Celebrities in advertising: the role of congruency

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Abstract:

The concept of congruence has been used in many research streams like brand extensions, sponsorship, or advertising. This paper aims to show the interest of considering this concept through the two dimensions proposed by Heckler and Childers (1992): relevancy and expectancy, in the case of celebrity endorsers in advertising. In order to measure this concept, we will then develop and empirically test a scale adapted from the works of Fleck-Dousteysier, Darpy and Roux (2005) on sponsorship.

Key words: endorsement, advertising, celebrities, congruence.

Résumé :

La congruence est un concept utilisé dans de nombreux courants de recherche, notamment l’extension de marque, le parrainage ou la publicité. Cette communication vise à démontrer l’intérêt de considérer ce concept selon les deux dimensions définies par Heckler et Childers (1992), à savoir la pertinence et le côté attendu, dans le cas de publicités faisant appel à des célébrités. Une échelle de mesure, adaptée des travaux de Fleck-Dousteysier, Darpy et Roux (2005) sur le parrainage, est proposée et testée empiriquement.

Mots-clefs : endossement, publicité, célébrités, congruence.
I N T R O D U C T I O N

Brands all over the world use celebrities to advertise their products. As early as 1890, actress Sarah Bernhardt appeared on posters for La Diaphane, a famous brand of rice powder at the time (Lehu, 1993). The use of celebrities in advertising is not, therefore, a new phenomenon, but it has become increasingly widespread. Brands like Pepsi have featured stars such as Michael Jackson, Madonna, or even the Spice Girls, with varying impact (Erdogan, 1999). Pizza Hut launched its restaurants on the international market with icons that are almost universally recognized, such as Cindy Crawford, Linda Evangelista, and Pamela Anderson. Some stars have several contracts with different brands: it is estimated that Michael Jordan, who appears in advertisements for Nike, Coke, Wheaties, Mc Donald's, Hanes, Oakley, and Gatorade, has an impact worth about 14 billion dollars on the American economy (Erdogan & al., 2001). Similarly, in a single week, French footballer Zinedine Zidane appeared on posters for Dior perfume and Leader Price hard-discount supermarkets, as well as TV ads for Dannon yoghurt. Stars have become a vital component of advertising for certain categories of products, like perfume and cosmetics. While celebrity endorsement in advertising is not a new phenomenon, it has certainly become much more widespread over the past twenty years. It has even become common practice for some companies. In fact, consumers have become increasingly keen on celebrities (Masse-Stamberger, 2005): they are interested in people who are well-known simply due to the fact they have appeared on television, − like the stars of reality shows −, and celebrity magazines are tremendously popular, as people always want to know more about stars' lives. The number of celebrities in advertising increased by 60 % between 2000 and 2004 (Neumann, 2006). As a result, in 2004, nearly 700 television advertisements featured celebrities. Alongside this phenomenon, research into the role of celebrities in advertising has also increased since the 1990s (Pringle and Binet, 2005; Erdogan, 1999; Ohanian, 1991). This research more specifically investigates the concept of congruency between celebrity and brand, which is apparently a crucial factor. We shall start by defining terms such as "celebrity" and "endorsement" and presenting the main models in this field then introduce a two-dimensional analysis of congruency. We shall attempt to define this concept and its antecedents in more detail. We shall then propose a scale for measuring perceived congruency between celebrities and brands.


Definitions of terms used

We must first define what we mean by celebrity endorsements in advertising. Firstly, we consider advertising according to an extremely broad definition, in agreement with Pringle and Binet (2005, p. 201): "Everything that has a name on it is advertising". This definition corresponds to consumer perception of advertising. It covers media advertising, as well as sales promotion, sponsoring, direct marketing, etc. As consumers do not generally make any distinction among these forms of communication (Ford-Hutchinson and Rothwell, 2002), it was appropriate to adopt this premise in our study, as we are examining the issue from a consumer standpoint.

The term "celebrity" needs to be defined: according to the "Encyclopédie de l’Agora", "celebrity is measured by the number of press cuttings and broadcast time devoted to a person and is thus distinguished from fame, which is generated by a person's outstanding work or exemplary life. Of course, a celebrity may be worthy of fame, as was the case of Lindbergh, but the connection is
accidental - celebrity has nothing to do with merit, it is simply the result of the media attention given to an act or person".

According to Glamour Speakers, a Paris communication agency specialized in consulting on the choice of celebrities, "a celebrity is a person whose name, face, and voice are spontaneously recognized by a proportion of the general public (...) and who is immediately associated with a set of values". This definition corresponds to "classic" celebrity types, like actors, models, sports personalities, and rock stars … These people maintain their "celebrity" by appearances in mass media, such as fashion magazines and tabloids, that inform the public about their private lives.

Endorsement (sometimes known as Celebrity Marketing) is a phenomenon where celebrities lend their image to brands.

Several researchers have attempted to define endorsement over the last twenty years (see Erdogan, 1999). We will use McCracken's definition (1989, p.310): "the celebrity endorser is defined as any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement ».

Celebrity endorsements: a major phenomenon

The fees received by celebrities for brand endorsements are very high: American actors Nicole Kidmann and Brad Pitt, as well as golfer Tiger Woods, may receive almost 5 million dollars per contract. In Europe, Zinedine Zidane refuses all proposals below 1.2 million dollars. Yannick Noah, who recently replaced the footballer as the French public's favorite personality, received 1,100,000 dollars (exclusive of commission on sales) for the new Sloggi underwear campaign.

Research has attempted to elucidate the reasons why companies invest so much money in communication featuring celebrities (Erdogan, Baket and Tagg, 2001). There are many reasons (Lehu, 1993), but firstly, it is significant that celebrity endorsements are a way of avoiding anonymity and standing out from the competition in saturated markets. For example, in the cosmetic and perfume industry, new products are being launched all the time. Cosmetic brands can no longer achieve recognition merely due to the intrinsic quality of their products, but do so, above all, by the image they project through their advertising campaigns, generally by featuring movie stars, models, or singers. Celebrities make an impression on consumers. According to Jacques Helleu, artistic director for Chanel, "it is the only way of making a sufficiently strong impression on consumers memories to trigger a purchase when they are in a sales outlet at a later date" (Devilliers, 2004).

Beyond this objective of differentiation, it also gives brands an opportunity to focus their positioning in consumers' minds. Another interesting example is that of Madrange, a French SME specialized in ham (Maudieu, 2004): recruiting famous actresses, like Véronique Jeannot in 1988, and, particularly, Véronique Genest and Sophie Duez, enabled this brand to develop awareness and a quality image, thus moving up to second position in this market, behind Fleury Michon. Sometimes, celebrity endorsements also give a brand considerable exposure in the press, who are more likely to report on events concerning the brand if the celebrities are present (e.g. brand promotion parties; Erdogan and al., 2001).

The impact on sales is more difficult to assess. In 1998, Fortune magazine estimated Michael Jordan's impact on the American economy and, particularly, on brands like Nike and Disney, at 14 billion dollars. Recent advertising campaigns for Sloggi, featuring Yannick Noah, led to a 47% increase in the brand's sales on the men's and 5% on the women's market over the past 10 months, which is an excellent result in a declining market (Neumann, 2006). The results of
celebrity endorsements are, however, highly variable, as there are many factors involved, including the choice of celebrity, and the quality of the advertising itself, as well as the media programme, or even press relations.

This is why it is interesting to understand how endorsement works and identify the decisive factors for its effectiveness. From this perspective, we shall present the main models devised to explain the type of relationship that develops between celebrities and consumers. These models are essential to our understanding of the influence of celebrity on brand perception.

**The source attractiveness model**
The attractiveness model assumes that the effectiveness of the message depends on the physical characteristics of the source. A celebrity spokesperson's physical attractiveness has a positive impact on brand recall, attitude towards the brand, and purchasing intent (Kahle and Homer, 1985). Here, the endorser's physical attractiveness is assumed to have an influence on the target's acceptance of the advertising, particularly due to the phenomenon of identification. The effectiveness of the message depends on the endorser's similarity, likeableness, and familiarity. While there is no doubt that a celebrity endorser may improve attitude towards advertising and a brand, its impact on purchasing behavior is less clear (Erdogan, 1999). Attractiveness of the source is not the only characteristic of a celebrity to take into account (Friedman and Friedman, 1979) and is mainly significant for brands related to physical appearance (Kamins, 1990).

**The source credibility model**
The source credibility model was developed in the 1950s by Hovland and colleagues (Hovland and Weiss, 1951). According to this model, the effectiveness of a message depends on the perceived level of expertise and trustworthiness of an endorser (Ohanian, 1991).

- **Expertise** refers to the extent to which the endorser is perceived as a valid source of information (Erdogan, 1999). It is a matter of determining whether the advertising target perceives the endorser as having a certain level of experience, knowledge, and know-how that makes their recommendation of a product and/or brand credible. Erdogan's review of previous literature (1999) indicated that a source perceived as highly credible is more effective and persuasive than a less credible one, as well as inducing a more positive change of attitude towards the brand or product and more changes in behavior.

- **Trustworthiness** refers to the endorser's honesty, credibility, and integrity, as perceived by the target. It is a matter of determining whether the consumer trusts the source for the honest, objective way the information is presented (Ohanian, 1991).

Ohanian (1990) developed a three-dimensional scale for assessing a celebrity's credibility. The three dimensions in this credibility scale are attractiveness, trustworthiness, and expertise. However, as McCracken (1989) and Erdogan (1999) noted, limiting the assessment of an individual to certain dimensions may seem rather restrictive.

These models may seem attractive but they have been criticized on several levels (Erdogan, 1999, Bower and Landreth, 2001). They do not properly take into account the multifunctional aspect of certain characteristics of the source and there is no proof that the dimensions examined are the correct ones. However, above all, these models seem incomplete as they do not consider all the significance and perceptions connected to a particular celebrity, merely focusing on certain characteristics of the endorser, so we do not feel they are capable of capturing what a person, as a
whole, is capable of contributing to an advertisement. We think that McCracken's meaning transfer model (1989), which includes all the cultural connotations of celebrity, is more suitable, as it explains the endorsement process as a whole.

**McCracken's meaning transfer model (1989)**

This model has the advantage of including affective and cognitive aspects. The transfer theory relies on the endorsement process described by McCracken (1989). This process is based on the idea that, in the consumer society, which is organized around culture, celebrities have a shared cultural significance in the eyes of consumers (McCracken, 1986, 1989). McCracken defines this transfer as the translation of the meaning of celebrity to a product or brand, e.g. in advertisements with celebrity spokespersons. Endorsement is effective when an individual who buys and consumes the product appropriates the meaning associated with the celebrity, which has been transferred to the product (Figure 1).

![Figure 1. – The endorsement process (McCracken, 1989, p. 315)](image)

The McCracken model makes it possible to explain how celebrities transmit an extensive set of associations to the brands they endorse. Therefore, before companies select celebrities to represent their brands, they need to ensure that the person conveys the right meaning. It is precisely this congruency between personality and brand that facilitates meaning and affect transfer from one to the other (Misra and Beatty, 1990; Kamins and Gupta, 1994, Lynch and Schuler, 1994). It is thus useful to define this concept of congruency in greater detail.

**The role of congruency**

The term "congruency" is used in several research areas, particularly brand extension, co-branding, sponsoring, and endorsement. In all these cases, the aim is to assess the fit between a brand and another entity (a new product category, another brand, an event, or an individual) (Fleck-Dousteyssier and al., 2005). A variety of terms have been used (congruency, fit, link, "match up effect", etc.) but the general concept is the same.

In the field of celebrity spokespersons, congruency was not really defined as such until Misra and Beatty's work (1990, p. 161). They deduced that it consisted of the fact "that the highly relevant characteristics of the spokesperson are consistent with the highly relevant attributes of the brand". A number of authors have studied specific aspects of celebrity, such as gender and skin
color (Huston and al., 2003) or physical attractiveness (Kamins, 1990), but few have analysed congruency in the broader sense.

The two dimensions of congruency
Heckler and Childers (1992) analysed the congruency between visual and verbal elements in advertisements, adapting concepts used in social cognition and, particularly, the memorisation of social characteristics, to advertising. Thus, they started from the concept of theme, which originates in verbal discourse and presents the general content of the story told by the advertisement. Congruency is then defined in two dimensions: relevancy and expectancy. Relevancy reflects the extent to which the information contained in the stimulus contributes to or prevents a clear identification of the main theme or message being communicated. Expectancy refers to the degree to which an item or piece of information fits into a predetermined pattern or structure evoked by this theme. This interesting approach suggests that the concept of congruency may be two-dimensional. These two dimensions are also mentioned in the area of brand extensions (Lane, 2000; Tauber, 1988), but under different names.

Impact of congruency between a celebrity and the brand endorsed on the brand
At first glance, it may seem logical that congruency between the celebrity and the brand endorsed should have a positive impact on the brand's image and that, the stronger the link, the more impact the association should have on the brand. Furthermore, the better-suited, more relevant or congruent the celebrity/brand pair is perceived to be, the greater the positive response to advertising in terms of attitude, or even purchasing intent (Misra and Beatty, 1990; Kamins and Gupta, 1994; Lynch and Schuler, 1994).

However, it is possible to imagine a more complex relationship and examine an alternative hypothesis, i.e. that a certain level of incongruence may have a positive impact on response to advertising, particularly in terms of brand image. Indeed, a moderate level of incongruence between an expectation and an object may be beneficial, provided it is perceived as interesting and positive (Meyers-Levy and Tybout, 1989). In that case, a relatively poor fit between brand and celebrity may be stimulating and encourage individuals to process the information more intensively and elaborate more. In the case of sponsoring, a slight inconsistency between the sponsor and the event should lead to enhanced recall and more favourable attitudes than in the case of total consistency (Jagre and al, 2001). However, if the incongruence is so great that consumers have to change their cognitive structures to comprehend it, they have a tendency to exhibit negative reactions, leading to negative cognitive elaboration and a feeling of frustration (D’Astous and Bitz, 1996).

The superiority of moderately incongruent pairings over highly congruent or very incongruent ones has also been confirmed by some research into brand extensions. Thus, moderate incongruence of a product in relation to the expectation activated may lead to more positive reactions to this product than strong congruency or incongruence (Meyers-Levy and Tybout, 1989; Meyers-Levy, Louie and Curren, 1994; Sheinin and Schmitt, 1994), and the effect is accentuated by repeated exposure to the moderately incongruent extension (Lane, 2000). We note that hypotheses and, therefore, results in research based on the theory of congruency may seem contradictory.

Whereas information processing theories tend to indicate that congruency is two-dimensional, there is not, at present, a reliable scale of measurement for congruency in the case of celebrity
endorsements that meets these specifications. A suitable scale has, however recently been developed in the field of sponsoring (Fleck-Dousteyssier and al., 2004).

**Proposal and Evaluation of a Two-Dimensional Congruency Measurement Scale**

*Definition of the construct*

We retained the two-dimensional structure of congruency, as defined by Heckler and Childers (1992). Current congruency measurements do not meet this criterion as they are based on a single-dimensional approach or consist of a simple manipulation check by an item (Fleck-Dousteyssier and al., 2005).

In the context of celebrity endorsement of a brand in an advertisement, we consider that:
- a brand/celebrity pair is relevant if it is meaningful and contributes to clear communication of a message about the brand
- the pair is expected if it corresponds to a predefined expectation about the brand.

*Generating items*

We adopted the scale developed by Fleck-Dousteyssier and al. in 2005, adapting it to our case (this scale was initially developed to analyze brand/sponsored entity pairs). The changes were minor, mainly consisting of replacing the name of the sponsored entity with that of a celebrity. This scale is based on work by Speed and Thompson (2000) and Heckler and Childers (1992). Table 1 presents the items selected by Fleck-Dousteyssier and al. (2005) and their adaptation to our research.

We also created a 3-item scale for measuring predisposition towards an advertisement featuring a given celebrity. This scale is used to assess to what extent an advertisement presenting a celebrity and the brand endorsed was favorably received by the respondents. This tool provides a more rigorous confirmation of the discriminant validity of the other scales.


<table>
<thead>
<tr>
<th>Scale devised by Fleck-Dousteyssier and al. (2004)</th>
<th>Scale used in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expectancy</strong></td>
<td></td>
</tr>
<tr>
<td>Att1 &lt;brand&gt; could be expected to sponsor &lt;event&gt;</td>
<td>&lt;celebrity&gt; could be expected to appear in advertising for &lt;brand&gt;</td>
</tr>
<tr>
<td>Att2 I am not surprised that &lt;brand&gt; sponsors &lt;event&gt;</td>
<td>I am not surprised that &lt;celebrity&gt; appears in advertising for &lt;brand&gt;</td>
</tr>
<tr>
<td>Att3 It was foreseeable that &lt;brand&gt; would sponsor &lt;event&gt;</td>
<td>It was foreseeable that &lt;celebrity&gt; would appear in advertising for &lt;brand&gt;</td>
</tr>
<tr>
<td><strong>Relevancy</strong></td>
<td></td>
</tr>
<tr>
<td>Pert1 The fact that &lt;brand&gt; sponsors &lt;event&gt; shows me something new about &lt;brand&gt;</td>
<td>The fact that &lt;celebrity&gt; appears in advertising for &lt;brand&gt; shows me something new about &lt;brand&gt;</td>
</tr>
<tr>
<td>Pert2 This sponsoring operation helps me to understand more about &lt;brand&gt;</td>
<td>&lt;celebrity&gt; helps me to understand more about &lt;brand&gt;</td>
</tr>
<tr>
<td>Pert3 Through this sponsoring operation, I discover a new facet of &lt;brand&gt;</td>
<td>This association between &lt;celebrity&gt; and &lt;brand&gt; shows me a new facet of &lt;brand&gt;</td>
</tr>
<tr>
<td><strong>Congruency</strong></td>
<td></td>
</tr>
<tr>
<td>Cong1 &lt;event&gt; and &lt;brand&gt; are a good match</td>
<td>&lt;brand&gt; and &lt;celebrity&gt; are a good match</td>
</tr>
<tr>
<td>Cong2 &lt;brand&gt; is totally appropriate for &lt;event&gt;</td>
<td>&lt;celebrity&gt; is totally appropriate for &lt;brand&gt;</td>
</tr>
<tr>
<td>Cong3 I feel &lt;brand&gt; is an appropriate sponsor for &lt;event&gt;</td>
<td>I feel &lt;celebrity&gt; is a good spokesperson for &lt;brand&gt;</td>
</tr>
<tr>
<td><strong>Predisposition towards advertisements featuring endorsing celebrities</strong></td>
<td></td>
</tr>
<tr>
<td>Pub1 I like the idea of &lt;celebrity&gt; appearing in an ad for &lt;brand&gt;</td>
<td></td>
</tr>
<tr>
<td>Pub2 I am pleased to see &lt;celebrity&gt; in an ad for &lt;brand&gt;</td>
<td></td>
</tr>
<tr>
<td>Pub3 &lt;celebrity&gt; in an ad for &lt;brand&gt; is something I appreciate</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.- Adaptation of the items used by Fleck-Dousteyssier and al. (2004) to celebrity endorsements in advertising.

N.B.: The last four items were not adapted from Fleck-Dousteyssier and al. (2004) but devised specially for this study.

Test of the scales
These scales were tested on 290 business students, including 55% women. We chose to focus on a single brand (for optimum internal validity) and selected four celebrities who seemed quite varied in terms of congruency (to maximize external validity). Following a preliminary test involving about twenty students, we chose the Citroën brand and the following celebrities: Sébastien Loeb (champion racing driver on the Citroën team), Adriana Karembeu (model), Dominique Chapatte (presenter of a French TV show on cars), and Jean-Pierre Foucault (French TV host). The objective was to find a brand:

- in a product category where celebrity endorsements are frequently used,
- as meaningful for men and women,
- for which we could expect different levels of involvement;
- for which we could expect various levels of attitudes and images;
- for which we could find celebrities with different degrees of congruency.

The relevancy and expectancy of the various celebrities could be assumed to be as follows:
We prepared four versions of the questionnaire, on the basis of the association between Citroën and each of the four celebrities, each presenting two potential endorsers in turn. A short, factual presentation of the celebrities preceded the questions. For example, the text presenting Sébastien Loeb (with a photo), was as follows

Sébastien Loeb is a 32-year-old French rally driver. He has just won the World WRC rally championship in a Citroën for the second time. Citroën envisages featuring Sébastien Loeb in an advertisement.

Once they had read the text and answered the first 12 questions, respondents read the text presenting the second celebrity then answered the next 12 questions. We then checked that the profile of the answers to the first 12 questions was similar to that of the next 12, so that we could aggregate the results.

The questionnaires were accessible via the Internet. Respondents who visited the site set up for this purpose were allocated one of the four versions of the questionnaire at random.

Once we had eliminated any incomplete questionnaires, we had a total of 530 answers (265 persons answered all the questions on two celebrities).

<table>
<thead>
<tr>
<th>Relevant pair</th>
<th>Non-relevant pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sébastien Loeb/ Citroën</td>
<td>Adriana Karembeu/ Citroën</td>
</tr>
<tr>
<td>Reason: races for Citroën, world champion</td>
<td>Reason: previous Citroën campaign with Claudia Schiffer, has already appeared in ads for the brand in other countries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unexpected pair</th>
<th>Jean-Pierre Foucault/ Citroën</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominique Chapatte/ Citroën</td>
<td>Reason: car expert</td>
</tr>
</tbody>
</table>

Table 2.- Examples selected as a basis for the questionnaire measuring congruency

<table>
<thead>
<tr>
<th>Components</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>expec1</td>
<td></td>
<td></td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>expec2</td>
<td></td>
<td></td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>expec3</td>
<td></td>
<td></td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>relev1</td>
<td></td>
<td></td>
<td></td>
<td>.89</td>
</tr>
<tr>
<td>relev2</td>
<td></td>
<td></td>
<td></td>
<td>.82</td>
</tr>
<tr>
<td>relev3</td>
<td></td>
<td></td>
<td></td>
<td>.81</td>
</tr>
<tr>
<td>cong1</td>
<td></td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cong2</td>
<td></td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cong3</td>
<td></td>
<td></td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>ad1</td>
<td></td>
<td></td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>ad2</td>
<td></td>
<td></td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>ad3</td>
<td></td>
<td></td>
<td>.89</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.- Findings of factorial analysis. 
Only loadings over .30 after Varimax rotation are indicated.
Following the recommendations of Gerbing and Hamilton (1996), we subjected the answers to a principal component analysis with Varimax rotation, using SPSS 13.5 software. The analysis table included 12 items (for measuring congruency in two dimensions as well as the predisposition towards advertising) for 530 observations. The results were very satisfactory: the first four axes accounted for over 87% of the variance, with each item saturating strongly on its own dimension and very little on the others (all the loadings were above 0.81 on their respective axes and below 0.3 on the others).

Two Structural Equation Model (SEM) analyses were carried out: first, a Confirmatory Factorial Analysis (CFA) that provided a more rigorous assessment of the psychometric properties of our four scales, then a second analysis to test any links between the dimensions of the congruency scales, as they were established conceptually and emerged through principal component analysis (figure 2). The concept of predisposition towards an advertisement featuring an endorsing celebrity was not included in the second model, as we assumed a non-linear correlation between predisposition and congruency, which is impossible to specify in an SEM, as it only accepts linear correlations between constructs.

CFA was then carried out and the estimation procedure used was that of maximum likelihood. CFA was used to evaluate the reliability and validity of the four scales, as well as estimate their inter-correlations. It was then possible to quantify the relative impact of the two dimensions of congruency on this concept.

Analysis of covariance structures, particularly CFA, which is a special case, provides many indices and parameters for assessing the quality of a model. Following the recommendations of Bagozzi and Yi (1988), as well as Jöreskog (1993), we divided this evaluation into three stages:

1. Checking that there were no aberrant results, such as correlations higher than 1 or non-significant parameters;
2. Examining the fit indices, which are used to evaluate the overall quality of the model and must reach certain threshold values;
3. Internal parameters in the model, such as \( \lambda \) (comparable to standardized regression coefficients) of the items as well as the reliability indicators must also reach certain threshold values.

In addition to the Chi-Squared test, which indicates the capacity of the data to reproduce the theoretical model (Bentler and Bonnett, 1980; Bearden, Sharma and Teel, 1982), the fit indices chosen were GFI, RMSEA, TLI, and CFI, following the recommendations of Hoyle and Panter (1995). Furthermore, Hu and Bentler (1999) also recommended using SRMR.

The CFA results were entirely satisfactory (see table 4): the fit indices were good (particularly the SRMR value of 0.026, as well as CFI and TLI above 0.98) and high internal parameters (e.g., all the \( \lambda \) were significant, with values between 0.81 and 0.95).

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>Degrees of freedom; p</th>
<th>GFI</th>
<th>RMSEA</th>
<th>RMSEA: 90% confidence interval</th>
<th>SRMR</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>110.237</td>
<td>48 ; .00%</td>
<td>.960</td>
<td>.055</td>
<td>(.042 ; .069)</td>
<td>.026</td>
<td>.984</td>
<td>.988</td>
</tr>
</tbody>
</table>

Table 4. – CFA findings on the constructs

Once the items had been finalized in this way, we could then analyse the reliability and validity of our scales.
Reliability and validity of the scales
Reliability is defined as the "quality of a measuring instrument that consistently gives the same results when applied several times to the same phenomenon" (Evrard, Pras and Roux, 1993, p. 586). Jöreskog's $\rho$ is an interesting alternative to Cronbach's $\alpha$, as it is less sensitive to the number of items analysed. A Jöreskog's $\rho$ above 0.8 indicates good reliability for the scale.

Validity indicates the degree to which a measuring instrument measures the concept under investigation (Bagozzi, 1981). There are four types of validity:

1. Content validity, for which there is no formal, statistical indicator.
2. Construct validity, consisting of convergent and discriminant validity:
   - convergent validity tests whether different indicators that are supposed to measure the same phenomenon are correlated. Fornell and Larcker (1981) propose assessing it by means of two criteria:
     a) the $\lambda$ must be significantly non null and the SMC ($r^2$) higher than 0.5;
     b) construct variance must be due more to the items used to measure it than error. This condition is verified by calculating $\rho_{VC}$, or AVE (Average Variance Extracted), which must be above 0.5;
   - discriminant validity means that two theoretically separate constructs are also different in practice. For this to be satisfactory, the square root of $\rho_{VC}$ of each construct must be higher than its correlation with the other constructs (Hulland, 1999);
3. Predictive validity, which consists of testing whether a construct is empirically related to a cause (or consequence) to which it is theoretically related.
4. Finally, nomological validity, which consists of linking a construct to a set of causes and/or consequences in a complex network.

This last point will only be partially explored in this article, in view of our more modest objectives. The following tables summarize the reliability and validity tests, which produced satisfactory results.

In particular, the correlations between the four constructs showed that they were empirically different. The square roots of $\rho_{VC}$ for each construct were indeed higher than the correlations with the other constructs (table 6), proving their discriminant validity.

<table>
<thead>
<tr>
<th></th>
<th>Reliability</th>
<th>convergent validity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jöreskog's $\rho$</td>
<td># of $\lambda$ not sign. at 5%</td>
</tr>
<tr>
<td>Expectancy</td>
<td>.94</td>
<td>0</td>
</tr>
<tr>
<td>Relevancy</td>
<td>.91</td>
<td>0</td>
</tr>
<tr>
<td>Congruence</td>
<td>.94</td>
<td>0</td>
</tr>
<tr>
<td>Predisposition towards ads...</td>
<td>.87</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5. – Assessment of reliability and convergent validity
A structural model was built to test for links between the dimensions of congruency established conceptually (figure 2).

![Figure 2. – The structural equation model of congruence](image)

The model had a good fit with the data (table 7). SMC (i.e., explained variance) corresponding to congruency was 0.57, which is correct: the two dimensions identified explained over half the variation in congruency. These results are also similar to those of Fleck-Douseyssier and al. (2005).

We may thus conclude that the psychometric properties of the scales are entirely satisfactory.
Chi-Square    Degrees of freedom ; p  GFI  RMSEA  RMSEA: 90% confidence interval  SRMR  TLI  CFI
4.036        24 ; .21%        .98  .040  (.015 ;.060)  .025  .993  .996

Table 7. – Test of a two-dimensional model of congruence

Analysis of the results: Brand/celebrity pairs
We previously hypothesized that each of the four brand/celebrity pairs would be located in one of the quadrants of a relevant*expected matrix. We felt it was interesting to check whether the respondents' perceptions fit this pattern. Figure 3 shows the positions of the celebrities in the expected*relevant plane (we averaged the 3 items measuring each construct). As expected, Sébastien Loeb and Jean-Pierre Foucault were in opposite positions. Their relatively low relevancy scores may, however, be surprising, as these two celebrities were assumed to be relevant. An ANOVA of the means confirmed that there was a significant correlation between the type of pair and relevancy, on the one hand, and expectancy, on the other hand, (ANOVA expected/pair: F= 29.0, sig = 0.000; ANOVA relevancy/pair: F= 3.24, sig = 0.023). A comparison of means indicated, however, that the scores of the two celebrities assumed to be relatively incongruent (A. Karembeu and D. Chapatte) were similar on both axes. These results are similar to those obtained by Fleck-Dousteyssier and al. (2004).

On the basis of data collected on both the selected pairs, relevancy accounted for less variance between the pairs than expectancy. Furthermore, the structural equation model indicated that this dimension had considerably less impact on congruency than expectancy.
These results highlight the fact that there are different levels of congruency. We certainly observed that the Citroën/S. Loeb pair had the highest congruency score, although it was still quite average (4.57), as it was perceived as being highly expected and relevant. The Citroën/J-P Foucault pair was actually perceived as incongruent (score: 2.93), as was also the case of A. Karembeu (score de 2.48). Although, to our surprise, D. Chapatte was considered only slightly relevant, this pair was perceived as relatively congruent (score: 3.45).

Figure 3.- Célébrités’ scores on « expected » and « relevant » axes.
It would be interesting to investigate how variations in individual characteristics (physical attractiveness, previous endorsements, perceived experience and expertise with the product category; Till and Busler, 1998; Silvera and Austad; 2004) may influence the perception of respondents on the expected and relevant axes.

Conclusion and Future Research

This research makes contributions on both a theoretical and methodological level. This article proposes the integration of information processing theories, congruency, and celebrity endorsement practices. We based our research on work on sponsoring, itself based on research in the fields of advertising, brand extensions, and co-branding. We highlighted the role of congruency, which is, in our opinion, based on a two-dimensional structure, consisting of "relevancy" and "expectancy". This link was empirically confirmed.

The relevancy of the brand/celebrity pair indicates that, during intensive processing, an individual exposed to the message will find this pair meaningful. In the advertising field, Grunert (1996) showed that individuals initially processed a message via an automatic, generally subconscious process, during which they determined its relevancy. The type of processing applied next depended on relevancy, as did a possible change to a strategic process which enabled them to make inferences concerning the brand. Furthermore, relevancy should increase an individual's ability to give meaning to a pair and analyse the message without too much difficulty. Individuals can then elaborate on that basis, creating new brand associations or strengthening existing ones, which build up the brand's image (Keller, 1993).

Furthermore, we assume that unexpected or surprising brand/celebrity pairs stimulate an individual's attention and curiosity, making them want to process the message more intensively. Expectancy thus has a negative impact on an individual's motivation to process the message. The fact that the message is processed less intensively means that it has less impact on an individual's perceived image of the brand. In the area of brand extensions, Boush and Loken (1991) also demonstrated an inverted U-shaped relationship between the typicality of a brand extension and the process used to assess it: moderately typical extensions were assessed less globally, i.e. more intensively, than highly typical or atypical extensions. Similarly, Meyers-Levy and al. (1994) emphasized that, in case of incongruence, processing was more intensive, leading to the generation of a greater number of thoughts, more thoughts on the content of the message, and a smaller proportion of thoughts not directly related to the message.

We therefore hypothesize that there is a curvilinear relationship between brand/celebrity congruency and brand image: advertising featuring a celebrity will have more impact on brand image if there is a moderate incongruence between the brand and the celebrity, i.e. the pair is relevant but unexpected, than when congruency is also high (both relevant and expected) or low (non-relevant and unexpected). Having said that, it may be assumed that in cases of strong congruency (expected and relevant), even if cognitive processing is limited, the individual's attitude towards the advertising will be strongly positive, making it possible to enhance attitude towards the brand in the future (Lee and Labro, 2004).

However, this approach has its limitations. The relevancy dimension, in particular, raises questions as its impact on congruency is limited (standardized coefficient: 0.27). Furthermore, it was found to be only weakly discriminant, as indicated by the fact that the difference in relevancy between S. Loeb and A. Karembeu was only 0.8 on a 7-point scale. This may be due to an excessively "restrictive" formulation of the items. The questions focused mainly on finding out information about the brand, following the celebrity endorsement. Perhaps it is necessary to integrate a simpler concept, asking whether the endorsement seems "meaningful" to the
respondent. In other words, perhaps we should consider that relevancy is not just providing information, but also an overall assessment of a given celebrity's added value for a brand as compared to any other celebrity and/or endorser.

It would also be interesting to carry out a similar study involving larger numbers of brands and celebrities, to raise the external validity. For example, we did not have the means to monitor the effect of physical attractiveness (note, however, that there was little or no difference between the men's and women's answers). One possibility would be to replicate our study using fictitious celebrities, as described by Till and colleagues (Till and Shrimp, 1998; Till and Busler, 1998), which would neutralize certain variables such as fame, familiarity, or physical attractiveness, likely to cause bias in the results.

The measurement scale proposed here was among the first contributions to research on congruency and offers new insight into other research that has attempted to explain the impact of celebrities in advertising.
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