Examination of Affective Responses to Images in Sponsorship-Linked Marketing

T. Bettina Cornwell*
Edwin E. & June Woldt Cone Professor of Marketing
Lundquist College of Business
Lillis 432
University of Oregon
Eugene, OR 97403-1208
Phone: (541) 346-8241
Fax: (541) 346-3341
tbc@uoregon.edu

Ottmar V. Lipp
Professor of Psychology
School of Psychology and Speech Pathology
Curtin University
GPO Box U1987, Perth, WA, 6845
Australia
Phone: +61 (08) 926 65112
Fax: +61 (08) 926 62464
ottmar.lipp@curtin.edu.au

Helena M. Purkis
Academic Staff
School of Applied Psychology – Gold Coast
Griffith University
Gold Coast campus, Parklands Drive, Southport, QLD, 4222
Australia
Phone: +61 (07) 567 80385
Fax: +61 (07) 567 88165
h.purkis@griffith.edu.au

* contact author
Abstract

Sponsorship of sports, arts, charity and entertainment events are all viewed as capable in building corporate and brand image. In this process, visual images are a key vehicle in the transportation of affect from an event to a brand. While the overall positive feeling of a sponsored event or activity is argued to rub-off on a brand, we know less about how individual images function in this process and we know even less about the role of negative images. Here, three experiments consider the potential of affect transfer from images to brands. All three experiments show explicit transfer of affect, and one finds implicit evaluative change. Importantly, positive images when mixed with negative are offset-setting. This research suggests that when negative events occur and are captured and repeated in the media, practitioners able to supply positive images may be able to control negative affective responses to some degree.

Keywords: marketing, psychology, affective priming, sponsorship
Referring to sport images of 2010, Lawton (2010) describes “the most haunting image of all” as that of the death of the young luger, Nodar Kumaritashvili. Again and again images of his death were paired with the Vancouver Winter Olympic Games. If affect influences overall image of a destination (Baloghu & McCleary 1999) and if destinations have brand equity (Konecnik & Gartner 2007) as a repository of affectively laden associations, then Vancouver will forever hold the image of his death and the sadness surrounding it.

In that same year but in sharp contrast, South Africa, host of the FIFA World Cup became one with the jubilant, colourful, if somewhat irritating, vuvuzela. Again and again images of exuberant spectators with their plastic horn in red, yellow, green or blue were paired with the FIFA World Cup South Africa. Like the sound or not, the images were of happiness and celebration. As countries, cities and companies seek to build relationships with events, there is increasing interest in influence of repeated images.

Research into the role of images in marketing communications is decidedly important given the increasing use of brand placement, corporate sponsorship and ambient marketing where brands are paired with images that arise spontaneously, and are for the most part, not interpreted by text. Spending on sponsorship-linked marketing alone topped $50 billion worldwide in 2012 (IEG Sponsorship Report 2012). Also important to marketing communications is the role of affect, both as an aspect of the communication and as context. Marketing approaches such as sponsorship that embed the brand in events do so with little or no control over the images with which the brand is paired. With the current research we seek to make two contributions. Firstly, using a sponsorship context, we want to learn if pairing brand names with valenced images
results in explicit and implicit changes to brand evaluations. Second, we examine characteristics of the communication that may influence evaluations. In particular, we consider the presentation of the brand in the context and the nature of the exposure pattern.

The touch points for this research are in advertising, marketing and more recently in research that considers a sponsorship context. From an advertising perspective past research has been concerned with affective responses to images in advertising messages and consider both affective responses to ads themselves (Huang 1997) as well as moods and feelings evoked by advertising (Batra & Ray 1986). Another research stream has considered the influence of program, editorial images or more generally, “context-induced emotions” on advertising messages (e.g., Faseur & Geuens 2006; Yi 1990).

Yet other research on emotional contagion (Howard & Gengler 2001), brand extensions (Liu, Hue & Grimm 2010), mood (e.g., Newmann & Strack 2000), and information processing (Ito, Larsen, Smith & Cacioppo 1998) all examine the idea that affect might be transferred from a stimulus to a brand measure. Research in the sponsorship context has largely focused on image transfer from the event to the brand (e.g., Gwinner 1997, Gwinner and Eaton 1999). The current research depart from past research in advertising by focusing on the images that might flow from sponsored activities (with an embedded logo or brand name) rather than on marketer controlled images within ads or ads within programs. Taken together, an extensive body of past research represents these topics, therefore a comprehensive review is not offered. Rather in the following sections, key insights from these applied areas and from basic research in psychology come together to frame the current research. We begin however, with a
summary of how affective response in sponsorship contexts may differ in a practical sense from advertising. We follow with experimental work that explores the potential of images to transfer affect to brands under varied conditions.

**Conceptual Development**

**Affect Transfer**

Affect has been conceived of as an “umbrella for a set of more specific mental processes including emotions, moods, and (possibly) attitudes” (Bagozzi, Gopinath, & Nyer 1999, p. 184). In keeping with Cohen and Areni (1991) the current research views affect generally as “valenced feeling.” Experienced feelings of affect could be measured as a subjective label applied to a cue associated with valenced images or as facilitated performance on a task, where feelings speed decision-making when the task is affectively congruent with the primed feeling. The current work explores the influence of valenced images and responds to a call for research in sponsorship that considers implicit processes in sponsorship-linked marketing (Cornwell, Weeks & Roy 2005). Explicit memory as put forward by Cooper and Schacter (1992) is thought to be conscious, intentional recollections typically measured by recognition and recall; whereas implicit memory refers to unintentional, non-conscious retrieval of acquired information. Implicit memory “must be inferred from priming effects, or facilitation of performance on tasks that do not require conscious recollection of past experiences” (Cooper & Schacter 1992, p. 141). In learning, the contrast is similar, explicit learning is aware learning whereas implicit learning is typically regarded as “largely independently of awareness of both the
process and the products of acquisition” (Reber, Allen & Reber 1999, p. 475). Implicit memory for marketing communications has long been argued as a needed measure of effectiveness (Shapiro & Krishnan 2001). Implicit attitudes have been shown to influence brand choice when decisions are made under time pressure even when implicit and explicit attitudes are opposing (Friese, Wänke & Plessner 2006).

In the current research the focus is on affective learning, where a brand is paired with a sport image for contingent presentation with the aim of studying the transfer of affective valance from image to brand. In a review of automatic activation of associated evaluations, Fazio (2001) notes that affective priming “has proven to be a robust and replicable phenomenon apparent in experiments using a variety of priming stimuli, target stimuli and specific task requirements” (p.117). While there is some debate in psychology over the possibility of affective learning in the absence of awareness (see Purkis & Lipp 2001 as an example), we supply information about contingency awareness (is a person aware that a brand was paired with positive or negative image) but do not focus on the debate. Our central expectation is that both explicit and implicit evaluations of brands will change after being paired with positive and negative images. Prior research in has shown that negative priming reduces affective ratings (Griffiths & Michell 2088) but it is not a given that these measures will move in tandem.

In sum, positive images will transfer positive valence to brands and negative images will transfer negative valence to brands as measured by an explicit measure of pleasantness. Affective priming, in terms of decision facilitation, will also result from brand pairing with valenced images. For example, after exposure to a positive brand image, presentation of the brand name alone speeds subsequent classification of a target
word when positive but not when negative (as discussed subsequently in more detail).

Thus, hypotheses regarding explicit and implicit transfer of affect follow:

H1: Brands paired with positively (negatively) valenced images will become more positive (negative) after picture presentation.

H2: The change in brand valence will be evident in explicit (ratings) and implicit (affective priming) measures of evaluation.

Embedded Communications

Unlike advertising where program effects and advertising effects have some potential to be examined as individual contributors to communication objectives, in sponsorship the context and message are often one. Granted, most sponsorship communications are leveraged in a number of ways such as sales promotion and advertising but for any sponsored event, one may experience sponsorship images as simple on-site or broadcast signage without interpretation. Moreover, many pictures disintegrated from their event make their way onto web pages and into news media as singular images. Take for example, the 2005 photo of Eric Carriere of France. In an attempt to “head” a soccer ball, he took the hit in the face and a photographer took the photo in just that instance. The picture was chosen as the Reuters picture of the year in 2005. Importantly, in clear focus on the close-up shot was the Nike Swoosh. While people may not remember the team or the game, this image is still communicating on the web on many sites. Thus, while past research has tended to look at image transfer from the event as a whole (Gwinner 1997), either through attending or broadcast viewing, individual images originating in events are regularly reproduced in event reporting and likely reach a wider audience than the event itself and are deserving of researcher attention.
Event exposure patterns and the partial reproduction of images from events result in an issue of practical and theoretical importance in sponsorship, namely: what role does brand or logo location play in communication? Are brand names on player jerseys or painted on cars able to communicate differently than those on the scoreboard or perimeter barrier? While this question may not be unique to sponsorship communications, sponsorship does present many opportunities to place logos on actors, not just in their environment. Literature on brand placement is somewhat concerned with the exposure characteristics of product placement (Van Reijmersdal, Neijens, & Smit 2009) but it is of particular and increasing importance in sport sponsorship due to new technological abilities to capture close up action and follow sports in an intimate way. Sponsorship pricing varies greatly depending on logo location. For example, in NASCAR (National Association for Stock Car Auto Racing) a car quarter panel or upper hood area may cost up to $10 million for brand identification, but to really cover most of the car with a single sponsor’s logo is $15 million.

From a theoretical view, athletes and their cars, boats or cycles are actors in a scene. From the brand placement literature we have learned that context matters (Balasubramanian, Karrha and Patwardhan 2006) and that brands central to the plot in television programs have a positive influence on memory and attitude (Russell 2002). In the sponsorship context a similar effect has been found and dubbed “centrality to action” when studied in an auto racing game (Schneider & Cornwell 2005). Thus we can expect, for sponsorship images, that a brand name on an “actor” as focal point would be more influential in affect transfer than a brand name on a background to the action.

H3: Brand placements central to action (on actors) will result in greater explicit and implicit image transfer than brand placement peripheral to action (on
Experiment 1

Measures

In an affective priming paradigm, brand names (before and after pairing with valenced images) precede pleasant and unpleasant target words. The participant is asked to classify these target words as quickly as possible as pleasant or unpleasant. Affective priming is evident if a pleasant target word is evaluated faster as pleasant after a positive than after a negative prime and if an unpleasant target word is evaluated faster as unpleasant after a negative than after a positive prime (for a review see Fazio & Olson, 2003).

Method

Participants. Twenty-seven (9 males, 18 females) aged 18-27 years (mean age: 21) volunteered participation in the current experiment. Twelve undergraduate students from a large state university participated in exchange for course credit and fifteen additional participants received $10 to compensate for their time. All participants in this and subsequent experiments provided informed consent before the experiment began.

Data Collection. The overall study was a 2 x 2 x 2 (Phase: prior to picture viewing, after picture viewing x Valence of Image: positive or negative x Position of brand: on actor (car) foreground or on background) design. Our interest is in resulting affective ratings and affective priming. In analysis, the target valence (to capture evaluation time) is treated as an additional factor. Here and in the subsequent experiments the design is “within-subjects.” This design is preferred in terms of power and in terms of the control offered over variance associated with individual differences. Individual
differences have been found to be important in response to both positive and negative advertising appeals (Moore & Harris 1996). Also, important is that, in this design, individuals are exposed to a balance of both positive and negative images in an experimental session so that results are not influence by a prevailing positive or negative mood.

The experiment was conducted on a computer running custom written psychological software (Forster & Forster 2003). All experimental trials, ratings and judgements, and task specific experimental instructions, were presented on a 17 inch computer monitor and all responses were recorded via a USB keyboard. Pictures were presented at a size of 600 x 369 pixels. Target word stimuli for affective priming tasks were obtained from Mathews, Mogg, Kentish, and Eysenck (1995) and consisted of the six pleasant words “confident,” “excellent,” “praise,” “pleasure,” “delight,” and “cheerful,” and the six unpleasant, physical threat words “violence,” “pain,” “injury,” “fatal,” “killer,” and “lethal.”

Four novel brand names, “Amory,” “Abington,” “Rowland,” and “Tulloind,” were “photoshopped” into four pictures of scenes from car races. Two of the pictures displayed positive content, a car in the lead and on a victory lap, two pictures displayed negative content, car crashes. Brand names were edited either onto the car (as actor), the foreground condition, or in the periphery of the track, the background condition. For each picture valence there was one with a brand name in the background and one on the car, thus the four pictures are referred to as car positive, background positive, car negative and background negative. The assignment of brand names to valence and location was counterbalanced, with participants allocated at random to the conditions.
Procedure. Participants completed the experiment individually and received an initial experimental briefing upon arrival (and debriefed upon exit). They provided informed consent and were seated in the participant room in front of the monitor. Prior to the computer tasks, participants were instructed on use of the keyboard and were told to operate the response keys with the index fingers of the left and right hand. Before the start of the experiment, participants were given a practice session to check their understanding. Practice sequences contained stimuli similar to those used in the experimental tasks.

Participants completed ratings and affective priming tasks before and after a picture presentation phase. During the picture presentation phase, participants watched presentations of the four pictures of racing cars with superimposed brand names. Each picture was presented eight times for 5 seconds, and there was a five second break in between presentations. Picture presentation order was randomized, and pictures were presented on a black background. Ratings required participants to rate each brand name on a 9-point semantic differential scale with the verbal anchors “unpleasant” and “pleasant” (these anchors are used in measuring affect, see Greenwald, McGhee & Schwartz 1998).

In the affective priming task, participants were asked to evaluate the target words presented on the computer screen as pleasant or unpleasant by pressing the right or left SHIFT keys on the keyboard. Presentation of each target word was preceded by the presentation of a brand name and participants were instructed to look at the brand names, although it had no stated relevance to their response task. There were 48 trials, each brand name presented with each positive and negative target word once. The allocation of
brand names to target words was random, as was the trial order for each participant. Each trial consisted of a black control screen containing a fixation cross presented for 200 ms, the brand name presented for 53 ms, a black control screen presented for 93 ms, and a target word presented for 10 seconds or until participants responded with a button press. Brand names and target words were presented in white on a black background in 12 point Arial font. The inter-trial interval, the time between separate trials, was 1 second. It is worth noting that, while there were a large number of exposures, they were communicated quickly.

After the second rating phase, participants rated the four racing car pictures on the 9-point affect scale. To check for contingency awareness, participants also completed a post experimental questionnaire that asked them to choose which of a pair of pictures they had seen during the experiment. Both pictures in each pair were the same except for the brand names displayed, where one brand name had been seen in the picture during the experiment, and one had not. All four experimental pictures were presented in this fashion.

**Scoring, Response Definition and Statistical Analyses.** Response times on trials on which participants classified the valence of the target word correctly were screened individually and outliers deviating from the mean by more than 3 standard deviations and response times shorter than 100 ms were removed and scored as errors. Error data were converted into percentage scores. Response times were inverse transformed ($\frac{1000}{RT}$; Ratcliff; 1993) to compensate for the positive skew of the distribution before the analyses.
Univariate statistics, Greenhouse-Geisser corrected where appropriate, are reported for all ANOVAs. All significant interactions were subjected to follow-up analyses using two-tailed t-tests. To protect against violation of the assumption of sphericity, Greenhouse-Geisser error values and degrees of freedom were used for follow up tests. Critical values from Sidak’s tables were used for follow up t-tests, to protect against the accumulation of á-error (Rohlf & Sokal, 1981). Where paired sample t-tests are used, results and critical values were obtained using SPSS statistical software. The level of significance was set at .05 for all statistical analyses.

**Results**

**Manipulation checks.** Inspection of the ratings for the racing pictures indicated some participants did not evaluate the positive and negative pictures differently (perhaps they did not attend fully to the task). In all, data from five participants were excluded. Analysis of the data for the remaining sample confirmed that participants evaluated the positive and the negative pictures as such. Ratings were subjected to a 2 x 2 (Valence x Position) ANOVA, which yielded significant main effects for Position, F(1,21) = 6.25, p <0.05, η² = .229, and Valence, F(1,21) = 208.96, p <0.001, η² = .909, and a Position x Valence interaction, F(1,21) = 7.66, p <0.05, η² = .267. The interaction reflects that the positive picture with the brand name in the background was rated as more positive than the positive picture with the brand name on the car, M = 7.73, SD = 1.49 vs. M = 6.59, SD = 1.40, t(21) = 4.07, p < .01, whereas there was no such difference between the negative pictures, M = 2.41, SD = 1.40 vs M = 2.36, SD = 1.29, t(21) < 1, ns. Overall, positive pictures were rated as more positive than negative ones, M = 7.16, SD = 1.45 vs M = 2.39, SD = 1.35, t(21) = 14.44, p < .001.
The post experimental questionnaire confirmed that 18 participants were aware of which brand name had been attached to which picture during the experiment, whereas four participants falsely identified one or two pictures incorrectly. The results for the sample of 22 did not differ from those obtained for the 18 participants who identified all pictures; hence all data are reported here. Again, while we do not investigate contingency awareness, it is supplied to those researchers wishing to consider it in interpretation of the findings.

**Affective Ratings.** As can be seen in Figure 1, brand names presented in positive pictures were evaluated as more positive, and brand names presented in negative pictures were evaluated as more negative after picture presentation. This finding supports H1. Ratings were subjected to a 2 x 2 x 2 (Phase x Valence x Position) repeated measures ANOVA. This analysis revealed main effects for Position, F(1,21) = 6.54, p < .05, $\eta^2_p = .238$, and Valence, F(1,21) = 12.13, p < .01, $\eta^2_p = .366$, and interactions for Phase x Position, F(1,21) = 10.94, p<0.01, $\eta^2_p = .342$, and Phase x Valence, F(1,21) = 17.50, p<0.001, $\eta^2_p = .455$. Follow up tests for the Phase x Position interaction indicated that prior to picture viewing, brand names that were to be presented on the cars (Amory and Rowland) were rated as more positive than those to be presented in the background (Albinqton and Tullossind), t(21)  = 5.98, p < .01, whereas there was no such difference after picture viewing, t(21)  = 1.30, ns. Thus, there is an unexpected baseline difference in brand name evaluations. The Phase x Valence interaction reflects that prior to picture viewing there was no difference in the evaluation of brands to be presented in positive or negative pictures, t(21) < . ns, whereas brands presented in positive pictures were evaluated as more positive than brands presented in negative pictures, after picture
viewing, $t(21) = 6.07, p < 0.01$.

*** Insert Figure 1 here ***

**Affective Priming.** Overall error rates were below 5%. Given the low error rates, error data were not analyzed further. The $2 \times 2 \times 2 \times 2$ (Phase x Position x Valence x Target valence) repeated measures ANOVA of the target word evaluation times revealed a main effect for Target valence, $F(1,21) = 18.89, p<0.001, \eta^2_p = .474$, and Phase x Position, $F(1,21) = 7.33, p<0.05, \eta^2_p = .259$, and Target valence x Position interactions, $F(1,21) = 5.52, p<0.05, \eta^2_p = .208$. The Phase x Position interaction reflects that evaluation times were faster after (than before picture viewing) for brands presented in the background, $t(21) = 3.35, p < .05$, but not for brands presented on cars, $t < 1., ns$. The Target valence x Position interaction reflects that difference in evaluation time between pleasant and unpleasant targets was larger after brands presented on cars than after brands presented in the background. Although both differences were significant, $t(21) = 5.63$ and $t(21) = 2.68$, both $p < .05$; it should be noted that differences in evaluation times between target words of different valence are likely to reflect on handedness effects and not on effects of differences in prime evaluation. Thus, H2 was not supported.

**Discussion**

As expected, brand names that had been presented with positive pictures were rated as more positive than brand names that had been presented with negative pictures. This change in rated valence occurred regardless of whether brand names had been presented on the cars or in the background of the pictures. This suggests that the affective response is for the visual as whole, at least in the case of car as the actor. The change in
explicit ratings was, however, not mirrored by a change in implicit brand evaluations. The affective priming task did not yield any evidence for an effect of pairing brands with positive or negative pictures. This result may reflect on the nature of the priming task used in Experiment 1, which employed very brief presentations of the brand names. Moreover, the brand names differed in evaluation at baseline, which is suspected from exit interviews to reflect on differences in pronounceability for the brand names.

**Experiment 2**

Experiment 2 was designed to address shortcomings of Experiment 1, to replicate the findings in the explicit measure of that experiment and to further explore the possibility of a change in evaluation in the implicit measure with different exposure conditions. In keeping with traditional thinking regarding advertising repetition and variation (Schumman & Clemons 1989), to increase the impact of exposure, duration was extended and images were repeated but varied within conditions. Given that the main effect of interest, the change in valence occurred regardless of location of presentation in Experiment 1, location of the placement of the brand name will not be varied. Thus while H1 and H2 regarding explicit and implicit affect transfer will be explored here under varied conditions; Hypotheses 3, regarding placement will not be investigated further.

**Participants.** Thirty undergraduate students, 15 female, with an average age of 21.6 years (range 18-35) completed the experiment. They provided informed consent and were compensated with $10.

**Data Collection.** The overall study was a 2 x 2 x 2 (Phase: prior to picture
viewing, after picture viewing x Valence of Image: positive or negative x Sport context: dirt biking, ice skating) design, however, as before, we include in analysis the target valence as an additional factor. The general setting and approach were the same as used in Experiment 1. However, a number of changes were made to the experimental procedure. Four novel brand names, “Amory,” “Abington,” (previously “Abinqton”) “Rowland,” and “Tolland,” (previously “Tulloind”) were “photoshopped” into four pictures of scenes from motorbike (dirtbike) races and into four scenes from ice (figure) skating. These changes to brand names were made to increase their pronounceability. As in Experiment 1, two of the pictures from each content area were positive, victory laps and artistic jumps, and two pictures from each content area displayed negative content, crashes and falls. Brand names were edited into the background of the pictures such that one brand was paired with two positive or two negative scenes from one content area. Allocation of brand name to positive or negative content was counterbalanced across participants.

As in Experiment 1, participants completed a rating session and a priming task followed by a picture viewing task, and a second set of rating and priming tasks. These tasks were followed by an assessment of contingency awareness, a rating of the pictures seen during picture viewing and a forced choice recognition task of the picture versions, content and brand, seen during picture viewing. After completion of the tasks, participants were debriefed and thanked. Several changes were made to the procedures relative to Experiment 1. Primes were presented for 107 ms during affective priming rather than for 53 ms and the allocation of response alternative to buttons was counterbalanced across participants. Eight rather than four different pictures were
presented during picture viewing, four each of motorbike racing and ice skating, two positive and two negative per sport. Each picture was shown four times retaining the number of picture presentations at 32. Data reduction and analysis was the same as in Experiment 1.

Results

Manipulation checks. Inspection of the ratings for the racing and skating pictures revealed that one participant classified all motorbike race pictures as highly positive regardless of content. Data of this participant were excluded from the subsequent analyses. Ratings were averaged across the two exemplars per category and subjected to a 2 x 2 (Valence x Sport) ANOVA, which yielded a main effect for Valence, \( F(1,28) = 143.05, p<0.001, \eta^2 = .836 \). Participants on average identified 85% of the 8 pictures in the forced choice recognition test correctly (range: 3-8). Twenty participants made one or no mistake; this indicates extensive awareness of which picture had been paired with which brand.

Affective Ratings. Figure 2 summarises the rating data from Experiment 2. As can be seen, ratings for the brands associated with positive or negative motorbike race or skating scenes did not differ before picture viewing, but did so afterwards. This was confirmed in the 2 x 2 x 2 factorial analysis (Phase x Sport x Valence) which yielded a main effect for Valence, \( F(1,28) = 8.75, p<0.01, \eta^2 = .238 \), and a Phase x Valence interaction, \( F(1,28) = 7.23, p<0.05, \eta^2 = .205 \). Post hoc tests confirmed that there was no difference between the brands before picture viewing, \( t(29) < 1., \text{ns} \), whereas a difference emerged after picture viewing, \( t(29) = 4.19, p < .01 \). H1 is supported in both sport contexts.
Affective Priming. As in Experiment 1, error rates were below 5% and are not analyzed further. Evaluation times were collapsed across the two brands associated with positive and negative pictures. As can be seen in Figure 3, target word evaluation times did not differ as a function of brand prime before exposure, but did so afterwards. Figure 3 shows average evaluation times in milliseconds that were obtained based on the inverted evaluation times used for analyses. The 2 x 2 x 2 (Phase x Valence x Target valence) confirmed this impression yielding a trend towards a three way interaction, $F(1,28) = 4.01, p=0.055, \eta_p^2 = .125$. The three-way interaction was followed up by calculating priming scores (incompatible prime-target pairs – compatible prime-target pairs; [brands paired with positive pictures-unpleasant targets + brands paired with negative pictures-pleasant targets] – [brands paired with positive pictures-pleasant targets - brands paired with negative pictures-unpleasant targets]) for each of the two phases and subjecting them to a one sample t-test. The affective priming score was significantly different from zero for the task run after the picture viewing, Mean = -0.0814, SD = 0.21, t(28) = 2.06, p < .05, but not for the task run before picture viewing, t < 1., ns. Thus, H2 is supported in Experiment 2.

Discussion

Experiment 2 yielded evidence for significant changes in implicit and explicit evaluations of brands paired with positive and with negative images relating to two different sports. This offers generalizability to the finding that presentation of brand names in the context of sporting events can convey positive or negative valence to these
The current study, even with control of the overall mood for a session, paints an overly positive picture of the likely effects of positive events as brands were exclusively paired with positive images (and likewise an overly negative view of the likely effects of negative events). Given it is likely that at any sporting event both positive and negative events may be paired with a particular brand, i.e., successful jumps and falls in the case of skating, we wanted to assess the robustness of the changes by using an exposure schedule that was not 100% positive or negative for a particular brand.

**Experiment 3**

Chowdhury, Olson and Pracejus (2008) examined the influence of mixed valence images within a single print advertisement and found that when images were of a single valence, the most extreme image determined response but when mixed valence images were utilized, a compensatory model drove response. Under a compensatory model, the overall valence that may be transferred to the brand would result from combining negatively and positively valenced images (here, in accordance to their number).

Other research has suggested that there is a greater weighting for negative information; and those in news media have given it quadruple weight against positive news (Kroloff 1988). In other contexts, findings suggest that the power of negative information against positive depends on a number of characteristics. For example in social situations, negative information is not “extra powerful” when it is not diagnostic (Skowronski & Carlston 1987) and in marketing, any negativity bias is attenuated with additional information such as brand familiarity (Ahluwalia 2002). Returning to the
current context, in sponsorship exposures, there are limited goals associated with communications. As Cornwell (2008) describes, sponsorship is an impoverished media with logo and brand name being communicated in context, but the brand is not typically seeking action (e.g., sale with a limited time, response via phone or email). Since the sponsorship context has what might be called low diagnosticity demands, a negativity bias may not be observed. Further, while the brands are fictitious and thus do not offer brand familiarity in an in depth and complex way, the repeated exposures do increase familiarity within the context and reduce the expectation of an overwhelming negativity bias due to a lack of familiarity, at least with the name. Therefore, with multiple mixed valence exposures a compensatory model is expected.

H4: Brands paired with predominantly positive (negative) valenced images will be rated as more positive (negative) after picture presentation.

H5: Brands paired with images mixed in valence will result in affective priming in keeping with the predominant valence.

Participants. Twenty-four undergraduate students, 17 female, with an average age of 21.7 years (range 18-26) participated in the experiment. They provided informed consent and were compensated with $10.

Data Collection. The overall study was a 2 x 2 x 2 (Phase: prior to picture viewing, after picture viewing x Valence of Images: predominantly positive or predominantly negative x Sport context: dirt biking, ice skating) design, however, as before, we include in analysis the target valence as an additional factor. As with Experiments 1 and 2, our interest is in resulting affective ratings and affective priming. The general setting and procedure was the same as used in Experiment 2, however, participants were presented with each of the eight sporting scenes eight times, and thus,
64 pictures in total. Moreover, the matching of brand name to picture valence was not 100% positive or negative; rather each brand was presented with pictures of one valence six times and two times with pictures of the opposite valence. So, in one counterbalanced sequence, brand name ‘Rowland’ was presented 6 times in positive skating pictures and twice in negative ones. The allocation of brands to valence categories was counterbalanced across participants. To capture contingency awareness our approach differed in this experiment. Given that participants saw all possible picture and brand combinations, the forced choice judgement “which of the two pictures did you see” was replaced with a frequency estimation task – “How often was this picture presented during picture viewing?”

Results

Manipulation checks. Inspection of the ratings for the racing and skating pictures revealed that all participants classified the positive pictures as more positive than the negative ones. Ratings were averaged across the two exemplars per category and subjected to a 2 x 2 (Valence x Sport) ANOVA, which yielded main effects for Sport, F(1,23) = 4.62, p<0.05, η² = .167, and Valence, F(1,23) = 235.80, p<0.001, η² = .911. Participants rated skating pictures and positive pictures as more positive. Participants did poorly at the frequency estimation task, overestimating the number of pictures shown, Mean = 76, SD = 16.65, and estimating the relative frequency as about 1:1 rather than 3:1. Thus, contingency awareness may have been reduced by the number of exposures and may have been made more challenging by the mixed valence exposure.

Affective Ratings. Figure 4 summarizes the rating data from Experiment 3. As can be seen, brands predominantly associated with positive and negative images were
rated differently after picture exposure, but not before. This impression was confirmed by the 2 x 2 x 2 factorial analysis (Phase x Sport x Valence) which yielded a main effect for Dominant Valence, F(1,23) = 4.63, p<0.05, η² = .168, and a trend towards a Phase x Dominant Valence interaction, F(1,23) = 4.15, p=0.053, η² = .153. Post hoc analysis confirmed a significant difference between brands associated with positive and negative pictures after exposure, t(23) = 2.70, p < .05, but not before, t(23) = 1., ns. H4 is supported.

*** Insert Figure 4 here ***

**Affective Priming.** Overall error percentages were below 5% and thus, errors are not analyzed further. The 2 x 2 x 2 (Phase x Valence x Target valence) factorial ANOVA yielded a main effect for Phase, F(1,23) = 11.70, p<0.01, η² = .337, indicating faster evaluation times after picture viewing. There was no evidence for affective priming by brands predominantly paired with positive or negative images. H5 is not supported.

**Discussion**

The rating data from Experiment 3 replicate those from Experiments 1 and 2 in that brands associated predominantly with positive images were evaluated as more positive after picture viewing than were brands predominantly associated with negative images. Thus, even a mix of images can produce changes to affective ratings and these ratings are swayed in the direction of predominating valence (e.g., more positive images produce more positive ratings). The change in brand evaluation was however, small by comparison to single valence exposure conditions, thus supporting a compensatory model. Moreover, there was no evidence for a shift in brand evaluation in the implicit measure, which had been evident in Experiment 2. Thus, reducing the association
between brand name and positive events by also including pairings with negative events (and vice versa) reduced the overall shift in evaluation seen for the brand. This loss of shift in the implicit measure was despite the more extended exposure as utilized in Experiment 2. Nonetheless, across studies the potential to move affect from images to brands has been supported.

**General Discussion**

The argument put forward in this study is that images alone can and do transfer valence from an event to a brand. These images were presented without elaboration or interpretation as one typically finds in advertising. This transfer from images has been demonstrated and some of the boundary conditions of this shift in valence have been explored. It is also important to note that these “within-subject” designs did not capitalize on developing overall affect or a prevailing mood during a session since both positive and negative exposures were utilized in a balanced presentation. This design offers a strong test of the valence transfer given the control of overall mood as well as individual characteristics. As a series of lab studies, the work does have a number of limitations, many of which might be addressed in future work.

**Limitations and Future Studies**

On obvious limitation to the current research is the static nature of the images, dynamic images of car crashes or skaters falling might be more strongly valenced, as may winners circling the track with a full accompaniment of sound and the emotional reactions of others. Moreover, sponsorship and other indirect marketing messages such
as brand placement may be accompanied by communications that follow during advertising breaks. All of these elements will influence the transfer of valence and might be considered in future studies.

In this research, valence is treated as a general construct; alternative theory suggests that affective responses may be varied. For example, Huang (1997) has argued that discrete and general negative affect may both be important in advertising. While this research achieved some generalizability across sports; sponsorships of the arts, charity and entertainment were not considered. Corporate associations related to charity have a particularly powerful potential to influence both brand related behaviors and image (Cornwell & Coote 2005; Ellen, Webb & Mohr 2006) but might be more difficult to manage due to their scrutiny when negative images arise.

While the current work sought to control individual differences through the use of a “within-subjects” design, there are individual difference variables that might influence the processing of image based sponsorship stimuli. For example, Lau-Gesk and Meyers-Levy (2009) found that in advertising, a person’s motivation level influences their response to valenced messages. Monga and John (2008) found that with information-based communications, holistic as compared to analytic thinkers were less susceptible to negative publicity with little downward assessment of brands based on information. This may hold true for image-based communications. Importantly, many individual variables that might be of interest can be readily manipulated in future studies.

The reduced image transfer in Experiment 3 resulting from the mix valence exposure suggests that a strategy of introducing positive images to off-set the influence of negative images may be worthy of consideration. In the final experiment, the mixed
images were of the sport itself. It would also be interesting to consider if sponsor controlled images such as public policy communications or advertising would work in the same way as other sport derived positive images. Future research might consider the extent to which marketer controlled images could be supplied and afford some compensation against negative images that have arisen. An important question in exploration of this strategy would be to learn if sponsor supplied images are seen as “commercial” in the context of negative events.

While for these materials, Experiment 1 did not suggest a difference in transferred valence depending on location (car or background); this topic deserves more exploration. Auto racing is, for the most part, seen at a distance during action and thus differences between foreground actor (car) and background retaining wall might be less than in other sports and activities. For example, close-up shots afforded by golf and tennis, especially viewed on high definition monitors offer an aesthetically different brand to actor (athlete, actor, singer) experience for viewers. Another location related variable of interest is the nature of logo presentation. For example, logos presented in their original corporate colors would be expected to communicate the brand more readily than those reduced to standard white on light blue presentation—which is the requirement in some sports. Does presentation in a standard font (as in this study) distance the brand from the valenced image? Finally, the extent of variation and repetition of images with positive and negative valence could be explored in naturalistic environments such as websites with a good deal of exposure control and monitoring.

This research did not investigate any subsequent purchase or consumption behaviors related to a developed affective response to a brand. A valenced feeling about
a brand might influence brand related behaviors, particularly if these emotions are in keeping expectations individuals hold about the product offering (Kim, Park & Schwartz 2010). In most instances a favorable consideration of the brand is a marketing outcome that is in keeping with strategy and objectives and is typically found in indirect marketing such as sponsorship. There is the possibility, however, that this could be a public policy concern if affective priming leads to unexamined consumption, for example in the areas of alcohol or unhealthy food.

In summary, these laboratory studies show that even brief exposures to valenced images stemming from sport sponsorship result in changes to explicit brand evaluations. Only slightly more (and varied) exposure also results in affective priming. For practitioners seeking to utilize sponsorship as a communication platform, these findings reinforce conceptual arguments regarding the potential to build image and capture the emotion of sport. As sponsorship expands as a communication platform for countries, destinations, companies and nonprofits, the process of image transfer becomes a more important mechanism to understand. Important here is that, the weight of valenced exposures, the ratio of positive to negative associated with a particular brand name, influences explicit ratings and can influence implicit affective priming. This suggests that even when unexpected negative events occur in sport sponsorship, compensating positive images might still influence image transfer.
References


Figure 1

Explicit evaluation of brand names displayed on cars or in the picture background and paired with positive or negative images before and after picture viewing in Experiment 1 (error bars indicate standard errors of the mean).
Figure 2

Explicit evaluation of brand names displayed on photos of bike races or ice skating and paired with positive or negative images before and after picture viewing in Experiment 2 (error bars indicate standard errors of the mean).
Figure 3
Target evaluation times in the implicit evaluation of brand names displayed on positive or negative images before and after picture viewing in Experiment 2.
Figure 4

Explicit evaluation of brand names displayed on photos of bike races or ice skating and paired with predominantly positive or predominantly negative images before and after picture viewing in Experiment 3 (error bars indicate standard errors of the mean).