How Event Sponsors Are Identified: An Individual-Level Field Analysis

Kirk Wakefield

Gita V. Johar

Michel Tuan Pham

September 1, 2002

Kirk Wakefield (Kirk_Wakefield@Baylor.edu) is Associate Professor and Chair of the Marketing Department at Baylor University, PO Box 98007, Waco, Texas 76798, 254-710-4267 (1068 fax). Gita V. Johar (gvj1@columbia.edu) and Michel Tuan Pham (tdp4@columbia.edu) are, respectively, Professor and Associate Professor of Business at the Graduate School of Business of Columbia University, 3022 Broadway, New York, NY 10027, (212) 854-3480 (7647 fax). We gratefully acknowledge the financial support for this research via a grant from the Office of Naval Research. The authors also thank Kamel Jedidi for his suggestions regarding analyses.
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Abstract

A persistent problem in sponsorship communication is to receive proper credit for one’s sponsorship. A field study among 399 baseball fans reveals that sponsorship accuracy is at chance, and confirms that identification judgments are largely constructed. Individual-level analyses of the processes used to identify sponsor suggest that direct memory retrieval is used only 10% of the time. As hypothesized, reliance on memory retrieval increases as the number of games attended increases. Correspondingly, reliance on various identification heuristics decreases as the number of games attended increases. Relatedness appears to be the dominant heuristic, while prominence is used as an alternative heuristic. These findings replicate and extend prior research on sponsor identification by providing insights into the distribution of different processes of sponsor identification in the population and by profiling personal and situational characteristics underlying their use.
Accurate identification of sponsors with the event, team, venue or cause is critical to the success of sponsorship communication. However, research continues to show that even frequent viewers and attendees confuse or forget the primary sponsors of major events. For example, half of the British fans who watched or attended, on average, thirteen matches of the Euro 2000 soccer competition could not recall any sponsors. In aided recall, these fans identified nonsponsors Nike and Carling more frequently than actual sponsors MasterCard, JVC, and Fuji (see www.researchsponsorship.com). Numerous field studies have uncovered similarly disappointing rates of sponsor identification with other events (e.g., Nebenzahl and Hornik 1985; Sandler and Shani 1989; The Wall Street Journal 1998). Clearly, if much of the audience is unable to correctly identify the sponsor of an event or, worse, identifies companies who did not pay the sponsorship fees, the value of the sponsorship is highly questionable. Desired benefits of improved brand familiarity and liking are unlikely to ensue in the absence of accurate sponsor identification.

The real world finding that commercial sponsors are often poorly identified prompts two important research questions. First, in the absence of direct recall, what are the processes that consumers use to identify event sponsors? Second, how does the use of these processes differ across people and situations? The first question has been addressed in prior research that has demonstrated that if direct retrieval fails, consumers are likely to rely on two heuristics, sponsor-event relatedness and sponsor prominence, to identify event sponsors (Johar & Pham 1999; Pham and Johar 1997, 2001). However, prior research has not examined the pervasiveness in the use of these heuristics as opposed to use of direct retrieval. Further, the use of multiple heuristics and combination heuristics has been discussed, but not critically examined. Finally, prior research has not identified the consumers most likely to use these different processes and real-
world conditions that enhance the use of these processes. Close examination of these issues entails running a field experiment with “real people” attending “real events,” and then analyzing the data at the individual level to gain insight into these issues. This is the goal of this paper.

Johar and Pham (1999) proposed that three types of processes may be involved when consumers are asked to identify the sponsor of an event. First, consumers may retrieve the sponsor directly from memory, which is more likely to happen if there is a strong association between the event and the sponsor in memory. Second, consumers may engage in pure guessing, which is more likely to happen when the motivation to be accurate is low (Pham and Johar 1997). The first type of process would obviously increase the accuracy of identification, and the latter would decrease it, introducing a large amount of random error. A third type of process, which is more central to these authors’ thesis, is a more effortful process of “educated” guessing. These educated guesses are more likely when memory fails and when there is sufficient motivation to be accurate (Pham and Johar 1997, 2001). This third type of process may increase or decrease the observed rate of identification, and introduce systematic (rather than random) error in the responses.

Two heuristics appear to be invoked in these educated guesses (Johar and Pham 1999; Pham and Johar 2001). The first is called relatedness. Relatedness refers to whether there is a semantic association between the event whose sponsor is to be identified and the brand or company that is a potential candidate (and may or may not be the actual sponsor). For example, in consumers’ minds Nike may be related to sporting events but not to performing arts and museums. Everything else equal, consumers seem to give disproportionate credit to brands that appear related to the event compared to brands that appear unrelated (Johar and Pham 1999; Quester and Farrelly 1998). The second heuristic is called prominence. Market prominence
refers to consumers’ perceptions of the reputation of the company or brand due to awareness, market share, visibility, and share-of-voice (Pham and Johar 2001). All else equal, prominent companies or brands seem more likely to be identified as sponsors, whether they are sponsors or not, than less prominent brands (Johar and Pham 1999; Pham and Johar 2001).

However, an important question concerns the confidence with which substantive conclusions can be drawn from these results. As the authors acknowledge, an important limitation of previous work on the heuristics of sponsor identification is that this work was done primarily in controlled laboratory settings (e.g., Johar and Pham 1999; Pham and Johar 2001). In order to draw conclusions about how pervasive reliance on the sponsor identification heuristics is, it is necessary to examine situations in which people are naturally exposed to sponsor-event associations over time rather than having them learn artificial event-sponsor associations through single exposures to each sponsor-event association. These experimental characteristics may inflate the actual degree of construction, as subjects must rely more heavily upon inferences than conditioned recall (cf. Speed and Thompson 2000).

Another goal of this paper is to closely examine the use of more than one process of sponsor identification by individuals and the use of these processes in combination. Past research has used aggregate-level analyses that cannot clearly isolate these issues. In this paper, we analyze the data at the individual level to capture the extent to which people rely on single versus multiple processes of sponsor identification. We also acknowledge inherent heterogeneity among consumers and determine the extent to which each type of process is used across the sample and among different clusters of respondents. This issue has been emphasized in the recent literature on consumer behavior as being essential in order to derive meaningful conclusions (Lehmann 1999; Hutchinson, Kamakura, and Lynch 2000).
A third goal of this paper is to identify the correlates of each of the heuristics used in terms of personal characteristics as well as situational characteristics. If, as prior work suggests, direct retrieval of the sponsor is the default, then people who have frequent exposure should be more likely to use retrieval than heuristics for both motivational as well as ability related reasons. A final goal of this paper is to examine the prominence heuristic in close detail. It is likely that prominence is not used for sponsor identification of less prominent events (Johar and Pham 1997). It may also be likely that prominence is used in a reverse way such that less prominent sponsors are more likely to get credit for less prominent events. This is especially likely if non-prominence cues relatedness – for example, a local event is more related to a local (as opposed to prominent, national) sponsor. Aggregate-level analyses used in prior research may have failed to capture these nuances in the use of sponsor identification strategies.

REAL-WORLD SPONSOR IDENTIFICATION

Identification Accuracy

It is not clear whether the accuracy of sponsor identification observed in a field setting will exceed or be lower than that observed in a lab setting. On the one hand, the magnitude of clutter and actual number of sponsors in a field setting typically exceeds that tested in laboratory studies. This factor should reduce the level of identification accuracy observed in the field compared to the lab. On the other hand, in a real-world setting consumers generally have multiple opportunities to learn the sponsor-event associations, both across media and over time. In previous lab studies, these opportunities were limited. This factor would enhance the level of identification accuracy observed in the field compared to the lab. Therefore, we expect generally low levels of overall sponsor identification accuracy, in line with previous field studies (e.g.,
Sandler and Shani 1989; The Wall Street Journal 1998), but do not make a priori propositions regarding the size of the inaccuracy in the field versus the lab.

Theoretically, identification accuracy should be largely correlated with the amount of exposure that the consumer has received to event-sponsor association. Controlling for exposure, it should also be positively correlated with the person’s level of involvement with the event (e.g., Lardinoit and Derbaix 2001), as involvement generally heightens attention to the environment and related stimuli (e.g., Mano and Oliver 1993). However, it is also possible that the relationship is curvilinear. Pham (1992) observed that, while moderate involvement increases attention to and memory for sponsorship information, very high involvement may decrease it. Presumably, this is because sponsorship information is often only peripheral to the audience’s true interest (the event itself). As a result, heightened attention to the event may sometimes come at the expense of the more peripheral sponsorship information, unless the sponsorship information is in fact central to the audience (Pham 1992).

In addition to exposure to games and involvement, identification accuracy may also be related to more generic demographics such as age, income, and gender. Research regarding individual differences with respect to recall or identification of sponsors with events is, to our knowledge, nonexistent. However, age, gender, and income are likely to affect sponsor identification accuracy. For example, research on age and advertising recall suggests that the cognitive speed of elderly may contribute to less effective advertising recall (Johnson and Cobb-Walgren (1994)). Accordingly, Dubow (1995) finds that brand recall and recognition based on advertising is better among younger (18-34) than older adults (35+). In contrast, Smith and Phillips (2001) find no age differences in recall for radio advertisements. Glassman and Ford (1988) find that older respondents have more accurate recall of bogus vs. actual advertising
slogans than younger respondents. Finally, research on source memory suggests that the elderly have poorer memory for information sources compared to others (Law, Hawkins, and Craik, 1998). They are therefore more likely to use heuristics to identify sponsors because of diminished retrieval of source information. Predictions are therefore mixed in terms of the effects of age on sponsor identification. In terms of gender, it is likely that sponsors tend to appeal to the dominant male audience (Shani, Sandler and Long, 1992); as a result, males may encode the sponsorships more strongly than females resulting in use of retrieval and hence, higher accuracy. We examine these issues empirically.

**Repeated Exposure and the Use of Heuristics**

Recent findings suggest that if the sponsorship has been strongly encoded, consumers are less likely to rely upon heuristics such as prominence and relatedness (Pham and Johar 2001). Still, it is not clear whether these experimental findings will hold outside of a laboratory setting. In the Pham and Johar (2001) study, the strength of encoding of the event-sponsor associations was manipulated by making these associations more or less salient using text formatting. In the real world such formatting options are limited. Moreover, in that study subjects were exposed to a limited number of sponsorship associations. In the real-world, event-sponsor associations are learned in a heavily cluttered environment.

In the present field study, the issue of whether the strength of encoding of the event-sponsor association moderates (attenuates) the reliance on heuristics of identification is tested with a simple but substantively meaningful operationalization of this strength of encoding: the number of exposures that the person has had to the event. We expect that, as the number of exposures to the event (hence to its associations with the sponsors) increases, people will rely less upon constructive processes such as relatedness and prominence. Providing field-level
evidence that use of sponsor identification heuristics does decrease as the number of exposures to the sponsor-event association increases would provide an ecologically valid test of Pham and Johar’s (1999) hypothesis that cued recall is the default process of identification and use of heuristics occurs only when recall fails.

**Individual Uses of Processes**

A major limitation of earlier experimental work on the heuristics of sponsor identification is that the analyses and inferences were done primarily at the aggregate level (by comparing means across between-subjects experimental conditions). Aggregate level analyses may sometimes be misleading, as the average response of widely different individuals may be a poor descriptor of any one individual’s response (e.g., Hutchinson, Kamakura, and Lynch 2000). This issue becomes critical in a field setting, as real world sports consumers are likely to be much more heterogeneous than the student population typically examined in experimental work. The response aggregation of earlier experimental work leaves three important questions unanswered.

First, how widespread is the use of prominence and relatedness among real world consumers? Are these heuristics (identified based on response averages) used to some extent by a large number of individuals, or instead used to a greater extent by a more limited subset of individuals? Second, do consumers favor one heuristic over the other (either prominence or relatedness), or do they appear to use both heuristics across identification judgments? Finally, do all consumers use these heuristics in the same fashion? Prior research (Johar and Pham 1999; Pham and Johar 2001) has assumed that relatedness and prominence are used as positive cues to infer sponsorship. In other words, this past work has postulated positive correlations between relatedness and prominence on the one hand, and the likelihood of identification on the other. One can envision, however, that some individuals may sometimes use relatedness and
prominence as negative cues when inferring sponsorship. For example, negative use of prominence to infer sponsorship could occur if a negative correlation between actual sponsorship and prominence is observed. This type of negative correlation is especially likely for on-site local event sponsorship as opposed to global media sponsorship (e.g., The Olympics.)

In this study, we examine the extent to which individuals use strategies based, not only on the positive, but also on the negative use of relatedness and prominence as cues to discern actual and false sponsors. In doing so, we expect to verify the veracity of prior experimental findings while estimating and illustrating the presence of alternative mental construction strategies. We also consider the use of combination strategies, such as retrieving the sponsor and then testing this somewhat vague recollection using relatedness or prominence as a cue. This hypothesis-testing approach to sponsor identification has been proposed in the literature (Johar and Pham 1999) but has not received much empirical attention.

Summary

To summarize, this research has four objectives: (1) to assess the overall accuracy of sponsorship identification among actual fans in a field setting and identify potential individual-level predictors of this accuracy, (2) to extend previous research to consider the effect of repeated exposures to the sponsor-event association on use of direct retrieval, (3) to examine possible interaction effects among alternative identification processes, and (4) to estimate the extent to which specific sponsorship identification strategies (positive and negative use of relatedness and prominence; use of combination processes) are used among consumers and to profile consumers using different strategies.
METHOD

Overview

This field study involved a professional baseball team in a large southern metropolitan area. An important feature of the study is that the stadium (where the sponsors were advertised) was new; this was the first season in which the team was playing in this stadium. The study was conducted in the stadium on four days, before Friday and Saturday games in July and August. Respondents were 399 individuals who had come to attend these games. They received a team mouse pad and were entered in a drawing for $150 of merchandise in exchange for their participation. Respondents were 55 percent male, 64 percent were married. Twenty-four percent had no college education, 60 percent had some undergraduate-level education, and 16 percent had graduate level education. The median age was 33 and the median household income bracket was $50,000-$65,000. The median number of games that respondents had attended thus far in the season was four. As the primary task, respondents were shown a list of brands and asked whether each one was an actual sponsor of the team. These identification responses and the processes underlying them were then analyzed.

Procedure

Respondents were recruited using the following sampling procedure. From the time the gates opened until the opening pitch, people entering the stadium were approached at approximately one-minute intervals and asked if they were willing to participate in a “game” organized by the home team. Those who agreed (more than 90% of those approached) were directed to a booth set-up near the gate, out of view of sponsor signage. Respondents were told that the game involved identifying the sponsors of the home team. They started by reporting demographic information (e.g., gender, income, age), the number of games they had already
attended this season, and their involvement with the home team. Involvement was measured using Fisher and Wakefield’s (1998) seven-point, five-item agree-disagree scale (e.g., “I think about the [home team] all the time”; “I watch or read about the [home team] whenever I can”; \( \alpha = .92 \)). Respondents were then presented with the names of 90 local and national brands (45 actual sponsors) and asked to indicate whether each one was the sponsor of the home team. Sponsors were defined to the respondents as those brands or companies whose names appear on scorecards, signage, game programs and broadcast media. On average respondents completed the study in 4 minutes.

**Stimuli**

The stimuli brands consisted of all of the 45 actual sponsors of the home team that appeared on signage and scoreboards around the stadium and 45 foils. Both actual sponsors and foils included large national brands (e.g., Wonder Bread; Home Depot) and regional brands (e.g., Seessel’s Grocery Store). While the actual sponsors were of course given, the foils were deliberately chosen to cover a wide range of relatedness and prominence, with an attempt to match the average levels of relatedness and prominence of actual sponsors. The relatedness and prominence of all 90 brands were assessed in a separate study among 125 respondents from the same geographical region. To avoid effects of fatigue, the 90 brands were divided into two sets and presented to different groups of respondents. Each respondent evaluated each brand in the set both in terms of prominence and in terms of relatedness. Prominence was measured using two seven-point items anchored at “Not known at all” (1) versus “Extremely well known” (7) and “Extremely small” (1) versus “Extremely large” (7). Responses to these items were highly correlated \( r = .98 \) and thus averaged across items. To measure relatedness, respondents were asked the following question: “Given the product or services that they offer and their image,
would it make sense for the following brands and companies to sponsor the [home team].”

Responses were collected on seven-point scales anchored at “Not at all” (1) versus “Very much” (7). Results show that the actual sponsors and foils had equivalent levels of prominence ($M_{Foils} = 4.88$ vs. $M_{Sponsors} = 4.53$, $p > .25$). Although the actual sponsors were slightly less related ($M = 4.05$) than foils ($M = 4.54$), the difference was only marginally significant ($p = .09$). There was a strong correlation between prominence and relatedness across all 90 brands ($r = .63$, $p < .001$). This ecological correlation was controlled for in the subsequent analyses.

**RESULTS**

**Presentation of Results**

We present the results in three sections. The first section examines the overall accuracy of respondents and highlights the individual and sponsor level factors that enhance identification accuracy. The second section presents the results of an aggregate analysis of the processes respondents use to identify sponsors and whether these processes change over time as exposure to the sponsors increases. The third section presents an individual-level analysis that models the processes that each respondent used and profiles the respondents who use different types of processes.

**Accuracy**

Each subject provided 90 yes-no (“sponsor-not sponsor”) responses, 45 of which involved actual sponsoring brands. Based on these responses, three measures of accuracy were computed: (1) overall accuracy (out of 90), (2) accuracy on sponsoring brands only (out of 45), and (3) accuracy on the 20 largest sponsors in terms of multimedia spending (out of 20). The means and standard deviations are reported in Table 1.
The mean overall accuracy rate across respondents was at chance levels (M = 45.57 out of 90). When performance was assessed for each individual separately, 32 percent of the respondents had an overall accuracy rate significantly above chance at the .05-level and 38 percent at the .10-level. Mean accuracy was higher when computed on the 45 sponsors only (M = 25.60 out of 45) and was significantly above chance (p < .001). On this measure, at the individual level, 40 percent of the respondents had accuracy above chance at the .05-level and 44 percent at the .10-level. Mean accuracy was even higher when computed on the 20 largest sponsors (M = 12.58 out of 20, p < .001). On this measure, at the individual level, 35 percent of the respondents had accuracy above chance at the .05-level and 44 percent at the .10-level. In summary, respondents’ accuracy was at chance levels when computed on all targets and foils (actual sponsors and nonsponsors), and was above chance when computed for actual sponsors alone, especially when the measure involved only the largest sponsors. However, even if above chance, the levels of accuracy for the actual sponsors remained modest at best (about 60 percent on average).

Table 1 reports the zero-order correlations between these three measures of accuracy and respondents’ characteristics. Women tended to perform poorer than men did on overall accuracy (M<sub>Men</sub> = 46.53, M<sub>Women</sub> = 43.83, F(1, 366) = 5.23, p < .05), but not on accuracy for the 45 actual sponsors (M<sub>Men</sub> = 25.96, M<sub>Women</sub> = 24.79, F < 1) and accuracy for the top-20 sponsors (M<sub>Men</sub> = 12.69, M<sub>Women</sub> = 12.36, F < 1). Age had a marginally significant positive correlation with overall accuracy and top-20 sponsor accuracy (i.e., older respondents tended to be more accurate). Income was positively related to overall accuracy and marginally related to top-20 sponsor accuracy, but not to overall sponsor accuracy. Education was also positively related to all three
measures, albeit only marginally for all sponsor accuracy. All three measures of accuracy exhibited positive correlations with involvement, and as expected, with the number of games attended.

**Aggregate Analyses of Identification Processes**

To examine the processes underlying respondents’ identification judgments (i.e., whether a brand [target or foil] was identified as a sponsor), these judgments (ID) were submitted to a logistic regression with the following predictors: (1) a **contrast coded** variable indicating whether the brand was actually a sponsor (ACTSPON); note that contrast coding ensures that main effects can be interpreted as such, (2) the judged relatedness of the brand as assessed in the pretest (RELATE), (3) the judged prominence of the brand as assessed in the pretest (PROMIN), (4) the interaction between (1) and (2) (SPONRELATE), (5) the interaction between (1) and (3) (SPONPROMIN), (6) the number of games attended (NUMGAME), (7) the interaction between (1) and (6) (SPONUM), (8) the interaction between (2) and (6) (RELNUM), and (9) the interaction between (3) and (6) (PRONUM). Formally,

$$\text{ID} = \alpha + \beta_1 \text{ACTSPON} + \beta_2 \text{RELATE} + \beta_3 \text{PROMIN} + \beta_4 \text{SPONRELATE}$$

$$+ \beta_5 \text{SPONPROMIN} + \beta_6 \text{NUMGAME} + \beta_7 \text{SPONUM} + \beta_8 \text{RELNUM} + \beta_9 \text{PRONUM} \quad (1)$$

This regression model provides a parsimonious, aggregate-level analysis of the following issues: (a) is there a significant ability to identify actual sponsors correctly **after** controlling for heuristics of sponsor identification ($\beta_1$) and does this ability increase with exposure to the event ($\beta_7$); (b) do the relatedness and prominence heuristics identified in laboratory settings influence sponsor identification judgments in a real-world setting ($\beta_2$ and $\beta_3$), (c) does the reliance on these
heuristics decrease with exposure ($\beta_8$ and $\beta_9$), and (d) are the heuristics used in a hypothesis-testing way, that is, to verify recollections of sponsors ($\beta_4$ and $\beta_5$)?

Consistent with the results on accuracy for the 45 actual sponsors, there was a significant effect of actual sponsorship ($\beta_1 = 0.165, \chi^2 = 10.81, p < .001$). This suggests that actual sponsorship significantly increased the chance of positive identification even after controlling for the effects of relatedness and prominence. Not surprisingly, this effect increased with the number of games attended ($\beta_7 = 0.013, \chi^2 = 165.01, p < .0001$; see Figure 1, Panel A).

In addition, there were pronounced effects of relatedness ($\beta_2 = 0.363, \chi^2 = 452.37, p < .0001$) and prominence ($\beta_3 = 0.068, \chi^2 = 21.96, p < .0001$). This suggests that both heuristics, relatedness in particular, operate in real-world settings as well. These effects also suggest that the heuristics increase the likelihood of positive identification of both actual sponsors as well as nonsponsors. However, as illustrated in Figure 1 (Panel B and Panel C), negative interactions with the number of games attended indicate that the effects of these heuristics decrease with exposure ($\beta_8 = -0.002, \chi^2 = 2.64, p = .10; \beta_9 = -0.003, \chi^2 = 12.53, p < .001$). These latter findings support the idea that heuristics of identification are less likely to be used when there is greater opportunity to encode the event-sponsor associations.

Finally, there was a significant positive interaction between relatedness and actual sponsorship ($\beta_4 = 0.054, \chi^2 = 13.31, p < .001$). As illustrated in Panel D of Figure 1, the effect of relatedness was greater for actual sponsors than for nonsponsors. This is consistent with the notion that heuristics of identification are sometimes used to support possibly vague recollections of actual sponsors (Johar and Pham 1999). The interaction between prominence and actual sponsorship was not significant ($p > .35$). The reason underlying this null finding will become
clearer when we report the individual-level analyses of the identification processes used by each respondent.

**Individual-Level Analyses of Processes Used**

As a starting point for the individual-level analyses, we fitted the following logistic regression model for each respondent across all the sponsorship judgments that he or she provided:

$$\text{ID} = \alpha + \beta_1 \text{ACTSPON} + \beta_2 \text{RELATE} + \beta_3 \text{PROMIN} + \beta_4 \text{SPONRELATE} + \beta_5 \text{SPONPROMIN}$$  \hspace{1cm} (2)

Actual sponsorship was contrast coded as before. Relatedness and prominence were standardized. This analysis yields, for each respondent, five coefficients reflecting the degree to which the respondent based his or her responses on actual sponsorship, relatedness, prominence, a combination of relatedness and actual sponsorship, and a combination of prominence and actual sponsorship.

These coefficients, which capture the “strategies” used by each respondent, were then used as input to several analyses. The first set of analyses focused on the coefficients that attained significance for each subject (ignoring the magnitude of these coefficients). The second set of analyses focused on the magnitude of the coefficients for each subject (ignoring their significance). The third set of analyses focused on clustering and profiling respondents on their pattern of coefficients.

**Distribution of Strategies.** The individual-level logistic regression model (Eq. 2) converged for 362 (97 percent) of the 373 respondents who provided sufficient data for individual analyses. Depending on their signs (positive or negative), the five regression coefficients of the model can indicate 10 possible strategies. For instance, a positive $\beta_3$ would
indicate a tendency on the part of the respondent to attribute sponsorship to more prominent brands, whereas a negative $\beta_3$ would indicate a tendency to attribute sponsorship to less prominent brands. Respondents for whom a model could be estimated were classified as users of one of the 10 strategies if the regression coefficient for that strategy was significant at the .10-level.\(^1\) This scheme allowed for some respondents to be classified as users of more than one strategy. The results are summarized in Table 2.

[Insert Table 2 about here.]

Consistent with the low levels of accuracy noted above in the aggregate level analyses, only 10 percent of the respondents could be classified as basing their judgments on actual sponsorship. In fact, 2 percent of the respondents consistently identified brands that were actually nonsponsors. The most widespread strategy among respondents was a positive use of relatedness. Thirty-eight percent of the respondents tended to base their judgments on how well the brand was related to the event. None of the respondents made negative use of relatedness (i.e., identifying less related brands as sponsors). Thirteen percent of the respondents made a positive use of prominence, and interestingly, 6 percent made a negative use of prominence. The latter respondents may have (correctly) intuited that actual sponsors were more likely to be small, regional brands, as opposed to large national brands (see Appendix).

Each of the four combination strategies (sponsor-relatedness-positive, sponsor-relatedness-negative, sponsor-prominence-positive, sponsor-prominence-negative) was used by a small percentage of the respondents. For six percent of the respondents, actual sponsorship magnified the weight placed on relatedness (or relatedness magnified the weight placed on actual sponsorship). For another six percent of the respondents, actual sponsorship attenuated the

\(^1\) Given the inherent measurement error in the predictors, a less conservative significance criterion was adopted to avoid Type-II error. The substantive conclusions do not change when a more stringent .05-level is adopted.
weight placed on relatedness (or vice versa). Similarly, for six percent of the respondents, actual sponsorship magnified the weight placed on prominence (or vice versa). For a final six percent of the respondents, actual sponsorship *attenuated* the weight placed on prominence (or vice versa).

Sixty-two percent of the respondents used at least one of the above processes, 25% using two or more. The remaining 38 percent did not exhibit any significant coefficients. These respondents can be viewed either as users of random guessing or as users of strategies not captured by the model.

**Magnitude of Process Use.** Whereas the previous analysis focused on the significance of the input-use coefficients (from Equation 2) for each respondent, this analysis focuses on the *magnitudes* of the coefficients across respondents. The correlations among the five coefficients across respondents are reported in Table 3. There were strong negative correlations between coefficients capturing the reliance on relatedness whether in isolation ($\beta_2$) or in conjunction with actual sponsorship ($\beta_4$) and coefficients capturing the reliance on prominence whether in isolation ($\beta_3$) or in conjunction with actual sponsorship ($\beta_5$). These negative correlations suggest respondents who tended to rely on relatedness tended not to rely on prominence, and vice versa.

[Insert Table 3 about here]

A MANOVA was performed to investigate the relation between the magnitude of all these coefficients and respondents’ gender and marital status. The only significant effect was an interaction between the type of coefficient and gender (Wilk’s Lambda = 0.96, $p < .05$). Follow-up univariate analyses indicate that female respondents had $\beta_4$ coefficients that were more positive ($M = 0.14$) than those of male respondents ($M = -0.04$; $F(1,263) = 4.22$, $p < .05$). Thus actual sponsorship tended to amplify the positive reliance on relatedness among women, but not
among men. On the other hand, women respondents had $\beta_5$ coefficients that were slightly more negative ($M = -0.09$) than men’s ($M = 0.08$; $F(1,263) = 3.99$, $p < .05$). For women, actual sponsorship tended to attenuate the reliance on prominence, whereas for men it tended to increase it.

A similar multivariate regression was performed on the relation between the magnitude of the coefficients and respondents’ income, number of games attended, involvement, age, and education. There was a significant interaction between type of coefficient and income (Wilk’s Lambda = 0.95, $p < .05$). Univariate analyses show that, as income increased, $\beta_1$ also increased ($F(1, 214) = 9.20$, $p < .01$). In other words, actual sponsorship was a more important determinant of identification judgment among respondents with higher incomes. There was a similar interaction between type of coefficient and number of games (Wilk’s Lambda = 0.88, $p < .001$). As the number of games attended increased, $\beta_1$ also increased ($F(1, 214) = 12.68$, $p < .001$). Finally, there was a significant interaction between type of coefficient and involvement (Wilk’s Lambda = 0.89, $p < .001$). As involvement increased, $\beta_1$ also increased ($F(1, 214) = 23.33$, $p < .001$). The positive influence that income, number of games attended, and involvement had on the reliance on actual sponsorship at the individual level is consistent with accuracy results observed at the aggregate-level. Income, number of games attended, and involvement were unrelated to the other coefficients ($\beta_2$ to $\beta_5$). No other effect was significant.

**Clustering and Profiling Respondents by Process Use.** To examine whether there were recurring patterns of process use across respondents, the magnitudes of the five input-use coefficients ($\beta_1$ – $\beta_5$) for each respondent were submitted to a hierarchical cluster analysis using
Ward’s minimum variance algorithm. Inspection of the dendogram suggested a five-cluster solution. The clusters are described in Table 4 along with their demographic profiles.²

[Insert Table 4 about here]

The largest cluster, Cluster 1 (32% of the respondents), consisted of individuals for whom all the coefficients had relatively low values, suggesting that they either relied on guessing or on processes not captured in our model. Clusters 2 and 3 used mainly single processes whereas clusters 3 and 4 used combination processes as well. Cluster 2 (21% of the respondents), consisted of individuals whose judgments reflected actual sponsorship to a greater extent than those of the average respondent (i.e., β₁ for this cluster was greater than the average of the β₁s across individuals). Cluster 3 (20% of the respondents) consisted of individuals who relied more than average on relatedness. Cluster 4 (19 % of the respondents) consisted of individuals who made the greatest positive use of prominence in isolation and a greater than average positive use of prominence combined with actual sponsorship. These respondents also tended to make a negative combined use of relatedness and actual sponsorship. Cluster 5 (8 % of the respondents) consisted of individuals who relied primarily on positive relatedness and to some extent, on negative prominence. They also exhibited greater than average positive reliance on relatedness in combination with actual sponsorship and negative reliance on prominence in combination with actual sponsorship. Profiles of these clusters did not clearly differentiate them. Not surprisingly, cluster 2, which relied on actual sponsorship, had the highest level of involvement and attended the most number of games.

² Because only half of the respondents provided complete demographic data, a discriminant analysis is not reported.
DISCUSSION

Limitations of the Research

We should acknowledge the limitations of the research. The study’s generalizability remains modest even if the study was conducted in the field. The study examined sponsor identification in a single domain (baseball), a single geographical market, and a single setting (among game attendees). The field setting obviously did not allow the same degree of experimental control as in a lab experiment. In addition, the research focused only on two heuristics of identification, whereas other heuristics are likely to exist. Moreover, the use of these heuristics was estimated by combining identification judgments from one set of respondents with the prominence and relatedness ratings of another set of respondents. Theoretically, the use of different sets of respondents should make the process estimates conservative. However, if feasible, one would prefer to obtain all the judgments from the same set of respondents. Further, the reliance on direct recollection was inferred from the weight that actual sponsorship had on the identification judgments. This is clearly an oversimplification: Actual sponsorship may lead to positive identification for reasons other than true recollection (e.g., lucky guesses). Finally, strength of encoding sponsor-event associations was measured using number of games attended; however this variable may not capture exposure in other ways such as during television viewing. All these limitations notwithstanding, the results seem to suggest the following implications.

Identification Accuracy and Its Correlates

The level of sponsor identification accuracy observed in this study was modest at best. Depending on the measure used, accuracy was at or slightly above chance levels. While not totally new, this finding is noteworthy. Recall that, unlike in previous studies, the data came
from a sample of real sports fans that were tested at the event venue (albeit out of sight of the sponsors’ signage). That identification accuracy remained modest, even among this self-selected group of presumably involved consumers, provides additional evidence of the seriousness of the sponsor misidentification problem. Widespread misidentification hurts not only the legitimate sponsors, but also the properties (e.g., events, teams, causes) that seek to attract sponsors. Should sponsor misidentification remain widespread, it will become increasingly difficult for the properties to justify the sponsorship fees that they seek.

There was, however, also evidence that identification accuracy increased with the fan’s involvement and with the number of games that the fan has attended. This should be somewhat reassuring for sponsors and properties. This suggests that identification accuracy can be improved, for instance, by providing additional media exposure to the event-sponsor associations. Sponsor identification is more accurate when the name of the sponsor can be directly retrieved from memory as a result of strong encoding.

**Sponsor Identification Revisited**

Our main objective, however, was to clarify how sponsor identification (or misidentification) operates in a real field setting. Consistent with previous experimental results, there was evidence of a substantial amount of construction in the fans’ identification responses. In fact, both aggregate and individual-level results suggest that the fans’ responses were driven more by identification heuristics such as relatedness and prominence than by a direct recollection of the actual sponsors. The widespread reliance of such heuristics has theoretical as well as substantive significance. Theoretically, this finding highlights the importance of treating sponsor identification—and, more generally, the identification of any source of marketing communication—as a judgment task, as opposed to a strict memory task. Substantively, the
widespread use of such heuristics suggests that there is a substantial amount of *systematic* (as opposed to random) error in existing estimates of sponsor identification. Existing industry practices do not appear to account for this systematic error, either in terms of how sponsorship strategies (e.g., which events should a company sponsor) are designed (see IEG Sponsorship Report 2000) or in terms of how sponsorship effectiveness is assessed. Market research analyses on sponsorship effectiveness based on accurate sponsor identification should take into account the role of relatedness and prominence in producing the results. For example, a “related” company may not have much cause to celebrate if their sponsorship is deemed effective as a result of accurate recall – the company may have got this benefit even in the absence of actual sponsorship.

Besides providing a real-world validation of the claim that sponsor identification is often based on relatedness and prominence, this study provides novel insights on how these heuristics operate. Johar and Pham (1999) speculated that, of the two heuristics, relatedness is likely to be the more influential. Our results support this speculation. Aggregate-level analyses revealed that on average relatedness was a more potent driver of identification than prominence was. Individual-level analyses revealed that more respondents relied on relatedness consistently than on prominence (almost three times as many). In addition, the results provide a potential explanation to why relatedness is invoked more readily than prominence is. Whereas respondents who relied on relatedness unanimously used it as a positive signal of sponsorship, respondents who relied on prominence were divided as to what to infer from a brand’s prominence. While some seem to consider it a positive signal of sponsorship, others seem to treat it as a negative signal. These different interpretations were not recognized in earlier work.
The results also qualify earlier propositions regarding how the heuristics of identification interact with the person’s recollection of the sponsor. Johar and Pham (1999; Pham and Johar 2001) suggested that these heuristics may be used in a process of hypothesis-testing (see Klayman and Ha 1987). Specifically, respondents may use a brand’s relatedness or prominence to verify their possibly vague recollections of the actual sponsors (or use their recollections of the sponsors to verify hypotheses based on relatedness or prominence). If this hypothesis-testing process does take place, positive identification should be higher among brands that are both actual sponsors and prominent or related—a pattern that Johar and Pham (1999; Pham and Johar 2001) did observe. However, these authors’ inferences were based on average identification responses across respondents. Our disaggregate analyses suggest that, in fact, only few respondents used the hypothesis-testing process described by Johar and Pham. A greater number of respondents seemed to use prominence and relatedness independently of their recollections. A small number of respondents even seemed to decrease their reliance on relatedness and prominence when the brand was actually the sponsor, contrary to what a hypothesis-testing process would predict. Finally, it was found that the use of relatedness was strongly negatively correlated with the use of prominence. This suggests that consumers rely on either one or the other, but not on both; that is, the two cues are used in a substitutive manner.

All of the above highlights the existence of pronounced individual differences in the way event sponsors are identified. Even if the reliance on relatedness was found to be pervasive, there seems to be a wide variety of strategies used by consumers to identify sponsors. We identified at least five distinct patterns of strategy use, that is, five segments of consumers. These segments appear to be only weakly related to the respondents’ demographics. To return to
our title question—how event sponsors are identified—the answer seems to be “generally poorly and in different ways by different consumers.”
# APPENDIX

## STIMULUS BRANDS: ACTUAL SPONSORS AND FOILS

<table>
<thead>
<tr>
<th>Actual Sponsors</th>
<th>Foils</th>
</tr>
</thead>
<tbody>
<tr>
<td>AutoZone</td>
<td>ABF Freight</td>
</tr>
<tr>
<td>BC Headache</td>
<td>Adidas</td>
</tr>
<tr>
<td>BBBC Law Firm</td>
<td>AFGA Film</td>
</tr>
<tr>
<td>BMW Dealership</td>
<td>Amazon.Com</td>
</tr>
<tr>
<td>Bryan Foods</td>
<td>Ballpark Franks</td>
</tr>
<tr>
<td>Budweiser</td>
<td>Beckett Sports</td>
</tr>
<tr>
<td>Chrysler Dealership</td>
<td>BMG Music</td>
</tr>
<tr>
<td>City Light, Gas &amp; Water</td>
<td>Conair</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>Corona Beer</td>
</tr>
<tr>
<td>Coor’s Beer</td>
<td>Dollar Tree</td>
</tr>
<tr>
<td>Dillard’s</td>
<td>EA Sports</td>
</tr>
<tr>
<td>Dodge</td>
<td>ESPN Radio</td>
</tr>
<tr>
<td>eOn Communication</td>
<td>Field of Dreams</td>
</tr>
<tr>
<td>Federal Express</td>
<td>Fogdog.Com</td>
</tr>
<tr>
<td>First State Bank</td>
<td>Foot Locker</td>
</tr>
<tr>
<td>Fred’s Department Stores</td>
<td>Fox Sports</td>
</tr>
<tr>
<td>Guardsmark Security</td>
<td>Gatorade</td>
</tr>
<tr>
<td>Harrah’s Casinos</td>
<td>General Electric</td>
</tr>
<tr>
<td>Hunter Fans</td>
<td>Home Depot</td>
</tr>
<tr>
<td>IBEW</td>
<td>JUGS Pitching Machines</td>
</tr>
<tr>
<td>INEOS Acrylics</td>
<td>Land’s End</td>
</tr>
<tr>
<td>iXL e-Business Service</td>
<td>Levi’s</td>
</tr>
<tr>
<td>Lawry’s Foods</td>
<td>Louisville Slugger</td>
</tr>
<tr>
<td>Local Electric Company</td>
<td>Lucent Technologies</td>
</tr>
<tr>
<td>Miller Beer</td>
<td>Microsoft</td>
</tr>
<tr>
<td>Nabisco</td>
<td>New Era Baseball Caps</td>
</tr>
<tr>
<td>Northwest Air</td>
<td>Nike</td>
</tr>
<tr>
<td>Powertel</td>
<td>Oakley Sunglasses</td>
</tr>
<tr>
<td>PriceWaterhouse</td>
<td>Pepsi</td>
</tr>
<tr>
<td>Rendevous</td>
<td>Rawlings</td>
</tr>
<tr>
<td>Sam’s Town</td>
<td>Rent-A-Center</td>
</tr>
<tr>
<td>Seesel’s Grocery</td>
<td>Scott’s Lawn Care</td>
</tr>
<tr>
<td>ServiceMaster</td>
<td>Sentry Insurance</td>
</tr>
<tr>
<td>Sherwin Williams</td>
<td>Snap-On Tools</td>
</tr>
<tr>
<td>Sleep Inn</td>
<td>Southwest Airlines</td>
</tr>
<tr>
<td>Sonic Drive-Ins</td>
<td>Sports Illustrated</td>
</tr>
<tr>
<td>Terminix</td>
<td>Sportticket.Com</td>
</tr>
<tr>
<td>The Registry Apartments</td>
<td>Standard Register</td>
</tr>
<tr>
<td>Toyota</td>
<td>State Farm</td>
</tr>
<tr>
<td>Toyota Industrial Equipment</td>
<td>Texaco</td>
</tr>
<tr>
<td>Turner Dairies</td>
<td>The Sports Authority</td>
</tr>
<tr>
<td>U.S. Office Products</td>
<td>VISA</td>
</tr>
<tr>
<td>Wendy’s Restaurants</td>
<td>Wall Street Journal</td>
</tr>
<tr>
<td>Wonder Bread</td>
<td>Wal-Mart</td>
</tr>
<tr>
<td>WorkNet Business Internet</td>
<td>Williams-Sonoma</td>
</tr>
</tbody>
</table>
**TABLE 1**
CORRELATIONAL ANALYSIS: WHAT AFFECTS % OF BRANDS ACCURATELY IDENTIFIED AS SPONSOR BY EACH SUBJECT?

<table>
<thead>
<tr>
<th></th>
<th>Overall accuracy (out of 90)</th>
<th>Accuracy for all sponsors (out of 45)</th>
<th>Accuracy for top sponsors (out of 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) for sample</td>
<td>45.57 (15.64)</td>
<td>25.60 (9.30)***</td>
<td>12.58 (4.11)***</td>
</tr>
<tr>
<td>Gender (0=M, 1=F)</td>
<td>-0.119**</td>
<td>-0.063</td>
<td>-0.040</td>
</tr>
<tr>
<td>Age</td>
<td>0.117*</td>
<td>0.110</td>
<td>0.148*</td>
</tr>
<tr>
<td>Income</td>
<td>0.217***</td>
<td>0.061</td>
<td>0.101*</td>
</tr>
<tr>
<td>Education</td>
<td>0.292***</td>
<td>0.123*</td>
<td>0.128**</td>
</tr>
<tr>
<td>Involvement</td>
<td>0.131**</td>
<td>0.229***</td>
<td>0.263***</td>
</tr>
<tr>
<td>Number of games attended</td>
<td>0.362***</td>
<td>0.234***</td>
<td>0.276***</td>
</tr>
</tbody>
</table>

Note. * indicates p < .10, ** indicates p < .05, *** indicates p < .01.
### TABLE 2
DISTRIBUTION OF INDIVIDUAL-LEVEL STRATEGIES:
PERCENTAGES (FREQUENCIES)

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Significant Use Positive Weight*</th>
<th>Significant Use Negative Weight*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Sponsorship</td>
<td>10.2% (37)</td>
<td>2.5% (9)</td>
</tr>
<tr>
<td>Relatedness</td>
<td>38.1% (137)</td>
<td>0% (0)</td>
</tr>
<tr>
<td>Prominence</td>
<td>13.5% (49)</td>
<td>6.1% (22)</td>
</tr>
<tr>
<td>Sponsorship × Relatedness</td>
<td>6.1% (22)</td>
<td>5.8% (21)</td>
</tr>
<tr>
<td>Sponsorship × Prominence</td>
<td>6.1% (22)</td>
<td>6.4% (23)</td>
</tr>
</tbody>
</table>

Note—*Significant use is defined as a coefficient in the regression model estimated for each respondent (Equation 2) different from zero at p < .10. The total number of respondents for whom the model converged is 362. For 37.9% of respondents (n = 136), none of the above processes was significant in the regression models estimated.
TABLE 3
CORRELATIONS AMONG INDIVIDUAL-LEVEL PROCESS COEFFICIENTS

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>Actual Sponsor</th>
<th>Relatedness</th>
<th>Prominence</th>
<th>Sponsor × Relatedness</th>
<th>Sponsor × Prominence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Sponsor</td>
<td>0.660 (0.633)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relatedness</td>
<td>0.693 (0.767)</td>
<td>0.143*</td>
<td>1.000</td>
<td></td>
<td>-0.014</td>
<td>-0.318*</td>
</tr>
<tr>
<td>Prominence</td>
<td>0.090 (0.658)</td>
<td>-0.020</td>
<td>-0.559*</td>
<td>1.000</td>
<td>0.016</td>
<td>0.308*</td>
</tr>
<tr>
<td>Sponsor × Relatedness</td>
<td>0.016 (0.695)</td>
<td>0.308*</td>
<td>0.318*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponsor × Prominence</td>
<td>0.004 (0.651)</td>
<td>-0.009</td>
<td>0.172*</td>
<td>-0.756*</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

Note: * Significant at p < .01, based on individual-level regression coefficients estimated based on Equation 2.
| TABLE 4 | CLUSTERING OF RESPONDENTS BY PROCESSES USED |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Clustering | Cluster 1 | Cluster 2 | Cluster 3 | Cluster 4 | Cluster 5 |
| Cluster | Coefficients | n = 109 | n = 71 | n = 70 | n = 66 | n = 28 |
| Mean | Actual | 0.301 | 1.257 | 0.612 | 0.601 | 0.522 |
| | Sponsor Relatedness | 0.407 | 0.864 | 1.071 | -0.074 | 1.924 |
| | Prominence | 0.115 | 0.091 | -0.153 | 0.707 | -0.640 |
| | Sponsor × Relatedness | 0.185 | 0.373 | -0.238 | -0.656 | 0.984 |
| | Sponsor × Prominence | -0.150 | -0.319 | 0.190 | 0.633 | -0.772 |
| Profile | Gender (Percent female) | 50.5 | 43.5 | 42.4 | 33.3 | 37.0 |
| | Median age | 41 | 40 | 42 | 39 | 40 |
| | Median income | 65-80K | 65-80K | 50-65K | 65-80K | 50-65K |
| | Median Education | Some college | Bachelor’s degree | 2-year college degree | Bachelor’s degree | 2-year college degree |
| | Mean Involvement (1-7 scale) | 3.97 | 4.83 | 4.19 | 4.13 | 3.78 |
| | Mean Number of games attended | 4 | 7.5 | 3.5 | 5 | 2 |
| | Mean Overall Accuracy (out of 90) | 46.19 | 55.27 | 49.12 | 48.25 | 40.04 |
Figure 1

A

B

C

D

Legend:

- **Nonsponsor**
- **Sponsor**
- **Nonrelated**
- **Related**
- **Nonprominent**
- **Prominent**

Variables:

- Number of Games Attended
- Percent Identified as Sponsor

Graph A: Comparison of the percentage of participants identified as sponsors in low and high number of games attended categories for Nonsponsor and Sponsor.

Graph B: Similar comparison for Nonrelated and Related categories.

Graph C: Comparison for Nonprominent and Prominent categories.

Graph D: Comparison for Nonsponsor and Sponsor categories based on Actual Status.
REFERENCES


