

The gladiatorial sponsorship arena: how ambushing impacts memory

The
gladiatorial
sponsorship
arena

417

Sarah J. Kelly
*Faculty of Business Economics and Law,
University of Queensland, Lota, Australia*
Bettina Cornwell
University of Oregon, Eugene, Oregon, USA, and
Kiran Singh
University of Queensland, Brisbane, Australia

Received 16 July 2018
Revised 1 October 2018
17 November 2018
Accepted 22 November 2018

Abstract

Purpose – The practice whereby a non-official sponsor brand attempts to “ambush” an official sponsor’s rights continues to threaten sporting events. A key motivator of the ensuing regulatory response is grounded in the ambiguity that ambush marketing generates, namely, by obscuring public awareness of the legitimate sponsor. However, the cognitive processes underpinning sponsorship identification have only recently been investigated empirically. The purpose of this paper is to investigate the effects of ambush advertising on sponsorship memory.

Design/methodology/approach – A 2 (brand advertising: sponsorship-linked vs non-sponsorship-linked) × 2 (ambush advertisement: ambush advertisement vs filler) experimental design was used to test the impact of exposure on sponsor recall and recognition.

Findings – The results indicate that exposure to ambush advertising has adverse effects cognitively. When presented with a sponsorship-linked advertisement and an ambush advertisement, the participants had diminished recall of who the legitimate sponsor was, and were less likely to recognize them.

Research limitations/implications – This work has important theoretical implications in that it draws together the existing literature on sponsorship, advertising and cognitive fields. Moreover, on a practical level, this work informs the debate on increased regulatory intervention into ambushing practices, which is centered on tensions between balancing fair marketing practice with the rights of sponsors and event organizers.

Originality/value – To date, there is a paucity of research that examines the effects of ambushing in a sports sponsorship context. The unique contribution of this study is that it shows the process through which ambushing advertising adversely impacts sponsors’ rights.

Keywords Brand equity, Sponsorship, Memory, Advertising

Paper type Research paper

Introduction

Recall the 1996 Summer Olympics that took place in Atlanta, Georgia. What sports shoe company was the official sponsor of the event? Reebok. And yet, most people are likely to recall the image of Michael Johnson carrying gold Nike shoes alongside his medals. Fast forward to the 2016 Rio Summer Olympics and the same scenario occurred with Usain Bolt’s gold Puma shoes taking center stage during one of the most watched events of the games, effectively usurping official sports show sponsor Adidas. The branding battles staged during major sporting events are now engrained, with the recent FIFA World Cup being no exception. Here, Heineken beer managed to secure a strong marketing presence, despite not being an official sponsor, through its sponsorship of other soccer-related competitions and advertising in the stadium. Likewise, Apple infiltrated the Rio Olympics, despite competitor Samsung’s exclusive sponsorship, by using country-specific iWatch bands launched during the lead-up to the Games. This practice is known in the marketing sphere as “ambushing” and refers to an organization’s attempt to associate its brand with a sporting event – with



the intention that doing so will create a false impression that the brand is the legitimate sponsor (Crompton, 2004). In view of the increasing competition among commercial brands for the extensive reach associated with commercial sports, ambush marketing is prevalent as a marketing strategy and continues to evolve, despite wide-ranging regulation aimed at protecting legitimate sponsors' interests. Ambush marketing commentary and research has been undertaken in law and marketing, but empirical examination of the impacts of ambush marketing is limited. While sponsoring brands are keen to protect their financial investments and sporting event proprietors often have a legal and commercial interest in ensuring the protection of official event sponsors (Sim, 2015; Louw, 2012), ambush marketers argue that the practice is often an outcome of competitive strategy and is not harmful to consumers. Indeed, there is some evidence to support the notion that ambush marketing is perceived by consumers as entertaining and humorous, potentially adding value to the event (Dickson *et al.*, 2015; Meenaghan, 1994; Payne, 1998; Pitt *et al.*, 2010). Ambush marketing has been an inevitable part of the integrated marketing communications associated with most sporting events since its initial emergence during the 1984 Los Angeles Olympics (Hoek and Gendall, 2002). Ironically, ambush marketers have included brands that regularly sponsor events, including those which might integrate legitimate sponsorships that are immune from ambush marketing, such as hospitality, into their portfolios (Carrillat *et al.*, 2014).

Accordingly, it is this legal and ethical debate that the field tends to emphasize (e.g. Gauthier, 2014; McKelvey and Longley, 2015; O'Sullivan and Murphy, 1998; Townley *et al.*, 1998), but little is known about how consumers process ambush marketing attempts and the mechanisms underpinning consumer responses to such marketing communications. Despite a handful of studies (e.g. Cornwell *et al.*, 2005; Tripodi *et al.*, 2003) focusing on the cognitive mechanisms attached to ambush marketing, little is known of its impacts, and how best to engage with this strategy, or combat it. If a better understanding of the cognitive processes involved in ambush marketing and its commercial impacts is developed, then such findings will more comprehensively inform issues of policy and regulation practices and reform. Ultimately, this enhanced understanding would yield benefits for the institution of sport, including for rights holders and event owners concerned with the protection of rights and for ambush marketers to develop suitable strategies and tactics to engage the market and legitimately affiliate with an event.

The present study therefore aims to empirically test the cognitive impacts of ambush marketing upon sponsorship brands in order to inform sponsors on how to limit the adverse impacts of ambush marketing, and to provide potential ambush marketers with insight into this strategy, which continues to operate despite regulatory attention. We therefore take a neutral, non-normative approach to understanding the operation and impact of ambush marketing to guide the strategy for both rights holders and potential ambush marketers by objectively testing its impacts upon cognitive (i.e. awareness) marketing objectives. That is, we acknowledge that ambush marketing is an attractive strategy and that it will continue to thrive if it is demonstrated to be effective in creating confusion. This research draws upon memory interference theory within the discipline of cognitive psychology to test the hypotheses that ambush marketing will diminish memory for sponsor brands, and that sponsorship leveraging through sponsorship-linked advertising may attenuate this effect. To test these claims, the study methodology included an online experiment in which sponsor-linked (vs non-sponsor) and ambush advertising were present (vs absent) and manipulated to assess the effects of ambush advertising upon sponsor recall and its interactive effects.

The following section proceeds as follows. First, a brief background on how the concept of ambush marketing has been defined is presented, including the various activities that fall under the rubric of this definition, its evolution alongside the digitalization of sport and why it will always exist. Next, a discussion of the complicated legalities associated with ambush marketing as well as the cognitive architecture that might inform the effects of ambush

marketing is provided. An overview of the literature examining the impacts of ambush marketing is then provided, followed by a report on the results of an experimental study undertaken to measure the impacts of ambushing upon consumer brand memory.

Ambush marketing defined

Ambushing is a global phenomenon linked to mega-sporting events that manifests in a variety of forms with the common aim of brand exposure, limited only by the extent of marketers' creativity. Researchers broadly define ambushing activities as "a variety of wholly legitimate and morally correct methods of intruding upon public consciousness surrounding the event" (e.g. Meenaghan, 1994, p. 79; see also, Humphreys *et al.*, 2010; Sandler and Shani, 1989). In particular, such activities may include creating an image that portrays an affiliation with a high-profile sports event – a term identified in the literature as "freeloading" (Chadwick and Burton, 2011; Mazodier and Quester, 2010; Mazodier *et al.*, 2012; McDermott, 2012; Nufer, 2013). Ambushing has been conceptualized as forming an association with an event either by association or by intrusion. Ambush marketing by association involves misleading consumers to believe the non-sponsor is an official sponsor of an event, while ambushing by intrusion involves a non-sponsor leveraging the publicity surrounding an event to gain brand exposure (Grady *et al.*, 2010). It is this latter form of ambushing that is most common due to its subtlety and reduced risk of legal infringement through misrepresentation, based on the relevant anti-ambushing legislation. Ambushing activities may therefore encompass blatant (direct) attempts, such as a non-sponsor advertising on a building adjacent to an event venue with some reference to the event or the sport generally, and subtler (indirect) tactics, such as a non-sponsor giving away event tickets in a radio or press competition, or congratulating a star athlete or team through social media.

Social media and ambushing

With the digitalization of sport, the ambushing battle has manifested in online activations through social media, live-streaming platforms, given their relative lack of regulation, elimination of cost barriers and direct-to-consumer appeal (Hoffman and Fodor, 2010; Grady, 2016). Some of the most memorable advertising during recent Olympic and World Cup events has originated from unofficial sources effectively leveraging social media platforms to offer timely and humorous responses to live sporting action. For example, the "Bitegate" incident between Luis Suarez and Giorgio Chiellini sparked a plethora of tweets from non-sponsor brands, including Snickers, Trident and Major League Baseball. Rights holders have responded to this new ambushing frontier with warning letters issued to non-sponsors, outlining limitations on the use of specific hashtags, words and retweets during events, actions that are arguably beyond permissible legal recourse. What is clear is that sponsors must share the social media stage with unofficial brands, and given the ability of non-sponsoring brands to communicate directly to consumers through social media, sponsorship valuation is potentially diluted (Chanavat and Desbordes, 2014). In response to this increasingly complex sponsorship environment, Chanavat *et al.* (2016) recently developed a conceptual framework to better identify the effects of sponsorship networks on consumer behavior, illustrating the significance of social media networks among all sponsorship stakeholders. Specifically, the model integrates the potential relations among sponsors, sponsees and ambushers at the cognitive, affective and conative levels.

This threat of social media to rights valuation has prompted the introduction of Rule 40 into the Olympic Charter, requiring a blackout period for the use of athletes' images, barring by official sponsors, during the duration of the games. Generic terms, including "sponsors," "gold," "performance," "challenge," "medal," "Rio" and "effort," are banned and the consequences are harsh for violations of Rule 40, including disqualification and being

stripped of medals (International Olympic Committee, 2015). The blackouts have caused athletes to tweet intensively leading up to the Rule 40 period, thanking sponsors, and many have vigorously opposed the policy, citing unreasonable restraint on personal freedom to commercialize their image (International Olympic Committee, 2015; Grady, 2016).

Ambush marketing research

Recent research has focused on consumers' attitudes toward ambushing tactics. For example, Kim and Cho (2015) found that Korean sports consumers with a high orientation toward sporting events had less favorable attitudes toward ambush marketing than those participants with a low orientation toward sporting events. Similar findings were revealed in a study by MacIntosh *et al.* (2012), which reported that mega-event sporting interest diminished consumers' attitudes toward ambushing brands. These findings suggest that if consumers can identify ambush marketing, and they care deeply about their sport, they may not be persuaded by the pseudo-sponsor. Likewise, Dickson *et al.* (2015) found that New Zealanders found ambush sponsors for the 2011 Rugby World Cup to be unethical and inappropriate. Similarly, Mazodier *et al.* (2012) also found less favorable attitudes toward the ambushing brand following the disclosure of ambushing.

Although significant insight has been gained by defining ambushing and the activities with which it is associated (e.g. Meenaghan, 1998), few empirical studies specifically related to the effects of ambushing have been conducted (for a systematic review of ambushing, see Piątkowska *et al.*, 2015). In a review paper on sponsorship impacts, Walraven *et al.* (2014) provide a useful overview of sponsorship processing and specific factors that influence sponsorship awareness in examining the impact of sponsorship duration on memory outcomes. Tripodi *et al.* (2003) empirically examines three different ways of measuring sponsorship recall based on brand, category and event prompts, effectively and systematically comparing sponsorship prompt types. Cornwell *et al.* (2005) argue that limited research has examined the processes underlying memory for sponsorship stimuli and address this gap by clarifying the role articulation plays in improving memory specific to sponsorship-linked marketing communications, but not ambushing. Memory for the relationship between a sponsor and event, measured by recall or recognition, has been a dependent variable of interest in various studies (e.g. Lardinois and Derbaix, 2001; Pham and Johar, 2001) and has been found to be contingent upon the perceived fit between the sponsor and event, as well as brand prominence (Johar and Pham, 1999). Cornwell *et al.* (2005) propose several useful theories to examine consumer response to and processing of sponsorship-linked communications, and provide a research agenda based on the memory mechanics underpinning sponsorship.

Previous researchers have found that ambushers may do as well as official sponsors in several key areas, including recall and recognition, attitude toward brand and purchase intent (McDaniel and Kinney, 1996; Sandler and Shani, 1989, 1993). In particular, Sandler and Shani (1989) examined the effectiveness of social event sponsorship in the presence of ambush marketing after the 1998 Olympic Games in Calgary. Based on the use of survey methods, their findings demonstrated that accurate sponsor identification occurred in only four of seven product categories (see also Stotlar, 1993). Other data examining the comparative effectiveness of true cause-related marketing (CRM) vs an ambush ad approach to social causes indicate that an ambush social cause appeal can perform as well as a CRM appeal in terms of brand beliefs and purchase intent (Mizerski *et al.*, 2002).

While the weight of this research suggests the adverse impact of ambushing upon memory for the sponsor, studies examining ambushing effects in a sports sponsorship context are confined to survey evidence, rather than the causal impacts of ambushing. Additionally, few have examined the memory impacts of ambushing and these studies often adopt real brands and events, which does not control for variables known to affect marketing outcomes, including brand familiarity and event experience (e.g. Cornwell *et al.*, 2005; Rifon *et al.*, 2004).

The legality of ambush marketing

In their review of ambushing tactics in a sports sponsorship context, McKelvey and Grady (2008) argue that ambush marketing is a strategic business tactic companies employ in order to overcome existing regulations, and highlight the legal and practical complexities associated with the plethora of tactics adopted by ambushers. These tactics include using generic phrases, purchasing advertising time within the event broadcast, ensuring a presence in and around the venue, and conducting consumer promotions and congratulatory messages (Chadwick and Burton, 2011; Ellis *et al.*, 2011; McKelvey and Grady, 2008). Townley *et al.* (1998) have differentiated between “piracies,” which have a clear-cut remedy under the law, and subtle ambushing practices, for which the remedy is less clear cut and may not exist at all. That is, at one extreme in the ambushing typology, piracy ambushing exists, which involves the blatant misappropriation of the proprietary or financial rights of sponsors and event stakeholders that are clearly within the ambit of existing laws. At the other end of the continuum are the more subtle practices at the heart of specific anti-ambushing legislation regarded as “intrusion ambushing.” It is this mode of ambushing that is of most concern to sponsors and event organizers, as the sophisticated tactics with which it is associated often elude legal intervention.

The implications of the recent decision in *Australian Olympic Committee Inc. v. Telstra Corporation Limited* (2017) emphasize the challenges and complexities with which event organizers and sponsors must contend in countering the modern-day ambush, as well as what actually constitutes an illegal ambush. The case involved a challenge by the AOC of Telstra’s advertisements during the 2016 Olympic Games, citing alleged contravention of the Olympic Insignia Protection Act 1987 (Cth), misleading and deceptive conduct and misleading representation contrary to Australian Consumer Law. After analyzing the overall theme of the advertisements, the Full Court concluded that Telstra did not convey an association with the AOC and had not contravened any of the legislation. The decision supports creative advertising in the context of free market competition, although it acknowledges that ambush marketing involving deception or trademark infringement should be prohibited (Sim, 2015). The case demonstrates that ambushers can encroach upon rights holders’ interests without legal intervention, given that the thematic space of an event is open to be creatively exploited if gaps in official marketing strategies exist.

The concern for rights holders is centered upon the potential for consumers to fail to recognize true sponsors, resulting from cognitive confusion. Hence established memory interference literature drawn from cognitive psychology is relevant in explaining the impacts of ambushing.

Memory interference and ambush marketing

Premised upon associative learning theories, memory interference is useful in predicting the contextual effects of perceptions of sponsorship. Interference refers to the impaired ability to remember an item previously learned as a result of other learned items stored in long-term memory (Anderson and Neely, 1996). Within a memory network context, a competitive ad undermines the retrieval of target information via confusion. Contextual interference, or memory interference arising due to the existence of a similar ad in contextual proximity to another, negatively affects memory (e.g. Keller 1987, 2001; Kumar and Krishnan, 2004). The associative network provides a perspective on retrieval failure by suggesting that information is encoded in long-term memory as a pattern of linkages between concept nodes. The associative network operates such that one will only be able to retrieve a subset of the total information depending on available memory cues (so the more cognitive overload, the less likelihood of accurate recall).

In previous studies, competing ads shared product class concept, but not message content (e.g. Burke and Srull, 1988; Jewell and Unnava, 2003). However, in the case of ambushing

within a sponsorship context, sponsor and ambush ads share links around both product class and ad content (i.e. themes around the event). As such, the use of sponsorship-linked advertising in its themed form by legitimate sponsors and ambushers is an effective tool that capitalizes on visual and verbal cues to implicitly convey an association with an event or activity (Kelly *et al.*, 2012). Specifically, it is known that cue substitution effects exist, namely, the idea that two brands linked by a common category in memory (e.g. Coke and Pepsi) can be substituted in the category context to confuse the consumer (so that consumers incorrectly identified Pepsi as the legitimate sponsor of the Olympics when it was actually Coke; Erickson and Mattson, 1981). Similarly, memory interference may arise due to the commonality among brands within a product category (e.g. sports shoes) or a more subtle overlap where brands may not be direct competitors within a single product category but may compete in terms of positioning or image (e.g. Rolex and BMW are both luxury brands that are often affiliated with large-scale sporting events). When information relating to an event is activated prior to the brand name, then it may interfere with the formation of the link between the advertised brand name and the ad content (Burke and Srull, 1988; Keller, 1993; Kent and Allen, 1994), as would be the case if Amex appeared prior to the combined ad of Visa and the Olympics. Such information might then either inadvertently strengthen the association between Amex and the Olympics, or at least neglect the association between Visa and the Olympics.

Research overview

The goal of this research is to examine the effects of ambushing on the participants' memory of true sponsors. Because event sponsorship has become a competitive promotional vehicle, marketers need to test their sponsorship support material in a context that reflects this environment (McDaniel and Kinney, 1996). With the current emphasis on advertisement effectiveness and sponsorship accountability, it is critical to focus on understanding the nature of memory in advertising (e.g. Crimmins and Horn, 1996; Kinney and McDaniel, 1996; for specific research within the field of cognitive psychology, see classic work by Anderson, 1981 and for additional work, see Anderson and Neely, 1996; Lardinois and Derbaix, 2001).

Cognitive outcomes have largely been measured by a range of recall and recognition measures, including response latency, sponsor-event matching and thought elicitation (e.g. Johar and Pham, 1999). When assessing the effectiveness of learning and memory, recall and recognition are commonly used as dependent variables due to the susceptibility of recognition measures to response bias (Singh *et al.*, 1988). However, a major limitation inherent in these studies was that the participants did not see official sponsors in simultaneous or close proximity to ambushers. Therefore, the studies did not adequately assess the ability of viewers to discriminate between sponsors and ambushers, nor did they test the combined effects of ambushing and sponsorship-linked advertising. The present research seeks to address these limitations.

On the basis of prior work, it is anticipated that sponsor recall and recognition will be stronger following exposure to sponsorship-linked advertising when no ambush is present, compared to when ambush is present, due to the absence of memory interference. Similarly, the positive effect of sponsorship-linked advertising on sponsor recall and recognition is expected to be diminished in the presence of an ambushing advertisement due to memory interference predictions:

- H1. Sponsorship-linked advertising and ambushing will interact such that the positive effect of sponsorship-linked advertising on sponsor recall is attenuated in the presence of ambushing and strengthened in the absence of ambushing.
- H2. Sponsorship-linked advertising and ambushing will interact such that the positive effect of sponsorship-linked advertising on sponsor recognition is attenuated in the presence of ambushing and strengthened in the absence of ambushing.

Method

Participants and design

In total, 387 people were recruited through Amazon Mechanical Turk to participate in the study upon completion of informed consent. This sample does not reflect the 32 respondents who were omitted based on incorrect responses to the manipulation check or attention checks. Of the total sample size, 155 participants (40 percent) were women, and 232 (60 percent) were men (the average age was 36, ranging from 24 to 52 years), and all were US citizens. The study employed an experimental design in which participants were randomly assigned to one of four cells of a 2 (product sponsorship: sponsorship-linked vs non-sponsorship) \times 2 (ambush advertisement: presence vs absence) design. The participants were debriefed and financially reimbursed for their time.

Procedure and manipulations

The participants were told that the purpose of the study was to investigate consumer attitudes toward advertisements. This served as a cover story. The experiment involved two phases. In phase one of the experiment, the participants were presented with a series of advertisements comprised of new products affiliated with the launch of various high-profile sporting events. The advertisements were counterbalanced in order of presentation. Importantly, too, the participants were not informed that they would be expected to recall this information and were instructed with a cover story that asked them to examine pilot advertisements for their appeal. In phase two of the experiment, the participants answered a series of questions designed to measure cognitive processes related to their recall and recognition of study stimuli, in addition to a familiarity with the event covariate measure. Specifically, the participants were asked to respond to a series of items that assessed whether they could: identify the legitimate sponsor of the sporting event featured within the study stimuli; correctly recognize the brands that were official sponsors of the sporting events; and be familiar with the main sporting events that were featured in the stimuli. The study took approximately 10 min to complete. After completing the questionnaire, the participants were thanked for taking part in the study and debriefed.

Measurement of independent variables

Both sponsorship-linked and ambush advertising independent variables were operationalized as manipulated advertisements across the four conditions. Four different target advertisements were created, consisting of two sponsorship-linked advertisements and two ambush advertisements relating to each of the two different product category/event pairings. Filler advertisements were also created that did not bear any association with the focal advertisements in terms of product category, brand name or sports thematic content. Three brand names, product categories and sporting events were selected on the basis of pretesting results, revealing comparable (moderate) scores of likeability, equivalent familiarity and the absence of an association with sporting events. Two products (cars and television sets) were selected from a pool of nine products on the basis of the pretesting results ($n = 50$) of equivalent mean likeability and familiarity ($M = 4.85$, $F(1, 8) = 2.36$, $p > 0.05$ and $M = 3.86$, $F(1, 5) = 2.36$, $p > 0.05$, respectively), along with the absence of brand or event associations. Familiarity for all pretests was measured using three Likert-type scale items, namely, "I have had a lot of experience with this [brand, product, event]," "I am highly knowledgeable about this [brand, product, event]" and "I would describe myself as being familiar with this [brand, product, event]." These were rated on seven-point scales anchored by "strongly agree" and "strongly disagree," and adapted from Beatty and Talpade (1994). Each participant's response was averaged to provide a composite familiarity value for each of the pretests relating to brand, product and event selection. The likeability of the brand, product and event was

measured in each of the three pretests with three seven-point semantic differential scale items with anchors of negative/positive, bad/good and favorable/unfavorable. These items were adopted from Muehling and Lacznik (1988).

Similarly, fictitious brand names for the two product categories of televisions and cars (Stage and Zephyr, respectively) and ambush advertisement brands (View and Hush, relating to television and car categories, respectively) were selected from a pool of six names per product category on the basis of there being no significant differences in mean likeability and familiarity ratings among the brands ($M = 4.23$, $F(1, 5) = 1.67$, $p > 0.05$ and $M = 2.43$, $F(1, 5) = 2.33$, $p > 0.05$, respectively). These brands were also pretested ($n = 50$) for any associations with sporting events and product categories, and demonstrated no such associations.

Two globally recognized sporting events (Winter Olympics and Formula One World Championships) were also adopted on the basis of there being no difference in mean event familiarity and event likeability ratings from a pool of six different events ($M = 5.45$, $F(1, 5) = 1.23$, $p > 0.05$ and $M = 4.13$, $F(1, 5) = 2.56$, $p > 0.05$). Events and brands were randomly assigned to form two event/brand pairings. The congruence between event and brand pairings was measured to ensure that each pairing was moderately congruent, given prior research establishing that moderate to high levels of fit between sponsor and sponsee have produced more favorable marketing outcomes for sponsors (e.g. Cornwell *et al.*, 2005; Rifon *et al.*, 2004). To assess perceptions of congruence, eight seven-point semantic differential scale items were used, adopted from Roy and Cornwell (2003), with anchors of “negative/positive,” “favorable/unfavorable,” “bad/good,” “complementary/not complementary,” “inappropriate/appropriate,” “illogical/logical,” “well matched/poorly matched” and “well suited/poorly suited.” A composite measure of perceived congruence was developed by averaging these items ($M = 3.87$, $F(1, 5) = 1.67$, $p > 0.05$).

Ambush advertising was operationalized through the use of sports-themed advertisements that were linked with an event-product category (competing brand). Ambush advertisement types featured a visual of the ambushing company’s product in the bottom right-hand corner, along with the ambusher’s brand name that was displayed in the bottom left-hand corner of the advertisement. The themes of the advertisements were comparable to those in the sponsorship-linked advertisement condition; however, these ads utilized different visuals relating to the relevant event. For the non-ambush condition, a filler advertisement was presented that did not relate to the product or event featured in the ambush/sponsorship-linked advertisements.

Dependent variables

- (1) Sponsorship recall: the participants were assessed for their ability to correctly identify the sponsors of the event (adapted from Johar and Pham, 1999).
- (2) Sponsorship recognition: the participants were asked to respond to a recognition test that asked them to select the brand that sponsors the Winter Olympics/Formula One in the advertisements viewed. As with sponsorship recall, this measure utilized the same filler brands in order to increase overall recognition difficulty for the participants.

Covariates

- (1) Familiarity: familiarity was measured as a covariate in light of its established impact upon sponsor brand recall and response (e.g. Johar and Pham, 1999) and its potential to produce a heightened reaction in the presence of ambushing. As with pretesting, respondents indicated their familiarity with the event using a three-item

(familiar/experienced/knowledgeable), seven-point Likert scale (1 = very unfamiliar to 7 = very knowledgeable) previously adopted in sponsorship studies (e.g. Beatty and Talpade, 1994; Cornwell *et al.*, 2005).

- (2) Demographics: the participants reported their age in years and their gender and were recruited on the basis of being US citizens due to their presumed exposure to the sponsorship and ambush marketing associated with commercialized sporting events. While the general level of exposure to sponsorship and awareness of ambushing tactics were not measured or controlled, the measurement and pretesting of familiarity with the events sponsored in the stimuli and the inclusion of a cover story limited hypothesis guessing and sponsorship expertise.

Results

Data analyses involved a series of logistic regressions – an appropriate technique to employ if the dependent variable is categorical and there are two or more categorical or continuous predictor variables (Tabacknick and Fidell, 2013). One of the dependent variables, sponsor recall, was coded dichotomously (1 = accurate sponsor recall and 0 = inaccurate sponsor recall) for each of the recall tasks. Each level of sponsorship-linked advertisement type and ambush advertisement was also dichotomously coded (1 = present and 0 = absent). The logistic regression analyses were performed first on the basis of the predictor variables, and then after the addition of two interactions between ambush advertisement and advertisement type. Overall event familiarity was entered as a covariate in all analyses.

In order to test the aforementioned hypotheses, two analyses were carried out that focused on the interactive effects of multiple focal variables within the study. Mean-centered variables were utilized in order to reduce the effects of potential multicollinearity issues that could arise among predictors. As indicated previously, event familiarity was entered as a control variable. To test for interactive effects, two interaction terms were also created, including Ambush × Sponsorship-Linked Advertisement and Ambush × Familiarity, and these terms were also mean-centered in order to avoid multicollinearity issues between the predictor variables and product terms.

Sponsor recall

A logistic regression analysis was performed to assess the prediction of overall sponsor recall on the basis of the predicted interactive effects between ambushing and sponsorship-linked advertisement (*H1*). The expected interaction in *H1* was also supported, with exposure to ambush advertising attenuating the positive effect of the sponsorship-linked advertisement exposure upon sponsor recall, $\beta = -2.91$, $p = 0.001$ (refer to Table I for a summary of these results). Finally, as expected, sponsor recall was also more accurate for participants who were more familiar with the sporting event brand, with the odds ratio improving the likelihood of sponsor recall 2.87 times for each unit increase in event familiarity, $\beta = 0.52$, $p = 0.05$. As expected, the familiarity x ambush interaction was significant, $\beta = -1.33$, $p = 0.05$, revealing that the positive effect of familiarity upon recall was weakened by ambush exposure.

Predictors	SE β	β	Wald	df	p	Exp (β)
Familiarity	0.8239	0.52	3.81	1	0.05	2.87
Ambush × SLA	0.0361	-2.91	4.63	1	0.00	1.84
Familiarity × Ambush	0.5377	-1.33	7.65	1	0.05	2.35

Table I.
Sponsor recall
accuracy results:
ambush, SLA and
familiarity

Sponsor recognition

A logistic regression analysis was performed to assess the prediction of sponsor recognition on the basis of the predicted interactive effect between the ambush and sponsorship-linked advertisement. *H2* was supported, $\beta = -2.91$, $p = 0.001$. The main effect of sponsorship-linked advertisement upon recognition was attenuated by exposure to ambush advertising (please refer to Table II for these results). An interaction effect was also revealed, $\beta = -0.56$, $p = 0.03$, with the relationship between event familiarity and correct sponsor recognition being attenuated among respondents exposed to ambush advertising, with an odds ratio of 0.60.

General discussion

The focus of this study was to examine the cognitive processes that underpin sponsorship identification, particularly as they relate to the effects of ambush advertising upon sponsorship recall and recognition as well as its combined effects with sponsorship-linked advertising. The premise of this study was based on the prediction that given memory interference and cue substitution effects, ambushing would weaken participants' memory of sponsor brands. Together, the findings from this research reveal that the combined effects of ambushing advertisements and sponsorship-linked advertisements bear the potential to diminish the memory of legitimate sponsors. Moreover, leveraging sponsorship through sponsorship-linked advertisements, particularly in its explicit form (i.e. statement of official partnering embedded), is warranted, but the ad must be strategically placed and negotiated to avoid ambushing. The value of adequately leveraging sponsorship, once secured, cannot be underestimated, and the results from this study demonstrate that it can greatly enhance sponsor recall. As a key objective of sponsorship marketing is to raise awareness (Keller, 1993; Kinney and McDaniel, 1996), this is an important outcome in terms of brand equity enhancement. Our research also highlights the attractiveness of ambushing as a strategy for brands to effectively align with sponsored events through creative, entertaining execution, which may strongly resonate in consumer memory. We emphasize a neutral view of ambushing in recognizing the complex issues arising in the context of the contrasting rights and perspectives claimed by stakeholders, whether they are rights holders, event owners, regulators or ambushing brands. The legitimacy of ambushing tactics can therefore only be judged on a case-by-case basis, and ambushing will often comprise a legitimate opportunity open to brands in a competitive market.

These findings are consistent with earlier studies examining ambush marketing and finding detrimental impacts upon consumer awareness (McDaniel and Kinney, 1996; Portlock and Rose, 2009). The present research extends these studies by controlling for brand affiliation and prior knowledge in adopting fictitious brands as stimuli and testing the combined effects of ambushing and sponsorship-linked advertising. This study also provides empirical evidence for theoretical explanations of memory interference (e.g. Anderson and Neely, 1996; Burke and Srull, 1988; Jewell and Unnava, 2003) and how erroneous processing can occur in consumers' minds when they are exposed to ambushing. This study provides some of the only causal evidence of ambushing producing memory interference effects and interactions with sponsorship leveraging, therefore providing both theoretical and practical contributions. Insight into how and why consumers may confuse ambush and sponsor-linked

Table II.
Overall sponsor
recognition

Predictors	SE β	β	Wald	df	<i>p</i>	Exp(β)
Familiarity	0.7209	2.88	3.81	1	0.05	2.67
Ambusher \times SLA	0.0322	-2.91	4.63	1	0.001	1.77
Familiarity \times Ambush	0.3248	-0.56	2.92	1	0.03	2.33

advertising may better inform rights holders in relation to sponsorship activation and protection strategies. It may also provide a reliable and objective means by which to assess the damage or risk associated with ambushing at sponsored events. Likewise, these findings are also of value to potential ambushing brands by providing evidence of the circumstances in which consumers are most likely to be confused, and where to best place and activate such advertising. Beyond the context of sport, memory interference is also likely to have relevance in advertising, more generally speaking, with the rise of copycat marketing, whereby brands and brand claims are often positioned to deliberately imitate leading brands in the category (Humphreys *et al.*, 2017; Horen and Pieters, 2012). However, the range of competition within a category of fast-moving consumer goods, for example, may prompt the recall of a strong leading original brand in the category when a copycat brand enters the category, but this proposition has yet to be empirically tested. In the competitive sports sponsorship context, it may be that the confusion is heightened due to the typically equivalent brand clout of sponsor and ambusher (e.g. Nike and Adidas). While the intellectual property of brands is protected by trademark trade practices regulations, no specific anti-ambushing regulatory framework exists, in contrast to sporting events. It is therefore interesting to observe that ambushing or copycat strategies continue to thrive in both domains, and that even the more stringent regulation attached to sporting events allows for creative ambush advertisers to leverage opportunities in placement and thematic affiliation with the event. The rise of direct-to-consumer communications and marketing through social media has seen the exponential growth of counterfeit and copycat advertising and branding (Le Roux *et al.*, 2016). These communications are also potentially confusing for consumers, and difficult to regulate due to the low barriers of entry associated with the internet, and the complexity of cross-jurisdictional policing of multiple sites globally. Hence, this research is relevant to the adduced evidence of confusion across a range of competitive marketing contexts, beyond sport sponsorship.

How can sponsors protect themselves?

In order to combat the rise of ambush marketing activities, event organizers and affiliated sponsors have started to engage in a variety of strategies in order to protect their financial investments. Indeed, in many cases the protection of sponsors' significant investments is a contractual obligation for event organizers and sports proprietors. Another strategy that can be used is carefully policing the event and controlling how ticket sales and merchandising sales occur during and up to the commencement of the event. Finally, public education could also be used by event organizers in order to convince the public that advertising activity that appears to be associated with the event (which is non-official) threatens the future of the event (Preuss *et al.*, 2008; Vassallo *et al.*, 2009; Watal, 2010). Sponsors need to be mindful of how they proceed when using these strategies, however, as incorrectly administering counter-ambushing strategies may result in strengthening the association between an ambusher and the event they attempt to ambush (Humphreys *et al.*, 2010).

Despite widening legal powers to control ambushing, there nevertheless appear to be opportunities for non-sponsors and lower-level sponsors aiming to elevate their sponsorship status to lawfully engage in creative (i.e. implicit) sponsorship-linked advertising (Kelly *et al.*, 2012). For example, if advertising opportunities coinciding with the event are available for purchase, companies cannot be criticized for taking such opportunities when sponsors have failed to take up first rights. With advertising costs at prohibitive rates during large events, it is often not feasible for official sponsors to leverage all advertising opportunities. Ultimately, more subtle types of ambushing may be impossible to control due to many factors. Such factors include the use of new media forms, the cost and difficulty of fully leveraging sponsorship opportunities, the competitive intensity surrounding global sporting events and the inability of country-specific legislation to extend globally.

Conclusion

In conclusion, it has been argued that the use of ambush marketing is merely another vehicle or competitive strategy that can be legitimately utilized by brands motivated to capitalize upon the universal goodwill and reach associated with large events. Indeed, our research demonstrates that ambushing is a very attractive strategy, given its legitimacy when subtly executed and its potential to confuse the market. The recent decision in *Australian Olympic Committee Inc. v. Telstra Corporation Limited* (2017) supports this view by accepting a very narrow ambit of association through thematic advertising. The broadening of event-specific protection to athletes' social media and image commercialization through the introduction of Rule 40 during events poses a new frontier for creative ambushing by individual celebrities through direct messaging to consumers. However, in responding to ambushing, sponsors need to consider possible backlash from the market for perceived heavy-handed reactions based on an assertion of legal rights. Indeed, Rule 40 required some relaxation following strong backlash from athletes and brand sponsors. The present study suggests that it is better for sponsors and sports property administrators to pre-empt the ambushing of events by heavily activating sponsorships through explicit sponsorship-linked advertising and an integrated program associated with the event, rather than relying upon the legal enforcement of their rights.

Future research should build on the growing body of research examining how consumers feel about ambush marketing (e.g. Kim and Cho, 2015; Dickson *et al.*, 2015) across all possible ambushing contexts, including above-the-line advertising, athlete-consumer direct communications through social media and live-streaming (OTT) platforms. It is therefore conceivable that the humorous and creative execution that characterizes ambush advertising might be appealing or even entertaining to consumers, but this proposition remains to be empirically tested. The rapidly growing context of esports events and their associated unregulated landscape represent attractive property for both sponsors and ambushers (Pizzo *et al.*, 2018). Research focused upon this burgeoning phenomenon, its unique audience behavior and marketing strategy effectiveness for both sponsors and ambushers is therefore warranted.

Generalizing the findings of this study to the field by testing the impacts of ambush advertising upon consumer memory and behavioral dependent variables, including purchase intent, word of mouth and loyalty, would also be worthwhile in future research. This study was restricted to two event-brand pairings and the print advertising medium, so further generalization of these results through replication across alternative pairings and additional media and communications strategies is recommended. For example, sponsorship activation, and therefore ambushing, is usually implemented as an integrated campaign, adopting multiple platforms and placement prior to, during and after the event. A longitudinal examination of ambush strategy's impacts is therefore warranted to understand the longer-term brand awareness impacts of ambushing and sponsorship activation, in addition to the optimal ratio of exposure between ambushing and legitimate sponsors' advertising. One limitation of this study is that we did not control for participants' exposure to the events used as stimuli. While we did measure participants' familiarity with these events, the frequency and depth of exposure would also be of interest in future studies. This study should set the course for future research into other cognitive factors that potentially influence the practice of ambush marketing and respond to previous calls to examine the memory outcomes of sponsorship and ambushing (e.g. Cornwell *et al.*, 2005; Walraven *et al.*, 2014).

The practice of ambush marketing is continuing to thrive, despite the existence of specific anti-ambushing legislation designed to eradicate it. The inability of legal protection to extend to subtle forms of ambushing that capitalize upon mega-sporting events is attributable to the competing need to support free market competition and draw the line at

owning generic themes, including in sports. This research provides evidence of the consumer brand confusion resulting from ambushing, suggesting that legitimate sponsors have a strong commercial reason to protect their affiliation from ambushing and that this strategy is a very attractive proposition to potential ambushing brands due to its legitimacy in most cases and the efficiency of its reach. However, this paper highlights the finding that sponsors might be well advised to elevate their rights through well-placed creative campaigns and collaboration with other rights holders and sporting events, rather than through heavy-handed legal redress.

References

- Anderson, J.R. (1981), "Effects of prior knowledge on memory for new information: the role of integrating knowledge", *Cognitive Psychology*, Vol. 9 No. 3, pp. 237-246.
- Anderson, M.C. and Neely, J.H. (1996), "Interference and inhibition in memory retrieval", in Bjork, E.L. and Bjork, R.A. (Eds), *Memory. A Handbook of Perception and Cognition*, 2nd ed., Academic Press, San Diego, CA, p. 237.
- Australian Olympic Committee Inc. v. Telstra Corporation Limited (2017), FCAFC 165 at [117].
- Beatty, S.E. and Talpade, S. (1994), "Adolescent influence in family decision making: a replication with extension", *Journal of Consumer Research*, Vol. 21 No. 2, pp. 332-341.
- Burke, R.R. and Srull, T.K. (1988), "Competitive interference and consumer memory for advertising", *Journal of Consumer Research*, Vol. 15 No. 1, pp. 55-68.
- Carrillat, F., Colbert, F. and Feigné, M. (2014), "Weapons of mass intrusion: the leveraging of ambush marketing strategies", *European Journal of Marketing*, Vol. 48 Nos 1/2, pp. 314-335.
- Chadwick, S. and Burton, N. (2011), "The evolving sophistication of ambush marketing: a typology of strategies", *Thunderbird International Business Review*, Vol. 53 No. 6, pp. 709-719.
- Chanavat, N. and Desbordes, M. (2014), "Towards the regulation and restriction of ambush marketing? The first truly social and digital mega sports event: Olympic Games, London 2012", *International Journal of Sports Marketing and Sponsorship*, Vol. 15 No. 3, pp. 2-11.
- Chanavat, N., Desbordes, M. and Dickson, G. (2016), "Sponsorship networks: toward an innovative model", *Sport, Business and Management: An International Journal*, Vol. 6 No. 4, pp. 424-439.
- Cornwell, T.B., Weeks, C.S. and Roy, D.P. (2005), "Sponsorship-linked marketing: opening the black box", *Journal of Advertising*, Vol. 34 No. 2, pp. 21-42.
- Crimmins, J. and Horn, M. (1996), "Sponsorship: from management ego trip to marketing success", *Journal of Advertising Research*, Vol. 36 No. 4, pp. 11-21.
- Crompton, J.L. (2004), "Sponsorship ambushing in sport", *Managing Leisure*, Vol. 9 No. 1, pp. 1-12.
- Dickson, G., Naylor, M. and Phelps, S. (2015), "Consumer attitudes towards ambush marketing", *Sport Management Review*, Vol. 18 No. 2, pp. 280-290.
- Ellis, D., Scassa, T. and Séguin, B. (2011), "Framing ambush marketing as a legal issue: an Olympic perspective", *Sport Management Review*, Vol. 14 No. 3, pp. 297-308.
- Erickson, T.D. and Mattson, M.E. (1981), "From words to meaning: a semantic illusion", *Journal of Verbal Learning and Verbal Behavior*, Vol. 20 No. 5, pp. 540-551.
- Gauthier, R. (2014), "Major event legislation: lessons from London and looking forward", *The International Sports Law Journal*, Vol. 14 Nos 1/2, pp. 58-71.
- Grady, J. (2016), "Predicting the future for Rio 2016: legal issues in sponsorship, ambush marketing, and social media", *The Entertainment and Sports Law Journal*, Vol. 14, pp. 1-4.
- Grady, J., McKelvey, S. and Bernthal, B. (2010), "From Beijing 2008 to London 2012: examining event specific Olympic legislation *vis à vis* the rights and interests of stakeholders", *Journal of Sponsorship*, Vol. 2 No. 2, pp. 144-156.
- Hoek, J. and Gendall, P. (2002), "Ambush marketing: more than just a commercial irritant?", *Entertainment Law*, Vol. 1 No. 2, pp. 72-91.

- Hoffman, D.L. and Fodor, M. (2010), "Can you measure the ROI of your social media marketing?", *MIT Sloan Management Review*, Vol. 52 No. 1, pp. 41-49.
- Horen, F.V. and Pieters, R. (2012), "When high-similarity copycats lose and moderate-similarity copycats gain: the impact of comparative evaluation", *Journal of Marketing Research*, Vol. 49 No. 1, pp. 83-91.
- Humphreys, M.S., Cornwell, T.B., McAlister, A.R., Kelly, S.J., Quinn, E.A. and Murray, K.L. (2010), "Sponsorship, ambushing, and counter-strategy: effects upon memory for sponsor and event", *Journal of Experimental Psychology: Applied*, Vol. 16 No. 1, pp. 96-108.
- Humphreys, M.S., McFarlane, K.A., Burt, J.S., Kelly, S.J., Weatherall, K.G. and Burrell, R.G. (2017), "Recognition in context: implications for trademark law", *Psychonomic Bulletin & Review*, Vol. 24 No. 5, pp. 1665-1672.
- International Olympic Committee (2015), *Olympic Charter*, Comité International Olympique, Lausanne.
- Jewell, R.D. and Unnava, H.R. (2003), "When competitive interference can be beneficial", *Journal of Consumer Research*, Vol. 30 No. 2, pp. 283-291.
- Johar, G.V. and Pham, M.T. (1999), "Relatedness, prominence, and constructive sponsor identification", *Advertising & Society Review*, Vol. 1 No. 1, pp. 249-312.
- Keller, K.L. (1987), "Memory factors in advertising: the effect of advertising retrieval cues on brand evaluations", *Journal of Consumer Research*, Vol. 14 No. 3, pp. 316-333.
- Keller, K.L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity", *Journal of Marketing*, Vol. 57 No. 1, pp. 1-22.
- Keller, K.L. (2001), "Building customer-based brand equity: a blueprint for creating strong brands", Report No. 01-107, Marketing Science Institute, Cambridge, MA.
- Kelly, S.J., Cornwell, T.B., Coote, L.V. and McAlister, A.R. (2012), "Event-related advertising and the special case of sponsorship-linked advertising", *International Journal of Advertising*, Vol. 31 No. 1, pp. 15-37.
- Kent, R.J. and Allen, C.T. (1994), "Competitive interference effects in consumer memory for advertising: the role of brand familiarity", *The Journal of Marketing*, Vol. 58 No. 3, pp. 97-105.
- Kim, C.H. and Cho, J.S. (2015), "Attitudes toward on sports sponsorship and ambush marketing by the Korean sports consumers", *Proceedings of the 2007 Academy of Marketing Science (AMS) Annual Conference*, Springer, Cham, CO, p. 288.
- Kinney, L. and McDaniel, S.R. (1996), "Strategic implications of attitude-toward-the-ad in leveraging event sponsorships", *Journal of Sport Management*, Vol. 10 No. 3, pp. 250-261.
- Kumar, A. and Krishnan, S. (2004), "Memory interference in advertising: a replication and extension", *Journal of Consumer Research*, Vol. 30 No. 4, pp. 602-612.
- Lardinois, T. and Derbaix, C. (2001), "Sponsorship and recall of sponsors", *Psychology and Marketing*, Vol. 18 No. 2, pp. 167-190.
- Le Roux, A., Thébault, M., Roy, Y. and Bobrie, F. (2016), "Brand typicality impact on brand imitations evaluation and categorization", *Journal of Product & Brand Management*, Vol. 25 No. 6, pp. 600-612.
- Louw, A.M. (2012), *Ambush Marketing & the Mega-Event Monopoly: How Laws Are to Protect Commercial Rights to Major Sporting Events*, Springer Science & Business Media, The Hague.
- McDaniel, S.R. and Kinney, L. (1996), "Ambush marketing revisited: An experimental study of perceived sponsorship effects on brand awareness, attitude toward the brand and purchase intention", *Journal of Promotion Management*, Vol. 3 Nos 1/2, pp. 141-168.
- McDermott, E. (2012), "The changing face of ambush marketing: managing intellectual property. September 21, available at: www.managingip.com/Article/3024337/Trade-marks-United-States-Jurisdiction-Archive/The-changing-face-of-ambush-marketing.html (accessed July 30, 2018).
- McKelvey, S. and Grady, J. (2008), "Sponsorship program protection strategies for special sport events: are event organizers outmanoeuvring ambush marketers?", *Journal of Sport Management*, Vol. 22 No. 5, pp. 550-586.

- McKelvey, S. and Longley, N. (2015), "Event-specific ambush marketing legislation for mega-sporting events: an economics perspective", *International Journal of Sports Marketing and Sponsorship*, Vol. 16 No. 5, pp. 20-35.
- MacIntosh, E., Nadeau, J., Seguin, B., O'Reilly, N., Bradish, C.L. and Legg, D. (2012), "The role of mega-sports event interest in sponsorship and ambush marketing attitudes", *Sport Marketing Quarterly*, Vol. 21 No. 1, pp. 43-52.
- Mazodier, M. and Quester, P. (2010), "Ambush marketing disclosure impact on attitudes toward the ambusher's brand", *Recherche et Applications en Marketing*, Vol. 25 No. 2, pp. 51-67.
- Mazodier, M., Quester, P. and Chandon, J.L. (2012), "Unmasking the ambushers: conceptual framework and empirical evidence", *European Journal of Marketing*, Vol. 46 No. 1, pp. 192-214.
- Meenaghan, T. (1994), "Point of view: ambush marketing: immoral or imaginative practice?", *Journal of Advertising Research*, Vol. 34 No. 5, pp. 77-89.
- Meenaghan, T. (1998), "Ambush marketing: corporate strategy and consumer reaction", *Psychology & Marketing*, Vol. 15 No. 4, pp. 305-322.
- Mizerski, D., Mizerski, K. and Sadler, O. (2002), "A field experiment comparing the effectiveness of 'ambush' and cause-related ad appeals for social marketing causes", *Journal of Nonprofit & Public Sector Marketing*, Vol. 9 No. 4, pp. 25-45.
- Muehling, D.D. and Laczniak, R.N. (1988), "Advertising's immediate and delayed influence on brand attitudes: considerations across message-involvement levels", *Journal of Advertising*, Vol. 17 No. 4, pp. 23-34.
- Nufer, G. (2013), "Guerrilla marketing-innovative or parasitic marketing?", *Modern Economy*, Vol. 4 No. 9, pp. 1-6.
- Olympic Insignia Protection Act 1987 (Cth), "An act to make provision for the protection of the olympic insignia, for the regulation of the commercial use of certain olympic expressions, and for related purposes", No. 27, available at: www.legislation.gov.au/Details/C2016C00852 (accessed March 8, 2018).
- O'Sullivan, P. and Murphy, P. (1998), "Ambush marketing: the ethical issues", *Psychology & Marketing*, Vol. 15 No. 4, pp. 349-366.
- Payne, M. (1998), "Ambush marketing: the undeserved advantage", *Psychology & Marketing*, Vol. 15 No. 4, pp. 323-331.
- Pham, M.T. and Johar, G.V. (2001), "Market prominence biases in sponsor identification: processes and consequentiality", *Psychology & Marketing*, Vol. 18 No. 2, pp. 123-143.
- Piątkowska, M., Żyśko, J. and Gocłowska, S. (2015), "A systematic literature review on ambush marketing in sport", *Physical Culture and Sport. Studies and Research*, Vol. 66 No. 1, pp. 14-27.
- Pitt, L., Parent, M., Berthon, P. and Steyn, P.G. (2010), "Event sponsorship and ambush marketing: lessons from the Beijing Olympics", *Business Horizons*, Vol. 53 No. 3, pp. 281-290.
- Pizzo, A.D., Baker, B.J., Na, S., Lee, M.A., Kim, D. and Funk, D.C. (2018), "eSport vs sport: a comparison of spectator motives", *Sport Marketing Quarterly*, Vol. 27 No. 2, pp. 1-6.
- Portlock, A. and Rose, S. (2009), "Effects of ambush marketing: UK consumer brand recall and attitudes to official sponsors and non-sponsors associated with the FIFA World Cup 2006", *International Journal of Sports Marketing and Sponsorship*, Vol. 10 No. 4, pp. 2-17.
- Preuss, H., Gemeinder, K. and Séguin, B. (2008), "Ambush marketing in China: counterbalancing Olympic sponsorship efforts", *Asian Business & Management*, Vol. 7 No. 2, pp. 243-263.
- Rifon, N.J., Choi, S.M., Trimble, C.S. and Li, H. (2004), "Congruence effects in sponsorship: the mediating role of sponsor credibility and consumer attributions of sponsor motive", *Journal of Advertising*, Vol. 33 No. 1, pp. 30-42.
- Roy, D.P. and Cornwell, T.B. (2003), "Brand equity's influence on responses to event sponsorships", *Journal of Product & Brand Management*, Vol. 12 No. 6, pp. 377-393.

- Sandler, D.M. and Shani, D. (1989), "Olympic sponsorship vs ambush marketing: who gets the gold?", *Journal of Advertising Research*, Vol. 29 No. 4, pp. 9-14.
- Sandler, D.M. and Shani, D. (1993), "Sponsorship and the Olympic Games: the consumer perspective", *Sport Marketing Quarterly*, Vol. 2 No. 3, pp. 38-43.
- Sim, Q. (2015), "Ambush marketing in major sports events: war minus the shooting?", *Journal of Intellectual Property Law & Practice*, Vol. 10 No. 7, pp. 536-550.
- Singh, S., Rothschild, M.L. and Churchill, G.A. (1988), "Recognition versus recall as measures of television commercial forgetting", *Journal of Marketing Research*, Vol. 25 No. 1, pp. 75-80.
- Stotlar, D.K. (1993), "Sponsorship and the Olympic winter games", *Sport Marketing Quarterly*, Vol. 2 No. 1, pp. 35-43.
- Tabacknick, B.G. and Fidell, L.S. (2013), *Using Multivariate Statistics*, 6th ed., Pearson Education, London.
- Townley, S., Harrington, D. and Couchman, N. (1998), "The legal and practical prevention of ambush marketing in sports", *Psychology & Marketing*, Vol. 15 No. 4, pp. 333-348.
- Tripodi, J.A., Hiron, M., Bednall, D. and Sutherland, M. (2003), "Cognitive evaluation: prompts used to measure sponsorship awareness", *International Journal of Market Research*, Vol. 45 No. 4, pp. 1-18.
- Vassallo, E., Blemaster, K. and Werner, P. (2009), "An international look at ambush marketing", *Intellectual Property Journal*, Vol. 22 No. 1, pp. 87-102.
- Walraven, M., Bijmolt, T.H. and Koning, R.H. (2014), "Dynamic effects of sponsoring: how sponsorship awareness develops over time", *Journal of Advertising*, Vol. 43 No. 2, pp. 142-154.
- Watal, A. (2010), "FIFA world cup 2010: an analytical study of the effectiveness of South African intellectual property regime to Combat ambush marketing and counterfeiting", available at: <https://ssrn.com/abstract=1699722> (accessed May 24, 2018).

Further reading

- Cornwell, T.B., Coote, L.V., Humphreys, M.S., Maguire, A.M., Weeks, C.S. and Tellegen, C.L. (2006), "Sponsorship-linked marketing: the role of articulation in memory", *Journal of Consumer Research*, Vol. 33 No. 3, pp. 312-321.
- Deitz, G.D., Myers, S.W. and Stafford, M.R. (2012), "Understanding consumer response to sponsorship information: a resource-matching approach", *Psychology and Marketing*, Vol. 29 No. 4, pp. 226-239.
- McDaniel, S.R. and Kinney, L. (1998), "The implications of recency and gender effects in consumer response to ambush marketing", *Psychology & Marketing*, Vol. 15 No. 4, pp. 385-403.
- Soldner, A. (2010), "Ambush marketing vs sponsorship values at the London Olympic games 2012", available at: www.ashurst.com/page.aspx?id_content=5383 (accessed January 5, 2017).

Corresponding author

Sarah J. Kelly can be contacted at: s.kelly@law.uq.edu.au