OIR 42,4

438

Received 7 November 2016 Revised 21 March 2017 27 April 2017 4 June 2017 Accepted 5 June 2017

Sport team-endorsed brands on Facebook

Effects of game outcome (win/loss), location (home/away) and team identification on fans' brand evaluations

Joe Phua

Department of Advertising and Public Relations, Grady College of Journalism and Mass Communication, University of Georgia, Athens, Georgia, USA

Po-Lin Pan

Department of Communication, Arkansas State University, Jonesboro, Arkansas, USA, and

Kuan-Ju Chen

Department of Business Administration, National Central University, Taoyuan, Taiwan

Abstract

Purpose – Applying social identity theory, the social identity-brand equity model and excitation-transfer theory, the purpose of this paper is to examine effects of game outcome (win/loss) and location (home/away) on sport fans' brand attitude and purchase intention toward a brand endorsed by their favorite sport team on Facebook, as well as the mediating role of team identification.

Design/methodology/approach – A two (win/loss) by two (home/away) full-factorial between-subjects experiment was conducted during the US National Collegiate Athletic Association (NCAA) football season over a four-month period. Participants (n = 338), who were Facebook users and fans of a NCAA division I football team, completed an online questionnaire assessing brand attitude and purchase intention toward a team-endorsed brand on Facebook, during weeks after the team: won a home game, lost a home game, won an away game, or lost an away game. Results were analyzed using analysis of variance and bootstrapping mediation methods.

Findings – Results revealed a significant main effect for game outcome (win/loss), and a significant interaction effect between game outcome (win/loss) and game location (home/away). Team identification also mediated between game outcome (win/loss) and game location (home/away) to influence brand attitude, but not purchase intention.

Originality/value — Implications for use of social networking site (SNS)-based brand endorsements as an integral part of brands' advertising strategies were discussed. Specifically, brands utilizing SNSs to advertise to sport fans should highlight team endorsements, particularly after home game wins, and also target highly identified fans, to maximize positive SNS-based brand evaluations.

Keywords Advertising, Social identity, Social networking sites, Sport fans, Excitation-transfer, Social identity-brand equity model

Paper type Research paper



Online Information Review Vol. 42 No. 4, 2018 pp. 438-450 © Emerald Publishing Limited 1468-4527 DOI 10.1108/OIR-11-2016-0317

Introduction

Social networking sites (SNSs) have become ubiquitous in the everyday lives of people around the world, not just as a way to stay connected to their friends and family, but also to interact with other likeminded individuals based around hobbies and interests, such as sports, as well as to engage with brands. SNSs have also been incorporated as part of numerous companies' integrated marketing communications, allowing them to play functional roles to promote their brands (Baena, 2016; Stavros *et al.*, 2014). Recent research

suggests that sport fans who "like" or "follow" brands on SNSs are likely to increase their brand engagement through activities including posting, sharing and commenting on branded content, recommending products and making purchases (McCarthy *et al.*, 2014). Accordingly, SNSs have become a highly feasible medium by which brands can reach sport fans, particularly through associating with particular teams and athletes, who often act as brand endorsers on SNSs brand pages (Pronschinske *et al.*, 2012). Approaching the interplay between sport fan behavior and SNS-based marketing communications, this study applies social identity theory (Tajfel and Turner, 1986), the social identity-brand equity (SIBE) model (Underwood *et al.*, 2001) and excitation-transfer theory (Bryant and Miron, 2003; Zillmann, 1971) to examine the joint influence of game outcome (win or loss) and game location (home game or away game) on US sport fans' brand attitude, and purchase intention toward a team-endorsed brand on Facebook.

Sport fans and SNS use

SNSs are interactive websites allowing members to create online profiles articulating their personal identities, connect with others, publicly display these relationships and upload, share and view content (pictures, news, videos, etc.) posted on the sites (Phua and Jin, 2012). The interactive, multimodal nature of SNSs allow for the rapid dissemination of news and information in a viral manner, as once posted, they are immediately broadcast onto the news feeds of the originator's friend connections, whose own interactions with the posts (e.g. "liking," commenting on them), in turn, are re-broadcast to connections in their own social networks. As such, content can be transmitted through SNSs at a much faster rate, and to a much larger and more responsive audience than most traditional media, such as television, radio and print, at a much lower cost. This distinct characteristic of SNSs has made them a popular way for marketers to directly interact with their target audience online, so as to raise awareness, create engagement and drive revenue for their brands (Abeza et al., 2015; Jeon et al., 2016; Phua and Ahn, 2016). In their review of SNS use for delivery and consumption of sport, Filo et al. (2015) also found that SNSs cultivate relationships among and between consumers and brands, with increasing interaction and consumer engagement playing important roles in facilitating these relationships. In research on management of sport-related brands on SNSs, fans who see brand endorsements by one of their favorite teams or athletes are also more likely to post about the brand, purchase products and expressing increased interest in sponsorship messages (Parganas et al., 2015). As such, sport teams and athletes can be highly effective brand spokespeople for advertisers looking to use SNS brand pages to engage sport fans.

Social identity theory

Social identity is the part of a person's self-concept that derives from knowledge of membership in a social group, along with the emotional and value significance placed on the membership (Tajfel and Turner, 1986). Individuals strive to create a positive, secure social identity through elevating their self-esteem and this is achieved through favorable comparisons with, and positive differentiation from, a relevant out-group (Slater *et al.*, 2014). When sport fans engage in social group identification, e.g., with sport teams, they become interchangeable exemplars of the in-group, sharing in the glory of the team's wins and obloquy of the team's losses (Jensen *et al.*, 2016).

In the USA, sport teams often represent cities, states and universities, enabling fans to identify with them through common affiliations, such as hometowns and alma maters. As a result, fan identification is often highly enduring, and by identifying with their favorite team or athlete, fans achieve a positive social identity through intergroup differentiation from rival sport teams (Wann *et al.*, 2016). Fans experience depersonalization when highly identified with a sport team, and become especially responsive to contextually salient social

group norms. Identification with a team unites sport fans as part of the in-group providing them with feelings of belonging and solidarity, and creating an "us" vs "them" atmosphere. Fans psychologically become part of the sport team they support, sharing in its glory of winning and agony of defeat and leading to high levels of in-group bias and out-group derogation (Rees *et al.*, 2015; Wann *et al.*, 2016). Due to the need for in-group positive distinctiveness, sport fans are highly strategic when associating with winning teams and dissociating from losing teams, using these behaviors to manage their fan-based social identities so as to reap maximum benefit from their fan activities (Bernache-Assollant *et al.*, 2016; Dwyer *et al.*, 2016; Jensen *et al.*, 2016; Kunkel *et al.*, 2016; Mudrick *et al.*, 2016). Based on this assumption of social identity theory, we propose that fans' positive feelings toward their favorite team after a win will be transferred to a team-endorsed brand on Facebook, resulting in more positive evaluations of the brand, while their negative feelings toward the team after a loss will result in more negative evaluations of the brand.

SIBE model

Based on social identity theory, Underwood *et al.* (2001) developed the SIBE model to examine the role of social identification in the creation of brand equity. They proposed social identification as a mechanism that can activate an emotional connection between sport fans and sport team and promote consumer-based brand equity. Furthermore, four marketplace characteristics—history, group experience, ritual and venue—are identified to increase social identification with the brand. Through identifying these potential factors toward social identification, the SIBE model provides brand managers with a starting point to develop strategies that lead to increased social identification with the brand in the context of sports (Watkins, 2014).

For most sport fans, a connection to the history of sport team is a key factor toward their team identification, activates them to develop attachments to the team and cultivates a sense of obligation to publicly support the team (Boyle and Magnusson, 2007; Richelieu and Pons, 2009; Wakefield, 2016). Incorporating the history of a sport team into marketing strategies also provides an outlet for brand differentiation. As the history of a sport team is emphasized, sport fans can be better equipped to connect themselves to the brand, which would result in positive influences on brand awareness and image (Underwood *et al.*, 2001). Group experience leads sport fans to enhance their in-group perception and develop their natural bias against the out-group (Underwood *et al.*, 2001). Hence, the common bond is cultivated among sport fans to separate them from just being spectators. Boyle and Magnusson (2007) suggested that heightened social identification with sport teams moves sport fans from being spectators to being active participants whose role in sporting events is perceived to be tantamount to team success. Phua (2010) further added that the common bond among sport fans creates an in-group sense of solidarity and an "us" vs "them" atmosphere when facing their competitive team and their fans.

Underwood *et al.* (2001) stated that ritual participation would foster an emotional connection of sport fans with sport team and increase their social identification with sport team. Simply stated, participation in sport team ritual promotes sport fans to publicly demonstrate their team identification and leads to increased social identification with sport team (Boyle and Magnusson, 2007). On the other hand, Underwood *et al.* (2001) suggested that the venue where the sport team plays is a key factor activating a connection between sport fans and sport team. Specifically, some physical facility in which sport team plays is attractive to sport fans as actual sport viewership provides a tangible representation of an intangible product. Moreover, Reysen *et al.* (2012) examined fan reaction to corporate renaming of a historic stadium and found that sport fans believe that changing the stadium's name would hurt sport team by losing an element of distinctiveness that separates sport team from competitors.

In the SIBE model, Underwood *et al.* (2001) suggested that social identification is the point at which consumers create an emotional connection with brands. In the context of sports, team identification is used interchangeably with social identification (Underwood *et al.*, 2001). Therefore, team identification is defined as the commitment and involvement sport consumers have with organizations (Sutton *et al.*, 1997) and influences sport fans' self-concept to the point that team success and failure would affect their self-esteem (Wann *et al.*, 2016). For highly identified sport fans, being a team follower is an integral component of their social identity (Wann and Branscombe, 1993). Boyle and Magnusson (2007) found that team identification that serves as mechanism for social interaction and identification with a desired reference group has a significant positive effect on brand equity. Simply stated, the heightened connection between sport fans and sport teams is assumed to build brand equity in the mind of consumers.

Excitation-transfer theory

Excitation-transfer theory (Bryant and Miron, 2003; Zillmann, 1971), meanwhile, proposes that residual arousal from prior stimuli can amplify the excitatory response to a subsequent stimulus, even though the hedonic valences of the stimuli differ, with the result that an individual has a stronger affective reaction to the subsequent stimulus. In prior advertising-related research, excitement from prior stimuli, including sexual, violent and humorous content, have been found to increase consumers' physiological arousal which, in turn, lead to more positive attitudes toward advertised brands and increased brand recall (Cho and Yoo 2014; Das *et al.*, 2015; Jeong *et al.*, 2011).

Additionally, sport teams and athletes can be highly effective endorsers for brands and products, due to sport fans' strong and enduring connections to their favorite teams and athletes (Bauer *et al.*, 2008; Bush *et al.*, 2004; Levin *et al.*, 2001; Phua, 2010). This positive effect on fans' brand evaluations is amplified when an athlete or sport team endorses a congruent sport-related brand (Koernig and Boyd, 2009; McDaniel, 1999). However, negative information about a celebrity endorser can also lower consumers' attitudes toward endorsed brands (Amos *et al.*, 2008; Jin and Phua, 2014; Till and Shimp, 1998). Based on the tenets of excitation-transfer theory, we also propose in this study that the arousal sport fans experience after their favorite team wins a game can be transferred to team-endorsed brands. As such, we hypothesize that due to the excitation-transfer effect, sport fans would evaluate a team-endorsed brand on Facebook more positively after their team wins a game, than after their team loses:

H1. Sport fans will have significantly more positive (a) brand attitude and (b) purchase intention, toward a team-endorsed brand on Facebook after a win, compared to after a loss.

Additionally, where a game is played (home or away game) can also have a strong influence on fans' self-enhancement behaviors (Smith, 2005). The home advantage in sport arises from a psychological state in which athletes and fans develop territoriality over their home arena, resulting in a strong desire to defend their home territory (Neave and Wolfson, 2003). When games are played on home turf, athletes have reported higher site familiarity (Gayton *et al.*, 2001), lower travel fatigue (Brown *et al.*, 2002), greater self-efficacy and confidence (Bray *et al.*, 2002) as underlying factors influencing performance. Furthermore, sport fans have also reported being more reactive to their team's performance when a game is played on home turf (Strauss, 2002), resulting in greater positive team association after wins and greater negative team dissociation after losses (Bernache-Assollant *et al.*, 2016; Dalakas *et al.*, 2004; Jensen *et al.*, 2016; Mudrick *et al.*, 2016). Based on excitation-transfer theory, when a team wins on home turf, residual excitement from the win may be more strongly transferred to a team-endorsed brand on Facebook than an away win. Conversely, when the

team loses a home game, residual disappointment from the loss may also be more readily transferred to the same team-endorsed brand than an away loss. Hence, we hypothesize that due to the excitation-transfer effect, game location (home or away) will interact with game outcome (win or loss) to influence sport fans' brand evaluations:

H2. Sport fans will have significantly more positive (a) brand attitude and (b) purchase intention, toward a team-endorsed brand on Facebook after a home game win, compared to after an away game win, after an away game loss and after a home game loss.

Social identification has been shown to exert a strong influence on fans' brand intentions (Campbell et al., 2004; Carlson and Donavan, 2008; Madrigal, 2000). Particularly, highly identified fans are less likely to develop negative feelings toward their favorite team after a loss, and remain loyal to the team over a longer period of time (End et al., 2002; Jensen et al., 2016; Kwon et al., 2008; Rees et al., 2015). Based on this, we hypothesize that sport fans' identification with a sport team would play an intervening role in the relationship between game outcome (win or loss) and game location (home or away) on their SNS-based brand evaluations:

H3. Identification with a sport team will mediate the relationship between game outcome (win or loss) and game location (home or away) on sport fans' (a) brand attitude, and (b) purchase intention, of a team-endorsed brand on Facebook.

Method

Procedure and design

A two (game outcome: win or loss) by two (game location: home game or away game) between-subjects full-factorial experiment was conducted during the US National Collegiate Athletic Association (NCAA) football season. Participants were recruited through the research pool of a major US university with a NCAA division I football team. A US university football fan sample was chosen, and deemed to be relevant for the study, since we used games played during the NCAA football season as a basis for our experiment. Current university students form a major proportion of university football fans, and are also avid SNS users (Gottfried and Shearer, 2016).

An online questionnaire created on Qualtrics.com was posted to the research pool during four weeks immediately after the university team: won a home game, lost a home game, won an away game or lost an away game. Each questionnaire was posted from the evening right after the game ended (Saturday), until the following Friday before the next game. Participants were first asked to read carefully a news article indicating the results of the week's game, noting whether the team won or lost the game and where the game was played (home or away). Actual news articles from ESPN.com reporting game results were used. After reading the news article, they were shown the Facebook brand page for Nike, with the university football team as brand spokespersons. Participants were asked to carefully examine the Facebook brand page, noting the brand (Nike) and the sport team (football team) endorsing the brand. They then answered a series of questions based on previously validated measures. Facebook was chosen because it is currently the most popular SNS among US online adults (Gottfried and Shearer, 2016). The brand Nike was chosen, given that it is an actual brand endorsed by the university football team, with the Nike logo prominently displayed on athletes' uniforms, as well as its congruency with university football fans. Participants who took part in the experiment in a prior week were excluded from the study in subsequent weeks.

Participants

A total of 353 participants enrolled at the US university took part in the study. In total, 15 participants who did not use Facebook were excluded from the analysis, with

338 participants included in the final sample. All participants identified as students of the US university and also as fans of the university football team. For gender, 176 were male (52.1 percent) and 162 female (47.9 percent). For race/ethnicity, 279 were Caucasians (82.5 percent), 28 African-Americans (8.3 percent), 13 Hispanics (3.8 percent) and 12 Asians (3.6 percent). Mean age was 20.4 years. For Facebook use, 204 checked the site several times a day (60.4 percent), 98 once a day (29.0 percent), 16 once every few days (4.7 percent), 10 once a week (3.0 percent) and 10 less than once a week (3.0 percent). For number of Facebook friends, 292 had more than 400 friends (86.4 percent), 16 had 301–400 friends (4.7 percent), 11 had 201–300 friends (3.3 percent), 7 had 101–200 friends (2.1 percent) and 12 had 100 friends or less (3.6 percent). For main device used to access Facebook, 201 used their mobile phone (59.5 percent), 66 used their laptop (19.5 percent), 39 used their desktop (11.5 percent), 28 used their tablet computer (8.3 percent) and 4 used other devices (1.2 percent). Mean time spent on the internet per day was $5.2 \, h$ (SD = 1.8) and mean time spent on Facebook per day was $1.3 \, h$ (SD = 1.0). Mean years as a Facebook member was $4.3 \, (SD = 1.3)$, and mean number of teams "liked" on Facebook was $5.5 \, h$ (SD = 3).

Measures

Dependent measures were assessed using previously validated scales. We selected specific scales based on their use in prior, related studies on social media, advertising and sport fans. Brand attitude was assessed using six items from Bruner (1998), which asked participants to indicate how they felt about the brand advertised in the Facebook brand page (unappealing/appealing, unpleasant/pleasant, boring/interesting, dislike/like, negative/positive, bad/good) on seven-point semantic differential scales, Cronbach's $\alpha = 0.93$. Purchase intention used four items modified from Baker and Churchill (1977), including "I would like to try this brand," and "I would buy other products of this brand," Cronbach's $\alpha = 0.88$. Identification with the team was measured using Wann and Branscombe's (1993) Sport Spectator Identification Scale, which has six items assessing fans' involvement and psychological connection to a sport team, on seven-point Likert scales, including "How important is it to you that the team wins?" and "How strongly do you see yourself as a fan of the team?" Cronbach's $\alpha = 0.94$.

Results

Results of a two-way ANOVA indicated there was a significant main effect for game outcome (F (1,334) = 69.1, p < 0.001, partial η^2 = 0.04) on brand attitude, which supported H1a. Mean for brand attitude was 6.10 (SD = 0.84) after a win, compared to 4.32 (SD = 1.07) after a loss. A significant interaction effect (F (1,334) = 38.89, p < 0.001, partial η^2 = 0.12) was also obtained between game outcome and game location, supporting H2a. A post hoc test revealed that brand attitude was significantly higher for a home game win (M = 6.24, SD = 0.69), compared to an away game win (M = 6.07, SD = 0.86), an away game loss (M = 5.44, SD = 0.69), and a home game loss (M = 3.91, SD = 0.86) (Figure 1).

Results of a two-way ANOVA indicated a significant main effect for game outcome $(F(1,334)=121.33,\ p<0.001,\ partial\ \eta^2=0.05)$ on purchase intention, supporting H1b. Mean for purchase intention was 5.95 (SD = 0.93) after a win, compared to 4.18 (SD = 1.05) after a loss. A significant interaction effect $(F(1,334)=16.15,\ p<0.001,\ partial\ \eta^2=0.05)$ was also obtained between game outcome and game location, supporting H2b. A post hoc test revealed purchase intention was significantly higher for a home game win $(M=6.39,\ SD=0.98)$, compared to an away game win $(M=5.86,\ SD=0.89)$, an away game loss $(M=4.61,\ SD=0.93)$, and a home game loss $(M=3.96,\ SD=0.86)$ (Figure 2).

This study used identification with a team as a mediator that may affect the relationship between game outcome and game location. Preacher and Hayes' (2008) SPSS mediation macro, across 10,000 bootstrap samples, was used to test whether identification mediated

444

Figure 1.

Interaction between

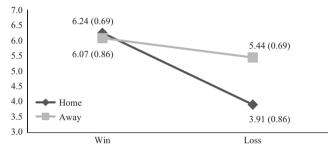
game outcome and

game location on

brand attitude

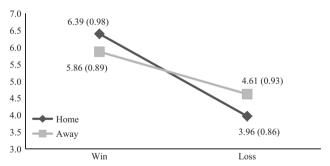
between game outcome/game location and brand evaluations. The experimental condition was re-coded as dummy variables, with a home game win entered as the IV, and away game win, home game loss and away game loss, as covariates.

Table I showed that the joint effects of game outcome and game location significantly led sport fans to various levels of brand attitude, $\beta = 0.47$, t (336) = 3.96, p < 0.01. Moreover, as indicated in Figure 3, using team identification as a mediator, the joint effects of game outcome and game location did not significantly direct brand attitude, $\beta = 0.09$, t(336) = 0.28, b = 0.79, but the indirect effect emerged to yield significant influences on brand attitude, Sobel test statistic = 0.26, SE = 0.12, Z= 2.29, p < 0.05. Hence, team identification mediated the joint effects of game outcome and game location on brand attitude, supporting H3a.



Note: Numbers in the body of the figure represent means with standard deviations in parentheses

Figure 2. Interaction between game outcome and game location on purchase intention



Note: Numbers in the body of the figure represent means with standard deviations in parentheses

Table I. Team identification as a mediator toward brand attitude and purchase intention	Predictor		
	Game outcome + game location		
	Notes: ***p < 0.01		

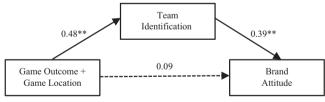
		Direct effects Without mediator With mediator		Indirect effects bootstrapping significance	
Predictor	Dependent variables	β	β	p	Mediation
Game outcome + game location	Brand attitude Purchase intention	0.47** 0.58**	0.09 0.39***	0.010 0.31	Full No
Notes: ** $p < 0.01$					

Similarly, Table I also demonstrated that the joint effects of game outcome and game location significantly changed sport fans' purchase intention, $\beta = 0.58$, t (336) = 8.03, p < 0.01. As indicated in Figure 4, when team identification was used as a mediator, the joint effects of game outcome and game location still significantly directed purchase intention, $\beta = 0.39$, t (336) = 4.86, p < 0.01, but the indirect effect was not significantly found on purchase intention, Sobel test statistic = 0.088, SE = 0.064, Z = 0.93, p = 0.31. Therefore, H3b was not supported, indicating that team identification did not mediate the joint effects of game outcome and game location on purchase intention.

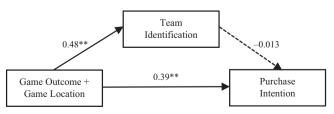
Discussion

Applying social identity theory, the SIBE model, and excitation-transfer theory, this study examines sport fans' perceptions of their favorite team's endorsed brands on SNSs based on game outcome (win or loss) and game location (home or away game). Results indicate that game outcome has a significant impact on fans' brand evaluations. After the team wins a game, fans have significantly more positive brand attitude, and purchase intention, toward a team-endorsed brand. Conversely, after the team loses a game, fans exhibit more negative brand attitude, and purchase intention toward the same brand. This finding suggests that after winning a game, sport fans engage in self-enhancement by linking themselves positively to the team, and this positive feeling toward the team is then carried over to the team-endorsed brand (Nike) on Facebook through the process of excitation-transfer. Similarly, after losing a game, fans dissociate themselves from the team, transferring their negative feelings toward the tem to the team-endorsed brand on Facebook. As previously explained, sport fans often outwardly display their team allegiances in order to manage their social identities (Bernache-Assollant et al., 2016; Dwyer et al., 2016; Jensen et al., 2016). Sport teams and athletes are highly effective brand ambassadors due to fans' strong connections with them (Bauer et al., 2008; Bush et al., 2004; Levin et al., 2001). It is fair to state that sport fans' self-enhancing behaviors can be transferred to brands endorsed by their favorite team, with victories positively influencing, and losses negatively impacting evaluations of endorsed brands.

Another interesting finding in this study is that game outcome (win or loss) interacts with game location (home or away) to influence sport fans' brand evaluations. Specifically, brand attitude and purchase intention are highest when the team wins a home game,



Notes: Dashed line represents non-significant path. **p<0.01



Notes: Dashed line represents non-significant path. **p<0.01

Figure 3.
Team identification as a mediator toward the joint effects of game outcome and game location on brand attitude

Figure 4.
Team identification as a mediator toward the joint effects of game outcome and game location on purchase intention

followed by when the team wins an away game, when the team loses an away game, and when the team loses a home game. As previously discussed, when a sport team plays a home game, fans perceive the team as having a home field advantage (Smith, 2005). As such, home wins often result in greater positive associations, and home losses result in greater negative associations, due to the team's geographical proximity to their fans (Bernache-Assollant *et al.*, 2016; Dalakas *et al.*, 2004; Mudrick *et al.*, 2016). Excitation-transfer is greater for home games than away games, and, therefore, brand evaluations are most positive when a team wins on home ground, but at the same time, is also most negative when the team loses on home ground. Therefore, game location plays an important role, along with game outcome (e.g., win or loss), on influencing fan evaluations of team-endorsed brands.

Moreover, identification with the team plays a mediating role in the relationship between game outcome/game location and brand attitude. When identification is held constant, game outcome and game location no longer have a direct effect on brand attitude toward a team-endorsed brand. Therefore, the more highly identified a sport fan is with a team, the more likely he or she is to have positive evaluations of team-endorsed brands, regardless of game outcome and game location. This finding offers practical insights into brand endorsements in sports arenas, indicating that brand endorsements are more likely to yield a more positive effect on fans who identify more highly with their favorite team or athlete, as they are less likely to be influenced by whether the team or athlete wins or loses a game, or by where the game is played.

However, the study does not find support for identification mediating the relationship between game outcome/game location and purchase intention. Sport fans exhibit greater purchase intention of a team-endorsed brand after a win (particularly after a home game win), and less purchase intention after a loss (particularly after a home game loss), but this is not influenced by their team identification. The reason may be that purchase intention is a short-term and more immediate brand outcome (Percy and Rosenbaum-Elliott, 2011), with fans being most or least likely to purchase team-endorsed brands depending on game outcome and game location, rather than on their identification.

Finally, the study confirms Underwood *et al*'s (2001) SIBE model that a heightened connection between sport fans and sport teams would promote consumer-based brand equity. Specifically, game outcome activates sport fans' bond with sport team and creates an "us" vs "them" atmosphere (Phua, 2010), which would yield significant effects on brand attitude and purchase intention. Similarly, both team identification and game location serve as two marketplace characteristics that significantly influence brand attitude and purchase intention in the context of mediated sports. Although the study finds that team identification only mediates the joint effects of game outcome and game location on brand attitude, but not purchase intention, another theoretical insight can be added into the SIBE model. That is, the levels of connection between sport fans and team-endorsed brands would differentiate significantly based on how strongly sport fans identify with their favorite team.

Limitations and implications

Some limitations emerge in this study. First, the study did not take into account game score (i.e. how many points did the team win or lose by) and degree of rivalry between two teams playing a game. It is likely that the final game score, as well as whether the opponent team is seen as a strong or weak rival, would impact fans' self-enhancement strategies after wins and losses. Second, the study only took into account fans' brand evaluations after a team's win or loss of one game, and did not examine whether a team's performance over the entire athletic season has an impact on fans' brand evaluations. For instance, a team may win a game in one week, but lose several consecutive games in subsequent weeks. Future studies should examine sport fan evaluations of team-endorsed brands over a longer period of wins and losses, as well as whether wins or losses in previous and subsequent weeks have an additive effect. Third, only one brand (Nike) was

included in the experimental stimuli. Even though the brand is congruent with the team and is currently endorsed, with its logo embossed on players' uniforms, there may be different implications based on brand category (e.g. high vs low involvement, utilitarian vs hedonic etc.). Additionally, since Nike is a widely recognizable global brand, prior attitudes toward the brand may confound our results. Future studies may examine a wider variety of endorsed brands, and also control for potential confounding effects of prior brand attitudes. Fourth, experimental stimuli were only included for Facebook. Other SNSs (e.g. Instagram, Snapchat, etc.) may elicit different degrees of brand evaluations. Future research should utilize experimental stimuli showcasing other SNSs. Fifth, our study examined NCAA football using a US university student sample. Future research should assess additional sports using a general sport fan sample, in order for results to be more generalizable. Finally, this study also did not consider time of exposure to the ad from the win/loss. Future research should vary the time lapse between game outcome and ad exposure.

This experimental study extends research in sport fans' SNS-based brand consumption behaviors during the game season, by examining fan evaluations of a brand (Nike) endorsed by their favorite team on Facebook, based on game outcome (win or loss) and game venue (home or away). Findings suggest that game outcome significantly impacts sport fans' brand attitude and purchase intention toward the team-endorsed brand on SNSs, and that fans exhibit more positive brand evaluations after the team wins a game than after the team loses a game. Game location also interacts with game outcome to influence sport fans' brand evaluations. Specifically, fans evaluate the team-endorsed brand on SNSs most positively when the team wins a home game, followed by when the team wins an away game, when the team loses an away game and when the team loses a home game. Additionally, identification with the team mediates the relationship between game outcome and game location to affect sport fans' brand attitudes. Regardless of game outcome and game location, highly identified fans have more positive attitude toward the team-endorsed brand on SNSs than less highly identified fans.

Through examining sport fans' SNS-based brand consumption behaviors based on game outcome and game location, and its impact on evaluations of SNS-based team-endorsed brands during the game season, sport sponsors and brand managers can reap positive benefits for their advertising and marketing campaigns by associating their brands with winning teams and athletes. Brands that highlight their endorsement relationships with teams after wins, adding more updates, posts, pictures, videos and other content to SNSs during winning weeks, particularly after home game wins, should be able to most effectively increase positive brand evaluations through SNSs. Brands that target highly identified fans are also likely to build a stronger brand image, as these fans are more likely to have positive evaluations of endorsed brands regardless of wins or losses.

In conclusion, sport fans employ self-enhancement strategies with regards to the victories and losses of their favorite teams and athletes, in order to achieve and maintain a positive social identity. Sport fans' positive association with their favorite teams during winning weeks, and negative association with teams during losing weeks, can significantly influence their perceptions of team-endorsed brands due to the process of excitation-transfer, which is stronger for home games than for away games. Brands' advertising and marketing strategies can be impacted by both game outcome and game location due to the transfer of fans' feelings toward their favorite teams and athletes to brands endorsed by these teams and athletes. The immediacy of SNSs for transmitting news, information and brand-related content can be highly efficacious for advertising and marketing campaigns. As such, brands utilizing sport teams and athletes as endorsers should include SNSs as part of their advertising and marketing efforts, so as to more effectively engage sport fans, and reap positive brand-related benefits online.

References

- Abeza, G., O'Reilly, N., Seguin, B. and Nzindukiyimana, O. (2015), "Social media scholarship in sport management research: a critical review", *Journal of Sport Management*, Vol. 29 No. 6, pp. 601-618.
- Amos, C., Holmes, G. and Strutton, D. (2008), "Exploring the relationship between celebrity endorser effects and advertising effectiveness", *International Journal of Advertising*, Vol. 27 No. 2, pp. 209-234.
- Baena, V. (2016), "Online and mobile marketing strategies as drivers of brand love in sports teams: findings from real Madrid", *International Journal of Sports Marketing and Sponsorship*, Vol. 17 No. 2, pp. 202-218.
- Baker, M.J. and Churchill, G.A. Jr (1977), "The impact of physically attractive models on advertising evaluations", *Journal of Marketing Research*, Vol. 14 No. 4, pp. 538-555.
- Bauer, H.H., Stokburger-Sauer, N.E. and Exler, S. (2008), "Brand image and fan loyalty in professional team sport: a refined model and empirical assessment", *Journal of Sport Management*, Vol. 22 No. 2, pp. 205-226.
- Bernache-Assollant, I., Chantal, Y., Bouchet, P. and Lacassagne, M.F. (2016), "Understanding the consequences of victory amongst sport spectators: the mediating role of BIRGing", *European Journal of Sport Science*, Vol. 16 No. 6, pp. 719-725.
- Boyle, B.A. and Magnusson, R. (2007), "Social identity and brand equity formation: a comparative study of collegiate sports fans", *Journal of Sport Management*, Vol. 21 No. 4, pp. 497-520.
- Bray, S.R., Jones, M.V. and Owen, S. (2002), "The influence of competition location on athletes' psychological states", *Journal of Sport Behavior*, Vol. 25 No. 3, pp. 231-242.
- Brown, T.D., Van Raalte, J.L., Brewer, B.W., Winter, C.R., Cornelius, A.E. and Andersen, M.B. (2002), "World Cup soccer home advantage", *Journal of Sport Behavior*, Vol. 25 No. 2, pp. 134-144.
- Bruner, G.C. (1998), "Standardization and justification: do Aad scales measure up?", *Journal of Current Issues & Research in Advertising*, Vol. 20 No. 1, pp. 1-18.
- Bryant, J. and Miron, D. (2003), "Excitation-transfer theory and three-factor theory of emotion", in Bryant, J., Roskos-Ewoldsen, D. and Cantor, J. (Eds), *Communication and Emotion: Essays in Honor of Dolf Zillmann*, Lawrence Erlbaum, Mahwah, NJ, pp. 31-59.
- Bush, A.L., Martin, C.A. and Bush, V.D. (2004), "Sports celebrity influence on the behavioral intentions of generation Y", *Journal of Advertising Research*, Vol. 44 No. 1, pp. 108-118.
- Campbell, R.M., Aiken, D. and Kent, A. (2004), "Beyond BIRGing and CORFing: continuing the exploration of fan behavior", *Sport Marketing Quarterly*, Vol. 13 No. 3, pp. 151-157.
- Carlson, B.D. and Donavan, D.T. (2008), "Concerning the effect of athlete endorsements on brand and team-related intentions", *Sport Marketing Quarterly*, Vol. 17 No. 3, pp. 154-162.
- Cho, E. and Yoo, S.C. (2014), "Effects of violent television programs on advertising effectiveness among young children: findings from a field experiment of kindergarten samples in South Korea", International Journal of Advertising, Vol. 33 No. 3, pp. 557-578.
- Dalakas, V., Madrigal, R. and Anderson, K.L. (2004), "We are number one! The phenomenon of basking in reflected glory and its implications for sports marketing", in Kahle, L.R. and Riley, C. (Eds), Sports Marketing and the Psychology of Marketing Communication, Lawrence Erlbaum, Mahwah, NJ, pp. 67-79.
- Das, E., Galekh, M. and Vonkeman, C. (2015), "Is sexy better than funny? Disentangling the persuasive effects of pleasure and arousal across sex and humor appeals", *International Journal of Advertising*, Vol. 34 No. 3, pp. 406-420.
- Dwyer, B., Achen, R.M. and Lupinek, J.M. (2016), "Fantasy vs. reality: exploring the BIRGing and CORFing behavior of fantasy football participants", Sport Marketing Quarterly, Vol. 25 No. 3, pp. 152-165.
- End, C.M., Dietz-Uhler, B., Harrick, E.A. and Jacquemotte, L. (2002), "Identifying with winners: a reexamination of sports fans' tendency to BIRG", Journal of Applied Social Psychology, Vol. 32 No. 5, pp. 1017-1030.
- Filo, K., Lock, D. and Karg, A. (2015), "Sport and social media research: a review", *Sport Management Review*, Vol. 18 No. 2, pp. 166-181.

Sport team-

endorsed

brands on

Facebook

- Gayton, W.F., Broida, J. and Elgee, L. (2001), "An investigation of coaches' perceptions of the causes of home advantage", Perception and Motor Skills, Vol. 92 No. 3, pp. 933-936.
- Gottfried, J. and Shearer, E. (2016), "News use across social media platforms", available at: www.journalism. org/files/2016/05/PJ_2016.05.26_social-media-and-news_FINAL-1.pdf (accessed November 6, 2016).
- Jensen, J.A., Turner, B.A., Delia, E.B., James, J., Greenwell, T.C., McEvoy, C.D., Ross, S., Seifried, C. and Walsh, P. (2016), "Forty years of BIRGing: new perspectives on Cialdini's seminal studies", *Journal of Sport Management*, Vol. 30 No. 2, pp. 149-161.
- Jeon, H., Ahn, H.J. and Yu, G.J. (2016), "What makes people react to the posts on the brand pages of mobile social network games?", Online Information Review, Vol. 40 No. 3, pp. 435-448.
- Jeong, E.J., Bohil, C.J. and Biocca, F.A. (2011), "Brand logo placements in violent games", Journal of Advertising, Vol. 40 No. 3, pp. 59-72.
- Jin, S.A.A. and Phua, J. (2014), "Following celebrities' tweets about brands: the impact of twitter-based electronic word-of-mouth on consumers' source credibility perception, buying intention, and social identification with celebrities", *Journal of Advertising*, Vol. 43 No. 2, pp. 181-195.
- Koernig, S.K. and Boyd, T.C. (2009), "To catch a tiger or let him go: the match-up effect and athlete endorsers for sport and non-sport brands", *Sport Marketing Quarterly*, Vol. 18 No. 1, pp. 15-37.
- Kunkel, T., Doyle, J.P., Funk, D.C., Du, J. and McDonald, H. (2016), "The development and change of brand associations and their influence on team loyalty over time", *Journal of Sport Management*, Vol. 30 No. 2, pp. 117-134.
- Kwon, H.H., Trail, G.T. and Lee, D. (2008), "The effects of vicarious achievement and team identification on BIRGing and CORFing", *Sport Marketing Quarterly*, Vol. 17 No. 4, pp. 209-217.
- Levin, A.M., Joiner, C. and Cameron, G. (2001), "The impact of sports sponsorship on consumers' brand attitudes and recall: the case of NASCAR fans", *Journal of Current Issues and Research in Advertising*, Vol. 23 No. 2, pp. 23-31.
- McCarthy, J., Rowley, J., Jane Ashworth, C. and Pioch, E. (2014), "Managing brand presence through social media: the case of UK football clubs", *Internet Research*, Vol. 24 No. 2, pp. 181-204.
- McDaniel, S.R. (1999), "An investigation of match-up effects in sport sponsorship advertising: the implications of consumer advertising schemas", Psychology and Marketing, Vol. 16 No. 2, pp. 163-184.
- Madrigal, R. (2000), "The influence of social alliances with sports teams on intentions to purchase corporate sponsors' products", *Journal of Advertising*, Vol. 29 No. 4, pp. 13-24.
- Mudrick, M., Miller, M. and Atkin, D. (2016), "The influence of social media on fan reactionary behaviors", *Telematics and Informatics*, Vol. 33 No. 4, pp. 896-903.
- Neave, N. and Wolfson, S. (2003), "Testosterone, territoriality, and the home advantage", *Physiology and Behavior*, Vol. 78 No. 2, pp. 269-275.
- Parganas, P., Anagnostopoulos, C. and Chadwick, S. (2015), "You'll never tweet alone: managing sports brands through social media", *Journal of Brand Management*, Vol. 22 No. 7, pp. 551-568.
- Percy, L. and Rosenbaum-Elliott, R. (2011), Strategic Advertising Management, 3rd ed., Oxford University Press, New York, NY.
- Phua, J. (2010), "Sports fans and media use: influence on sports fan identification and collective self-esteem", *International Journal of Sport Communication*, Vol. 3 No. 2, pp. 190-206.
- Phua, J. and Ahn, S.J. (2016), "Explicating the 'like' on facebook brand pages: the effect of intensity of facebook use, number of overall 'likes', and number of friends' 'likes' on consumers' brand outcomes", *Journal of Marketing Communications*, Vol. 22 No. 5, pp. 544-559.
- Phua, J. and Jin, S.A.A. (2012), "Finding a home away from home: the use of social networking sites by Asia-Pacific students in the United States for bridging and bonding social capital", *Asian Journal of Communication*, Vol. 21 No. 5, pp. 504-519.
- Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavioral Research Methods*, Vol. 40 No. 3, pp. 879-891.

- Pronschinske, M., Groza, M.D. and Walker, M. (2012), "Attracting Facebook 'fans': the importance of authenticity and engagement as a social networking strategy for professional sport teams", *Sport Marketing Quarterly*, Vol. 21 No. 4, pp. 221-231.
- Rees, T., Haslam, S.A., Coffee, P. and Lavallee, D. (2015), "A social identity approach to sport psychology: principles, practice, and prospects", Sports Medicine, Vol. 45 No. 8, pp. 1083-1096.
- Reysen, S., Snider, J.S. and Branscombe, N.R. (2012), "Corporate renaming of stadiums, team identification and threat to distinctiveness", *Journal of Sport Management*, Vol. 26 No. 4, pp. 350-357.
- Richelieu, A. and Pons, F. (2009), "If brand equity matters, where is the brand strategy? A look at Canadian hockey teams in the NHL", *International Journal of Sport Management and Marketing*, Vol. 5 Nos 1-2, pp. 162-182.
- Slater, M.J., Coffee, P., Barker, J.B. and Evans, A.L. (2014), "Promoting shared meanings in group memberships: a social identity approach to leadership in sport", *Reflective Practice*, Vol. 15 No. 5, pp. 672-685.
- Smith, D.R. (2005), "Disconnects between popular discourse and home advantage research: What can fans and media tell us about the home advantage phenomenon?", *Journal of Sports Science*, Vol. 23 No. 4, pp. 351-364.
- Stavros, C., Meng, M.D., Westberg, K. and Farrelly, F. (2014), "Understanding fan motivation for interacting on social media", Sport Management Review, Vol. 17 No. 4, pp. 455-469.
- Strauss, B. (2002), "The impact of supportive spectator behavior on performance in team sports", International Journal of Sport Psychology, Vol. 33 No. 4, pp. 372-390.
- Sutton, W.A., McDonald, M.A., Milne, G.R. and Cimperman, J. (1997), "Creating and fostering fan identification in professional sports", *Sports Marketing Quarterly*, Vol. 6 No. 1, pp. 15-22.
- Tajfel, H. and Turner, J.C. (1986), "The social identity theory of intergroup behavior", in Worchel, S. and Austin, W. (Eds), *Psychology of Intergroup Relations*, Nelson Hall, Chicago, IL, pp. 7-24.
- Till, B.D. and Shimp, T.A. (1998), "Endorsers in advertising: the case of negative celebrity information", Journal of Advertising, Vol. 27 No. 1, pp. 67-82.
- Underwood, R., Bond, E. and Baer, R. (2001), "Building service brands via social identity: Lessons from the sports marketplace", *Journal of Marketing Theory and Practice*, Vol. 9 No. 1, pp. 1-13.
- Wakefield, K. (2016), "Using fan passion to predict attendance, media consumption and social media behaviors", *Journal of Sport Management*, Vol. 30 No. 3, pp. 229-247.
- Wann, D.L. and Branscombe, N.L. (1993), "Sports fans: measuring degree of identification with their team", *International Journal of Sport Psychology*, Vol. 24 No. 1, pp. 1-17.
- Wann, D.L., Havard, C.T., Grieve, F.G., Lanter, J.R., Partridge, J.A. and Zapalac, R.K. (2016), "Investigating sport rivals: number, evaluations and relationship with team identification", *The Journal of Fandom Studies*, Vol. 4 No. 1, pp. 71-88.
- Watkins, B.A. (2014), "Revisiting the social identity-brand equity model: an application to professional sports", *Journal of Sport Management*, Vol. 28 No. 4, pp. 471-480.
- Zillmann, D. (1971), "Excitation transfer in communication-mediated aggressive behavior", Journal of Experimental Social Psychology, Vol. 7 No. 4, pp. 419-434.

Corresponding author

Joe Phua can be contacted at: joephua@uga.edu