Comparing consumers' in-group-favor and out-group-animosity processes within sports sponsorship

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Abstract

Purpose – The paper aims to compare two general team identification processes of consumers' in-group-favor and out-group-animosity responses to sports sponsorship.

Design/methodology/approach – The paper draws on two studies and four samples of professional baseball fans in Taiwan ($N = 1,294$). In Study 1, data from the fans of three teams were analyzed by using multi-group structural equation modeling to account for team effects and to consider parallel in-group-favor and out-group-animosity processes. In Study 2, the fans of one team were sampled and randomly assigned to assess the sponsors of one of three specific competitor teams to account for differences in team competition and rivalry. In both studies, these two processes were compared using patterns of significant relationships and differences in the indirect identification-attitude-outcome relationships.

Findings – Positive outcomes of in-group-favor processes were broader in scope and were more pronounced in absolute magnitude than the negative outcomes of out-group-animosity processes across all outcomes and studies.

Research limitations/implications – The research was conducted in one country and considered the sponsorship of one sport. It is possible that the results could differ for leagues within different countries, more global leagues and different fan bases.

Practical implications – The results suggest that managers should carefully consider whether the negative out-group-animosity outcomes are actually present, broad enough or strong enough to warrant costly or compromising intervention, because they might not always be present or meaningful.

Originality/value – The paper demonstrates the comparatively greater breadth and strength of in-group-favor processes when compared directly to out-group-animosity processes.

Keywords Team identification, Sports sponsorship, Rivalry, In-group-favor, Out-group-animosity, Minimal group paradigm

Paper type Research paper

Companies use sponsorship as a marketing communication tool with an expectation that the goodwill consumers feel toward an event, sports team or a cause will be transferred to their brand images. Meenaghan (1983, p.9) defines sponsorship as "the provision of assistance either financial or in-kind to an activity by a commercial organization for the purpose of achieving commercial objectives." While sponsorship can involve altruistic motives (Klincewics, 1998), especially within sponsorships of social causes (Du *et al.*, 2008), most broad definitions of sponsorship imply at least some commercial motive or potential (Olson, 2010; Woisetschläger *et al.*, 2017). In more general terms, sponsorships represent a mutually beneficial relationship between a sponsor entity and a sponsee entity across different sports, social and arts contexts (Cornwell and Kwon, 2019; Cornwell *et al.*, 2005). In this paper, we focus on sports sponsorship.

Research on sports sponsorship has increased remarkably in recent years (Grohs *et al.*, 2015; Mazodier *et al.*, 2018; Olson, 2018). This research attention aligns with the 2017 sports sponsorship expenditures of US$16bn in North America, US$11bn in Europe and US$11bn in Asia (Statista, 2017). However, empirical evidence suggests that within a competitive context, sports sponsorship can have both positive outcomes (e.g. positive attitudes toward sponsorship, recognition, purchase intentions, patronage and post-purchase satisfaction: Edeling *et al.*, 2017; Gwinner and Swanson, 2003; Herrmann *et al.*, 2016) and negative outcomes (e.g. negative attitudes, beliefs and purchase intentions toward the brand: Angell *et al.*, 2016; Bee and Dalakas, 2015; Bergkvist, 2012; Dalakas and Levin, 2005) for the sponsoring firms. Prior research on the negative implications suggests that there are negative implications for the sponsors of competing teams (Bergkvist, 2012; Olson, 2018); consumers have a less positive response to the sponsors of competing sports entities when compared to the sponsors of the sports entities that they support (Dalakas and Levin, 2005); fans' identification with the sports entity can increase the negative sponsorship outcomes for competing teams (Bee and Dalakas, 2015; Grohs *et al.*, 2015) and that the animosity which fans hold toward a competing team magnifies the relationship between identification and the outcomes for sponsors of competing teams (Angell *et al.*, 2016).

These positive and negative consumer reactions suggest that sponsorship agreements can have concurrent positive and negative implications for the sponsors according to in-group/out-group identification processes. However, research has yet to directly compare the scope and magnitude of positive and negative identification processes across outcomes such as attitudes toward the sponsors, sponsor recognition, purchase intentions and post-purchase satisfaction. The alternative possibilities presented by these different processes could obscure and jeopardize the strategic viability of sports sponsorship. For example, companies could benefit from knowing whether negative outcomes of sponsorship can be equivalent to or even more pronounced than positive outcomes.

Herein, we provide our primary theoretical contribution by specifying and comparing the scope and magnitude of consumers' concurrent in-group-favor and out-group-animosity identification processes. Understanding this comparison will ultimately help managers decide how positive sponsorship benefits should be balanced against the unintended negative implications of sponsorship. Prior research has explored boundary conditions of the negative implications of sponsorship for competing teams to help firms avoid these negative implications (Grohs *et al.*, 2015; Olson, 2018). We intended to complement this prior research by comparing the scope and magnitude of in-group-favor and out-group-animosity processes to understand which outcomes could be most susceptible to out-group-animosity processes and to understand the relative potency of these processes. This should help companies understand when, or if, negative outcomes could threaten the overall benefits of sponsorship to better inform sponsorship communications within competitive sports contexts.

We sought to compare the concurrent in-group-favor and out-group-animosity identification processes and how they relate to respective positive and negative outcomes for sponsoring firms. In Study 1, we drew on social identity theory (Tajfel and Turner, 1979) and three team samples ($N = 917$) of Taiwanese baseball fans. In this study, we compared the scope and magnitude of in-group-favor and out-group animosity processes. This comparison should help synthesize and clarify the literature on the similarities and differences between these concurrent identification processes. Here, we assessed outcomes of attitude measures, recognition test measures, purchase intention measures and post-purchase satisfaction measures. Attitudes and intentions were operationalized here as attitudes and intentions toward the generalized set of sponsors for competing teams. We compared in-group-favor and out-group animosity in two ways. First, we assessed them according to the pattern of significant indirect relationships to allow comparisons of the scope of outcomes related to the different processes. Second, we assessed them according to the differences in the absolute magnitude of the indirect relationships between team identification, attitudes toward the sponsors (mechanisms) and distal sponsorship outcomes. Study 2 ($N = 377$) retested the main predictions of Study 1 for the outcome of purchase intentions by controlling for fans' agreeableness and evaluating whether different randomly assigned team matchups (that varied in competition and rivalry) influenced the processes assessed in Study 1. Here, attitudes and intentions were assessed for the sponsors of specified competing teams.

Literature review
Sports sponsorship
The research on sports sponsorship has developed as an extension of the literature on general sponsorship (Cornwell and Maignan, 1998; Crimmins and Horn, 1996; Gwinner and Eaton, 1999). This research on sports sponsorship has adopted multiple theoretical perspectives, such as image transfer, balance theory, classical conditioning theory and social identity theory (Dalakas and Levin, 2005; Gwinner, 1997; Gwinner and Swanson, 2003; Grohs *et al.*, 2015; Madrigal, 2000, 2001; Speed and Thompson, 2000) as examples. The consumer research on the topic has also adopted both survey and experimental methodologies (Grohs *et al.*, 2015; Madrigal, 2000; Mazodier *et al.*, 2018; Olson, 2018).

Results of these empirical studies generally suggest that sports sponsorship can benefit sponsors' outcomes such as fans' ability to recall or recognize the sponsor (Edeling *et al.*, 2017; Herrmann *et al.*, 2016), attitudes toward the sponsor (Dalakas and Levin, 2005; Gwinner and Swanson, 2003), purchase intentions (Madrigal, 2000, 2001; Gwinner and Swanson, 2003), actual patronage of the sponsors (Herrmann *et al.*, 2016; Gwinner and Swanson, 2003) and post-purchase satisfaction (Gwinner and Swanson, 2003). Much of this prior research on sports sponsorship has considered team identification processes as mechanisms of improving sponsorship outcomes either as an unmeasured conceptual mechanism or through the specific assessment of team identification. For example, Madrigal (2000, 2001) suggests that sports fans who identify with a particular team are more likely to have stronger purchase intentions for the products of that team's sponsors. Herrmann *et al.* (2016) draw on identification as a partial explanation for how sponsorship activities can promote consumers' ability to recall the sponsor and their patronage of the sponsor's stores. Conversely, multiple studies also suggest the presence of unintended negative outcomes for the sponsors of competing teams (Angell *et al.*, 2016; Bee and Dalakas, 2015; Bergkvist, 2012; Dalakas and Levin, 2005; Olson, 2018). For example, fans' identification with the sports entity and associated animosity appear to magnify the negative implications for the sponsors of competing teams (Angell *et al.*, 2016; Bee and Dalakas, 2015; Grohs *et al.*, 2015). Such rivalry effects represent external and unpredictable events associated with sponsorship that could require nuanced managerial decision-making (Cornwell and Kwon, 2019).
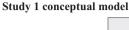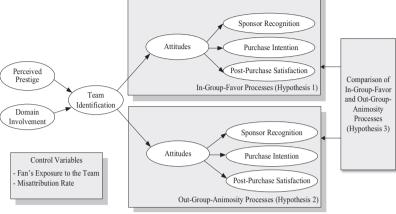
Social identity theory

We draw on social identity theory (Tajfel and Turner, 1979) to explain how sports fans' perceptions of their favorite team and the general (sports) domain will relate to their identification with the team. This identification, in turn, provides subsequent benefits for the sponsors of the team and detriments for the sponsors of the competing teams. The social identity theory of intergroup conflict, often referred to more simply as social identity theory, is a self-concept-based perspective of psychological group membership that explains intergroup cognitions and behaviors. The theory is derived from earlier perspectives of realistic group conflict theory, which explains how groups come into conflict over competition for limited resources (Sherif, 1966). It has meaningfully informed contemporary management and marketing research (Ashforth and Mael, 1989; Press and Arnould, 2011), as well as sports sponsorship research (Grohs *et al.*, 2015; Gwinner and Swanson, 2003; Madrigal, 2000, 2001).

Social identity theory outlines interrelated and successive processes of categorization, identity and comparison as they relate to psychological and behavioral favoritism for in-groups and antagonism toward out-groups (Tajfel and Turner, 1979). *Social categorization* captures the fact that the social world is divided into different social categories, i.e. groups, and that individuals classify themselves according to these groups by either general characteristics such as social class, gender or more specific social affiliations such as national citizenship and even the fan-base of a given sports team. Considerable research on the *minimal group paradigm* asserts that groups based on relatively loose membership criteria such as age or organizational membership can form the basis of in-group favoritism and out-group animosity without the presence of conflicting group interests (Ashforth and Mael, 1989; Billig and Tajfel, 1973; Tajfel and Turner, 1979). Tajfel and Turner (1979, p. 38) state:

> [...] the mere awareness of the presence of an out-group is sufficient to provoke intergroup competitive or discriminative responses on the part of the in-group [...] The basic and highly reliable finding is that the trivial, *ad hoc* intergroup categorization leads to in-group favoritism and discrimination against the out-group.

Social identity can generally be defined as one's self-image or self-concept that can have both individualistic and collective components (Ashforth and Mael, 1989; Tajfel and Turner, 1979). While the concept of identity is a much broader psychological concept than that discussed in the social identity theory of intergroup conflict (Tajfel, 1982), we pay specific attention to social identity as it relates to social categorization and comparison processes. According to Tajfel and Turner (1979, p. 40), social identity consists of "those aspects of an individual's self-image that derive from the social categories to which he perceives himself as belonging." They assert that individuals have a basic need for a positive self-evaluation to establish a positive self-concept and that membership within social groups carry positive or negative value. The value of one's social group is established through social comparisons with other groups (Tajfel and Turner, 1979). *Social comparison* represents the mechanism whereby the value of one's social identity, based on their evaluation of their in-group, is determined through comparisons with other relevant social groups, i.e. the out-group(s). Results of suboptimal comparisons can either lead people to abandon their current in-group, possibly by switching allegiance to another group, or lead people to engage thoughts and activities to make their in-group more positively distinct (Tajfel and Turner, 1979). Herein, we use the terms in-group team and out-group team(s) in reference to the primary team that a fan follows and the other teams that compete against this team, respectively.

Study 1 conceptual model

Study 2 conceptual model

Figure 1.
Conceptual model
tested in Study 1 and
Study 2

Conceptual framework

The conceptual framework is presented in Figure 1. We draw on the more specific social identity theory processes of in-group-favor and out-group-animosity to understand how sports fans' team identification relates to multiple concurrent outcomes of sports sponsorship. We expect that companies will sponsor sports teams as a mechanism of signaling hedonic value and establishing an identification relationship with fans. Considerable prior research suggests that brands can signal the quality of a product to their consumers (Kirmani and Rao, 2000), and that consumers can pay attention to both functional (i.e. utilitarian) and personally relevant (i.e. hedonic) product characteristics (Bhargave *et al.*, 2015; Holbrook and Hirschman, 1982). We propose that when companies

make the decision to sponsor a team, they signal their membership within the in-group of the team's fan base. This signaling aligns with evidence that companies benefit from or are hindered by transfers of the sponsored entities' images (Bergkvist, 2012; Olson, 2010). From consumer perspectives, fans are expected to view these sponsoring entities as part of this in-group. They will establish stronger and more positive affiliations with the sponsors of teams that are what we call the in-group team (Tajfel and Turner, 1979). However, by sponsoring a given team, companies also situate themselves within the out-group(s) of fans for whom the team sponsored is a competitor, fostering consumer animosity toward these competing "out-group" teams. Furthermore, Gwinner and Swanson (2003) suggest that fans will be more likely to identify with the teams and their sponsors when the fans have a favorable evaluation of the team and when they are more psychologically involved in the sports domain. Therefore, we account for these individual characteristics of the fans as assumptions within our model.

We propose that as individual fans identify closely with one team, they categorize themselves and others (i.e. other fans and affiliate entities of the team, such as sponsors) into an in-group or one or more out-groups that can form the basis of both support and animosity. We propose that support and animosity represent parallel processes of sports sponsorship consumer responses. Here, the *in-group-favor process* explains fans' support, loyalty and self-sacrifice toward those associated with the in-group team (i.e. the official sponsors), whereas the *out-group-animosity process* explains indifference, unkindness and even hostility toward those associated with the out-group team (i.e. the official sponsors). More specifically, our study examines how fans' in-group-favor and out-group-animosity concurrently influence sponsorship outcomes of attitudes toward the sponsors of in-group and out-group teams (our proposed mechanism), sponsor recognition, purchase intentions and post-purchase satisfaction. This breadth of outcomes allows comparisons of both a recognition accuracy test and self-report measures to distinguish cognitive awareness outcomes from attitudes and intentions. It also allows us to assess both attitudes and intentions, which represent different stages of consumers' pre-purchase decision-making (Madrigal, 2001), as well as post-purchase evaluations which can reveal the durability of a product's perceived value once consumers gain personal knowledge of the product's quality from direct experience.

In-group-favor and out-group-animosity processes. We expect that there will be concurrent identification processes that any given fan will experience for the sponsors of both in-group and out-group teams. The mechanisms of these processes are proposed to be represented as the attitudes toward the sponsors of in-group teams and out-group teams.

First, we expect that a fan's team identification and subsequent attitudes toward the sponsors of in-group and out-group teams will make the sponsors of these teams more salient in the fans' minds. We expect this to occur according to the importance of in-groups and out-groups as more attention is paid to both groups in social identification, social comparison and social categorization processes (Howe and Krosnick, 2017; Tajfel and Turner, 1979). Ashforth and Mael (1989, p. 26) state that "as the individual comes to identify with the group, the value and practices of the in-group become more salient and perceived as unique and distinctive." Extending this logic, Howe and Krosnick (2017) assert that social identification processes also increase the importance of an attitude object. Therefore, we expect that the sponsors of a fan's in-group team will become more important in the fan's mind in a manner that facilitates the fan's recognition of these sponsors.

In this regard, social identification has been shown to positively relate with fans' recognition of the in-group team's sponsors (Gwinner and Swanson, 2003), suggesting that salience and importance within sports can increase recognition. For any given fan, this

salience can be psychological, idiosyncratic and conveyed through fans' relative favor toward sponsors of in-group teams. In this regard, prior research suggests that attitudes can serve a knowledge function and can bias cognitive processes. Specifically, Howe and Krosnick (2017) propose that people holding stronger attitudes about a specific target, which they deem to be important, would be more likely to acquire and process information about the target. Such increased attention could occur according to an inherent interest in differentiating in-groups from out-groups, and then selectively engaging cognitive elaboration focused on this information (Howe and Krosnick, 2017; Tajfel and Turner, 1979). This focused acquisition and processing could then make the information gained about the target more easily accessible for the fan as a consequence of importance-induced processing (Howe and Krosnick, 2017). Therefore, while prior sponsorship theory suggests that cognitive learning precedes affective liking and preferences in a sequential manner (Poon and Prendergast, 2006), we believe that a fan's recognition of the sponsor can also be enhanced according to identification-induced evaluative processes whereby fans' attitudes are strengthened according to their identification with the in-group team (Gwinner and Swanson, 2003; Howe and Krosnick, 2017; Tajfel and Turner, 1979). These strengthened attitudes could then subsequently promote the focused acquisition, processing and elaboration of team-relevant knowledge to make it more accessible and recognizable (Howe and Krosnick, 2017).

Competing teams, and by extension their sponsors, will be scrutinized more thoroughly according to social comparison processes as well. In this regard, out-groups represent competing entities even in the case of "minimal" tangible conflicts of interest and resources (Tajfel and Turner, 1979). These competing teams will be considered by fans as being relevant out-groups according to the team's shared physical proximity during competitions and the situational importance derived from their competitive threat to the in-group team (Tajfel and Turner, 1979). The general evidence of negative outcomes of identification for competing teams (Dalakas and Levin, 2005; Grohs et al., 2015) suggests that the proposed increased salience of out-groups in social categorization and comparison processes occurs in sports sponsorship. Furthermore, while prior research has not assessed whether identification relates to a fans' recognition of sponsors of out-group teams, prior research does suggest a linkage between fans' psychological attachment to a team and their recognition of the team's sponsors (Gwinner and Swanson, 2003). Indeed, Angell et al. (2016) also found that animosity positively interacted with identification to increase fans' interest in the sponsors of the competing teams, suggesting an increase in the importance of these out-group teams as well. Similar to fans' relative responses to the sponsors of in-group teams, this importance can be conveyed through the fan's relative disfavor toward sponsors of out-group teams (Howe and Krosnick, 2017; Tajfel and Turner, 1979). Thus, we expect that attitudes toward sponsors of in-group and out-group teams will mediate the relationships that team identification has with fans' recognition of in-group and out-group team sponsors, respectively.

Second, we expect that attitudes toward the sponsors of in-group and out-group teams can be translated into behavioral purchase intentions and post-purchase satisfaction with the products or services of the in-group and out-group teams. A primary assertion of social identity theory is that people will hold more favorable evaluations of their in-group and its members, while also holding less favorable evaluations of the members of one or more out-groups according to competitive comparison motives (Tajfel and Turner, 1979). Research on sponsorship in general suggests that attitudes tend to represent proximal mechanisms that can predict more distal sponsorship outcomes such as purchase intentions (Close et al., 2006; Close et al., 2015; Martensen et al., 2007), and more broad sponsor equity for a specific

sponsoring firm (Olson, 2010). Furthermore, prior research on team identification and sponsorship suggests that there could be an indirect relationship between team identification and purchase intentions that operates through attitudes toward the sponsor. Specifically, Madrigal (2001) found that team identification was positively related to attitudes toward the sponsor and that controlling for team identification, attitudes toward the sponsor was positively related to purchase intentions. We interpret this set of logic and evidence to suggest that greater identification likely operates through mechanisms of attitudes toward the sponsors of in-group and out-group teams to influence purchase intentions and post-purchase satisfaction. These relationships should be present when controlling for fans' exposure to team competitions.

H1. Attitudes toward the sponsors of the in-group team will mediate the relationship between team identification and in-group sponsor outcomes of (a) sponsor recognition, (b) purchase intentions and (c) post-purchase satisfaction.

H2. Attitudes toward the sponsors of competitor out-group teams will mediate the relationship between team identification and out-group sponsor outcomes of (a) sponsor recognition, (b) purchase intentions and (c) post-purchase satisfaction.

Comparison of in-group-favor and out-group-animosity processes. We intend to compare whether in-group-favor and out-group-animosity processes are equivalent or not according to their relationships with sponsorship outcomes. We draw on social impact theory (Latané, 1981) to propose that in-group-favor processes will have a broader and more pronounced set of relationships with sponsorship outcomes than out-group-animosity processes. Latané (1981) asserts that individuals are impacted by social forces derived from other social entities. These social forces are more potent when they are stronger, more numerous and more immediate. The theory also proposes that there will be marginally decreasing incremental potency of the total social force according to each new social entity acting on an individual target. Furthermore, an individual target will experience a less potent social force as the number of other targets of the same social force increases. Prior research applying social impact theory to explain social identification and social influence suggests that stronger social forces of identification can make individuals more susceptible to social influence (Bruning *et al.*, 2018).

In the current research, we expect that fans will be more influenced by the social forces from the in-group team than from the out-group teams being considered in sponsor evaluation. Fans are expected to place greater salience and importance on the in-group, increasing the strength of the social force of persuasion for in-group team sponsors (Ashforth and Mael, 1989; Howe and Krosnick, 2017; Tajfel and Turner, 1979). Social impact theory asserts that the incremental effect each additional social entity has on a social force decreases as more social entities become involved in a given social force (Latané, 1981). This suggests that out-group teams' unique salience and importance to the fan (i.e. strength), which is derived from their competitive threat to the in-group team, will dissipate across the other set of competing teams in the league or competition. This is expected to occur in a non-additive manner, whereby each additional team with "competitor" status would, on average, decrease the proportional importance of other competitor teams.

Fans are also expected to have greater exposure to the in-group team and its sponsors in stadiums, television programming and website content. In this regard, fans are likely to encounter other teams according to their interface and competition with the fans' in-group teams, whereby fans will mainly watch these competing teams play when they compete against the in-group team. Fans will also be more likely to receive news about these other

teams through the lens of the in-group teams' news channels (e.g. television programs and internet sites). This greater exposure will increase the psychological immediacy of the social force of persuasion for in-group team sponsors (Latané, 1981).

Together these comparatively stronger social forces are expected to make the influence potential of in-group-favor more pronounced than that of out-group animosity. These greater social forces are expected to be reflected as more pronounced positive attitudes, evaluations and intentions that fans hold toward the sponsors of in-group teams when compared to the negative attitudes, evaluations and intentions that fans might hold toward the sponsors of out-group teams. These stronger social forces are also likely to make the sponsors of in-group teams more important than the sponsors of out-group teams in fan's minds (Johar and Pham, 1999). On average, we believe that a team's more prominent in-group status will foster stronger social forces of sponsorship influence than a team's out-group status.

H3. The relationships between team identification, attitudes toward sponsors and other distal sponsorship outcomes will be (a) broader in scope across outcomes and (b) more pronounced in the absolute magnitude of the indirect relationships for in-group teams (i.e., in-group-favor processes) than for out-group teams (i.e., out-group-animosity processes).

Study 1 methods
Sample and procedures
The study investigated sports fans' team identification, attitudes toward the sponsors of in-group and out-group teams, sponsor recognition and distal sponsorship outcomes in the top Taiwanese professional baseball league. We recruited participants for the study by electronically posting questionnaires in the official online forums of the three teams assessed. These official forums provided fans with updated information about the teams and also allowed fans to share their opinions and information online. The questionnaire was designed specifically for the purposes of the present study, and both instructions and items were customized for the particular teams being assessed. These team-specific questionnaires were then posted on the specific team's official forum. Our research focused on how consumers' team identification related to psychological sports sponsorship outcomes, according to mechanisms of attitudes toward the sponsors of in-group and out-group teams. Therefore, it was necessary to formally identify the fans and sponsors of the specific teams. For example, we needed to ensure that fans of Team A would complete a survey about Team A and provide evaluations for the specific sponsors of Team A (and also the sponsors of Team A's competing teams). Thus, different questionnaires were developed for each team, and the specific team was identified by name in the items. Respondents were asked at the beginning of the survey to indicate if they supported the named team. If they answered "no," their survey would be terminated, and they would be thanked for their participation. The survey was pilot tested using a convenience sample to refine the survey items, logic and flow prior to the formal data collection. The survey was developed and conducted in Mandarin, the most widely used language in Taiwan, and was translated using back-translation (Brislin, 1970).

A total of 937 responses were recorded across the three samples, 917 of them had unique IP addresses and identified that they were the fans of the designated teams that were assessed in the survey. We excluded responses that did not have unique IP addresses to reduce duplicate responses. The sample profiles for all three teams are

Demographic variable	Study 1 Team 1 (n = 415)	Study 1 Team 2 (n = 302)	Study 1 Team 3 (n = 200)	Study 1 Total sample (n = 917)	Study 2 Total sample (n = 377)
Gender					
Male	49.88	68.87	34.50	52.78	62.60
Female	50.12	31.13	65.50	47.22	37.40
Age					
⇐20	23.85	28.48	27.00	26.06	9.82
21-35	73.25	70.53	72.50	72.19	72.94
⇒36	2.89	0.99	0.50	1.75	17.24
Education					
⇐High school	1.69	3.64	4.50	2.95	0.54
High school	11.57	11.26	12.00	11.56	4.24
College degree and above	86.75	85.10	83.50	85.50	95.22
Marital status					
Unmarried	92.53	97.68	94.00	94.55	84.62
Married	7.47	2.32	6.00	5.45	15.38
Income					
⇐NT20,000	57.34	75.83	72.50	66.74	26.26
NT20,001-50,000	37.35	22.85	24.50	29.77	51.98
⇒NT50,001	5.30	1.32	3.00	3.49	21.76
Occupation					
Student	56.39	71.52	72.50	64.89	23.61
Employed full-time	32.53	23.84	19.00	26.72	59.42
Self-employed	2.65	0.99	2.00	1.96	6.90
Other (retired, stay-at-home, unemployed)	8.43	3.64	6.50	6.43	10.08
Watch baseball in the stadium every season					
0 times	17.35	8.61	10.00	12.87	3.18
1-3 times	60.48	28.48	28.00	42.86	44.83
4-9 times	16.15	38.08	30.50	26.50	35.28
10 times or more	6.02	24.83	31.50	17.78	16.71
Watch baseball on TV every week					
0 h	0.48	0.66	0.50	0.55	0.27
1-3 h	24.10	7.95	6.50	14.94	8.75
4-9 h	51.32	41.39	48.50	47.43	42.71
10 h or more	24.10	50.00	44.50	37.08	48.27
Visit baseball websites every week					
0 h	0.00	0.99	0.50	0.44	4.24
1-3 h	10.84	11.26	13.00	11.45	29.71
4-9 h	30.60	27.48	31.50	29.78	32.89
10 h or more	58.55	60.26	55.00	58.34	33.16

Table I.
Respondent sample characteristics for Study 1 and Study 2

Note: *All values represented in the table are percentages

presented in Table I. The samples showed reasonably good variability across gender, age, education, marital status, income, occupation and behavioral involvement with the baseball games (assessed as watching games in the stadium on a yearly basis, watching games on television on a weekly basis, and visiting the team's official website on a weekly basis).

Instrument development
Our survey measures (i.e. team identification, perceived prestige, domain involvement, attitudes, sponsor recognition, purchase intentions and post-purchase satisfaction toward the sponsors of supporting teams) were based on previous research by Gwinner and Swanson (2003). In the current survey, we also added the parallel outcome measures for the sponsors of competing teams (i.e. attitudes, sponsor recognition, purchase intentions and post-purchase satisfaction toward the sponsors of competing teams). Items were modified to fit the professional baseball context within Taiwan. The Appendix presents the items used in the questionnaires that have been translated into English.

We specified the sponsors of the teams as those displayed on the players' uniforms. We focused on the sponsors displayed on the uniform because the team uniforms are much more accessible to a wider fan base, because they would have appeared throughout the duration of the baseball game across any visual viewing medium (i.e. in-person viewing, television viewing, photos capturing game action and any other time that the players are photographed in their uniforms, such as when they conduct televised interviews). Having a sponsor's logo on the players' uniform also costs the sponsors the most, signaling a greater investment in and commitment to the team by the sponsors. Furthermore, teams authenticate their relationships with the sponsors by having the sponsors formally included on the team uniforms. This authentication can facilitate the influence of a social entity (Lin, 2017) and could reduce the possibility of confusion derived from ambush marketing. Thus, we focused on the sponsors that were represented on the players' uniforms, which have the highest media exposure and are always the official sponsors of the teams.

Overall, there were ten official sponsors on the players' uniforms for Team 1, five sponsors on the players' uniforms for Team 2, and eight sponsors on the players' uniforms for Team 3. This variation allowed us to assess the relationships across sponsorship agreements that provide greater brand signaling exclusivity in the case of the team with the fewest sponsors, or more diluted brand signaling in the cases where teams had more sponsors. We included all sponsors in the questionnaire and added ten random competing companies on the list of Team 1's sponsor list, five random competing companies on the list of Team 2's sponsor list and eight random competing companies on the list of Team 3's sponsor list. If the participants had never purchased the sponsors' products or services, we removed these specific data points (i.e. 91 participants) from the overall model specification for the post-purchase satisfaction hypothesis testing (final sample $n = 826$).

Measures
Antecedents of team identification. Perceived prestige of the in-group team captures the degree to which the team is held in high regard by fans (Mael and Ashforth, 1992). We used a three-item measure ($\alpha = 0.69$) developed by Bhattacharya *et al.* (1995), which was assessed using a seven-point Likert-type scale with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end. *Domain involvement* captures the deep psychological bond that fans establish with the sport of baseball. Similar to Fisher and Wakefield (1998), we adapted a three-item measure ($\alpha = 0.77$) to assess domain involvement and used a seven-point Likert-type scale with bases of "Strongly Disagree" at the low end

and "Strongly Agree" at the high end. These measures were included in the model to account for theoretical antecedents of team identification (Gwinner and Swanson, 2003).

Team identification. We used five items ($\alpha = 0.72$) based on Mael and Ashforth's (1992) organizational identification scale to measure team identification. The use of an organizational identification scale was especially relevant for sports fan identification. In this context, fans could, and often would, actively participate in the organizations' activities and communications by attending games, watching televised games and interacting with the team through online communication channels. Thus, active fans were much more likely to be tangibly involved with the organization (i.e. team) on an ongoing basis. Furthermore, relational forms of identification, derived from Tajfel and Turner's (1979) concept of social identification, have been similarly applied conceptually across both the management and marketing literatures (Cardador, 2006). We used a seven-point Likert-type scale with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end.

In-group-favor processes. We assessed attitudes and three outcomes for sponsors of the in-group team. We assessed *attitudes toward sponsors* by asking participants to rate their overall impression of firms that sponsored the in-group teams using three-items ($\alpha = 0.87$) derived from Gwinner and Swanson (2003).

We assessed *sponsor recognition* in a manner similar to that used in previous sponsorship studies (Gwinner and Swanson, 2003), where participants were asked to identify known sponsors (i.e. those that had their company name printed on the team's jerseys) from a pre-determined list. To assess respondents' level of recognition, they were provided with a list of company names for each team. One-half of the company names on the list were actual sponsors and the other half of the company names on the list were direct competitors of the actual sponsors. The company names on the list were presented in random order. Respondents were asked to identify sponsors from a list of 20 companies for Team 1, 10 companies for Team 2 and 16 companies for Team 3. They were asked to check all of the companies that they thought were the sponsors of the teams that they supported (i.e. their in-group teams). We calculated each participant's *sponsor recognition* according to the accuracy rate, i.e. the number of sponsors that participants correctly identify divided by the total number of actual sponsors. For example, if a participant identified 5 sponsors for Team 1, with 2 of them being wrong, his or her accuracy rate would be 0.3 (this participant has correctly identified three out of ten sponsors). Accuracy rates (mean = 0.68, SD = 0.24) were scaled from 0 to 1. We also controlled for the misattribution rate in our hypothesis tests, calculated as the number of non-sponsors that participants mistakenly identified divided by the total number of sponsors that participants correctly or incorrectly identified. Using the same example as presented above, the misattribution rate would be 0.4 (the participant has identified 2 wrong sponsors out of 5 sponsors he/she provided). The misattribution rate (mean = 0.03, SD = 0.08) was also scaled from 0 to 1.

We assessed *purchase intentions* according to the intention of the respondents to purchase the products or services offered by the sponsor of the in-group team. We used a three-item scale ($\alpha = 0.92$) from Gwinner and Swanson (2003) to assess fan's purchase intentions. Both measures were assessed using a seven-point Likert-type scale with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end. For the *post-purchase satisfaction* toward the in-group team sponsor, participants identified an actual sponsor that they had done business with and then responded with respect to the products or services of this company. Here, we asked participants to identify if they had purchased the products from the sponsors of the in-group teams and to indicate the name of the sponsor. If they had purchased products from more than one sponsor of the in-group teams, we asked them to answer questions about the one sponsor that they had the clearest

memory of. We removed the sample points if the participants had never purchased products or services from a sponsor for the post-purchase satisfaction hypothesis testing. We used a modified version of the three-item scale (α = 0.92) by Bitner and Hubbert (1994) for the post-purchase satisfaction measure using a seven-point Likert-type scale with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end.

Out-group-animosity processes. We assessed attitudes and three outcomes for the sponsors of out-group teams similar to the procedures of the in-group team. Participants' *sponsor recognition* (for out-group teams) was assessed by providing participants with a random list comprised of 50 per cent sponsors and 50 per cent non-sponsors in a manner similar to that used for the in-group team. Misattributions were controlled for in the hypothesis tests. The items and procedures to measure fan's *attitudes*, *purchase intentions* and *post-purchase satisfaction* toward the out-group team sponsors were similar to those used for the in-group team sponsors. The only difference to the wording for these measures was that the out-group teams were referenced in the items instead of the in-group teams. These measures were each assessed using a seven-point Likert-type scale with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end. All measures had coefficient alphas above 0.85 (i.e. 0.86 for attitude, 0.89 for purchase intention and 0.93 for post-purchase satisfaction).

The sponsor recognition outcome for the out-group teams was calculated as the average of the scores for the two competing teams. For example, a fan from Team A was asked to assess both the sponsors for Team B and Team C. We calculated the average score (i.e. the recognition accuracy rate) for Team B and Team C to represent the out-group team sponsor recognition accuracy rate. The attitude, purchase intention and post-purchase satisfaction measures were presented after participants had answered this recognition question. For the attitude and purchase intention measures, we adapted the procedures applied in prior research that studied competitions where there were multiple competing teams or entities for respondents to consider (Dalakas and Levin, 2005). This allowed us to assess participants' attitudes and purchase intentions toward the sponsors of competing teams. Participants recalled one sponsor of a competing team that they had purchased from for the post-purchase satisfaction outcome assessment.

Study 1 results and discussion
Discriminant validity and reliability
All participant self-report measures were assessed using confirmatory factor analysis, except for sponsor recognition, misattributions and different forms of behavioral exposure to the sponsors, as these measures were manifest variables (i.e. not psychometric scales). We evaluated the psychometric properties of our consumer self-report measures by estimating a nine-factor measurement model. The analyses were conducted using an overall sample with the three samples of participants combined and were also conducted independently for each team-specific sample. Results show acceptable fit for the nine-factor measurement model for the combined sample (χ^2 = 639.29, df = 341, CFI = 0.98, NNFI = 0.97, RMSEA = 0.03), the Team 1 sample (χ^2 = 522.13, df = 341, CFI = 0.98, NNFI = 0.98, RMSEA = 0.04), the Team 2 sample (χ^2 = 504.59, df = 341, CFI = 0.95, NNFI = 0.95, RMSEA = 0.05) and the Team 3 sample (χ^2 = 563.43, df = 341, CFI = 0.94, NNFI = 0.93, RMSEA = 0.06). All factor loadings were highly significant (p < 0.01).

Coefficient alpha estimates of internal consistency ranged from 0.69 to 0.93 in the combined team sample; average variance extracted (AVE) estimates ranged from 0.36 to 0.82, and construct reliabilities ranged from 0.69 to 0.93 (Bagozzi and Yi, 1988). We compared the square of the correlations between pairs of constructs to the AVE estimates

	1	2	3	4	5	6	7	8	9
Study 1 Latent constructs									
1 Team identification	1.00								
2 Perceived prestige	0.59	1.00							
3 Domain involvement	0.46	0.47	1.00						
4 Attitudes (in-group teams)	0.46	0.36	0.30	1.00					
5 Purchase intentions (in-group teams)	0.48	0.39	0.33	0.69	1.00				
6 Post-purchase satisfaction (in-group teams)	0.42	0.25	0.28	0.62	0.59	1.00			
7 Attitudes (out-group teams)	−0.05	0.01	0.03	0.07	−0.02	0.06	1.00		
8 Purchase intentions (out-group teams)	−0.20	−0.10	−0.09	−0.09	−0.14	−0.11	0.60	1.00	
9 Post-purchase satisfaction (out-group teams)	0.04	0.13	0.09	0.16	0.12	0.24	0.40	0.25	1.00
Mean	5.98	6.48	6.46	5.55	5.54	5.76	4.58	3.63	5.15
SD	1.21	0.89	0.73	1.14	1.28	1.05	1.16	1.34	1.13
Alpha	0.72	0.69	0.77	0.87	0.92	0.92	0.86	0.89	0.93
AVE	0.36	0.42	0.56	0.71	0.81	0.81	0.67	0.73	0.82
Construct reliability	0.71	0.69	0.78	0.88	0.93	0.93	0.86	0.89	0.93
Study 2 Latent constructs									
1 Team identification	1.00								
2 Rivalry	0.03	1.00							
3 Competition	0.17	0.35	1.00						
4 Agreeableness	0.05	−0.07	−0.03	1.00					
5 Attitudes (in-group teams)	0.39	0.23	0.27	0.01	1.00				
6 Purchase intentions (in-group teams)	0.37	0.18	0.21	−0.00	0.64	1.00			
7 Attitudes (out-group teams)	0.02	0.18	0.36	−0.04	0.27	0.28	1.00		
8 Purchase intentions (out-group teams)	−0.10	0.06	0.25	−0.17	0.09	0.20	0.60	1.00	
Mean	4.07	3.21	3.58	3.72	3.50	3.05	2.58	3.72	
SD	0.79	1.02	0.77	0.77	0.96	0.71	0.79	0.77	
Alpha	0.80	0.72	0.85	0.67	0.91	0.91	0.93	0.94	
AVE	0.46	0.46	0.76	0.58	0.78	0.77	0.82	0.86	
Construct reliability	0.80	0.75	0.86	0.78	0.91	0.91	0.93	0.95	

Notes: We conducted a set of *t*-tests to assess whether the mean differences between the specific outcome measures in Study 1 and Study 2 for sponsors of in-group and out-group teams were significant. All mean difference comparisons between specific outcome measures for in-group sponsors versus those for out-group sponsors were statistically significant at $p < 0.01$

Table II.
Study 1 (combined sample) and Study 2 construct correlations, reliabilities and validities

(AVEs) to assess discriminant validity (Fornell and Larcker, 1981). All possible pairs in the combined sample had a between-construct shared variance that is less than the construct's AVE. Therefore, the discriminant validity is supported for all constructs within the combined sample. Table II provides bivariate correlations, descriptive statistics, coefficient alphas, AVEs and construct reliabilities. We tested for common method bias using the common latent factor model estimation to assess whether an unmeasured common latent factor was present to a significant degree within the data (Podsakoff *et al.*, 2003). Here, we added a latent factor to our measurement model that was related to all variables. The differences in χ^2 between our conceptual model and the common latent factor model were tested in the total sample using a chi-square difference test. The model with the common latent factor included had a significantly worse fit with the data than the model with no common latent factor included (χ^2 difference = 73.4, df = 9, $p < 0.01$), suggesting no indication that common method bias impacts the findings. Our test measure of sponsor recognition also minimizes the threat of common method bias, as this was a measure of recognition accuracy instead of participants' perceptions or cognitive evaluations.

Furthermore, respondents were assured confidentiality, respondents were encouraged to respond candidly, items were worded to minimize ambiguity and we controlled for variance related to fan's self-reported exposure to baseball to account for exposure-induced common method variance, all in an effort to further reduce the potential threats of common method bias (MacKenzie and Podsakoff, 2012; Malhotra *et al.*, 2017; Podsakoff *et al.*, 2003).

Measurement invariance
We tested for measurement invariance across the three sub-samples to ensure that our measurement models had the same optimal factor structure across the three samples. Here, we estimated a multi-group confirmatory factor analysis (Vandenberg and Lance, 2000) using the R software, an open source statistical programing language (Rosseel, 2012). We first ran a baseline model where all factor loadings were set free-to-estimate across the three samples. We then ran a second model where all factor loadings were constrained to be equal across the three samples. While multiple fit indicators are commonly used to assess measurement invariance, we used delta comparative fit index (ΔCFI) to assess the model fit because chi-square tests are highly sensitive to sample size (Brannick, 1995; Kelloway, 1995; Meade and Lautenschlager, 2004). For this reason, Cheung and Rensvold (2002) recommended using ΔCFI for tests of measurement invariance. In these tests, the assumption of measurement invariance holds when ΔCFI is less than 0.01. Our analyses show that the CFI value had minimal change between the two models (from 0.961 to 0.959: ΔCFI = 0.002). Therefore, the factor loadings for all measurement items were invariant across the three teams. We also ran the third model where both factor loadings and intercepts were constrained to be equal across groups. Results of this test showed that the CFI value had minimal change between the two models (from 0.951 to 0.959: ΔCFI = 0.008). Thus, the invariance of the factor loadings and intercepts suggests that the constructs hold the same meaning to participants across the three team-specific sub-samples. The results of an ANOVA test revealed that there were not significant mean differences across teams ($F = 0.12$, *ns*). Thus, teams appear to be comparable according to the fan's average level of team identification. Together these results suggest the appropriateness of combining the three sub-samples in a concurrent multi-group analysis.

We then used multi-group structural equation modeling (SEM) to test our hypotheses with the total combined sample because our assumptions of measurement invariance were supported empirically. The model was tested using the maximum likelihood method of parameter estimation within the R software. The model displayed good fit with the data ($\chi^2 = 833.79$, df = 381, CFI = 0.97, NNFI = 0.96, RMSEA = 0.04).

Hypothesis tests
In-group-favor and out-group-animosity processes. We predicted that team identification would relate to attitudes toward the sponsors of in-group and out-group teams (our proposed mediator variable) and indirectly relate to sponsor recognition, purchase intentions and post-purchase satisfaction through this mechanism. We expected positive indirect relationships for sponsors of in-group teams and negative indirect relationships for sponsors of out-group teams. Table III presents a summary of the relationships assessed in our hypothesis tests, standardized coefficients and *t*-values for the hypothesized paths. In structural equation modeling, the mediation effect can be specified as an indirect effect (Preacher and Hayes, 2008). Thus, we assess the indirect relationships that operated through the attitudes toward the sponsors of in-group and out-group teams to test *H1* and *H2*. In these tests, we control for the fan's level of exposure via attending baseball games, watching baseball games on television and browsing the baseball team's webpage. We apply these

Constructs	Hypothesis	Estimate	z-value
Direct relationships			
Perceived prestige → Team identification		0.67	10.41***
Domain involvement → Team identification		0.31	4.91***
Team identification → Attitudes (in-group)		0.37	5.48***
Team identification → Attitudes (out-group)		−0.16	−1.88*
Attitudes (in-group) → Sponsor recognition (in-group)		0.03	3.86***
Attitudes (in-group) → Purchase intentions (in-group)		0.74	15.38***
Attitudes (in-group) → Post-purchase satisfaction (in-group)		0.48	12.64***
Attitudes (out-group) → Sponsor recognition (out-group)		0.03	4.13***
Attitudes (out-group) → Purchase intentions (out-group)		0.59	11.39***
Attitudes (out-group) → Post-purchase satisfaction (out-group)		0.34	7.71***
Indirect relationships			
1. Team identification → Attitudes (in-group) → Sponsor recognition (in-group)	H1a	0.01	3.21***
2. Team identification → Attitudes (in-group) → Purchase intentions (in-group)	H1b	0.28	5.26***
3. Team identification → Attitudes (in-group) → Post-purchase satisfaction (in-group)	H1c	0.18	5.15***
4. Team identification → Attitudes (out-group) → Sponsor recognition (out-group)	H2a	−0.01	−1.72*
5. Team identification → Attitudes (out-group) → Purchase intentions (out-group)	H2b	−0.09	−1.87*
6. Team identification → Attitudes (out-group) → Post-purchase satisfaction (out-group)	H2c	−0.05	−1.84*
Comparison of indirect relationships			
Comparison of indirect relationship #1 with #4	H3b	0.01	1.77*
Comparison of indirect relationship #2 with #5	H3b	0.19	3.51***
Comparison of indirect relationship #3 with #6	H3b	0.13	3.61***

Table III.
Study 1 structural equation modeling path coefficient results and hypothesis tests

Notes: * $p < 0.1$; **$p < 0.05$; ***$p < 0.01$. $\chi^2 = 1242.25$, DF = 535, CFI = 0.95, NNFI = 0.94, RMSEA = 0.04. All estimates are standardized estimates. We controlled for number of times watching games in the stadium, number of times watching the team on TV and number of hours per week on the team's website. We also controlled for respondents' in-group sponsor misattribution rates and out-group sponsor misattribution rates when predicting the respective recognition rates

controls by using these variables to account for variance in the dependent and mediator variables within the empirical models. We also controlled for misattribution rates (i.e. the proportion of non-sponsors that were misidentified as actual sponsors), specifically when predicting in-group and out-group recognition. We included this control to account for recognition errors that could be derived from the number of sponsors that a team had.

H1 predicted that attitudes toward the sponsors of the in-group team would mediate the relationship between team identification and (a) sponsor recognition, (b) purchase intentions and (c) post-purchase satisfaction for sponsors of in-group teams. Results suggested that there was a positive indirect relationship between team identification and in-group sponsor recognition (standardized coefficient = 0.01, $p < 0.01$), in-group sponsor purchase intentions (standardized coefficient = 0.28, $p < 0.01$) and in-group sponsor post-purchase satisfaction (standardized coefficient = 0.18, $p < 0.01$). *H1a*, *H1b* and *H1c* were supported.

H2 predicted that attitudes towards the sponsors of the out-group team would mediate the relationship between team identification and (a) sponsor recognition, (b) purchase intentions, and (c) post-purchase satisfaction for sponsors of out-group teams. Results

suggested that there was a significant indirect relationship between team identification and out-group sponsor recognition (standardized coefficient = –0.01, $p < 0.1$), out-group sponsor purchase intentions (standardized coefficient = –0.09, $p < 0.1$) and out-group sponsor post-purchase satisfaction (standardized coefficient = –0.05, $p < 0.1$). *H2a*, *H2b* and *H2c* were supported.

Comparison of in-group-favor and out-group-animosity processes. H3 predicted that in-group-favor processes would have more pronounced relationships with sponsorship outcomes than out-group-animosity processes. We tested two possibilities as distinct sub-hypotheses by considering both (a) patterns of significant indirect relationships with sponsorship outcomes, and (b) the statistical significance of differences between the absolute magnitude of the indirect relationships that team identification had with attitudes towards the sponsors, and subsequently with sponsorship outcomes.

First, we compared the patterns of significant results from the tests of our *H1abc* and *H2abc* to understand the equivalence of in-group-favor and out-group-animosity processes in sports sponsorship. Our results revealed strong and consistent support for *H1a*, *H1b* and *H1c*, suggesting a comprehensive benefit of team identification on sponsorship outcomes for sponsors of in-group teams across all outcomes assessed. Specifically, through attitudes toward in-group sponsors, team identification had a significant positive indirect relationship with in-group sponsor recognition (*H1a*), purchase intentions (*H1b*) and post-purchase satisfaction (*H1c*). The results also provided more marginal support for *H2a-H2c*. Specifically, team identification had significant indirect negative relationships when operating through attitudes toward the sponsors and predicting out-group sponsor recognition (*H2a*), purchase intentions (*H2b*) and post-purchase satisfaction (*H2c*). Together, these results suggested minimal support for *H3a*.

Second, we tested whether the magnitude of the coefficients for the indirect (mediation) relationships occurring through the attitudes toward the sponsors was statistically different for sponsors of in-group and out-group teams (Ryu and Cheong, 2017; Chan, 2007; MacKinnon *et al.*, 2002). Results of these tests suggested significant differences for each of the three distal outcomes whereby there was a significantly stronger relationship (i.e. one of higher magnitude) for in-group-favor processes when compared to the relevant out-group-animosity processes. Specifically, there were significant differences between in-group-favor and out-group-animosity processes in the total indirect relationships for: sponsor recognition (standardized coefficient = 0.01, $p < 0.1$); purchase intentions (standardized coefficient = 0.19, $p < 0.01$); and post-purchase satisfaction (standardized coefficient = 0.13, $p < 0.01$). *H3b* received full support, as the in-group-favor processes involved relationships of greater magnitude than out-group-animosity processes.

Post-hoc analyses. We also analyzed an alternative model in which post-purchase satisfaction was removed to allow an assessment of the full sample that included the 917 participants who had not purchased products from the sponsors of both the in-group team and an out-group team. One drawback of this model is that it did not include the important outcome of post-purchase satisfaction (Gwinner and Swanson, 2003) and did not account for whether the fans had any customer experience with the sponsors of the in-group team and sponsors of the out-group teams. However, this post-hoc test allowed us to check whether the results from our primary analysis held when the removed participants were included in the model. These tests revealed that all relationships were similar in sign and significance, suggesting that the removal of the participants who had not purchased a product from the sponsor of an out-group team did not substantively change our results.

Discussion of Study 1 results

The results of Study 1 suggested that there can be benefits accrued by the sponsors of consumers' in-group teams. These benefits include positive attitudes toward the sponsor, accuracy of participants' recognition, purchase intentions toward the sponsor and even post-purchase evaluations of the sponsor's products and services that account for customers' first-hand experience with the sponsor's products and services. Our results provided consistent support that the minimal group paradigm applies to the in-group-favor process of sponsorship support according to sports fans' social identification. The results also supported the findings of prior research that has revealed negative outcomes for the sponsors of competing teams (Bergkvist, 2012; Grohs *et al.*, 2015; Olson, 2018). In this regard, consumers' team identification had negative relationships with attitudes, sponsor recognition, purchase intentions and post-purchase satisfaction directed toward the sponsors of competing teams. To our knowledge, this is the first study to test and find that identification had a negative (indirect) relationship with out-group sponsor recognition. These results supported the presence of both in-group-favor and out-group-animosity identification processes for consumers across cognitive, affective and conative/behavioral sponsorship outcomes (Cornwell *et al.*, 2005). However, the outcomes of these in-group-favor and out-group-animosity processes did not appear to be equivalent, as the out-group-animosity processes appeared to be more limited in magnitude than the in-group-favor processes. Specifically, the significant differences in the magnitude of indirect relationships for all outcomes suggested that out-group-animosity processes might have a more limited potency than in-group-favor processes across sponsorship outcomes.

There were multiple strengths of Study 1, such as the more generalizable multi-team samples, the ability to control for the team-level variance in the sponsorship context, evidence of measurement invariance across different team contexts, and the assessment of a range of sponsorship outcome types (Cornwell *et al.*, 2005). However, there were also some limitations that should be addressed further in a follow-up study. First, while we did account for fans' exposure to the teams' competitions, we did not account for the fans' dispositional tendencies toward support and animosity. Second, our measure of attitudes and purchase intentions toward the out-group sponsors were generalized and answered in reference to the sponsors of all competing teams in the league. Such attitudes can be considered as being either generalized whereby they focus on the overall set of competitor teams' sponsors or specifically focused on the sponsors of a particular team. This distinction is important because when generalized, the attitudes are not focused on aspects of a fan's recognition, intentions or satisfaction with a given company and their products or services. Instead, the attitudes capture the generalized evaluation of the entire set of sponsors for a given team according to their in-group or out-group status. While this perspective helps to capture the general competitive attitudes and intentions that fans hold, it does not represent their attitudes and intentions toward the specific sponsors of opponents within a competitive matchup.

Third, we did not provide empirical evidence that there was meaningful competition and rivalry between the teams in the league as perceived by the fans. Finally, we did not empirically account for how this competition and rivalry might influence the relationships involved with in-group-favor and out-group-animosity. Therefore, we conducted a follow-up study to account for each of these limitations by:

- controlling for fans' dispositional agreeableness;
- referencing the sponsorship outcome measures toward the sponsors of a specific competing team;

- testing for significant mean differences in competition and rivalry across team matchups; and
- assessing whether the team matchup condition moderated the in-group-favor and out-group-animosity processes.

Study 2 introduction

We engaged Study 2 in an effort to cross-validate our general findings from Study 1 regarding the presence of in-group-favor and out-group-animosity processes, as well as the differences in the magnitude of these relationships. In this follow-up study, we sought to address two limitations of the first study by accounting for fans' dispositional tendencies toward support and animosity, as well as assessing and accounting for between-team competition and rivalry. We also assessed fans' responses to the sponsors of specific teams according to competitive matchups. Thus, we sought to re-test our model considering purchase intentions as the outcome to account for fans' dispositional agreeableness that could vary across samples and sponsorship contexts (see Figure 1).

We controlled for the personality characteristic of agreeableness, which relates to a person's tendency to be cooperative instead of antagonistic (Costa and McCrae, 1992; Donnellan *et al.*, 2006). Agreeableness is likely to influence how people would respond to sports sponsorship in their natural environment. People who are more agreeable might be more prone to in-group-favor processes because of their tendency toward benevolence and conformity that can make people socially accommodating, committed and possibly acquiescent (Chiaburu *et al.*, , 2011; Choi *et al.*, 2015; Fischer and Boer, 2014). However, they might also be less prone to out-group-animosity processes according to their lower general tendencies to be prejudiced against other groups of people in general and to display antagonistic behavior (Crawford and Brandt, 2019; Vize *et al.*, 2019). Therefore, even though sports can be considered as a competitive domain, it is possible that more agreeable fans will have fewer dispositional tendencies to be prejudiced and antagonistic toward the sponsors of rival teams. Together, these two sets of findings suggest the possibility that agreeableness represents a disposition that theoretically could be relevant to both in-group-favor and out-group-animosity processes.

We also sought to explore whether there were meaningful and differential levels of between-team competition and rivalry within the context of the current research (i.e. the Taiwanese professional baseball league). Furthermore, we wanted to extend this exploration to assess whether the level of competition and rivalry between teams enhances the in-group-favor and out-group-animosity processes that occurred within fans. Competition and rivalry are proposed to represent separate constructs (Kilduff *et al.*, 2010). Therefore, we define competition as the degree to which teams are perceived to be evenly matched in their capabilities within a matchup or set of matchups (Kilduff, 2014). Rivalry is defined by Kilduff *et al.* (2010) as:

> a subjective competitive relationship that an actor has with another actor that entails increased psychological involvement and perceived stakes of competition for the focal actor, independent of the objective characteristics of the situation

Therefore, we re-focused our assessment of attitudes and purchase intentions toward the sponsors of out-group teams to reference the sponsors of the specific competitor teams within a dyadic competitive relationship.

Rivalry has been conceptualized in multiple ways within the sports management literature (Tyler *et al.*, 2017). Prior research on sports sponsorship that operationalizes

rivalry discusses the level of rivalry as a pre-designed study condition (Bergkvist, 2012; Dalakas and Levin, 2005; Olson, 2018). It has also been operationalized in sports settings as a psychological variable that can influence motivation (Kilduff, 2014; Kilduff *et al.*, 2010) and behavior that is either antagonistic or otherwise reckless (Kilduff *et al.*, 2016; To *et al.*, 2018). Prior sports sponsorship research has considered schadenfreude (Angell *et al.*, 2016; Dalakas and Melancon, 2012) as a psychological measure that captures a pronounced negative relationship. Evenly matched competition has been found to correlate with rivalry (Kilduff, 2014). Therefore, we will consider this construct in addition to rivalry to provide a more comprehensive description of the competitive environment within the league. While prior research has assessed repeated competition as another element of the competitive context, the match scheduling within the Taiwanese baseball league is organized to ensure that all teams play each other an equal number of times each season. Therefore, repeated competition is treated as a constant.

Defining characteristics of rivalry are that it is relationally driven, it is subjective, it is based on prior interactions, it magnifies the psychological relevance of the relationship, it varies in strength, and it can be unidirectional in that it does not require reciprocation (Kilduff *et al.*, 2010). Based on these defining characteristics, we expect that rivalry will differ across the teams in the league according to the defining characteristics of its varied strength, its subjective nature and the fact that it develops on the basis of prior competitive interactions. We expect competition to vary across matchups in a similar manner. These team-level differences in rivalry could moderate the relationship between team identification and purchase intentions by accentuating both the in-group-favor and out-group animosity processes derived from this identification. These concepts of competition and rivalry represent a critical underlying theme of the social comparison process within social identification theory (Tajfel and Turner, 1979), as people compare their in-group with more salient out-groups. In this regard, competition and rivalry could represent components of this out-group salience as a specific application of identification-based intergroup bias (Kilduff, 2014; Kilduff *et al.*, 2010). Thus, we seek to answer the following research question.

RQ1. Do different team matchups that vary in levels of competition and rivalry moderate the relationship that team identification has with attitudes toward the sponsor and sponsor purchase intentions?

Study 2 methods
Sample and procedures
We recruited participants for the study by electronically posting questionnaires in the official online forum of the most popular baseball team in the Taiwanese Baseball league. The questionnaire was designed specifically for the purposes of the present study, and both instructions and items were customized for the particular in-group team and out-group teams being assessed. The survey was developed and conducted in Mandarin. Translations were conducted using back-translation (Brislin, 1970). The team-specific questionnaires were then posted on the specific team's official online forum.

A total of 377 participants completed the survey who had unique IP addresses and who indicated that they were the fans of the designated in-group team that was the focus of the study. The sample profile is presented in Table I. We assessed whether respondents were fans of the team using two questions. First, we asked them if they were a fan of the team at the beginning of the survey. If they answered "no," their survey would be terminated, and they would be thanked for their participation. Second, we presented them with a list of the four teams being compared in the current study and asked them to rank the teams from their

most favorite to their least favorite. Participants who did not rank the focal (in-group) team as being their favorite were also removed from the sample. The samples showed reasonably good variability across gender, age, education, marital status, income, occupation and behavioral involvement with the baseball games (Table I).

We added a randomized experimental manipulation to the survey that presented participants with three different team comparison conditions. The conditions presented different frames of comparisons that participants were to make according to the specific competitor team that they would evaluate. We added this manipulation to assess aggregate differences in fans' perceived competition and rivalry toward these different teams. Here, we presented participants with three different teams that they would compare with their in-group team according to a randomly assigned experimental condition. Conditions were randomized using a branching application within the survey delivery. All questions were presented referencing these specific competing teams in any given survey. Each survey would exclusively focus on measures of the in-group team and the specific out-group teams according to the experimental condition. Unlike prior studies of sports rivalries where certain participant entities could compete more or less frequently (Kilduff, 2014), all teams competed on a regular basis and had evenly scheduled competitions within the league. Therefore, the in-group team had a similar frequency of competition with all competitor teams.

Measures
We assessed these different conditions according to competitiveness, assessed as participants' perceptions of how similar the teams' capabilities were using two items (α = 0.85), and a psychological measure of rivalry that used four items (α = 0.72). Both scales were adapted from Kilduff (2014) and were assessed using five-point Likert-type scales with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end. To assess the other measures considered in the model, we used similar measures of team identification, attitudes toward the sponsor, and purchase intentions that were used in study 1. We used five items (α = 0.80) based on Mael and Ashforth's (1992) organizational identification scale to measure team identification. We assessed *attitudes toward sponsors* by asking participants to rate their overall impression of firms that sponsored the in-group teams using three-items for the in-group teams (α = 0.91) and three items for the specific out-group team (α = 0.93). Both measures were derived from Gwinner and Swanson (2003). We assessed *purchase intentions* according to the intention of the respondents to purchase the products or services offered by the sponsor of the in-group team and the randomly specified out-group team. We used a three-item scale adapted from Gwinner and Swanson (2003) to assess fan's purchase intentions for sponsors of the in-group team (α = 0.91) and for sponsors of the out-group team (α = 0.94). In this study, we specified the team in the measures of attitudes and purchase intentions toward the sponsor to ensure that participants referenced the team specified in the experimental condition. All psychometric measures were assessed using five-point Likert-type scales with bases of "Strongly Disagree" at the low end and "Strongly Agree" at the high end. The Appendix presents the items used in the questionnaires that have been translated into English.

Study 2 results and discussion
Discriminant validity and reliability
The hypothesized eight-factor measurement model displayed good fit with the data (χ^2 = 614.14, df = 296, CFI = 0.95, NNFI = 0.94, RMSEA = 0.05). AVE estimates ranged from 0.46 to 0.86; and construct reliabilities ranged from 0.75 to 0.95 (Bagozzi and Yi, 1988). Table II

provides bivariate correlations, descriptive statistics, coefficient alphas, AVEs and construct reliabilities. We compared the square of the correlations between pairs of constructs to the AVEs to assess discriminant validity (Fornell and Larcker, 1981) and the results supported the discriminant validity for all constructs. We tested for common method bias using the common latent factor model estimation (MacKenzie and Podsakoff, 2012; Podsakoff *et al.*, 2003), and the results suggested that the model with a common latent factor included had a worse fit with the data than the model without a common latent factor (χ^2 difference = 117, df = 8, $p < 0.01$). We also controlled for fans' agreeableness (all four-items used, $\alpha = 0.67$: Donnellan *et al.*, 2006), as well as their levels of exposure through attending baseball games, watching baseball games on television, and browsing the baseball team's webpage to account for specific sources of common method bias. Specifically, we applied these controls by using these variables to account for variance in the mediator and outcome variables within the empirical model to address common method variance that could be related to a fan's self-reported exposure to the sport of baseball, as well as their agreeableness and dispositional tendency toward acquiescence (MacKenzie and Podsakoff, 2012; Malhotra *et al.*, 2017; Podsakoff *et al.*, 2003).

Manipulation checks for team conditions

We considered perceived similarity in capability as a manipulation check to address the level of competition. This concept was treated as being conceptually distinct from our manipulation check of rivalry which captures fans' subjective interpretation of what this competition meant to the fans (Kilduff, 2014; Kilduff *et al.*, 2010). Results of one-way ANOVAs suggested that there were significant differences between competitor teams according to both perceived similarity in capability ($F = 3.88$, $p < 0.05$) and rivalry ($F = 20$, $p < 0.01$). These results suggested that fans were able to meaningfully differentiate between teams with regard to their perceptions that the teams were competitive, and also that fans felt a given level of rivalry toward these teams. Teams were subsequently coded according to numerical relative rivalry scores. We focused this ordering on rivalry as it represents a more extreme extension of competitiveness that holds greater potential for support and animosity (Kilduff, 2014; Kilduff *et al.*, 2010; Kilduff *et al.*, 2016). The team with the lowest rivalry score was assigned "1," and the team with the highest rivalry score was assigned "3."

Hypothesis tests and research questions

In-group-favor and out-group-animosity processes. Table IV presents a summary of the relationships assessed in our hypothesis tests, standardized coefficients and *t*-values for the hypothesized paths. The table also includes indirect relationships and the comparison of indirect relationships. According to *H1b* and *H2b*, we expected positive indirect relationships between team identification and purchase intentions according to attitudes toward the sponsors of in-group teams. We also expected negative indirect relationships for sponsors of out-group teams. Results suggested that there was a positive indirect relationship between team identification and in-group sponsor purchase intentions as mediated by attitudes toward the sponsor (standardized coefficient = 0.33, $p < 0.01$). *H1b* was supported. Results suggested that there was not a significant indirect relationship between team identification and out-group sponsor purchase intentions as mediated by attitudes toward the sponsor (standardized coefficient = 0.03, ns). *H2b* was not supported. However, there was some evidence of out-group animosity in the finding that team identification had a significant and negative direct relationship with purchase intentions (standardized coefficient = –0.13, $p < 0.05$).

Constructs	Hypothesis	Estimate	z-value
Direct relationships			
Team identification → Attitudes (in-group)		0.46	6.38***
Team condition → Attitudes (in-group)		−0.07	−1.89*
Team identification*Team condition → Attitudes (in-group)		−0.09	−1.11
Team identification → Attitudes (out-group)		0.06	0.83
Team condition → Attitudes (out-group)		0.15	3.36***
Team identification*Team condition → Attitudes (out-group)		0.07	0.81
Team identification → Purchase Intentions (in-group)		0.19	2.45**
Team condition → Purchase intentions (in-group)		0.13	3.12***
Team identification*Team condition → Purchase intentions (in-group)		−0.10	−1.20
Attitudes (in-group) → Purchase intentions (in-group)		0.73	10.64***
Team identification → Purchase intentions (out-group)		−0.13	−2.12**
Team condition → Purchase intentions (out-group)		0.05	1.51
Team identification*Team condition → Purchase intentions (out-group)		0.04	0.60
Attitudes (out-group) → Purchase intentions toward (out-group)		0.57	11.42***
Indirect relationships			
1. Team identification → Attitudes (in-group) → Purchase intentions (in-group)	H1b	0.33	5.74***
2. Team identification → Attitudes (out-group) → Purchase intentions (out-group)	H2b	0.03	0.82
Comparison of indirect relationships			
Comparison of indirect relationship #1 with #2	H3b	0.30	5.17**

Notes: * $p < 0.1$; **$p < 0.05$; ***$p < 0.01$. $\chi^2 = 1123.35$, DF = 551, CFI = 0.92, NNFI = 0.90, RMSEA = 0.05. All estimates are standardized estimates. We controlled for number of times watching games in the stadium, number of times watching the team on TV, number of hours per week on the team's website and agreeableness

Table IV.
Study 2 structural
equation modeling
path coefficient
results and
hypothesis tests

Comparison of in-group-favor and out-group-animosity processes. H3 predicted that in-group-favor processes would have more pronounced relationships with sponsorship outcomes than out-group-animosity processes. As with Study 1, we tested two possibilities as distinct sub-hypotheses. First, we compared the patterns of significant results from the tests of our *H1b* and *H2b* to understand the equivalence of in-group-favor and out-group-animosity processes in sports sponsorship. Our results supported *H1b*, whereas the results did not support *H2b*. Together, these results supported *H3a* for the purchase intention outcome. Second, we tested whether the magnitude of the coefficients for the indirect (mediation) relationships occurring through the attitudes toward the sponsors was statistically different for sponsors of in-group and out-group teams (Ryu and Cheong, 2017; Chan, 2007; MacKinnon *et al.*, 2002). Results of this test suggested that there were significant differences for the indirect relationship between team identification and purchase intentions through attitudes toward the sponsor (standardized coefficient = 0.30, $p < 0.01$). This suggested that the in-group-favor processes involved a relationship with a greater magnitude than the out-group-animosity process. *H3b* was supported for the purchase intention outcome.

Moderating effects of rivalry on the strength of in-group-favor and out-group-animosity processes. A second objective that we had in Study 2 was to assess the degree to which differences in the competition and rivalry between teams would amplify the in-group-favor or out-group-animosity processes. Our results suggested that the interaction between team

condition and team identification did not have a significant relationship with attitudes toward the sponsors of in-group teams (standardized coefficient = –0.09, ns), attitudes toward the sponsors of out-group teams (standardized coefficient = 0.07, ns), purchase intentions toward the sponsors of in-group teams (standardized coefficient = –0.10, ns), or purchase intentions toward the sponsors of out-group teams (standardized coefficient = 0.04, ns).

Discussion of Study 2 results

The results of Study 2 support *H1b*, *H3a* and *H3b*. They also aligned with the results of study 1 for the presence of in-group-favor processes and the fact that in-group-favor processes were more pronounced than out-group-animosity processes. The fans appeared to experience meaningful competition and rivalry, and these levels of competition and rivalry differed according to the team being referenced by the experimental manipulation. However, the specific team matchups, which significantly differed in competition and rivalry, did not significantly moderate the relationships between team identification and sponsorship outcomes.

There were also some findings that warranted further elaboration. First, the finding that team identification had a significant direct relationship with purchase intentions suggested the possibility that there could have been some out-group-animosity that was not mediated through fans' attitudes toward the sponsors of the specific out-group team. In this regard, the differences in this finding between the results of Study 1 and Study 2 could have been because of the level of specification in the study items. It is possible that attitudes toward the sponsors of a generalized set of out-group teams better captured a generalized animosity toward competitive threats that related to lower purchase intentions. Conversely, when fans assessed their attitudes toward the sponsors of a specific team, they might have thought more about those sponsors as companies that provide specific products and services when making these evaluations. Future research should explore this further, as our current results did not suggest a complete absence of out-group-animosity relationships. The results only suggested that these relationships did not transfer through attitudes toward the sponsors of specific teams.

Second, agreeableness had a small negative correlation with purchase intentions for out-group teams. In the development of Study 2, we included this measure as a control variable because we believed that trait agreeableness would make people less antagonistic according to their acquiescence to social conventions of harmony, by extension making them less prone to out-group animosity processes. However, the current results suggest that a person's trait agreeableness could actually make them more likely to acquiesce to the expected in-group motives to conform and dissociate with the sponsors of out-group teams. It is possible that reduced purchase intentions represent private and more passive modes of dissociation, which might not seem antagonistic to many agreeable people. Combined with agreeable peoples' trait tendencies to acquiesce and conform, lowered purchase intentions might not be interpreted as antagonistic behaviors that agreeable people would seek to avoid. Nevertheless, the current findings maintain that agreeableness is a relevant dispositional control because of its association with out-group animosity processes.

Third, another finding that should be discussed further is the non-significant relationship that the interaction between the rivalry condition and team identification had with sponsorship outcomes. Indeed, prior research suggests that competition and rivalry could form the basis of negative sponsorship outcomes for competing teams (Bergkvist, 2012; Olson, 2018), and the more general literature on rivalry suggests that a strong rivalry could promote highly motivated, risky and possibly anti-social behaviors (Kilduff *et al.*, 2010;

Kilduff *et al.*, 2016; To *et al.*, 2018). Thus, we present a few possibilities that should be considered further to address the misalignment between our findings and the evidence from this prior research. One possibility is that competition and rivalry effects only show up in extreme cases, as rivalry is a unique situation that promotes people to experience abnormal motivation and display abnormal behavior (Bergkvist, 2012; Kilduff *et al.*, 2010, 2016; Olson, 2018). It is also possible that rivalry could be more of an individual-level psychological experience according to a specific fan's exposure to competitive events and interactions (Kilduff *et al.*, 2010). In this regard, contexts should be differentiated according to whether the competition and rivalry effects are expected to occur at an aggregate level or be more nuanced according to fans' idiosyncratic experiences.

Furthermore, it is possible that the culture of different sports influences how competition and rivalry are manifest. Some sports could have what might be considered a "friendly rivalry" culture where the fans enjoy the high-quality competition. Others could have a more "antagonistic rivalry" culture where fans experience negative emotions as a result of the antagonistic interactions during competition. In this regard, it is possible that there are differences in the aggression and antagonism expressed in baseball rivalries when compared to American football or football (soccer) rivalries. It is also possible that the level of antagonism within rivalries differ according to national or regional culture. Perhaps there are differences in the aggression and antagonism expressed in Taiwanese sports compared to sports in other countries. Prior sponsorship studies on sports team identification and out-group-animosity have drawn samples from cultures such as the USA, the UK, Sweden, Germany, France and Spain (Alonso Dos Santos *et al.*, 2016; Angell *et al.*, 2016; Bee and Dalakas, 2015; Bergkvist, 2012; Grohs *et al.*, 2015; Madrigal, 2000, 2001; Herrmann *et al.*, 2016; Olson, 2018), neglecting Eastern Asia. Taiwan is a country that is high on collectivism and long-term orientation, which would suggest that Taiwanese fans might be more prone to behaviors that maintain social harmony and more prone to consumption decisions that are frugal and functional (Hofstede *et al.*, 2010). Unnecessary antagonism against the sponsors of rival teams could conflict with these personal values, as it would sacrifice harmony and allow hedonic impulses to override otherwise utilitarian purchase decisions.

Study 2 provided some unique insight that was not provided in Study 1. Specifically, Study 2 controlled for respondents' level of agreeableness, considered the relationships according to specific team matchups, assessed mean differences in competition and rivalry across these matchups and assessed whether rivalry influenced the indirect relationships that team identification had with purchase intentions. Study 2 also provided a different perspective on the attitudes toward the sponsors construct that likely reflects a different meaning than the attitude measure that was assessed in Study 1. In Study 1 we assessed fans' attitudes toward the generalized set of sponsors for all competing teams, whereas in Study 2, we assessed fans' attitudes toward the specific team involved in the matchup presented. This difference allowed the comparison of fans' attitudes to all competitors (Study 1) with fans' attitudes toward the sponsors of a specific team (Study 2). There were also some limitations of the current study, such as a more narrow range of outcomes, a more narrow range of antecedents and a focus on only one in-group team. However, each of these limitations were addressed in Study 1. Therefore, the two studies adopted complementary methods as each study accounted for the strengths and weaknesses of the other.

General discussion
The current research sought to compare the sponsorship outcomes of sports team identification according to concurrent in-group-favor and out-group-animosity identification processes. Our results provided strong support for the presence of in-group-favor team

identification processes and some support for the out-group-animosity processes for competing teams. However, our results did suggest that the in-group-favor processes were more reliable across studies. They were also of a greater magnitude according to the direct comparison of the strength of the indirect relationships.

The results provided empirical support that sponsoring a professional sports team can help brands establish an overall positive brand equity with the fans of the sponsored team. We generally suggest that sponsors engage marketing activities to enhance sponsorship signals to the fan base further by using promotional activities (Herrmann *et al.*, 2016) that could be communicated through social and online marketing channels to associate themselves with the team (Cornwell and Kwon, 2019; Lin *et al.*, 2018; Lin *et al.*, 2017). Our results also suggest that out-group-animosity could negatively bias consumers against the sponsoring company. However, these negative biases might not be very substantial and might not even occur in some instances. Overall, our results suggest that in-group-favor processes were more pronounced than out-group-animosity processes.

Prior research suggests that sponsoring a league instead of a specific team, communicating the sponsorship affiliation instead of having the team communicate the affiliation, or choosing to focus on sponsoring teams that do not have a competitor sponsored by a business competitor might help suppress out-group-animosity processes (Grohs *et al.*, 2015; Olson, 2018). However, these suppression decisions might have other less-positive implications such as increasing the cost of a sponsorship or hindering the intended benefits of the sponsorship initiative. Our results suggest that these are not tradeoffs that would maximize the value of sponsorship, as the negative out-group-animosity processes appear to be weaker and more superficial than the beneficial in-group-favor processes. Instead of dissipating their associations with teams, companies might consider pairing team sponsorship with strategically placed cues to their sponsorship to maximize the in-group fans' knowledge about the sponsorship, while minimizing the company's association with the team to the fans of competing teams. For example, teams with a distinctly regional fan base might emphasize their advertisements within the regions with the most adamant fans, while also minimizing any linkage to the team in regions with numerous fans of competing teams. In general, we suggest that companies continue to embrace the comparatively stronger benefits of sports sponsorship according to in-group-favor processes and evaluate the true threat of out-group-animosity processes before taking corrective action that might suppress the more substantial benefits of sponsorship.

There are multiple avenues for future research. A primary focus for future research should be to further explain the differences and explore the broader nomological networks of in-group-favor and out-group-animosity processes. This research should consider antecedents that uniquely predict these processes; cognitive, emotional and behavioral mechanisms that characterize these processes; and boundary conditions that could influence these processes. Specific examples of such boundary conditions could include considering the different manners in which sponsorship relationships are signaled (e.g. stadium signage/displays, national/regional advertising); whether fans watch the event in person or in some other more virtual manner such as on television or online (Carrillat *et al.*, 2015); the duration of sponsorship effects after the contract has ended (Edeling *et al.*, 2017); the role of fit between the sponsor and the sponsored entity (Angell *et al.*, 2016); and differences in the prominence of the in-group and out-group sponsors (Johar and Pham, 1999). This research could also consider the implications of sponsorships where one company sponsors multiple teams to assess the role of concurrent in-group-favor and out-group-animosity processes in these contexts. Furthermore, it would be informative to account for other types of exposure and specific measures of attitude strength (Howe and Krosnick, 2017). Future research

focused on assessing the competition and rivalry effects might also consider different operationalizations of rivalry (Tyler *et al.*, 2017). This research might further benefit from the use of qualitative methodologies to understand the nuance of whether fans consider the generalized set of rival sponsors or the specific sponsors of rival teams and more broadly explore the concepts involved in sponsorship rivalry processes.

Another extension of this research would be to study particular brand sponsors, rather than generalized team sponsors or situations. This would allow for a closer consideration of the sponsorship characteristics such as whether the sponsors are involved in controversial industries such as gambling, alcohol or tobacco. In this regard, sponsors might withdrawal from sponsorships with teams or sponsored entities that have a poor reputation (e.g. instances of players taking drugs, match-fixing, or ball tampering). Other times, the sponsors could be undesirable partners for the sports entities (e.g. companies selling alcohol, tobacco or betting services, or corporations with poor environmental records) as they could damage the reputations of other sponsors of the teams. Such issues could be relevant for both in-group and out-group fans and, therefore, should be considered to better inform managerial decision-making. Future research should also assess how the dispositional traits and tendencies of fans influence sponsorship rivalry processes. This research could help explain whether fans' trait agreeableness reduces their general tendency toward out-group-animosity or just their tendencies to engage in more visibly antagonistic actions such as negative word-of-mouth.

There were some general limitations of the research that should be addressed in the design of future studies. We only sampled one sport from one culture, and it is possible that results could differ across other sporting and cultural sponsorship contexts. Prior research suggests that there are cross-cultural differences in consumer responses to both formal signaling engaged by companies (Akdeniz and Talay, 2013) and informal signaling engaged by other participants within the market (Lin and Kalwani, 2018). Thus, future research should broadly consider how cultural values, national identities and sports cultures interface with sponsorship-based identification to influence in-group-favor and out-group-animosity processes. Another limitation is that we only considered three comparison teams in the Study 2 experimental manipulation of team rivalry. It is possible that the level of rivalry between these conditions was not linear. Therefore, future research should explore both linear and non-linear measures of team rivalry. Future research that involves randomly assigned team matchups should also consider leagues with more teams such as the National Basketball Association (NBA), or broader global competitions such as the Olympics, to provide a more continuous measure of team rivalry.

We also asked the participants to answer questions about the sponsors of their in-group team first, and then asked them questions about the sponsors of out-group teams. It is possible that exclusively asking questions about the sponsors of in-group/out-group teams in any one survey wave or randomly reversing the order of questions might reveal different patterns of results. Future studies should also control for possible order effects whereby the sequence of questions about in-group and out out-group team sponsors is randomly assigned to participants. Another limitation is that questionnaires were administered through the official websites of sports teams. Therefore, fans who did not follow the team online, or did not register with the teams' official websites, were not contacted through our recruitment. Research should also continue to refine the measurement of team identification within countries and populations that primarily speak Mandarin, such as Taiwan. Furthermore, while we took multiple steps to account for common method bias such as ensuring participant confidentiality, assessing test measures of recognition, and accounting for theoretically relevant self-reported measures (i.e. exposure to the team and

agreeableness), future research could use marker variables to account for unanticipated sources of common method bias (Malhotra *et al.*, 2017; Podsakoff *et al.*, 2003).

Conclusion

We compared concurrent in-group-favor and out-group-animosity processes in consumers' reactions to sports sponsorship across two studies and four separate samples. These processes had positive outcomes for the sponsors of in-group teams, and in some cases had negative outcomes for the sponsors of out-group teams. However, our results also suggested that the in-group-favor processes had more reliable and potent implications than the out-group-animosity processes. While consumers can hold animosity toward sponsors of competitor teams, this animosity might be relatively weak and superficial, if it occurs at all. Therefore, companies should sponsor popular teams and closely consider if out-group-animosity is a threat in their specific context. If it is, they should consider how to minimize the salience of their connection to the team in a targeted manner specifically for fans of competitor teams.

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Appendix. Measurement items used for Study 1 and Study 2

<Team> identification (Study 1 and Study 2)
- When someone criticizes <Team>, I want to argue back.
- I pay attention to what others say about <Team>.
- When I talk about <Team>, I usually say "we <Team>"rather than "they <Team>".
- When someone praises <Team>, it feels like a personal complement.
- If a story in the media criticizes <Team>, I would feel upset.

Perceived prestige (Study 1)
- The fans who support <Team> think <Team> is a very good team.
- The fans who support <Team> think <Team> has an outstanding reputation.
- The fans who support <Team> think <Team> has excellent game performance.

Domain involvement (Study 1)
- Baseball is very important to me.
- I think about baseball all of the time.
- I turn on the TV to watch baseball when it is live.

Attitude toward sponsors of in-group teams-specified (Study 1 and Study 2)
- I feel the sponsors of <Team> are good brands.
- The sponsors of <Team> are companies I like.
- I am satisfied with the sponsors of <Team>.

Purchase intentions for sponsors of the in-group teams-specified (Study 1 and Study 2)
- When I shop for products or services, I often look for those sold by sponsors of <Team>.
- When there are no quality, price, or other differences, I purchase products or services sold by sponsors of <Team> first.
- In general, I will consider the products or services sold by sponsors of <Team> in my purchase decision-making.

Post-purchase satisfaction for sponsors of the in-group teams-specified (Study 1)
- Based on my experiences, I am satisfied with the company's product or service.
- Compared to other similar organizations that I have done business with, I am more satisfied with the company's product or service.
- In general, I am satisfied with the company.

Attitude toward sponsors of out-group teams-generalized (Study 1)
- I feel the sponsors of other teams are good brands.
- The sponsors of other teams are companies I like.
- I am satisfied with the sponsors of other teams.

Purchase intentions for sponsors of the out-group teams-generalized (Study 1)
- When I shop for products or services, I often look for those sold by sponsors of other teams.
- When there are no quality, price or other differences, I purchase products or services sold by sponsors of other teams first.
- In general, I will consider the products or services sold by sponsors of other teams in my purchase decision-making.

Post-purchase satisfaction for sponsors of the out-group teams-specified (Study 1)
- Based on my experiences, I am satisfied with the company's product or service.
- Compared to other similar organizations that I have done business with, I am more satisfied with the company's product or service.
- In general, I am satisfied with the company.

Rivalry (Study 2)
- I feel rivalry toward <Competing Team>.
- <Team> have a history with <Competing Team> that makes competitions against this team more significant than competitions against other teams.

- I consider <Competing Team> to be a primary rival of the <Team>.
- Competitions against <Competing Team> are more important to me because of the relationship that exists between them and <Team>.

Competition (Study 2)

- <Competing Team> and <Team> have been evenly matched in their competitions against each other.
- <Teams'> competitions against <Competing Team> have been closely decided (i.e., the margins of victory or defeat were small).

Attitude toward sponsors of out-group teams-specified (Study 2)

- I feel the sponsors of <Competing Team> are good brands.
- The sponsors of <Competing Team> are companies I like.
- I am satisfied with the sponsors of <Competing Team>.

Purchase intentions for sponsors of the out-group teams-specified (Study 2)

- When I shop for products or services, I often look for those sold by sponsors of <Competing Team>.
- When there are no quality, price or other differences, I purchase products or services sold by sponsors of <Competing Team> first.
- In general, I will consider the products or services sold by sponsors of <Competing Team> in my purchase decision-making.

Appendix Note: "<Team>" represents in-group team and "<Competing Team>" represents comparison out-group team. In study 2, the competing team is the out-group team that is specifically mentioned in the randomized manipulation. The term "generalized" refers to a measure that addresses the sponsors of all competing teams, whereas the term "specified" refers to a measure that addresses the sponsor(s) of a specific team.

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