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SAGE Open 2012 2:

DOI: 10.1177/2158244012468139

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SAGE Open
October-December 2012: 1–14
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DOI: 10.1177/2158244012468139
<http://sgo.sagepub.com>


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Abstract

Corporate sponsorship value is brought into question when false recognition of foils suggests confusion regarding true sponsors. While an indicator of confusion, recognition false alarms do not tell the entire story regarding memory for sponsor–event relationships. Two free recall experiments show relatively good memory for sponsors and also that under certain conditions, the mention of direct competitors can actually facilitate recall of true sponsors and events. The findings point to the importance of understanding the memory-based characteristics of measurement as well as to the memory-supported decision-making tasks that sponsorship information might eventually influence.

Keywords

communication, psychology, memory, recall, recognition, events, marketing, advertising, sponsorship, sports, art, cause

The value of sponsorship-linked marketing is brought into question when false recognition of foils suggests confusion regarding true sponsors. While an indicator of confusion, recognition false alarms do not tell the entire story regarding memory for sponsor–event relationships. In two experiments using press release announcements about sponsored events, free recall results show relatively good memory for sponsors, and that under certain conditions, the mention of direct competitors can actually facilitate recall of true sponsors and events. The findings point to the importance of understanding the memory-based characteristics of measurement as well as to the memory-supported decision-making tasks that sponsorship information might eventually influence. Needless to say, these findings also raise several interesting future research questions. In particular, the findings suggest a role in sponsorship-linked communications for “episodic-semantic constellations” that may naturally arise as exposure to sponsorship-linked communications is combined with semantic knowledge.

Marketing practitioners, in response to increasingly fragmented media markets, are rapidly evolving a set of marketing communication strategies that have been labeled indirect marketing (Cornwell, 2008). These indirect marketing communications are typically embedded in consumer experiences and include sponsorship of sports and events; brand placement in programs, movies, and computer games; ambient marketing; and various forms of electronic communication (de Pelsmacker & Neijens, 2012). Of these, sponsorship currently takes the largest share of communications spending, at more than 48 billion US dollar in 2011 (International Events Group, 2011). Moreover, this figure

most likely underestimates the importance of sponsorship in attempting to reach consumers because it does not include the traditional advertising and promotion that is thematically tied to sponsorship. Given that marketers expect that consumer awareness is influenced by sponsorship communications, and that marketers also believe that image and goodwill toward their brand can be influenced by learning about sponsor–event relationships, we need to understand how consumers remember these communications. Unfortunately, in this loosely coupled relationship between event and brand, confusion may arise. Indeed, the business press is awash with disconcerting reports of sponsor misidentification. The objectives of this article are to examine how it is that memory confusion is currently addressed in the sponsorship literature, to learn what is typically held in memory, and to consider the influence of competitive mentions on recall for sponsorship relationships.

Memory for Sponsorship Relationships

Table 1 offers a review of selected sponsorship-related studies that measure memory. It is not intended to be a

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comprehensive review; rather the studies were selected to demonstrate the range of memory measures in use, to document the nature of memory for these communications, and to explore the relationship between memory measurement and memory findings. Table 1 will be a reference for the following sections.

Ambushing

One of the most important strategic sources of potential confusion in sponsoring is ambushing by another company, oftentimes a direct competitor. Sandler and Shani (1989) defined ambushing as the efforts of an organization to associate itself with an event in the hope of reaping the benefits of an official sponsor. The success of ambushing attempts in terms of outcome variables of interest (e.g., awareness of ambusher brand stemming from the ambushing activity), although richly discussed in the business press and academic writings, offers less in terms of clear empirical support. Many field studies do not have adequate control over exposure to allow ambushing to be documented as the source of memory confusion. Table 1 offers two experimental studies of the memory effects from ambushing advertisements. Kinney and McDaniel (1996) pitted early sponsorship-linked advertising for the true sponsor of the Olympics against actual ambusher advertising by direct competitors. Their findings demonstrated that sponsors (with a clear Olympic association) and ambushers (with an implied Olympic association) were equally well recalled and ascribed as sponsors. In their research, study participants were not made aware within the experiment of the true sponsorship status, thus participants were easily duped by marketing communications into believing that the ambushers were true sponsors.

Humphreys, Cornwell, et al. (2010) examined the memory effects of counterambushing communications. On one hand, transgressed true sponsors are known to invoke a "name and shame" strategy (Farrelly, Quester, & Greyser, 2005) to discredit ambushers; on the other hand, Cornwell, Weeks, and Roy (2005) have suggested that the often whimsical and fun nature of ambushing may lead to positive affect for ambushers and potentially distinctive memories. Importantly, counterambushing messages are an additional instance when links between the event and the ambusher are communicated. Humphreys, Cornwell, et al. found that counterambushing communications, after a short delay, worked to improve the memory of the relationship between the event and the ambusher. It is possible that the gist of who's who (ambusher or sponsor) was lost and the relationship of the event to the ambushing brand was strengthened. Ambushing is a strategic activity that holds many interesting memory questions. It is perhaps less worrisome to marketers,

however, given current legislative protection for true sponsors, than is simple confusion.

False Recognition

One phenomenon of consistent interest in studies of sponsorship is that of false recognition. Although perhaps not discussed as false recognition, many studies have documented the tendency of sponsorship audiences to recognize foils as sponsors (see Table 1). For example, in a study set in a motor sport context, Quester's (1997) use of what she referred to as pre-post aided recall (asking if a list of brands were event sponsors) showed foils with awareness levels sometimes surpassing those of true sponsors. Interestingly, nonsponsoring brands Castrol motor oil and Fuji film not only had high recognition as sponsors initially (67% and 42%) but also retained these levels after the passage of the event (63% and 41%). Notably, these foil brands were direct competitors of true sponsors: Agip (motor lubricant) event sponsor and Kodak (film) sponsor-supplier. At the same time, respondents were able to identify true sponsors of the event as well or better than foils in some instances after the event (Regional government sponsor 85%, Agip 46%, and Kodak 46%). An important point to note for the current research is that simply because a foil congruent with the event may be falsely recognized as a sponsor does not necessarily indicate destructive interference for recognition of true sponsors for an event. In fact, there is substantial evidence in recognition research that destructive interference does not occur (Dyne, Humphreys, Bain, & Pike, 1990; Metcalfe, 1990).

This tendency to falsely recognize competing brands as sponsors is presumably driven in part by similarity between competing brands. Given that brands such as Powerade and Gatorade are consumed in a similar way, for a similar purpose, and marketed in conjunction with similar events, is it any wonder that consumers might mistake one for the other when asked about their sponsorship of an event? To suggest that brand parity is leading to brand confusion would not be new (Clancy & Trout, 2002); however, simple similarity of brands per se has not been investigated in the literature on sponsorship. In addressing the communication challenge posed by brand similarity, the broader marketing and advertising literature is fragmented with many contextually specific studies, for example, similarity due to comparative advertising (Gorn & Weinberg, 1984), similarity related to perceptions of brand origin (Loken, Ross, & Hinkle, 1986), and similarity due to inferences about service providers (Matta & Folkes, 2005). In this instance, for communication contexts such as sponsorship and brand placement, prior literature has not identified the range of variables that might be relevant and the paradigms that might be applied to

Table 1. Selected Sponsorship Studies Measuring Memory

| Author(s) (year) and measurement context | Memory measure | Memory findings | Comments |
|--|--|---|--|
| Bennett (1999), Interviews conducted before and after a soccer match outside stadia | Sponsor awareness on exit was based on a measure of free recall for "any firms or brands advertised on perimeter posters." Subsequently, awareness was cued by product category and then by a "fully aided" cue, which asked if attendees recalled specific brands (including foils). | Depending on the regularity of attendance, recall of sponsors ranged from 0% to 26% and fully aided memory of specific brands ranged from 8% to 88%. Claimed recall for foils was low (3% to 6%). | While the measures taken on exit were discussed as "unprompted," they were collected outside the stadia directly following the conclusion of games. |
| Cornwell, Humphreys, Maguire, Weeks, and Tellegen (2006), Cued recall followed experimental exposure to sponsorship press releases | Cued recall utilized the sponsor as cue for the event or the event as cue for the sponsor. Participants supplied the event or sponsor depending on the cue across three experiments. | Depending on the cue direction, articulating statement, and the presence of competitors in the press release, proportion correct recall ranged from .44 to .85. | Twelve press releases were utilized. The level of interference stemming from competitor mentions was low and not significant. |
| Grohs, Wagner, and Vsetecka (2004), Questionnaire following the Alpine Ski World Championships | Unaided recall: | Unaided recall ranged from 5% to 62% across six categories. | Although termed <i>unaided recall</i> , the event context was provided to the respondents. |
| | Which sponsor of the Alpine Ski World Championships 2001 in St. Anton do you recall? | Aided recall following failure to recall increased correct responding by 8% to 25%. | |
| | Aided recall: Which companies in the following industries were in your opinion Sponsors of the Alpine Ski World Championships 2001? [Automobile, chocolate, telecommunications, watch, cigarettes, beer] | Reported misidentification (incorrectly attributing the sponsorship to companies other than the true sponsors) ranged from less than 3% to 15%. | |
| Humphreys, Cornwell, et al. (2010), Cued recall followed experimental exposure to sponsorship press releases | Cued recall utilized the sponsor as cue for the event or the event as cue for the sponsor. Participants supplied the event or sponsor depending on the cue across three experiments. | Depending on the cue direction, "not sponsor" inference likely or unlikely, the presence of competitors, and counterambushing in press releases, proportion correct recall ranged from .51 to .84 in Study 1 but ranged widely with delay in Study 2. | Any message that linked the competitor to the event increased competitor intrusions given the event as a cue and increased event recall given the competitor as a cue. |
| Johar and Pham (1999), Cued identification of sponsors followed experimental exposure to sponsorship press releases | In Experiment 1, respondents were given event cues and asked to match each event with its sponsor and were supplied the actual sponsor and one foil. In Experiment 2, respondents were asked to identify from among eight sponsors those sponsoring two events to which they had been exposed. In Experiment 3, an "open-ended" task provided the event and asked respondents to recall the actual sponsor and to declare how sure they were of this response. | Findings showed prominence and relatedness biases. | |

(continued)

Table 1. Continued

| Author(s) (year) and measurement context | Memory measure | Memory findings | Comments |
|---|---|--|---|
| | | "Open-ended sure recall" results found respondents confident 32% of the time and when confident, they were correct in 56% of their decisions. Results also showed 91% of inaccurate responses were for related sponsors. | |
| Johar, Pham, and Wakefield (2006), Survey of fans attending minor league games during the summer season. | For a list of 90 possible sponsors (half true sponsors and half plausibility matched foils) respondents were asked to indicate whether each brand was a "sponsor" or "not a sponsor." A single index of each brand's plausibility as a sponsor was computed by taking its average score on perceived prominence, relatedness, and general involvement. On average, the foil brands had a level of plausibility comparable with that of the actual sponsor brands. | Correct identification was made 57% of the time whereas correct rejection was made 60% of the time. Thus, the false alarm rate was 40%. | The authors note that judgments were clearly influenced by the plausibility of the brands as sponsors. |
| Kinney and McDaniel (1996), Recall and recognition questions following controlled experimental exposure of advertisements of true sponsors (control) and ambusher (treatment) | [Aided] recall asked, "What brand of (product category) was featured during the women's freestyle skiing segment?" Recognition was tested with the question "Which of the following brands was the official (product category) of the 1994 Winter Olympic Games?" Forced choice was made from four alternatives, including the true sponsor, ambusher, and two other competitors in the respective categories. | Recall for sponsors was 93% and ambushers 82%. Recognition, 90% and 87% for recall and recognition, respectively. | Recall and recognition were near ceiling for sponsors and ambushers due to immediate testing and the limited memory demands. Only two target communications were included among nontest advertisements. |
| Oakes (2003), Questionnaires made available at the Classical and Jazz music events taking place at the same venue in the same town but 2 months apart | An open-end question asked respondents to identify any festival sponsors. | At the Jazz and Classical music festivals, 39% and 55% of respondents, respectively, could identify at least one sponsor but these figures were not corrected for the differing number of total sponsors. One organization was falsely identified by 18% of respondents as a sponsor of the jazz festival. | The misidentified sponsor was supporting the classical music festival. |
| Quester (1997), Surveys conducted before, during, and after the Adelaide Grand Prix | Unaided awareness was captured by asking respondents to list up to 10 sponsors without any prompting. | Unaided recall results showed that before the event, 61% of respondents could name one or more sponsors, during the event this number increased to 82% and after the event it returned to 56%. | Foils were selected to be prominent brands competing directly with legitimate sponsors. These brands were not actively ambushing the event by seeking any association with it. |

(continued)

Table 1. Continued

| Author(s) (year) and measurement context | Memory measure | Memory findings | Comments |
|---|---|---|--|
| Tripodi, Hirons, Bednall, and Sutherland (2003), Telephone survey prior to the Sydney Olympics using different approaches to memory measurement Participants were assigned to one of three conditions (event sponsorship prompt; brand sponsorship prompt; category sponsorship prompt). Each condition included a series of questions | Aided awareness or recognition was measured by response to a list of companies including true sponsors and nonsponsor foils. | Aided awareness or recognition measures found that foils were incorrectly identified by as high as 65% of respondents. | The target sponsor was the smallest of four large banks known to sponsor sport events and this may have contributed to the lower recall with the brand prompt. It should be noted that participants in the brand sponsorship prompt group were only given the brand and asked to recall the event. |
| | Respondents were asked one of the following cued recall questions: (a) "When you think of [Event Z], which sponsors come to mind? (b) "When you think of [Brand X], what sponsorships come to mind? (c) "When you think of [Category Y, for example, banks] what sponsorships come to mind?" and then a recognition question (d) I am going to tell you some of Brand X's current or recent sponsorships. For each one, could you tell me whether you were aware, before today, of Brand X sponsoring that event? | A total of 32% of people in the "event sponsorship prompt" group recalled the target sponsor; whereas only 16% of people in the "brand sponsorship prompt" group recalled the event when the recognition prompt further supported memory for the correct sponsor; particularly for those in the "brand sponsorship prompt" group (49%). | |
| Wakefield, Becker-Olsen, and Cornwell (2007), Survey collected prior to baseball game at end of season | Respondents were shown a list of brands and foils and were asked if each was an actual sponsor. Half of the participants were cued with the size and location of the sponsor communications (e.g., concourse walls, left field). | Overall prominent and related brands were correctly identified as sponsors 70% of the time whereas prominent and related foils were incorrectly identified as sponsors in 57% of the responses. Cueing tended to reduce accuracy for all sponsors but particularly anchor sponsors. | Although termed <i>recall</i> this is a recognition measure. |

Note: Memory measures and findings in Table 1 demonstrate the current approaches to measurement and give an impression of the levels of awareness found. In most instances, the most summative findings are reported. This table is not intended to provide a detailed account of methods and findings.

understand the memory of these simple yet complexly embedded communications.

Measure of Memory for Sponsorship

Most past studies of memory for sponsorship communication have employed cued or aided recall (see Table 1). One study specifically considering the variation in cueing is that of Tripodi, Hirons, Bednall, and Sutherland (2003). Using telephone survey data collected about the time of the 2000 Olympics, they considered four approaches to measuring recall: (a) event sponsorship prompt ("When you think of [Event Z], which sponsors come to mind?"), (b) brand sponsorship prompt ("When you think of [Brand X], what

sponsorships come to mind?"), (c) category sponsorship prompt ("When you think of [Category Y, for example, bands] what sponsorships come to mind?") and (d) brand recognition recall ("I am going to tell you some of Brand X's current or recent sponsorships. For each one, could you tell me whether you were aware, before today, of Brand X sponsoring that event?"). Not surprisingly, Tripodi et al. found that these different approaches to measurement yielded different estimates of memory. Free recall was not utilized but had it been, one could only suspect it too would have yielded yet a different picture of memory.

An example of a study using free recall is that of Bennett (1999) who measured consumer awareness of sponsorship information, both before and after the viewing of a soccer

match. On exit, awareness was based on a measure of free recall for “any firms or brands advertised on perimeter posters” (Bennett, 1999, p. 301). Subsequently, awareness was cued by product category and then by a “fully aided” cue (which transformed the task into a recognition task). That is, attendees were presented with specific brands (including foils) and asked which ones they recalled (recognized). Note that the initial task is classified as free recall study in that no explicit cues for individual brands were supplied. However, a cue was provided in that participants were asked to recall brands and firms and the general context of the sporting event may have also served as a cue. In a very different approach, Johar and Pham (1999) utilized an open-ended sure recall measure following exposure to press release sponsorship announcements. With each participant reading four press releases followed by a rating task and a filler task, participants were cued with the event for the sponsor. In this task, 32% reported feeling sure that they recalled the sponsor and 56% of these had indeed identified the true sponsor.

Although the studies in Table 1 show a great deal of variety in measurement, several empirical consistencies can be identified. First, when recognition measures are utilized (consider Johar, Pham, & Wakefield, 2006; Quester, 1997; Wakefield, Becker-Olsen, & Cornwell, 2007), there is huge potential for foils to be identified as sponsors. This is most likely due to what Johar et al. (2006) called “general plausibility” of named brands as sponsors (p. 190). In contrast, research using recall measures finds very little spontaneous interference from nonsponsors (Bennett, 1999; Grohs, Wagner, & Vsetecka, 2004). This is the case even when these nonsponsors are direct competitors active in the field environment (Oakes, 2003) or presented for the study in an experimental context (Cornwell, Humphreys, Maguire, Weeks, & Tellegen, 2006). Finally, and important to the current research, is the fact that oftentimes good recognition of true sponsors is found at the same time as high incorrect recognition of foils (Johar et al., 2006; Quester, 1997; Wakefield, Becker-Olsen, & Cornwell, 2007).

The Assumption of Destructive Interference

It is safe to say that the standard assumption in research on sponsorship communications is that competitive mentions are problematic. This assumption is often accompanied by another subtler theoretical one that assumes that memories overwrite. That is, if you learn more about the competitor you will forget more about the sponsor. Evidence for destructive interference in the basic memory literature is actually quite weak and finding it depends on the task used (recognition vs. recall). Recent research suggests that memory errors that could be interpreted as errors induced by interference might rather be described as a failure to access a particular bit of information (Humphreys, Tangen et al. 2010). Given a different cue, or in a different context, a correct response may be available (Tulving & Pearlstone,

1966). In recall, when two targets come to be subsumed under the same cue, such as when an event associated with a sponsor is also then associated with a competitor, a person may report the competitor not the sponsor when asked about event sponsorship. The issue that occupied early researchers in psychology was whether this “mistake” occurred because learning the association between a cue and a new word caused the “unlearning” of the prior association or whether the participant was confused as to which of the two alternatives was correct (Barnes & Underwood, 1959). Using recall tasks, evidence was found for both positions, though the evidence for confusion is stronger (Postman & Stark, 1969). More recently it has been shown that at the time of retrieval, the two targets subsumed under a cue can block each other so that neither is produced (Humphreys, Tehan, O’Shea, & Bolland, 2000). Postman and Starks’s (1969) evidence for “unlearning” does not discriminate between destructive interference and this type of response competition. The evidence for interference when memory was tested by recognition, however, was equivocal.

Ideas about recognition being a matching operation in which the recognition response is driven by a calculation of the similarity between the “to-be-recognized” item and the contents of memory led Dyne et al. (1990) to reexamine the role of associative interference in recognition. Using very similar tasks, they showed that associative interference had differential effects on cued recall and pair recognition. That is, they showed that associating the same cue with two different responses hurt recall but increased both the hit rate (correct identification of old items) and the false alarm rate (false recognition of new items) in recognition. Dyne et al. did not address the situation where a similar cue is associated with the same item (e.g., a competitor is also associated with the event); however, Metcalfe (1990) analyzed this situation from a theoretical perspective, which was essentially the same as the Dyne et al. perspective. On the basis of the Metcalfe analysis (also see Humphreys, Pike, Bain, & Tehan, 1989), it seems likely that Dyne et al.’s findings will also apply to the situation where two similar cues are associated with the same item. This in turn applied to sponsorship suggests that in recognition, the association of a similar competitor of the sponsor to an event is likely to increase the probability of identifying the competitor and the sponsor as being associated with the event. Thus, in recognition, the probability of being able to discriminate between the sponsor and its similar competitor is reduced. At the same time, in cued recall, a presented competitor can be expected to result in interference if recall of the sponsor is cued with the event. Further evidence against destructive interference comes from a short-term cued recall paradigm by Tehan and Humphreys (1996). These researchers showed that interference occurred when the cue subsumed both the target and the interfering item but not when it only subsumed the target.

If sponsorship is examined by free recall, there are also task-based characteristics at work. For example, premature

cessation of recall (i.e., stopping further recall attempts once one item has been recalled) is less likely to occur in free recall than in cued recall. Therefore, interference found in cued recall studies is less likely because the participant will not stop recalling when an alternative is found. However, it is true that in free recall, the recall of one member of a category tends to reduce the probability of recalling other members from that category (for discussion of how remembering can cause forgetting see Anderson, Bjork, & Bjork, 1994). Thus, the recall of one brand (either sponsor or competitor) may reduce the probability of recalling the other.

The gist of this basic memory research for sponsorship is that many popular measurement approaches may suggest high levels of destructive interference. For example, forced-choice recognition studies may look like destructive interference but a different picture may emerge with yes/no recognition measurement where the hit rate and the false alarm rate allow a more straightforward examination of memory. Furthermore, with recall, the results may depend on whether cued recall or free recall is used. Thus, the approach to measurement is decidedly important.

The Possibility of Role Reversal

In contrast to the destructive view, there are at least three ways a competitive mention might improve memory for the true sponsor. First, the presentation of an event and related sponsors and their competitors may be organized into a category (e.g., Olympic-type alliances). Second, the competitor may serve during recall as another retrieval cue. Third, during the encoding process, one may pay more attention to the true sponsor when a competitor is present. Each of these possibilities will be discussed in turn.

Organization and categorization. Studies of the organization of memory have shown that materials having some provided structure (e.g., words from a category such as *a fish, an insect*) result in associative clustering in memory (Bousfield, Cohen, & Whitmarsh, 1958). That is, items from the same category tend to be recalled in adjacent output positions. There is evidence that this increase in clustering and the accompanying increase in free recall result, at least in part, from organizational processes occurring during the study. That is, Einstein and Hunt (1980) showed that instructions to sort list items into categories improved free recall, especially when the organized structure of the study list was not that obvious. Presumably, what is happening is that preexisting semantic relationships combine with new episodic learning in a manner that is not fully understood (e.g., Schwartz & Humphreys, 1973). This associative clustering not only explains organization in memory but it is also the case that organization supports recall. While memory researchers have been primarily interested in the organization of memory and the extent to which individuals depend on available structure or develop their own subjective structure (e.g., Schwartz & Humphreys, 1973; Tulving, 1962), the findings readily apply to the sponsorship context. If an event is named and congruent sponsors

for the event and their direct competitors are mentioned (e.g., marathon event, New Balance as sponsor, and Reebok as competitor), a category of sorts may form, especially if this information is contrasted with another, different event (e.g., biking event, Cannondale as sponsor, and Schwinn as competitor). The juxtaposition of such information could readily be found in a general sports magazine like *Sports Illustrated*. Thus, the memory for each category and the elements in it will be supported by preexisting associations among the elements as well as by the exposure episode.

Associates as cues. In addition to memory effects related to exposure or study processes, memory research is also concerned with processes operating at the point of recall or test. For example, Tulving and Pearlstone (1966) provided a demonstration of the power of providing category names as retrieval cues at test. Shuell (1968) and Strand (1970) demonstrated that they could selectively interfere with category recall (the probability of recalling at least one member of a category) and item recall (the probability of recalling a particular item from a category) given that the category label was present as a retrieval cue. More recently, Nelson and colleagues (Nelson, McEvoy, & Schreiber, 1990) have provided an impressive amount of evidence showing that associatively related words can serve as effective retrieval cues even though they were not present at study. That is to say that if the competitor brand, Reebok, comes to mind at test, for whatever reason, it may support recall of New Balance as the true sponsor of a marathon.

Attending to differences. As an alternative to a new integration of semantic knowledge and episodic learning, it is possible that a competitive mention simply directs attention to the true sponsor and thus enhances the learning of who the true sponsor is. This is in keeping with work on similarity judgments showing that distinctive features are helpful in discerning between two options (Tversky, 1977). That is, particularly in the case of ambushing, it seems reasonable that ambushers draw attention to the designation of true sponsor. For example, an ambusher flying a blimp over the stadium sponsored by a direct competitor is bound to draw attention to the true sponsor and the ambusher and potentially create better recall for both and for the event itself. While in this context, the possible role of competitive mention facilitating memory is clear, it may also be complicated by individual attitudes toward the act of ambushing. Cornwell et al. (2006) considered the mention of direct competitors within a press release and found that traditional interference was not particularly great. They note that study participants may have used the format of the press release to make an inference that the particular competitor mentioned was not the true sponsor and this clarity may have supported memory for the true sponsor. In experimental studies, the presence of a competitor without the role of ambusher may simply make a person read the materials more carefully for understanding.

In summary, we do not yet understand what is typically held in memory from sponsorship-linked marketing communications

Table 2. Sample Stimulus for the Sponsors and their Corresponding Competitors (Competitor-Present Condition) for the Sponsor–Event Pairings in Experiments

Congruent and articulated press release with competitor: Energizer and Remote Control Vehicles Race

After a lengthy competition for sponsorship rights with Duracell, Energizer, a leading manufacturer of dry cell batteries and flashlights, announced a 3-year sponsorship deal with the Remote Control Vehicles Race. The Remote Control Vehicles Race will be restricted to vehicles that have been made by their controllers and should include entries of all shapes and sizes. Energizer will be providing the batteries to power the vehicles on the day, which will demonstrate how their products “never say die,” as the race will span 30 laps. Energizer hopes this sponsorship deal will demonstrate the utility and durability of their products.

Congruent and articulated press release without competitor: Sony and Moonlight Music Festival

Yesterday, after months of intense competition among some of the most comprehensive entertainment brands in the world, Sony announced the beginning of a 3-year sponsorship deal with the new Moonlight Music Festival. The festival will run each year in summer and will feature a variety of rock bands playing from dusk until dawn. Sony explained that the sponsorship of the Moonlight Music Festival is ideal, as it will strengthen the company's image of delivering quality means for entertainment. Sony is excited about the move to target young adults and view this sponsorship opportunity as the perfect starting point.

because we have not yet explored all of the ways that memory can be probed. Moreover, there is a need in measurement to understand the impact of interference from competitive mentions in general without engaging participants with issues arising from ambushing. We will now turn to a discussion of the materials developed for this study.

Design and Procedure for Experiments

For word economy, an overview of the design and procedure for both experiments is given here and only variations from this format introduce Experiment 2. A paradigm used by Johar and Pham (1999; see also Pham & Johar, 2001) is utilized in the current research. In their studies, participants read simulated press releases naming a company and a sponsored event. The adaptation of this paradigm by Cornwell et al. (2006) will also be adopted for introducing a competitor to avoid the affectively charged issue of ambushing. While simulated press releases offer an appealing context for the study of sponsorship communications due to their ecological validity (these announcements appear regularly in the business press) and flexibility (they are easily manipulated in an experimental setting), their construction is a complex undertaking and will thus be described in detail.

Twelve sets of press releases were developed for the experiment—one set for each of 12 events. All brands utilized in the study were well-known international or national brand names and all events were fictitious. Given that articulation of the relationship between sponsor and event and their congruence has been shown to influence memory (Cornwell et al., 2006), all versions of the press release were for a congruent sponsor–event relationship and all had an articulating sentence that explained why this brand would sponsor this event.

Each press release was a passage of text, four sentences in length, announcing a sponsorship deal between a company and event. The first sentence included the name of the company, a brief description of the company in relationship to the industry (to ensure participants were familiar with the company's domain), and the name of the event. In

the competitor-present condition, this first sentence also mentioned that a competitor had vied for but lost the sponsorship contract. The second sentence described the event. The third and final sentence described and reinforced the reason for the sponsorship. In each press release, the sponsor and event names were mentioned 3 times across the four sentences. Every attempt was made to match the content of the press releases within a set and across sets. For a sample of the stimuli used in the experiment, see Table 2.

The experiment was administered via computer. At the beginning of the experiment, participants were instructed that they would be required to read a series of press releases about upcoming events and their sponsors. They were informed that each event had a unique sponsor. Participants were not informed that they would be tested on their memory for the sponsor–event pairings.

Each participant received 12 press releases. The press releases for the 12 events were presented in a random order for each participant. The version of the press release appearing at exposure for each event was counterbalanced across participants. The exposure phase was self-paced with participants pressing the space bar following the presentation of a press release to indicate they had finished reading the passage of text. Following exposure, participants spent 10 min engaged in a visuospatial puzzle task, which served to create a delay between the exposure and test phases of the experiment, and to reduce possible rehearsal or additional processing of the sponsorship information. In reporting the experimental results, the recall values are discussed as probabilities and stem from the raw recall in each cell of the designs.

Experiment I

In this free recall task, participants are asked to recall all items in a network. As discussed, the presence of a similar competitor might improve free recall if the competitor helps to form a category and if it functions as a cue for other members in a network. Thus, in free recall, an individual's recall of a highly similar competitor may serve as a cue for the

Table 3. Probability of Sponsors, Competitors, and Events Recalled in Free Recall Experiments 1 and 2

| | <i>n</i> | Competitor absent <i>M</i> (<i>SD</i>) | Competitor present <i>M</i> (<i>SD</i>) | Statistical significance |
|------------------------------|----------|---|--|-----------------------------|
| Experiment 1 | 20 | | | |
| P (sponsor) | | .58 (.23) | .73 (.21) | $p < .05$ |
| P (competitor) | | .00 (.05) | .54 (.52) | $p < .05$ |
| P (event) | | .52 (.24) | .64 (.19) | $p = .05$ |
| Experiment 2 | | | | |
| Within-industry condition | 28 | | | |
| P (sponsor) | | .64 (.25) | .70 (.18) | <i>ns</i> |
| P (competitor) | | .01 (.04) | .48 (.23) | $p < .05$ |
| P (event) | | .61 (.22) | .63 (.22) | <i>ns</i> |
| Different-industry condition | 28 | | | |
| P (sponsor) | | .67 (.22) | .65 (.19) | <i>ns</i> |
| P (competitor) | | .00 (.00) | .37 (.20) | $p < .05$ |
| P (event) | | .55 (.30) | .58 (.22) | <i>ns</i> |

sponsor. The competitor may also serve as a cue for the brand category, which may in turn serve as a cue for the sponsor and the event. It thus seems probable that the supportive cueing function of the competitor, including the possibility that the presence of a competitor will increase attention to the designation of true sponsor, would outweigh any interfering effect of the competitor and produce net facilitation. This prediction depends on the assumption that the competitor and the sponsor are highly similar. Because the brands utilized in the study were identified from industry databases as direct competitors (e.g., BP and Shell, Kodak and Fuji, Gatorade and Powerade, adidas and Puma), we can assume some level of similarity, but we do not know whether they are similar enough to produce facilitation in free recall. Experiment 1 thus becomes a test of this similarity assumption. In addition, it allows for a direct comparison between the recall of the sponsor and recall of the competitor. This experiment will allow us to learn the extent to which sponsor and competitor information are available, with the expectation that the presence of a direct competitor will support recall.

Hypothesis 1: Facilitation can occur in free recall when a similar competitor is mentioned in the press release.

Method

Participants. Twenty participants were drawn from a paid participant pool at a large state university. Each person participated in an individual session, received AU\$10, and spoke English as their first language.

Design. Experiment 1 involved a within-subjects design. Competitive mention (competitor present; competitor absent) was the independent variable and free recall for the sponsor, event, and competitor served as the dependent variables.

Procedure and materials. The instructions specified that participants were to list, in the space provided, the name of the events that they read about in the press releases. Moreover, they were to provide the name of each event's sponsor. If participants believed that there was an additional brand mentioned, they were instructed to write the name of that brand in the final space. An example was provided to illustrate the task requirements. Participants were instructed to fill in as many spaces as possible, even if they had to leave some only partially complete.

Results

The free recall probabilities for Experiment 1 are presented in Table 3. In the competitor-present condition, the probability of recalling the sponsor ($M = .73$) was significantly greater than the probability of recalling the competitor ($M = .54$), $F(1, 19) = 38.96$, $p < .001$. In addition, a greater number of sponsors were recalled from the competitor-present ($M = .73$) as opposed to the competitor-absent ($M = .58$) conditions, $F(1, 19) = 5.94$, $p < .05$. Similarly, a marginally greater number of event names were recalled from the competitor-present ($M = .64$) as opposed to the competitor-absent ($M = .52$) conditions, $F(1, 19) = 4.30$, $p = .05$. Debriefing of study participants suggested that instructions were easily followed.

Discussion

Overall, higher recall of the sponsor than the competitor indicates that the sponsor was more available than the competitor and/or better integrated into the associative network. Given that the materials mention the sponsor 3 times and the competitor only once, this is expected. Most importantly, the predicted facilitation occurred. That is, the probability of recalling the sponsor was higher in the competitor-present condition as was the probability of recalling the event. This

may have happened because the presence of a similar competitor was a good retrieval cue for the sponsor and may even be a weak retrieval cue for the event. Thus, the competitor's similarity to the sponsor facilitated an episodic-semantic relationship among the elements in memory.

This interpretation of facilitation as related to sponsor-competitor similarity would be further enhanced if facilitation could be shown not to occur when the sponsor and competitor were less similar (e.g., if they came from different-industry categories). In sum, categorization and associate-based cueing would be less likely to occur when an out-of-industry competitor is mentioned in the press release. Experiment 2 is designed to test this interpretation and thus Hypothesis 2.

Hypothesis 2: An out-of-industry competitor will not produce the facilitation found for a within-industry competitor.

Experiment 2

Method

Participants. A new group of 56 participants was drawn from the university's paid participant pool. Each person participated in individual sessions, received AU\$10, and spoke English as their first language. Each participant was randomly assigned to one of two conditions (within-industry condition, $n = 28$; different-industry condition, $n = 28$).

Design. In each condition, participants were assigned to a within-subjects design where competitor mention (competitor present; competitor absent) was the independent variable. In the within-industry condition, the competitor was within the same-industry category (e.g., "Sony defeated Panasonic in a bid for sponsorship"). In the different-industry condition, the competitor was not within the same brand category (e.g., "Sony defeated Smirnoff in a bid for sponsorship"). In both conditions, free recall for the sponsor, event, and competitor were the dependent variables.

Procedure and materials. A different set of 12 press releases was required for Experiment 2 so that the sponsor and the out-of-industry competitor were congruent with the event. Thus, there were 12 sponsors, 12 within-industry competitors, and 12 out-of-industry competitors, each of which was congruent with 1 of 12 events. In the within-industry condition, each participant viewed 12 press releases with 6 press releases having mention of a competitor within the same brand category and 6 containing no competitive mention. In the different-industry condition, each participant viewed 12 press releases with 6 press releases having mention of an out-of-industry competitor and 6 having no competitive mention. All other aspects of the procedure were the same as in Experiment 1.

Results

Given that our experimental design resulted in a distribution of participants to cells that is not straightforwardly analyzed using ANOVA, t -test results are presented in the following section. As in Experiment 1, in the competitor-present condition, the probability of recalling the sponsor was higher than the probability of recalling the competitor. This result held in both the within-industry condition, $t(27) = 5.76$, $p < .001$, $M_s = .70$ and $.48$ for the sponsor and competitor, respectively, and the different-industry condition, $t(27) = 5.86$, $p < .001$, $M_s = .65$ and $.37$ for the sponsor and competitor, respectively. Again, this was an expected finding.

Although the trend was again for greater sponsor recall in the competitor-present condition ($M = .70$) over the competitor-absent condition ($M = .64$) in the within-industry condition, the result was not significant, $t(27) = 0.99$, ns . In the different-industry condition, as predicted by Hypothesis 2, there was no facilitation effect, $t(27) = 0.54$, ns ; $M_s = .67$ and $.65$ for the competitor absent and present conditions, respectively. Table 3 presents the free recall probabilities for Experiment 2. While the findings support the lack of facilitation in the different-industry condition, the within-industry condition of Experiment 2 failed to replicate the finding of facilitation from Experiment 1. An explanation for this lack of predicted facilitation follows.

During the debriefing of Experiment 2, several participants identified three sponsors contained within the press releases (Sony, Dolby, and Kodak) as belonging to "film and sound" and in a sense to the same-industry category. Although this was unexpected, it is reasonable given that participants might have been inspired by fictitious events such as a music festival and a film festival to form, what we might call, an "episodic-semantic constellation." This episodic-semantic constellation is presumably similar to the use of weakly related items to organize recall. One can observe the use of these weak links if the items have been chosen so that more obvious links are not present (Schwartz & Humphreys, 1973). It was decided that a post hoc analysis could explore the influence of an episodic-semantic constellation on the results.

Post hoc analyses. In Experiment 2, as mentioned above, the version of the press release appearing at exposure for each event was counterbalanced across participants. For half the participants, the press releases containing these three sponsors (Sony, Dolby, and Kodak) appeared in the competitor-present condition. For the other half of participants, these three sponsors appeared in the competitor-absent condition. As a result of the link between these sponsors and their fictitious events, the initial recall of just one of these sponsors might facilitate recall of one or both of the other two, especially when no other within-industry competitor to support sponsor recall has been provided within the original press release (i.e., the competitor-absent condition). In other

Table 4. Pre- and Postdeletion Sponsor Recall Probabilities

| P (sponsor) | Competitor absent | Competitor present | Statistical significance |
|------------------------------|-------------------|--------------------|--------------------------|
| Within-industry condition | | | |
| Predeletion | .64 (.25) | .70 (.18) | ns |
| Postdeletion | .56 (.27) | .70 (.18) | $p < .05$ |
| Different-industry condition | | | |
| Predeletion | .67 (.22) | .65 (.19) | ns |
| Postdeletion | .67 (.22) | .66 (.19) | ns |

words, for some of the items, we may have inadvertently provided an industry member that served to support sponsor recall in the competitor-absent condition, thus weakening our manipulation. This possibility leads to the following testable hypotheses:

Hypothesis 3: In the within-industry condition, the deletion of these three items should result in a drop in sponsor recall when the competitor is absent compared with when the competitor is present, resulting in significant facilitation.

Hypothesis 4: In the different-industry condition, the deletion of these items should result in no differential change when the competitor is present and when it is absent, resulting in no significant facilitation.

The results following the deletion of the three press releases identified by participants as being subsumed under the same-industry category are presented in Table 4. For comparison purposes, the predeletion results are also presented. The results of the deletion were as predicted. For the within-industry condition, the probability of recalling the sponsor dropped when the competitor was absent and remained essentially the same when the competitor was present. The result was a significant difference in sponsor recall as a function of whether the competitor was present or absent, $t(27) = 2.52$, $p < .05$, $M = .70$ and $.56$, respectively. In contrast, deletion resulted in only minimal changes in sponsor recall in the different-industry condition. The result was that there was still no significant difference in sponsor recall as a function of whether the different-industry competitor was present or absent, $t(27) = 0.09$, ns ; $M = .66$ and $.67$, respectively. Thus, an arising episodic-semantic constellation had masked the predicted facilitation. Therefore, the post hoc analysis of Experiment 2 supports the findings of Experiment 1, namely, in free recall, the presence of a similar competitor can facilitate recall.

Final Discussion and Future Directions

These results demonstrate that contrary to popular discussion of the detrimental effects of competitive mention largely driven by studies of false recognition, competitors can produce facilitation as well as interference. That is,

results from these free recall experiments find that competitive mentions can support recall of the sponsor and event. We can say with some confidence that memory organization and categorization plays a role in sponsorship recall for these materials. Both the experimental results contrasting within the industry with different industries of competitive mention and the post hoc analysis support the notion that individuals form episodic-semantic constellations and that these are used in recall. Although these findings consider several events, the results may generalize to other aspects of organization and categorization in sponsorship. For instance, the nature of an event roster (or number of event sponsors) has been examined for its potential influence on attitudes (Ruth & Simonin, 2006), but facilitative memory effects arising from the nature of other sponsors for an event have not been considered. If the various sponsors for an event form an episodic-semantic constellation that facilitates (or does not facilitate) recall for the elements in the constellation, marketers may want to know. In addition, if a consistent roster of sponsors for an event were to be maintained it could be argued that, over time, memory for the episodic-semantic constellation could strengthen and/or become less dependent on the specific context and thus support long-term memory. Likewise, although the findings here are not directly applicable to the firm's formation of a sponsorship portfolio (e.g., the combining of various art, charity, and sport sponsorships), the findings do suggest that the organization and categorization of sponsorship portfolios might influence recall as well as perceptions of image.

Although we cannot examine individuals' cue chains, presumably in these experiments, recall of the competitor was cueing recall of the sponsor either directly, via the industry category, or via the event. This is decidedly important as sponsorship-linked marketing is manifest within contexts rich with direct competitor and noncompetitor mentions. Likewise, retail environments where sponsorship-linked marketing communications may be relevant in decision making are often also rich with direct competitor cues; however, these cues might not be detrimental, especially if true sponsor cues are available on packaging. At the moment, the most we can say is that marketers should attempt to be aware of important associates as cues and not to presume that they result in destructive interference for sponsorship-linked marketing communications.

In the current experiments, press releases in the competitor-present condition allowed the proposition “not a sponsor” to be encoded. This contrasting information is presumed to have supported a distinction (Tversky, 1977) and influenced memory. One can only suspect that exciting and memorable ambushing events such as when runner Linford Christy wore Puma logo contact lenses at the 1996 Olympics (where adidas was the official sponsor, Barrett, 1996) would be even more influential on memory than the manipulations used here. Because intentional and inadvertent ambushers are a regular part of the sponsorship landscape, the power of propositional statements to influence information processing may be important to marketers as well as legislators. Aside from memory, future research will eventually have to consider the potentially positive affective response to ambushing.

Moreover, these facilitation findings resulting from an episodic-semantic constellation are important as they might help to understand other unexplained facilitation findings. For example, in studies investigating the role of interference, Kumar and Krishnan (2004) showed that contextual advertising elements (e.g., advertising photos) can be a source of interference and facilitation. Specifically in their Experiment 2, when a picture label (e.g., beach scene) served as the retrieval cue, brand claim and brand name recall with similar visual scenes were less than those with dissimilar visual scenes. When product class served as the retrieval cue, brand claim and brand name recall were higher with similar visual scenes than with different visual scenes. The authors suggest that the product class cue was enabling participants to recall brand name via a retrieval path not encountering contextual interference. An explanation that is compatible with the Kumar and Krishnan explanation, but which is also more specific, is that the study of two beach scenes made either the label “beach scene” or a composite image of a beach scene more available. This label or image would be highly connected to the product category (sun tan lotion) and to the specific highly familiar brand name used (Coppertone). The result is that two exposures to a beach scene create an available alternative retrieval pathway to the direct link between the product category and the brand name. This appears to be similar to the alternative retrieval pathway created by the presence of a similar competitor in Experiments 1 and 2 of the present research.

Several findings here suggest the need for future research. Included is the possible influence of propositional information. This is consistent with other calls for research on consumer inference making (Kardes, Posavac, & Cronley, 2004). With respect to another aspect of inference making, if statements regarding a competitor are placed outside the press release where the sponsor–event link is initially formed, do they result in the incidental ambushing described by Quester (1997)? Because almost any sports program or publication would exhibit a pattern of sponsor–event information followed by product advertising from, if not direct competitors, competitors able to form an episodic-semantic

constellation, the resulting memory is of decided interest to marketers. In sum, many unintentional or incidental ambushing communications take place in conjunction with legitimate sponsorship communications. How detrimental or facilitating is increased competitor availability when it is accomplished via independent and unrelated competitive mentions?

In conclusion, the advent of embedded communications in sponsorship and areas such as brand placement and ambient marketing brings with it the requirement to investigate these communications, as best we can, in situ. We must consider information processing tasks as they are presented to consumers. Although this seems in contrast to controlled experimental work, this research has shown that a systematic investigation of somewhat complex or even “messy” press releases (from an experimental paradigm perspective) can yield insights. In summary, we found that even a brief press release can produce a relatively strong memory for a sponsor–event relationship. While these types of communications may be naturally vulnerable to confusion when direct competitors are mentioned, significant memory for each communication element is possible even under these cluttered conditions. Finally, this research showed that individuals form episodic-semantic constellations and that these constellations can support memory, at least in the short term. Such constellations are, therefore, potentially important in many aspects of sponsorship where collaborating or competitive sponsors are communicated.

Acknowledgment

We would like to dedicate this manuscript to Professor J. Q. Johnson, University of Oregon, who was an inspiring advocate of Open Access publishing.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The authors thank the Australian Research Council DP0772168 for funding of the research.

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