

Market Prominence Biases in Sponsor Identification: Processes and Consequentiality

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ABSTRACT

It has been recently suggested that sponsor identification may be biased in favor of prominent brands. All things equal, consumers are more likely to attribute sponsorship to brands that they perceive to be more prominent in the marketplace, such as large-share brands. This article offers additional empirical evidence for this phenomenon and examines the underlying processes. The results of a controlled laboratory experiment replicate the phenomenon and show that this bias arises only when consumers are unable to retrieve the name of the sponsor directly from memory. In other words, direct retrieval is the default process of sponsor identification. The prominence bias is therefore more likely to occur in cluttered media environments where learning the event-sponsor associations is difficult. The findings further suggest that this bias emanates from a relatively controlled hypothesis-testing process that combines retrieval and constructive processes. During identification, the prominence of the brand is used as a confirmation cue that either validates or conflicts with people's vague recollections. The results also indicate that prominent brands identified or misidentified as sponsors do in fact benefit from enhanced brand image. © 2001 John Wiley & Sons, Inc.

Any marketer who spends a significant amount of money on event sponsorship would hope that this investment is somewhat effective. Accurate

identification of the event sponsor, as assessed by recall or recognition, is one of the most important measures of sponsorship effectiveness. Empirical evidence shows however that event sponsors often do not receive proper credit (e.g., Crimmins & Horn, 1996; Gardner & Shuman, 1987; "Public is confused," 1998). Worse, it is often the sponsor's competitor who is improperly credited for sponsoring the event (see, e.g., Sandler & Shani, 1989). The causes of these frequent misidentifications are multiple. People who attend sponsored events and/or watch them on TV typically pay limited attention to sponsorship information (e.g., logos and billboards) contained in the sporting arena (e.g., d'Ydewalle, Abeele, Rensbergen, & Coucke, 1987; Pham, 1992). In addition, unethical competitors may deliberately attempt to confuse consumers about who is the actual sponsor of an event—a practice known as "ambush marketing" (e.g., Meenaghan, 1994; Sandler & Shani, 1989). We propose that another cause of these widespread misidentifications lies in the psychology of sponsor identification.

Recent research indicates that, contrary to marketers' assumptions, consumers do not identify event sponsors solely based on their recollections (Johar & Pham, 1999). In other words, they do not merely access their memory records for the event-sponsor associations. Instead, consumers often appear to identify sponsors based on constructive (inferential) processes—a phenomenon that seems to generalize to other types of source identification in marketing, including retail advertising (Pham & Johar, 1997).

Johar and Pham (1999) identified and analyzed two common heuristics of constructive sponsor identification. The first heuristic, called *relatedness*, capitalizes on the semantic relationship that many consumers assume should exist between events (e.g., a track-and-field competition) and the sponsoring companies (e.g., athletic shoes). Everything else equal, companies and brands that seem to be related to an event are more likely to be identified as the actual sponsors of the event than companies and brands that seem unrelated. Practically, this implies that ambush marketers may enhance their probability of being misidentified as sponsors by "ambushing" those events with which they have natural associations.

The second heuristic, called *market prominence*, refers to consumers' use of variations in the market prominence of potential sponsors as a source of information when inferring the identity of event sponsors. Perceived market prominence may derive from factors such as brand awareness, market share, visibility, and share-of-voice. Everything else equal, companies and brands that are perceived to be more prominent in the marketplace (e.g., Nike) are more likely to be identified (accurately or inaccurately) as event sponsors than brands that are less prominent (e.g., Converse).

This article holds product category relatedness between the event and

sponsor constant at a high level and further examines the operation of the prominence bias. The research has the following four objectives:

1. To replicate the previous finding that sponsor identification is indeed biased toward brands with high market prominence.
2. To show that this identification bias has significant consequences for brand image.
3. To further document the processes underlying reliance on this heuristic.
4. To demonstrate that use of prominence occurs primarily when direct retrieval fails as a process of identification.

PROMINENCE-BASED IDENTIFICATION

The proposition that sponsor identification may be constructive and may be based on market-prominence heuristic raises two sets of issues. The first set of issues is substantive and refers to the robustness and consequentiality of the phenomenon. The second set of issues is more theoretical and concerns the processes underlying use of the market prominence heuristic and the contingencies surrounding its use. Below, we derive hypotheses related to these issues.

Robustness and Consequentiality

An obvious reason for sponsor identification being biased in favor of prominent brands is that these brands are more accessible in memory and are therefore more likely to be retrieved during sponsor identification, than are less prominent brands. We propose that the prominence bias goes beyond this greater retrievability of prominent brand names. Findings from previous research support the proposition that retrievability is not the sole determinant of the prominence bias (Johar & Pham, 1999). Specifically, the finding that this bias is even stronger when the names of the potential sponsors are not supplied during sponsor identification attests to the role of differential retrievability. Importantly, results demonstrate a prominence bias even when the names of the potential sponsors are supplied during sponsor identification, that is, even when retrievability is presumably not an issue. Because confidence in the robustness of this effect would be greater if it could be replicated, we test the following hypothesis.

- H1:** Sponsor identification can be biased toward brands with high market prominence such that they are more likely to be credited

with sponsorship than are brands with low market prominence, even after controlling for the differential retrievability of the brands.

In practical terms, H1 means that respondents are more likely to accurately or inaccurately identify the more prominent brand as the sponsor of an event, even if the names of other less-prominent brands are provided in the survey (thus controlling for differential brand retrievability).

Should the robustness of the market prominence bias be demonstrated, it is important to examine the substantive significance of sponsor misidentification. Many sponsors are not interested in being identified *per se*; they are more interested in influencing their brand image through their sponsorship activities (e.g., Javalgi, Traylor, Gross, & Lampman, 1994; Marshall & Cook, 1992; Nebenzahl & Jaffe, 1991; Stipp & Schiavone, 1996). One could argue therefore that sponsorship effectiveness (or ineffectiveness) should be assessed in terms of brand image or association and not in terms of identification accuracy. Previous research has not directly measured the impact of accurate or inaccurate sponsor identification on brand image. We hypothesize that reliance on the prominence heuristic in sponsor identification does have significant consequences for brand judgments.

H2: The market-prominence bias in sponsor identification can have measurable influences on brand image judgments.

In practical terms, H2 means that proper or improper identification of a sponsor *is* consequential.

Processes and Contingencies

As mentioned earlier, we believe that the market-prominence effect reflects more than just the greater retrievability of more prominent brands. It could manifest itself even if the names of potential sponsors are externally provided during identification (e.g., in a multiple-choice format). Several mechanisms can explain why sponsor identification would be biased in favor of prominent brands even after controlling for the differential retrievability of the brands.

The source of the bias may lie in the encoding of the event-sponsor association (e.g., at the time when consumers watch the sponsored event or when they are reminded of the sponsorship through paid advertising). Research in the learning literature (e.g., Underwood, 1983) suggests that it may be easier to encode an association (e.g., sponsorship of an event) to a familiar concept (e.g., a meaningful word or a prominent brand) than it is to encode the same association to a less familiar concept (e.g., a nonmeaningful word or a less prominent brand). Therefore, it

could be that prominent brands are more likely to be identified as sponsors primarily because their sponsorship activities are learned more efficiently and are hence more likely to be remembered. This is the *pure encoding* explanation.

Alternatively, the source of the market prominence bias may lie in processes that occur well after the event-sponsor association has been learned. Specifically, the prominence effect may arise at the very moment that the consumer is asked to make sponsor identification judgments. It could be that consumers make these judgments completely from scratch, relying solely on cues that are available during identification, including the relative prominence of the alternative sponsors. Such construction would account for accurate sponsor identification judgments when prominent brands are the actual sponsors as well as for misattribution of sponsorship by less prominent brands to more prominent brands. This is the *pure construction* explanation. It echoes recent work in the social cognition and behavioral decision literatures that suggests that many judgments and choices are essentially constructed at the time they are rendered (e.g., Payne, Bettman, & Johnson, 1992; Wilson & Hodges, 1992).

Interestingly, earlier results do not seem to support either explanation (Johar & Pham, 1999). Instead, it appears that consumers rely on a *combination* of (encoding-mediated) recollective processes and constructive processes to generate their answers during identification. They seem to rely on a hypothesis-testing strategy (see, e.g., Klayman & Ha, 1987), whereby sponsors suggested by their (possibly vague) recollection are “cross-checked” against cues available during identification, such as prominence. Similarly, sponsors suggested by cues such as prominence are cross-validated against their recollection of the event-sponsor associations. For example, a consumer may have a vague recollection that Coca-Cola was a sponsor of the 1996 Olympic Games. When the consumer is asked which of several brands of soft drinks sponsored the event, he may feel more confident of his recollection because it is reinforced by the fact that Coca-Cola is more prominent than the other brands listed in the survey (e.g., Dr. Pepper). This hypothesis-testing process would be biased against less prominent brands because, even if these brands are recalled as being the actual sponsors, their lower perceived prominence would conflict with this recollection and hence, decrease consumers’ confidence in their recollections. Prominent brands would be immune to this problem because their higher prominence would support people’s recollections should they be the actual sponsors. In Johar and Pham (1999), this explanation was supported by a specific pattern of findings that would benefit from replication. We hypothesize the following.

- H3:** The market prominence bias is the result of a hypothesis-testing strategy that combines recollections of the event-sponsor associ-

ations with constructive inferences based on the perceived prominence of the potential sponsors at the time of identification.

In other words, prominence of a brand alone does not ensure that it will be accurately or inaccurately identified as an event sponsor. Rather, prominence increases the likelihood of identification when it supports consumers' recollections.

Although we suggest that sponsor identification may be more constructive (e.g., market-prominence based) than has been previously recognized, we do not mean to imply that it will always be constructive (i.e., never be recollective). Constructive processes of identification are more likely to be invoked when recollective processes of identification fail (Pham & Johar, 1997). In other words, people tend to rely first on their direct recollections. Two explanations account for this primacy of recollection. First, compared to constructive inferencing, recollection can be a much faster mode of identification, especially when the association has been strongly encoded (e.g., Moscovitch, 1994). Second, because recollections capture traces of the external reality, they may be perceived as more valid than constructed inferences (see Johnson & Raye, 1981, for a related discussion). We therefore predict that prominence-based sponsor identification is more likely under situations where consumers are not confident in their memory record of the event-sponsor associations. Such lack of confidence is more likely in situations where learning of these associations is difficult. For instance, events that involve numerous official sponsors make it difficult for consumers to learn any single event-sponsor association, thereby making consumers resort to using constructive cues such as prominence.

H4: The market prominence bias is more likely in situations where learning of the event-sponsor associations is difficult and the event-sponsor association is therefore weak.

Note that this hypothesis proposes an important moderating condition for Hypotheses 1 and 3.

METHOD

Design and Predictions

Thirty-four subjects were exposed to information on a series of sporting events, each sponsored by one brand, and were subsequently asked to identify the sponsor of each event. The main dependent variable was subjects' sponsor identification accuracy. The experiment used a 2×2 mixed design. The first factor manipulated within subject the *market prominence* of the actual sponsors. As in Johar and Pham (1999), this factor was operationalized through the brands' relative market shares

in their respective product categories. For each subject, 6 of the 12 events (e.g., Olympics' track and field) were sponsored by prominent brands (e.g., UPS rather than DHL) and the other 6 events (Rugby Currie Cup) were sponsored by less prominent brands (e.g., Converse rather than Reebok). These pairings were counterbalanced across subjects as explained below.

The second factor manipulated between subjects the *strength of associations* between events and sponsors. In the real world, strength of event-sponsor associations can vary as a function of factors such as the number of repetitions of the association (e.g., through supporting media advertising) and exclusive sponsorship arrangements. In this experiment, strength of association was manipulated by varying the font in which the name of the sponsor and the event were presented. Half of the subjects were randomly assigned to the strong event-sponsor association condition (i.e., easy learning environment) where the event and sponsor were in bold font. The other half of the subjects were assigned to a weak event-sponsor association condition font (i.e., difficult learning environment) where only the event was in bold font and the sponsor was in regular font. This factor allows for testing the proposition that reliance on prominence is contingent upon failure of reproductive processes, as expected when the event-sponsor association is weak.

H1 predicts a main effect of prominence. If people rely on a prominence heuristic to identify event sponsors, their sponsor identification accuracy should be higher if the actual sponsor is a prominent brand (e.g., UPS or Reebok) than if it is a less prominent brand (e.g., DHL or Converse). However, H4 suggests that this effect will be observed mostly under difficult learning environments, that is, when the event-sponsor association was not made salient via bold font. We therefore predicted a two-way interaction between prominence and ease of learning. The simple effect of prominence on sponsor identification accuracy should be greater under difficult learning conditions than under easy learning conditions. This is because subjects are more likely to rely on constructive processes when difficult learning conditions prevent easy retrieval of the event-sponsor association.

H2 predicts that the effects of prominence on sponsor identification should carry over to judgments of brand image. H3 suggests that, under difficult learning conditions, subjects will use both their recollections and the perceived prominence of the brands at test to identify the sponsor. Such a hypothesis-testing process would make two predictions (under difficult learning conditions). First, sponsor identification accuracy should be greater for more prominent brands than for less prominent brands (see H1 and H4). This is because, when the actual sponsor is a prominent brand, recollection and prominence provide converging signals for identifying the sponsor. In contrast, when the actual sponsor is a nonprominent brand, recollection and prominence provide conflicting signals for identifying the sponsor. Second, and more important, sponsor

identification accuracy of the less prominent brands should not be below the chance level. Chance is defined as 50% accuracy because subjects chose from two potential sponsors for each event. For less prominent actual sponsors to be identified below chance levels, the prominence cue would have to completely overrule people's recollections. Although this result may be consistent with a pure construction mechanism, it is contrary to our hypothesis-testing explanation, which involves the *combined* use of construction and recollection.

Procedure

The experiment was administered in two questionnaires, separated by an unrelated filler task (see the Appendix for examples of stimuli and measures). The first questionnaire was purportedly about the World Wide Web as a communication medium. Subjects were asked to read 12 press releases about sporting events around the world that were downloaded from the Web and to rate the clarity of each release. In reality, we constructed the press releases to manipulate the associations between events and sponsors. After rating the clarity of each press release and completing a 5-min filler task, subjects were administered a second questionnaire with the dependent measures and various checks. The first part of the questionnaire was the sponsor-identification task. Subjects were given the names of the sporting events seen earlier and, next to each event, the names of the two possible sponsors, one prominent and one less prominent brand of the same product category (thus largely equating the two response options in terms of semantic relatedness to the event). Subjects had to select, for each event, which of the two brands had sponsored it. By making both more and less prominent brands available during sponsor identification, this procedure controls for the effects of brand-name retrievability. That is, any observed prominence effect cannot be attributed to ease of recall of more prominent brands because both more and less prominent brands were presented at test.

To assess the effects of sponsor (mis)identification on brand image, subjects were then asked to rate how "energetic" each brand was (1 = not at all and 7 = very much). The brands were presented in a single, random order. Subjects next provided an open-ended response on how they came up with their matching answer and completed a manipulation check on the brands' relative market shares in each category. Subjects then reported their familiarity with each brand on a 7-point scale (1 = not at all familiar and 7 = very familiar). Finally, subjects were asked to rate each brand on a downscale–upscale dimension (1 = downscale and 7 = upscale).

Stimuli

Each press release provided a short description of an international event (e.g., Rugby Currie Cup, South Africa) and mentioned the name of its

alleged sponsor (e.g., Converse). The release also mentioned the name of another brand from the same product category (e.g., Reebok) that was described as not being involved in the sponsorship of the event. Subjects were subsequently asked to identify which of these two brands sponsored the event. Mentioning both brands in the press releases controls for the number of within-experiment presentations, and therefore for the possibility that subjects could identify the sponsor by remembering which brand they had seen in the context of the study.

Plausible pairings between the events and the brands' product categories were determined based on a pretest. Twenty-four subjects rated the likelihood that different product categories would sponsor different sporting events on a 5-point scale. The event–product category pairings selected for the main study were all plausible (mean likelihood = 4). The pretest also ensured that none of the subjects knew the actual sponsor of the selected events. This control rules out the possibility that subjects would rely on any prior knowledge about the actual event-sponsor associations.

A second pretest ($n = 24$) identified pairs of brands in different product categories that differed in terms of their relative prominence. Subjects were asked to estimate the relative market shares of different brands in different categories, and rate their familiarity on a 5-point scale (1 = very low and 5 = very high). Familiarity was measured as a proxy for prominence. The 12 pairs of brands used in the main study met three criteria:

1. Subjects were accurate about their relative market shares.
2. The large- and small-share brands differed in terms of familiarity (M s across brands = 3.86 vs. 3.46, $t(23) = 3.40$, $p < .01$).
3. Both brands were relatively well known (familiarity above 3).

The relative familiarity of the selected brands was further assessed in a third pretest. Sixteen subjects rated the familiarity of each of the 24 brands on a 7-point scale. Unlike in the preceding pretest, all brands were presented in a random order and not organized by product category. The results confirmed that the large-share brands were perceived to be more familiar ($M = 6.23$) than their small share counterparts ($M = 5.03$, $t(15) = 11.7$, $p < .001$). Familiarity ratings suggest that the larger-share brands were indeed more prominent than the small-share brands.

Based on these pretests, 12 press releases were constructed. Two stimuli sets (Sets 1 and 2) were created with six high-market-share and six low-market-share sponsors in each set. In a final pretest, 16 subjects read the press releases and rated the plausibility of each sponsor–event match. Half the subjects read the press releases with associated sponsors in Set 1 and half read those in Set 2. For example, subjects in one

condition rated how likely it was that Sony (high-market-share electronics company) would sponsor the European Men's Judo Championship, whereas subjects in the other condition rated how likely it was that Panasonic (low-market-share electronics company) would sponsor the same event. Note that, in this example, both brands are Japanese companies that are plausible sponsors of a judo event. The pretest confirmed that the event-sponsor associations were credible (average rating = 3.55 on a 5-point scale). More importantly, in all but one instance, the perceived plausibility of each association (e.g., judo championship with Sony vs. Panasonic) was equivalent in the two groups. Therefore, when judged in isolation, large- and small-share brands were perceived as equally plausible sponsors of their respective events.

Manipulations

Strength of Association (Ease of Learning). This factor manipulated between subjects the salience of the event-sponsor associations. As described in the overview section, subjects in the strong association (i.e., easy learning) condition read each press release paragraph with the name of the sponsor and the name of the event in bold font. The name of the competing nonsponsor brand appeared in regular font. No bold fonts were used in the weak association (i.e., difficult learning) condition.

This manipulation was assessed in a pretest with 24 subjects. Subjects first read five press releases; half of the subjects saw the name of the event and the name of the sponsor in bold font (easy condition); the other half saw the name of the sponsor in regular font. After a filler task, all subjects were given the names of the events with two possible sponsors listed next to each event. They were to circle the name of the brand they perceived to be the sponsor mentioned in the press release. Subjects in the easy condition were more accurate than those in the difficult-to-encode condition ($M_s = 4$ vs. 2.77 , $F(1,22) = 8.90$, $p < .01$), confirming that the bold-font manipulation made it easier to learn the event-sponsor association.

Prominence. Half the subjects were randomly assigned to read one set of sponsor–event matches and the other half read the other set. Set 1 (Set 2) featured high- (low-) market-share sponsors for six events and low- (high-) market-share sponsors for the other six, ensuring that each event was sponsored by low- and high-market-share brands. Thus, prominence was manipulated within subjects with sponsor–event pairings counterbalanced across subjects.

RESULTS

Manipulation Checks

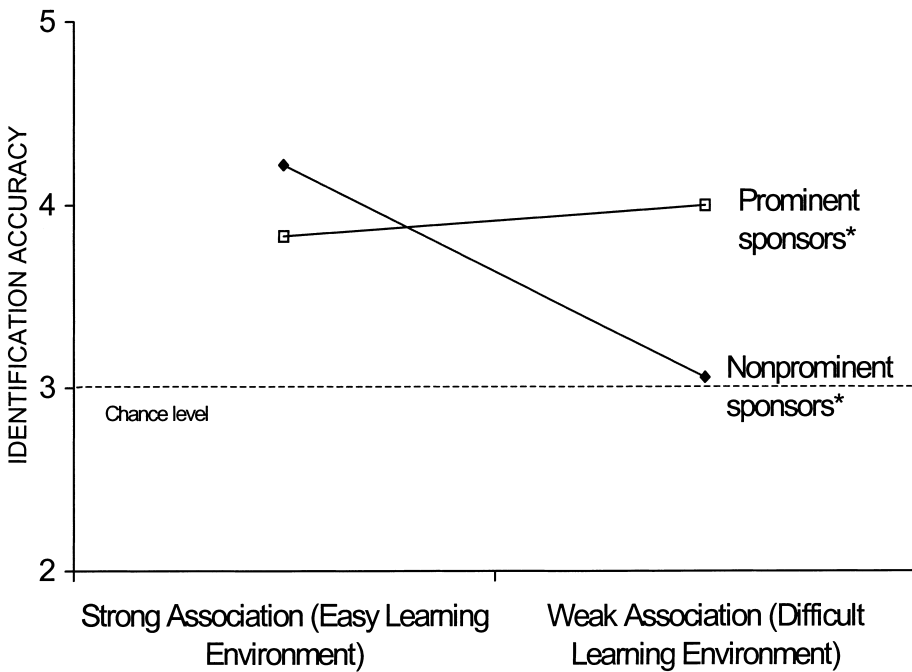
Subjects were asked to identify the larger brand from each pair and exhibited good overall intuitive knowledge about the relative size of the brands ($M = 10.38$ out of 12). A two-way ANOVA with ease of learning and stimulus set as between-subjects factors further revealed that the overall accuracy was equivalent across learning conditions and stimulus sets (both F s < 1). The prominence manipulation was thus equally potent across conditions.

Sponsor Identification Accuracy

Sponsor identification accuracy scores were calculated for more and less prominent brands separately. These scores were submitted to a 2 (prominence: high- vs. low-market-share sponsor) \times 2 (strength of event-sponsor association: bold vs. regular font) \times 2 (stimulus set) mixed ANOVA. A prominence-by-strength interaction was expected such that identification accuracy would be higher for prominent brands than for less prominent brands in the weak association (regular font) condition, where learning the association was difficult, but not in the strong association (bold font) condition, where learning the association was easy (H1 and H4). Figure 1 depicts the mean sponsor identification accuracy scores (out of 6) in the different conditions.

The analysis revealed the predicted prominence by strength of association interaction ($F(1,30) = 7.1, p < .05$). No other effects were significant. As expected, planned contrasts show that accuracy was higher for prominent brands than for less prominent brands in the weak association (i.e., difficult learning) condition (M 's = 4.00 vs. 3.06; $F(1,32) = 6.81, p < .05$), but not in the strong association (i.e., easy learning) condition (M 's = 3.83 vs. 4.22, $F(1,32) = 1.28, p = .27$). This pattern of results suggests that subjects in the difficult learning condition tended to rely on a prominence-based heuristic favoring the large-market-share brands. Reliance on this heuristic led them to be more accurate when the actual sponsor was a prominent brand than when it was a less prominent brand, supporting H1. Use of this heuristic was less likely in the easy learning condition, where accuracy did not depend on the prominence of the brands, supporting H4.

H3 predicts that, for less prominent brands, sponsor identification accuracy would not be below chance levels even in the weak association (i.e., difficult learning) condition. Consistent with this hypothesis, the mean level of accuracy in this condition was at the chance level of 3 ($M = 3.06; t < 1$). If subjects had indiscriminately relied on a prominence heuristic, they would have performed below chance whenever the actual



* In the weak association (difficult learning) condition, out of six event sponsored by prominent brands, subjects correctly identified an average of 4.0 sponsors. In the same condition, out of six events sponsored by nonprominent brands, subjects correctly identified an average of 3.1 sponsors.

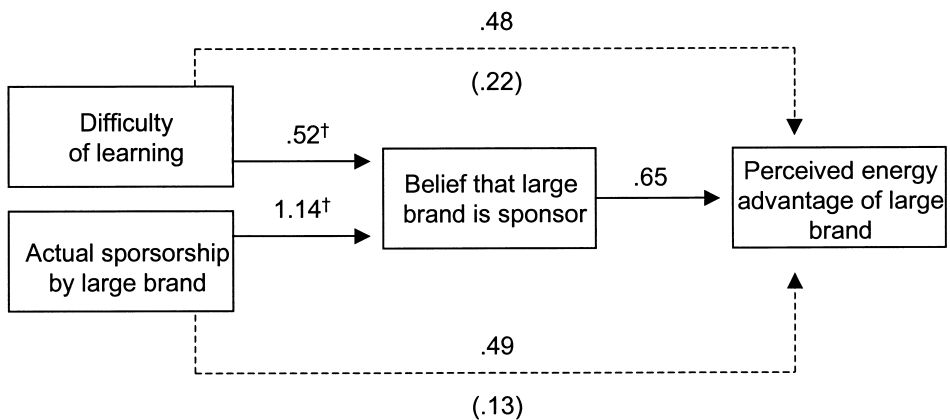
Figure 1. Effects of prominence and ease of learning on identification accuracy.

sponsor was not a prominent brand. The findings therefore suggest that, as proposed by Johar and Pham (1989), the prominence bias in sponsor identification reflects a fairly controlled hypothesis-testing process rather than a more automatic process. Further evidence that the process underlying the use of market prominence is likely to be a controlled one comes from the finding that subjects' beliefs that the more prominent brands were the sponsors were related to subjects' perceptions that these brands were actually larger ($\chi^2 = 7.29, \phi = 0.13, p < .01$), but not related to the sheer familiarity differential of these brands (Wald $\chi^2 < 1, ns$).

Perceived Brand Energy

We next analyzed whether subjects' tendency to rely on a prominence heuristic that favored large-share brands contaminated their judgments of brand image (H2). We used a series of regression analyses to examine how the (accurate or inaccurate) identification of prominent brands as

sponsors influenced subjects' ratings of the relative energy of each pair of brands. Each subject performed 12 independent sponsor identification judgments (12 events each associated with one of two brands from 12 product categories). The regressions were therefore based on 12 observations per subject (408 observations in total). The main dependent variable was the difference—within each of the 12 different product categories (e.g., tires)—between the prominent brand's (e.g., Goodyear) perceived energy and the less prominent brand's (e.g., Firestone) perceived energy. This dependent variable, which was positive on average ($M = 0.86$), captures an “energetic image” advantage of the prominent brand over the less prominent brand for each subject and each product category. As shown by the ANOVA results on sponsor identification accuracy reported above, subjects in the weak association (i.e., difficult learning) condition were more likely to believe that the prominent brands were the sponsors, even if this were not true. If this tendency had significant judgmental consequences, subjects in the weak association (i.e., difficult learning) condition should report a higher perceived energy advantage of the prominent brand (relative to the less prominent brand) than subjects in the strong association (i.e., easy learning) condition. This effect should be mediated by subjects' pattern of sponsor identification judgments. Further, the entire mediational pattern should hold even after controlling for actual sponsorship.



Notes— † indicate logistic regression coefficients. Others coefficients are OLS. Numbers outside parentheses are unadjusted coefficients of direct effects; numbers in parentheses are adjusted coefficients controlling for belief that the large share brand is the sponsor.

Figure 2. Effects on judgments of perceived energy.

A series of regressions based on a total of 408 observations (34 subjects \times 12 responses per subject) was estimated to show that (a) a difficult learning environment led to (b) sponsor identification favoring the prominent brand, which (c) reinforced the image advantage of the prominent brand over the less prominent brand (see Figure 2). In a first regression (testing $a \rightarrow c$), two dummy variables were entered as predictors of differential image (energy of prominent – energy of less prominent); one captured ease of learning (0 = easy or bold font and 1 = difficult or regular font), and the other captured whether the prominent brand was the actual sponsor (0 = no and 1 = yes). The effect of actual sponsorship by the prominent brand was significant ($b = 0.32$, $t(405) = 1.80$, two-tailed $p = .07$, one-tailed $p < .05$). As predicted, even after controlling for this effect, difference in perceived energy was higher in the difficult learning condition than in the easy learning condition ($b = 0.30$, $t(405) = 1.71$, two-tailed $p = .09$, one-tailed $p < .05$). In a second (logistic) regression (testing $a \rightarrow b$), ease of learning and actual sponsorship were entered as predictors of the probability of identifying the prominent brand (as opposed to the less prominent brand) as sponsor. After controlling for actual sponsorship ($b = 1.15$, Wald $\chi^2 = 30.33$, $p < .01$), difficult encoding was associated with a greater probability of identifying the prominent brands as sponsors ($b = 0.52$, Wald $\chi^2 = 6.27$, $p < .05$), consistent with the ANOVA results. A third regression confirmed that belief that the prominent brand was the sponsor was related to the energy advantage of the prominent brand ($b = 0.68$, $t(405) = 3.76$, two-tailed $p < .01$), even after controlling for the effect of actual sponsorship ($b = 0.13$, $t(405) = 0.72$, two-tailed $p = .47$). A final regression tested whether the effect of ease of learning on the energy advantage of the more prominent brand was mediated by the belief that the prominent brand was the sponsor. In this regression (testing $a \rightarrow c$, controlling for b), belief that the prominent brand was the sponsor was entered, in addition to ease of learning and actual sponsorship, as a predictor of differential perceived energy. When the effect of perceived sponsorship by the prominent brand is controlled for ($b = 0.65$, $t(404) = 3.57$, $p < .001$), the effects of ease of learning ($b = 0.22$, $t(404) = 1.27$, $p = .20$) and actual sponsorship ($b = 0.14$, $t(404) = 0.76$, $p = .45$) become insignificant. Therefore, it can be concluded that the effect of ease of learning on differential energy of the prominent brand—not attributable to actual sponsorship—was indeed mediated by a tendency to identify the prominent brands as the sponsors of the events (Baron & Kenny 1986).

Analyses revealed that ease of learning and belief that the prominent brand was the sponsor did not have parallel effects on differential perceptions of upscale vs. downscale image—a dimension of brand image that was not closely related to sports sponsorship activities (p 's > 0.35). This finding suggests that perceived sponsorship affects dimensions of brand judgments that are related to sponsorship activities (e.g., brand

energy) but does not affect more global judgments (e.g., upscale vs. downscale).

DISCUSSION

Summary of the Findings

The results of this study provide additional empirical evidence that sponsor identification tends to be biased in favor of brands that are prominent in the marketplace. As in Johar and Pham (1999), identification accuracy was higher when the event was sponsored by a prominent brand than when it was sponsored by a less prominent brand. However, the results also show that this bias is contingent on how well the event-sponsor association has been learned. Identification accuracy was higher for the prominent sponsors than for the less prominent ones in the weak-association (i.e., difficult learning) condition but not in the strong-association (i.e., easy learning) condition.

Why were the prominent brands disproportionately credited for sponsoring the event in the difficult learning condition? We can rule out the possibility that prominent brands may have been simply easier to retrieve than less prominent ones, because the names of all the potential sponsors (both prominent and less prominent) were provided during sponsor identification. The pretest results showed that prominent and less prominent brands used in the experiment were equally plausible sponsors of the events. Therefore, we can also rule out the possibility that the prominent brands used in the study may generally be perceived to be more plausible sponsors than the less prominent brands.

We suggest that, at the time of making the identification judgments, subjects used the relative prominence of the suggested brands as a heuristic cue to infer the sponsors' identities. Subjects intuited that prominent brands were more likely to be the sponsors than were less prominent brands. This experiment also explored the spontaneity of consumers' inferences (e.g., Johar, 1995). An interesting issue is whether consumers' "intuition" regarding sponsorship reflected a controlled, strategic inferential process or a more spontaneous, automatic process (e.g., Mandler, Nakamura, & van Zandt, 1987). Although admittedly tentative, our results converge with those of Johar and Pham (1999) in suggesting that the process underlying the market prominence bias is strategic and controlled rather than spontaneous and automatic. Consumers appear to consciously infer from the brand's prominence that it must be the sponsor. These conscious inferences are similar to consumers' inferences regarding brand attribute levels (Kirmani, 1990) or company responsibility for deception (Johar, 1996).

Although sponsor identification may thus be more constructive than previously recognized, it is theoretically noteworthy that subjects did not completely disregard their recollections. Had they done so, identification accuracy of the less prominent sponsors would have been below chance; it was not. From the overall pattern of results, it appears that, in the difficult learning condition, subjects relied on a type of hypothesis-testing strategy where they pit their (vague) recollections of the sponsors against identification cues such as prominence that were available at the time of making their judgments. When the actual sponsor was a prominent brand, these two sources of information—recollection and prominence—provided consistent signals, resulting in greater accuracy. When the actual sponsor was a less prominent brand, the two sources of information provided conflicting signals, resulting in accuracy near, but not below, chance levels. Subjects who were confused by these conflicting signals may have sometimes responded based on their recollection and sometimes based on the prominence cue.

The finding that the prominence bias was more pronounced in the difficult learning condition than in the easy learning condition is consistent with the general predictions of the contingent source identification framework (Pham & Johar, 1997). This framework predicts that reliance on constructive processes of source (e.g., sponsor) identification is most likely when direct retrieval processes fail to provide a diagnostic answer. Compared to subjects in the difficult learning condition, subjects in the easy learning condition did not rely as much on the prominence heuristic presumably because they were more likely to retrieve the answers directly from memory.

Given that event sponsors often pursue image objectives, it is also noteworthy that subjects' sponsor identifications—whether correct or incorrect—did affect their judgments of one dimension of brand image, that of energy. Belief that the prominent brand was the sponsor increased the advantage of the prominent sponsor in terms of perceived energetic image. A portion of this effect can be attributed directly to the difficulty of the learning environment because these beliefs were greater in the difficult vs. easy learning condition, independent of actual sponsorship. These residual effects of difficulty of learning environment on the belief that the prominent brand was the sponsor may partly reflect use of the prominence heuristic. These results are significant given that we used well-established, real brands whose image should be hard to influence with a single exposure to sponsorship information in the context of an experiment. As Prentice and Miller (1982) convincingly argue, even a “small” experimental effect becomes meaningful when it is uncovered (1) on a dependent variable that is difficult to influence and (2) with a manipulation that is minimal (see also Pham & Vanhuele, 1997).

Implications, Limitations, and Future Research

Overall, our results suggest greater caution when interpreting sponsor identification data. For instance, market-research data that could be interpreted as successful sponsorship by a prominent brand (e.g., high percentage of respondents associating Nike with Olympics) may reflect little more than respondents' educated guesses. When interpreting sponsor identification data, it may therefore be useful to disentangle the multiple processes (including pure guessing) that respondents may have used to generate their answers. The process decomposition approach recently developed by Pham and Johar (1997; see also Johar & Pham, 1999) may prove useful in this respect. More generally, marketers need to be cautious when interpreting results from sponsor identification surveys. For instance, surveys that assess identification in a recognition format are likely to be biased whenever the various response options are not of comparable prominence.

Practically, the market prominence bias also means that less prominent brands may need to reconsider whether the sponsorship of highly visible events—with the vast expenses that this entails—is indeed the most efficient way of improving their market prominence. Less prominent brands may wish to seek out sponsorship opportunities that allow consumers to build strong associations between the event and the sponsor. An example of this approach would be an exclusive sponsorship agreement with a less prominent (but high image) event where the prominence heuristic is less likely to be used (Johar & Pham, 1999). Table 1 summarizes the managerial implications of this research.

Of course, limitations of our research need to be acknowledged. First, suggesting alternative sponsors during identification—a means of controlling the sheer retrievability explanation—may have artificially increased the salience of prominence as cue for identification. However, Johar and Pham (1999) report results that rule out such a strict salience interpretation of the phenomenon. Their results also show that not providing alternative sponsors during identification in fact magnifies the prominence bias, because both ease of retrieval and constructive inferences favor the more prominent brands. Second, the relationship between the sponsor identification responses and perceived brand energy may have been inflated due to contiguity of their measurement. Note, however, that although a carryover effect cannot be ruled out, the finding that upscale image judgments were not similarly affected argues against a strict demand characteristics interpretation. Sponsorship judgments affected only those dimensions of image that were related to sponsorship activities.

Considering the growth of sponsorship as a form of marketing communication, it is disconcerting that we know so little about its effectiveness. Two factors explain this state of affairs. First, the number of em-

Table 1. Managerial Implications.

Type of Brand	Actual Sponsor of Event	Not Actual Sponsor of Event
Prominent brand	<ul style="list-style-type: none">· Very likely to be accurately identified as sponsor (because prominence heuristic validates recollection)· Risk of overestimating sponsorship effectiveness (because of prominence-based educated guesses)· Recommendation: Include equally prominent brands as other response options in surveys	<ul style="list-style-type: none">· Likely to be incorrectly identified as sponsor, especially if product category matches that of actual sponsor· Ambush marketing most effective (because prominence would support recollection of ambush messages)· Recommendation: If consistently incorrectly identified with an event, consider event for future sponsorship (because misidentification suggests good relatedness with event)
Nonprominent brand	<ul style="list-style-type: none">· Less likely to be accurately identified because (a) brand name may be more difficult to retrieve from memory, and (b) even if retrieved, prominence heuristic does not validate recollection· Recommendations:<ul style="list-style-type: none">· If resources allow, strengthen association with event either (a) through supporting media advertising, or (b) through exclusive sponsorship rights· Sponsor less prominent events as long as image of event is consistent with desired positioning· Select events with strong semantic association with brand meaning· Protect against ambush from more prominent brands	<ul style="list-style-type: none">· Ambush marketing less likely to be effective (because recollection of ambush messages not supported by prominence heuristic)

pirical studies documenting the effects of sponsorship is still limited, although it is increasing (see Cornwell & Maignan, 1998 for a review). Second, the few studies that have examined the effects of sponsorship have tended to invoke different theoretical frameworks. For instance, although we relied on a source identification framework in this research, other studies have relied on information processing (e.g., d'Ydewalle et al., 1987), associative and implicit memory (Pham & Vanhuele, 1997), media vehicle effects, and brand equity (e.g., Cornwell & Maignan, 1998). We strongly believe that this domain of investigation would benefit from additional empirical studies—preferably with high experimental control—and greater theoretical integration. This Special Issue is a clearly welcome step in that direction.

APPENDIX: STIMULI AND MEASURES USED IN THE STUDY

Example of Press Release Used in the Experiment (Strong Event-Sponsor Association)

MasterCard will sponsor **World Cup Cricket** in the year 2000. Visa sponsored this event in 1988. The last World Cup Cricket Tournament in 1996 was held in the Indian subcontinent (India, Pakistan, and Sri Lanka). Sri Lanka defeated Australia to win the cup in the final match played in Lahore, Pakistan. The 1996 World Cup was marred by the refusal of Australia and the West Indies to play their matches in Sri Lanka because of terrorist bomb attacks in the Sri Lankan capital of Colombo.

1	2	3	4	5
not at all clear				very clear

Note: “MasterCard” was not in bold font in the weak event-sponsor association condition. Only “World Cup Cricket” was in bold font.

Sponsor Identification Measure (12 Events)

The table below contains the actual list of sporting events mentioned earlier in the short press releases. Now, try to remember who was the actual sponsor of each event. Report your answer event by event by circling the name of the one company/brand you believe is the actual sponsor.

Event	Actual Sponsor (circle one)	
World Cup Cricket (Year 2000)	MasterCard	Visa
Olympics Track and Field, Sydney	DHL	UPS
FIA Formula One Spa-Francorchamp	Firestone	Goodyear

Brand Energy Measure

Now think about each of the brands/companies listed below and rate them in terms of how energetic they are.

	Not at all						Very much
Visa is an energetic marketer	1	2	3	4	5	6	7
Firestone is an energetic marketer	1	2	3	4	5	6	7

Prominence Manipulation Check Measure

For each product category in the table below, circle the one company/brand that you think is the bigger company/brand of the two (based on relative sales).

Category	Brands/Companies (Circle the Bigger One in Each Row)	
Credit cards	MasterCard	Visa
Overnight delivery services	DHL	UPS
Tires	Firestone	Goodyear

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