
<th>Self-esteem</th>
<th>Model Trustworthiness</th>
<th>Attitude toward the Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model Trustworthiness</td>
<td>0.062</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward the Brand</td>
<td>0.212***</td>
<td>0.368***</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0.282***</td>
<td>0.331***</td>
<td>0.574***</td>
</tr>
</tbody>
</table>

***p < 0.001

### TABLE 2
Correlations for the Idealized Advertisement

<table>
<thead>
<tr>
<th></th>
<th>Self-esteem</th>
<th>Model Trustworthiness</th>
<th>Attitude toward the Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model Trustworthiness</td>
<td>0.157**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward the Brand</td>
<td>0.130**</td>
<td>0.276***</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0.232*</td>
<td>0.383***</td>
<td>0.477***</td>
</tr>
</tbody>
</table>

***p < 0.001; **p < 0.05; *p < 0.10
To refine the results, the current study also verified that H1 was supported despite the respondent's perception of their current level of beauty. For consumers who tended to have higher self-esteem, self-esteem was significantly higher after exposure to a nonidealized model compared to an idealized model \((F(1, 172) = 3.67; p < 0.05)\). For consumers who tended to have lower self-esteem, self-esteem also was significantly higher after exposure to a nonidealized model compared to an idealized model \((F(1, 171) = 4.06; p < 0.05)\).

Further, the authors established whether age, socio-professional category, and place of residence (urban versus rural) could explain consumers’ levels of self-esteem, which can yield useful results for segmentation strategies. It appeared that the relationship between age and the level of self-esteem followed a quadratic function \((F(2, 344) = 9.468; p < 0.001)\); self-esteem \(= C + 0.547 \text{ age} – 0.09 \text{ age}^2\). The function’s maximum was in the age category between 35 and 44.

The authors also found an effect of the place of residence: The closer one lives to an urban area, the higher the self-esteem \((\beta = 0.214; t(344) = 4.05; p < 0.001)\). No effect for socio-professional category was found \((F(2, 344) = 1.658; p > 0.19)\).

**Body Images and Model Trustworthiness**

It was postulated in H2 that after viewing an advertisement for cosmetics, model trustworthiness would be significantly higher in the case of exposure to a nonidealized model \((M = 3.61; SD = 0.97)\) compared to an idealized model \((M = 2.72; SD = 0.94)\). This hypothesis was confirmed \((F(1, 345) = 75.60; p < 0.05)\).

Similar to what the authors did for self-esteem, they also established whether age, socio-professional category, and place of residence influenced model trustworthiness. They found no significant effect of age \((\beta = -0.027; t(344) = -0.504; p = 0.614)\) or socio-professional category on self-esteem \((F(2, 344) = 1.99; p = 0.138)\). They did find, however, an effect for place of residence: The closer one lived to an urban area, the lower the model trustworthiness \((\beta = -0.127; t(344) = 2.37; p < 0.05)\). Regarding this interesting effect, the authors note that significant differences in model trustworthiness between the rural \((M = 2.97; SD = 0.97)\) and urban areas \((M = 2.64; SD = 0.92)\) appeared in the case of an idealized image \((F(1, 174) = 4.125; p < 0.05)\) but not in the case of a nonidealized one \((F(1, 170) = 1.905; p > 0.10)\).

Consistent with previous findings, model trustworthiness for the nonidealized image in an urban area \((M = 3.55; SD = 0.98)\) was significantly higher than trustworthiness for the idealized image \((M = 2.64; SD = 0.92)\) in the same area.

**Self-Esteem and Brand Responses**

H3 postulated a moderating effect of self-esteem between the body image and (1) attitude toward the brand and (2) the purchase intention such that

- for consumers with a low self-esteem, brand responses would be lower after exposure to idealized models than after exposure to nonidealized models and,
- for consumers with a high self-esteem, brand responses would be higher after exposure to idealized models than after exposure to nonidealized models.

As expected, the current study revealed a significant body image \(\times\) self-esteem interaction on the attitude toward the brand \((\beta = -0.179; t(346) = 3.27; p < 0.001)\) and the purchase intention \((\beta = -0.189; t(346) = 4.02; p < 0.001)\). Decomposition of the interaction at one standard deviation above and below the mean for self-esteem (Aiken and West, 1991) revealed that, in the case of low self-esteem, the attitude toward the brand was significantly lower after exposure to idealized models than after exposure to nonidealized models \((\beta = -0.206; t(346) = -2.71; p < 0.05)\).

The same relationship was valid for the purchase intention \((\beta = -0.409; t(346) = -5.54; p < 0.001)\). As posited in H3b, for consumers with a high self-esteem, the attitude toward the brand and its purchase intention was higher after exposure to idealized models than after exposure to nonidealized models, respectively \((\beta = 0.318; t(346) = 3.28; p < 0.001)\) and \((\beta = 0.382; t(346) = 4.06; p < 0.001)\) (See Figure 2).

**Model Trustworthiness and Brand Responses: Moderation and Suppression Effects**

The current study found no significant moderating effect of model trustworthiness between the body image displayed in the advertisement and the attitude toward the brand \((\beta = 0.08; t(346) = 1.07; p = 0.28)\).

The research team also observed that trustworthiness did not moderate the relationship between body image and the purchase intention \((\beta = -0.02; t(346) = -0.330; p = 0.74)\). It found support for H4a, which hypothesized a positive relationship between model trustworthiness and the attitude toward the brand \((\beta = 0.294; t(346) = 3.66; p < 0.001)\) and the purchase intention.
intention ($\beta = 0.257; t(346) = 3.69; p < 0.001$) independently from the body image of the model portrayed in the advertisement.

The authors then examined whether model trustworthiness fully mediates the effect of exposure to advertising images on the attitude toward the brand and the purchase intention.

In a first step, the research team did not find, overall, that the relationship between body image and the attitude toward the brand was significant ($\beta = -0.025; t(346) = -0.470; p = 0.64$). This meant that, normally, they could not further test for mediation in case of the attitude toward the brand (Baron and Kenny, 1986). Given that the authors previously had established that self-esteem moderates the relationship between body image and the attitude toward the brand, however, they continued by carrying out the mediation test including the findings on the moderation effect of self-esteem (e.g., Morin, Dubé, Chebat, 2007).

In a second step, they found evidence for a significant relationship between the independent variable (body image) and the mediator (trustworthiness) ($\beta = -0.424; t(346) = 8.69; p < 0.001$): The more idealized the model was, the lower model trustworthiness. Introducing the effect of model trustworthiness on the attitude toward the brand ($\beta = 0.356; t(346) = 6.359; p < 0.001$) did not cause body image $\times$ self-esteem to become nonsignificant ($\beta = 0.271; t(346) = 3.175; p < 0.05$). In other words, model trustworthiness did not fully mediate the relationship between the body image and the attitude toward the brand when one takes into account the moderating effects of the viewer’s self-esteem ($R^2 = 0.184$).

One must then conclude that there is, under specific circumstances, a suppression effect (Kenny, Kashy, and Bolger, 1998). When the model was idealized and the viewer’s self-esteem was high, the positive effect of this interaction on the attitude toward the brand was suppressed by the negative influence of an idealized body image on the trustworthiness of the model. Also, when the body image was nonidealized and the viewers’ self-esteem was high, the negative effect of this interaction on the attitude toward the brand was suppressed by the positive influence of a nonidealized image on the trustworthiness of the model.

For the high self-esteem viewers only (median split), an idealized body image had a negative influence on trustworthiness ($\beta = -0.398; t(171) = -5.516; p < 0.001$), whereas body image ($\beta = 0.241; t(170) = 3.176; p < 0.05$) and model trustworthiness ($\beta = 0.442; t(170) = 5.826; p < 0.001$) both had positive effects on the attitude toward the brand. Overall, the direct and indirect effects of body image on the attitude toward the brand for high self-esteem viewers were equal to 0.241 and -0.176, respectively ($R^2 = 0.199$).

Further, the authors demonstrated the significant effect of body image on the purchase intention ($\beta = -0.186; t(346) = -3.53; p < 0.001$): Idealized body images led to lower purchase intention compared to nonidealized body images. When regressing the independent variable and the mediator simultaneously on purchase intention, the authors found a significant relationship between model trustworthiness and purchase intention ($\beta = 0.384; t(345) = 7.03; p < 0.001$), whereas the relationship between body image and purchase intention became nonsignificant ($\beta = 0.023; t(345) = 0.429; p > 0.05$). The authors also performed a Sobel (1982) mediation test, which confirmed the full mediation of model trustworthiness between body image and the purchase intention ($z = 3.15; p < 0.05$).

In sum, H4b was supported only partially, as model trustworthiness fully mediated only the relationship between body image and purchase intention. The authors, however, did observe a suppression effect of model trustworthiness on the relationship between body image and the attitude toward the brand when the viewer’s self-esteem was high.

Excluding the overall neutral effect of body image on the attitude toward the brand under high self-esteem circumstances, the authors showed that lower perceptions of trustworthiness means that idealized body images led to lower purchase intentions compared to nonidealized images.

**GENERAL DISCUSSION**

Advertisers frequently use models in marketing communications. In general, they select attractive thin models who represent a certain kind of the beauty ideal, reasoning that such imagery would positively influence consumers to buy the brand endorsed by the ideal model.

Earlier research, however, has shown that exposure to such “ideal” images actually may have negative effects on the self-evaluation of consumers. For instance, some studies have demonstrated that exposure to attractive faces in advertisements has led consumers to evaluate themselves more negatively (Richins, 1991; Smesters and Mandel, 2006).

Recently, marketers have shown some interest in employing more real—nonidealized—models in advertisements. Little is known, however, about the effects of such models—both on self-evaluation and product evaluations and on the processes that play a role during exposure to such models. It, therefore, is important to make a comparison between idealized and nonidealized models and examine their potentially different effects on the advertising effectiveness of advertised brands.

In the current study, female consumers were exposed to either thin or heavier models. The findings indicated that the way advertising models have had an effect on the purchase intention of (and the
The authors recommend advertisers not played the highest levels of self-esteem, consumers between 35 and 44 years old dispersed the data in the current study, however, indicated that self-esteem also moderated the effect of advertising models on the responses to the advertised brand. More specifically, participants with a lower self-esteem reported a more negative attitude and a lower purchase intention of the brand after exposure to an idealized model compared to a nonidealized model. Conversely, participants with a higher self-esteem reported a more positive attitude and a higher purchase intention of the brand after exposure to an idealized model compared to a nonidealized model. These results indicated that self-esteem can vary in function of the advertising models but that inter-individual variations in self-esteem largely could affect how consumers evaluate brands supported by an idealized or nonidealized model.

Consumers with an overall higher level of self-esteem reacted more positively to a brand when it was endorsed by an idealized model, whereas consumers with an overall lower level of self-esteem reacted more negatively in a comparable situation. Practically, this means that companies must try to measure their target consumers’ level of self-esteem before making advertising decisions. Companies could request that this crucial information be added to survey questionnaires for consumer market research.

Given that the current study found consumers between 35 and 44 years old displayed the highest levels of self-esteem, the authors recommend advertisers not utilize a nonidealized model in their appeals to this target group—especially if this target group also lives in urban areas, where self-esteem is relatively higher.

A second crucial process by which advertising models affected responses to brands was through a model-evaluation route. It appeared that nonidealized models were judged to be more trustworthy than idealized models. Further, trustworthiness mediated the effect of the advertising models on the purchase intention of the advertised brand and the attitude toward the brand considering the moderation effect of self-esteem.

Hence, compared to idealized models, nonidealized models led to higher purchase intentions (and attitudes toward the brand under the condition of low self-esteem) due to higher perceived trustworthiness of the model.

The current study demonstrated that the closer one lives to an urban area, the lower model trustworthiness becomes in the case of an idealized image. Advertisers carefully must study the balance between using an idealized model for the suppression effects between the self-evaluation and the model-evaluation processes.

Finally, this paper demonstrated that multiple processes play a role during exposure to advertising models. In other words, the relevant findings regarding the self-evaluative process can be significantly linked to advertising effectiveness only when the model-evaluation process is considered.

Of course, the question remains whether, under the relevant high self-esteem condition, these processes always will suppress one another to enable researchers to conclude with full certainty that idealized images are best avoided on advertising campaigns.

Indeed, if the effects of body image × self-esteem under a high self-esteem condition is significantly stronger than the negative effect of an idealized body image on trustworthiness, it could be that idealized images are not detrimental to advertising effectiveness.

In fact, it is possible that one of these two processes dominates the other, depending on situational or personal circumstances. For instance, if one is planning to purchase a product like the one that is advertised, model trustworthiness may have a stronger effect than social comparison. Further, earlier research had demonstrated that some individuals are more likely to compare themselves with others than other individuals. For example, one study demonstrated that social comparison effects were stronger for individuals whose self-concept was activated or who were more uncertain (Stapel and Koomen, 2001).

It, therefore, could be demonstrated that, for individuals whose self-concept is activated (i.e., who are more focused on themselves) or who are more uncertain about themselves, the self-evaluation process will dominate, whereas individuals whose self is not activated or who are more certain about themselves will be more likely to experience a dominating model-evaluation process. Future research should examine specific situational and personal moderators that determine when the self-evaluation and the model-evaluation route will dominate.

It also should be noted that companies should analyze carefully whether their target consumers would like the nonidealized models in their advertisements. This is not always the case. One piece of research found that, although all participants in the studies agreed that there is an unattainable thin norm in society and applauded the use of nonidealized models, not all of the subjects liked the models used in Dove’s campaign (Gustafson, Hanley, and Popovich, 2008). More specifically, the participants in that study said...
that they did not like the women shown in underwear and in unflattering poses. In addition, participants also found the message that Dove conveyed to be contradictory by suggesting that plus-sized women were attractive but that they still need firming cream.

Although there are many positive effects of using nonidealized models in advertisements, it is important that the way these models are presented does not offend consumers and that the conveyed message is believable.

LIMITATIONS AND FUTURE RESEARCH
The results of the current study have important implications for marketers. In general, it seems that nonidealized models lead to higher purchase intentions compared to idealized models, due to higher perceived trustworthiness and positive shifts in self-esteem. Only participants with on average higher levels of self-esteem have a higher purchase intention in case of idealized models. These findings would suggest that it might be more successful to use nonidealized models over idealized models.

Some limitations, however, should be considered regarding the theoretical and managerial contributions of the current findings:

- First, the current sample includes only French women, who may not react to advertising in the same way as women in other countries or from other cultures (Lundstrom, White, and Chopoorian, 1999).

- The models portrayed in the advertising and respondents were Caucasian, which may affect some conclusions given that the perceptions and reactions to advertising images may vary between ethnic groups. A similar study with non-Caucasian women exposed to different advertisements with thin or full-figured models from different ethnicities remains an avenue for future research.

- Indeed, cultural diversity is growing fast in most industrialized countries. The use of ethnic minorities in advertising has already been studied in other countries such as the United States, New Zealand, and the United Kingdom, where ethnicity was revealed to have a significant impact on consumption patterns, shopping orientation, responses to promotion, purchase decisions, media usage, and brand loyalty among ethnic consumers (Briley, Shrum, and Wyer, 2007; Kwai-Choi, Fernandez and Martin, 2002). However, none of these studies established how visible minorities and the Caucasian majority could react differently to an exposure to thin or full-figured models in advertisements.

- The authors also must note that the different levels of uncertainty avoidance and individualism in different countries (Hofstede, 2001) may lead to a suppression effect with slightly altered intensities. Uncertainty avoidance may make the model-evaluation route dominant whereas individualism may make the self-evaluation route dominant. In France, levels of individualism and uncertainty avoidance practically are identical (Hofstede, 2001). In the United Kingdom and the United States, individualism is very high whereas uncertainty avoidance is lower. This could mean that the effects of self-esteem may outweigh the effects of model trustworthiness in the suppression mechanism.

- The use of nonidealized images may be very detrimental for high self-esteem consumers between 35 and 44 years old living in urban areas such as London, Paris, New York, or Chicago. This remains an avenue for future research given that we did not establish cultural differences in this paper.

- The authors studied the effects of nonidealized images of physical attractiveness using a body cream advertisement. Body creams are mass beauty products, and the findings of the current study may not hold true for other categories of products such as luxury beauty products or vacations (Kwortnik and Ross, 2007) and/or other types of products featuring female models in their advertising campaigns.

- As Charles Revson, the founder of Revlon, once said, “In the factory, we make cosmetics; in the drugstore, we sell hope.” In other words, the level of consumer involvement with the purchase (Assael, 1995) and the salience and amount of differences between brands/products may lead to the dominance of the self-evaluation or the model-evaluation route. This remains to be tackled by future research.

- Finally, similar research could be carried out with male consumers given that the men’s personal-care market should exceed $33.2 billion by 2015 (Global Industry Analysts, 2010). Given the growing numbers of “metrosexual” men in industrialized economies (Flocker, 2003), advertisers should establish whether this important group of consumers who spend time and money shopping for their appearance are sensitive to the body-mass index of male models in advertising.

Female and male consumers exhibit significantly different attitudes toward brands and purchase intentions (Orth and Holancova, 2004). Also, men
belonging to different subcultures of consumption (e.g., sexual orientation; Kates, 2002) could affect the relative dominance of the self-evaluation and the model-evaluation routes.

To conclude, given that often female consumers buy beauty products for their male partner, the authors acknowledge that studying the responses of female consumers toward idealized versus nonidealized images of male models constitutes an interesting avenue for future research.

ACKNOWLEDGMENT

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REFERENCES


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TAKE YOUR PICk: KATE MOSS OR THE GIRL NEXT DOOR?


APPENDICES

APPENDIX 1
Nonidealized image versus idealized image

Note: The full-faced nonidealized model has been purposefully hidden to respect her anonymity.

APPENDIX 2
Measurement Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>1. I feel satisfied with the way my body looks right now</td>
</tr>
<tr>
<td></td>
<td>2. I feel that others respect and admire me*</td>
</tr>
<tr>
<td></td>
<td>3. I am dissatisfied with my weight (–)</td>
</tr>
<tr>
<td></td>
<td>4. I feel good about myself</td>
</tr>
<tr>
<td></td>
<td>5. I am pleased with my appearance right now</td>
</tr>
<tr>
<td></td>
<td>6. I feel unattractive (–)*</td>
</tr>
<tr>
<td>Model</td>
<td>1. Dishonest/Honest</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>2. Unreliable/Reliable</td>
</tr>
<tr>
<td></td>
<td>3. Not dependable/Dependable</td>
</tr>
<tr>
<td></td>
<td>4. Not trustworthy/Trustworthy</td>
</tr>
<tr>
<td>Attitude toward the Ad</td>
<td>1. I dislike the advertisement/I like the advertisement</td>
</tr>
<tr>
<td></td>
<td>2. I react unfavorably to the advertisement/I react favorably to the advertisement</td>
</tr>
<tr>
<td></td>
<td>3. I feel negative toward the advertisement/I feel positive toward the advertisement</td>
</tr>
<tr>
<td>Attitude toward the Brand</td>
<td>1. This is a bad brand/This is a good brand</td>
</tr>
<tr>
<td></td>
<td>2. I dislike the brand/I like the brand</td>
</tr>
<tr>
<td></td>
<td>3. I feel negative toward the brand/I feel positive toward the brand</td>
</tr>
<tr>
<td></td>
<td>4. The brand is awful/The brand is nice</td>
</tr>
<tr>
<td></td>
<td>5. The brand is unpleasant/The brand is pleasant</td>
</tr>
<tr>
<td></td>
<td>6. The brand is unattractive/The brand is attractive</td>
</tr>
<tr>
<td></td>
<td>7. I disapprove of the brand/I approve of the brand</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>1. I am eager to check out the product because of this advertisement</td>
</tr>
<tr>
<td></td>
<td>2. I intend to buy this product</td>
</tr>
<tr>
<td></td>
<td>3. I plan on buying this product</td>
</tr>
</tbody>
</table>

* This item was dropped during measurement purification
APPENDIX 3
Standard loadings, composite reliability, and average variance extracted for idealized and nonidealized images of beauty

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Type</th>
<th>Standard Loadings</th>
<th>Standard Loadings</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Idealized</td>
<td>Nonidealized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>1</td>
<td>Reflective</td>
<td>0.60</td>
<td>0.61</td>
<td>≥ 0.860</td>
<td>≥ 0.607</td>
</tr>
<tr>
<td></td>
<td>2*</td>
<td></td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.79</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>0.82</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>0.80</td>
<td>0.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6*</td>
<td></td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model Trustworthiness</td>
<td>1</td>
<td>Reflective</td>
<td>0.77</td>
<td>0.82</td>
<td>≥ 0.881</td>
<td>≥ 0.598</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>0.80</td>
<td>0.73</td>
<td></td>
<td>Nl: 0.917</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.82</td>
<td>0.90</td>
<td></td>
<td>Nl: 0.917</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>0.81</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward the Ad</td>
<td>1</td>
<td>Reflective</td>
<td>0.89</td>
<td>0.87</td>
<td>≥ 0.937</td>
<td>≥ 0.790</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>0.92</td>
<td>0.92</td>
<td></td>
<td>Nl: 0.942</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.93</td>
<td>0.88</td>
<td></td>
<td>Nl: 0.803</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>0.79</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward the Brand</td>
<td>1</td>
<td>Reflective</td>
<td>0.87</td>
<td>0.86</td>
<td>≥ 0.950</td>
<td>≥ 0.733</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>0.88</td>
<td>0.86</td>
<td></td>
<td>Nl: 0.955</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.89</td>
<td>0.87</td>
<td></td>
<td>Nl: 0.753</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>0.80</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td>0.84</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td>0.81</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td>0.88</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>1</td>
<td>Reflective</td>
<td>0.90</td>
<td>0.92</td>
<td>≥ 0.956</td>
<td>≥ 0.880</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>0.95</td>
<td>0.96</td>
<td></td>
<td>Nl: 0.962</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.96</td>
<td>0.94</td>
<td></td>
<td>Nl: 0.895</td>
</tr>
</tbody>
</table>

* This item was dropped during measurement purification
I: Idealized; Nl: Nonidealized