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Moderating and Mediating Effects of Team Identification in Regard to Causal Attributions and Summary Judgments Following a Game Outcome

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Fans' causal attributions for a game outcome refer to their assessments of the underlying reasons for why things turned out as they did. We investigate the extent to which team identification moderates fans' attributional responses to a game outcome so as to produce a self-serving bias that favors the preferred team. Also explored is the ability of team identification to mediate the effect of attributions on the summary judgments of basking in reflected glory (BIRG) and satisfaction with the team's performance. Consistent with a self-serving bias, we found that highly identified fans were more likely to attribute a winning effort to stable and internal causes than were lowly identified fans. Moreover, the extremity of response between winners and losers was greater among highly identified fans than lowly identified fans. Team identification was also found to mediate the influence of (a) stability on BIRGing and (b) internal control on BIRGing. No such mediation effects were observed in the case of satisfaction. Managerial implications are discussed.

Attribution theory focuses on a fundamental need that people have to explain the underlying causes of important events or outcomes (Weiner, 1986). Causal attributions are a type of general fact-based knowledge (i.e., concerns matters such as who, what, when, where, why, and how) that allows people to comprehend the meaning of an event. Given its centrality to human nature, it is therefore not surprising that fans put so much effort into identifying the reasons behind a preferred team's victory or defeat. One need only listen to sports talk radio or read a sports blog on the day after an important game to appreciate the prevalence of such behavior among fans.

Understanding how fans interpret sporting event outcomes is important to managers because it allows them to better understand the ways in which their product is being consumed. Research has consistently shown that causal attributions influence consumers' reactions to a product or service (Folkes, 1988; Folkes, Koletsky, & Graham, 1987; Weiner, 2000). We consider two such reactions in the context of the consumption of a sporting event: satisfaction with the team's

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performance and desire to bask in the reflected glory (BIRG) of the team. Whereas satisfaction is concerned with a summary judgment of a team's performance in a given game, BIRGing addresses the fan's need to affiliate with a successful other to boost his or her own esteem in the eyes of others.

From a managerial perspective, a variable that should be especially important when considering reactions arising from causal attributions is the degree to which the fan is psychologically attached to a sports team. Clearly, managers have little ability to directly affect fans' attributions regarding the events contributing to a particular outcome. However, it is possible for managers to influence fans' avidity with a sports team. For example, the NBA hosts player blogs and chat forums online to build a connection between the player, team, and fans; the MLB hosts fantasy baseball games for its fans; and NFL teams such as the Green Bay Packers conduct football camps during the summer to cultivate the next generation of fans. The psychological attachment that a fan has with a favorite team represents an especially important social identity to many people. In fact, for those most highly aligned, a team's victories and defeats are frequently interpreted as individual successes and failures (Hirt, Zillmann, Erickson, & Kennedy, 1991). We conceptualize a fan's psychological alignment with a team in terms of team identification.

The current study investigates two issues pertaining to team identification and causal attributions. First, we consider how level of identification with a team moderates fans' attributional responses to a game outcome so as to produce a self-serving bias for those most highly aligned with the team. A self-serving bias refers to a highly identified fan's tendency to attribute successful outcomes by a favorite team to causes considered to be internal to and controllable by the team, and stable over time, and to attribute unsuccessful outcomes to causes perceived to be external to the team. Our second area of investigation concerns the ability of team identification to mediate the effect of causal attributions on summary judgments. We expect a mediation effect in the case of BIRGing because the self-esteem benefits associated with identification are likely to be more proximal to the BIRG reaction than are causal attributions. In contrast, given the focus on an outcome to a single game, we expect that team identification will not mediate the effect of attributions on satisfaction.

Background

Weiner (1986) asserts that the underlying causes for an event's outcome are assessed along three causal dimensions: (a) locus of causality, whether an outcome was due to internal causes (e.g., ability, effort); (b) controllability, whether the outcome was under the control of the individual or due to uncontrollable factors (e.g., luck); and (c) stability, whether an outcome is due to a stable versus unstable cause and could have been anticipated. More recently, Weiner (2000) has argued that attributions "intervene and exert their influence after a product-related outcome and prior to the next choice" (p. 383). As such, they have a direct effect on consumers' postconsumption summary judgments of the product. For example, substantial research has investigated the link between causal attributions and consumer satisfaction (Oliver & DeSarbo, 1988; A. K. Smith, Bolton, & Wagner, 1999; Tsiros, Mittal, & Ross, 2004).

Causal attributions are a type of "cold" knowledge in that they are concerned with facts about some event or situation (C. A. Smith, Haynes, Pope, & Lazarus, 1993). Interestingly, these facts are open to interpretation depending on one's perspective. The first study to consider how fans' attributions about a game outcome are interpreted differently based on team allegiance was conducted by Hastorf and Cantril (1954). They found that Princeton students reported seeing a higher number of infractions committed against their school's team than did students from an opposing team's school in a game in which Princeton's star player was injured. The results suggest that although both groups of students were exposed to the same objective information, their interpretation of events varied greatly depending on their affiliation with the team. Similar results have been reported by others with the overwhelming implication being that sports fans attribute team success to more stable and controllable causes, and failures to unstable and external causes (Lau, 1984; Lau & Russell, 1980; Mann, 1974). This tendency has been referred to as a hedonic or self-serving bias (Miller & Ross, 1975).

Research by Wann and his colleagues has explored in greater detail how fans' level of psychological commitment to a sports team affects their postgame attributions. Operationalized in terms of team identification, Wann and his colleagues have argued that highly identified fans exhibit more extreme behaviors in reaction to a favorite team's performance than do those with lower levels of identification (Madrigal, 2004; Wann, Melnick, Russell, & Pease, 2001 for reviews). For example, focusing on locus of causality, Wann and Dolan (1994) reported that highly identified fans were more apt to attribute a winning effort by a preferred team to internal causes (e.g., players' efforts, fan support), and a losing effort to external causes (e.g., referees, fate). In effect, this research adds credence to the notion of a self-serving bias but clarifies that such an effect is most pronounced for those who are most highly identified with the team. In a later study, Wann and Schrader (2000) were able to replicate the locus effect demonstrated by Wann and Dolan (1994), and also examined the extent to which the attributions of controllability and stability were moderated by team identification. Consistent with a self-serving bias, they reported that highly identified fans were more likely to attribute a win to controllable and stable causes than were lowly identified fans.

Although an important first step in its conception, the design and execution of the Wann and Schrader (2000) study may be faulted on a number of different fronts. First, rather than using multiple-item scales so as to enhance reliability and validity, the study relied on single-item measures to assess controllability and stability. In addition, only two items each were used to measure internal and external attributions. Each of these scales was constructed specifically for their study. No mention was made of the discriminant or construct validity of the attribution items used in the research. The use of such measures is curious given the existence of well established multiple-item scales designed to assess the dimensions of causal attributions (McAuley, Duncan, & Russell, 1992). Second, team identification data were collected after rather than before the game was played. Thus, responses may have been contaminated by the game's outcome. Third, the games included as stimuli were selected based on the likelihood that the preferred team would either win or lose. A central tenet of attribution theory is that causal attributions are affected by expectations (Weiner, 1986). Although not referenced in the article, it is unlikely that Wann and Schrader (2000) informed respondents' of the

likely outcome before the game. However, it is quite probable that respondents were also aware of how things were expected to turn out—particularly those who were most highly identified with the team. Thus, the possibility exists that participants' attribution ratings were affected by this knowledge. Including games as stimuli for which the outcome was less predictable or controlling for variance in pregame expectations would add credibility to Wann and Schrader's results.

More recently, End et al. (2003) examined how game outcome affects the type of attributions that fans and rival fans generate in a computer-mediated medium. They randomly selected 164 attributions for a team's performance that were posted on a sports magazine's message board and coded them along the dimensions of locus, controllability, and stability. Contrary to Wann and Schrader's (2000) findings implying a self-serving bias, their results suggested that fans were more likely to attribute their team's victories to external, stable, and uncontrollable factors, and losses to internal, unstable, and controllable attributions. In addition, fans of a losing team made more internal and controllable attributions following their team's losses compared with rival fans. End et al. (2003) concluded that the pattern of effects found in their study implies that self-presentation motives and social norms influence fans' attributions. Yet, data from rival fans were more consistent with a self-serving bias than were the data from fans. Thus, their results are not only contrary to those reported by Wann and Schrader (2000) but they are also internally inconsistent.

Like the Wann and Schrader (2000) study, the End et al. (2003) research also suffered from many shortcomings. First, data were collected from a website for which no controls existed for determining who was participating in the study. Thus, it was not possible to determine how representative the sample was of sports fans in general or even to know from whom data were being collected. Second, data were coded by two undergraduate students who had limited expertise in coding procedures. Third, there was no way for the authors to determine fans' level of identification with a team. Fourth, the categorization of respondents as fans of the team was highly subjective.

Given the nature of conflicting results and methodological shortcomings of research in this area, it is clear that additional work would aid our understanding of the attributions made by sports spectators following a sporting event. Thus, the first purpose of our research is to examine whether team identification moderates the effects of game outcomes on causal attributions so as to produce a self-serving bias in sports fans. We improve on previous research by using multiple-item attribution measures that have demonstrated strong internal consistency and are well represented in the social psychological literature. In addition, we control for pregame expectations by including a measure assessing respondents' estimates of the preferred team's chances of winning. In addition, in contrast to Wann and Schrader (2000), team identification data are collected before the start of the game.

Consistent with a self-serving bias we expect that compared with low identification fans, highly identified fans whose preferred team wins will attribute the outcome to causes that are: (a) more internal to the team's ability, (b) more under the personal control of the team, (c) more stable over time, and (d) less under others' control. A self-serving bias is also anticipated following a loss such that high identifiers will be more likely than low identifiers to attribute the outcome to

causes external to the team (i.e., an external locus and under external control). We also expect that due to the more extreme reactions resulting from higher levels of fan avidity that differences between winners and losers for each causal attribution will be more pronounced for those high in team identification compared with those low in team identification. That is, the difference between winners and losers on each attribution will be substantially greater for high identifiers than low identifiers.

Consequences of Causal Attributions. An especially interesting omission in the research on team identification and sports fans' attributions is the lack of attention paid to the consequences of causal attributions. We consider two such consequences: basking in reflected glory (BIRGing) and satisfaction with team performance. Consistent with balance theory (Heider, 1958), fans enhance their own esteem in the eyes of others by communicating their affiliation with a team whose actions they consider praiseworthy. Fans demonstrate BIRGing behavior in a variety of ways, including bragging about their preferred team, using the first-person pronoun "we" rather than "they" when referring to their team, and wearing clothing displaying the team's logo (Cialdini et al., 1976). In contrast, fans seek to distance themselves from a team that is judged to be blameworthy, an image-protection technique referred to as cutting off reflected failure or CORFing (Snyder, Lassegard, & Ford, 1986). CORFing is a corollary of BIRGing and the two terms are conceptualized here as bipolar endpoints existing along a continuum. For purposes of clarity, the term BIRGing is used in the current research with higher levels indicating a fan's desire to decrease the distance between self and team, and lower levels indicating a fan's desire to increase the distance.

To date, no research has specifically linked causal attributions with BIRGing. However, we hypothesize that BIRGing should be predicted by attributions given that the evaluation of a game relies on factual information represented in the form of causal attributions. For example, believing a win to be the result of the team's own ability should heighten the possibility that the fan will let others know of her association with the team, thus leading to greater levels of BIRGing. We expect, however, that such an effect should be mediated by team identification. That is, attributions about a team's successful performance should enhance self-image and therefore reinforce feelings of affiliation with the team and these feelings are then, in turn, transferred to BIRGing.

In contrast to BIRGing which is a direct consequence of one's level of affiliation with a sports team, satisfaction focuses only on how well the team has performed in a particular game. Satisfaction is the result of a process tied to a singular experience (Oliver, 1997). It relies on judgments of the individual events occurring during a specific game that contribute to its outcome as well as an overall impression of the team's collective performance. Thus, consistent with Oliver (1997), satisfaction is conceptualized here as a fulfillment response resulting from a fan's decision to select a particular team as her favorite based on its performance in a single game that has just been completed. Because of its focus on just one game, we expect that the effect of attributions on satisfaction will not be mediated by team identification. Satisfaction will be proximal to attributions because facts about the game as characterized in the form of causal attributions will be trans-

ferred directly to the fan's fulfillment response. Team identification should not influence these feelings because satisfaction focuses on a singular performance by the team, not on feelings of self esteem which are directly linked to a BIRG reaction.

Method

Procedure and Sample

Respondents watched one of two National Football League games in which teams were vying for a conference championship. A convenience sample was used in which respondents were recruited from a variety of university courses (e.g., physical education, sports management, general business, and psychology) and were rewarded with extra credit for their participation. All respondents viewed their respective game on television. Neither of the games featured teams from the same geographical location in which subject data were collected.

The use of a convenience sample that was not restricted to only individuals residing in the cities represented by the participating teams was deemed appropriate for two reasons. First, people identify with a number of different groups depending on the salience of that particular group in a given situation. Such allegiances are often arranged hierarchically such that identification at one level of membership is often subsumed under another level of membership depending on the situation. For example, a San Francisco 49er fan is likely to identify with and root for the winner of the National Football Conference West regardless if it is the 49ers simply because that is the conference in which the 49ers play. If the NFC West winner does not prevail in the divisional playoff, the fan is likely to shift his allegiance in the Super Bowl to the NFC Conference champion. Second, it is quite common for fans to simply pick a team to root for when watching a sporting event. Identification in this case may be explained in terms of the minimal group paradigm which suggests that even individuals who are randomly assigned to one group versus another consistently show an in-group bias favoring their assigned group (Tajfel, 1970). Moreover, this bias is accentuated in the presence of competition between the two groups (Turner, 1975). Regardless of the underlying process, of greatest consequence to this research is that study participants are more highly identified with one of the competitors than they are with its opponent.

Eighty-nine individuals watched a National Football Conference championship game and 37 watched an American Football Conference championship game. Four individuals failed to watch the NFC game in its entirety and were subsequently eliminated from the analysis. In total, data used in this study were collected from 121 individuals who watched their assigned game in its entirety and completed all scale items. Most were juniors or seniors in college (79%) and were male (74%).

Besides the difference in NFL conference, data collection varied between the groups on two dimensions. First, data for those watching the NFC game were collected from students attending a large Midwestern university whereas AFC game data were collected from individuals attending a moderately sized university located in the Northwest. The other difference was that data for the NFC group were collected at two different points in time. On the Friday before the game,

respondents completed a team identification scale for each of the participating teams and indicated the team that was their most preferred (i.e., favorite). They also provided a probability estimate of each team's chances of winning this particular game. NFC respondents were then asked to watch the game in its entirety on television in a location of their own choosing. A second stage of data collection for the NFC group took place on the Monday immediately following the game. Here, respondents completed scales related to causal attributions, satisfaction with their favorite team's performance, and BIRGing.

In contrast, all data for respondents in the AFC group were collected during a single data collection. The reason for varying the data collection procedures was to determine if any differences would be found based on how the scales were administered and where respondents watched the game. Arriving at the university's Media Services Center (MSC) 40 min before AFC game kickoff, respondents were initially asked to complete the team identification scale for each of the competing teams and to then indicate which of the two teams was their favorite. They were then asked to provide a likelihood estimate of each team's chances of winning the game. Next, they were randomly assigned to one of two rooms in the MSC to watch the game. Immediately after the game, respondents completed scales measuring attributions, satisfaction, and BIRGing.

Measures

Team Identification. A subset of five items from the Sports Spectator Identification Scale (SSI; Wann & Branscombe, 1993) was used to measure team identification with each of the participating teams. The two items not included from the original scale pertained to media usage and were deemed not to fit the current context because "local" teams were not featured as stimuli. Using 7-point semantic differential scales, the items included in the current study measured each respondent's perceptions of (a) the importance of being a fan of the team (*not at all important/very important*); (b) the importance of the team winning this game (*not at all important/very important*); (c) how strongly the respondent sees himself as being a fan of the team (*not at all a fan/very much a fan*); (d) how strongly friends see the respondent as being a fan of the team (*not at all a fan/very much a fan*). In addition, one behavioral item from the SSI scale was included: "How often do you publicly display clothing featuring the team's logo or colors?" (*never/always*). Respondents completed the scale for each of the participating teams and also indicated which of the two teams was their favorite (i.e., most preferred). The alpha coefficients for the summed Team Identification scales for their favorite team and its opponent were, respectively, .94 and .84.

Causal Attributions. McAuley, Duncan, and Russell's (1992) Revised Causal Dimension Scale (CDSII) was adapted in the current study to assess causal attributions. After providing an open-ended description of the causes contributing to the game's outcome, respondents were instructed to code that ascription along four causal dimensions. They were asked to do this in reference to the team they selected as their favorite. All items for each dimension were measured using 10-point semantic differential scaling: *locus of causality* (reflects an aspect of my favorite team/reflects an aspect of the situation; internal to my favorite team/external to my favorite team; something about my favorite team/something about

others; alpha = .85); *personal control* (under the personal control of my favorite team/not under the personal control of my favorite team; manageable by my favorite team/not manageable by my team; over which my favorite team had some power/over which my favorite team had no power; alpha = .80); *external control* (under the power of others [e.g., opponent, referees]/not under the power of others; over which others had control/over which others had no control; a result of others' actions/not the result of others' actions; alpha = .76); and *stability* (typical of my favorite team/not typical of my favorite team; likely to happen again if the same two teams played/not likely to happen again; would result in the same outcome again in the future/would not result in the same outcome again in the future; alpha = .85). All items in the Revised CDSII were reverse coded so as to reflect greater levels of internal locus, personal control, external control, and stability.

Satisfaction With Team Performance. Four items, each measured on a 10-point Likert scale (*strongly disagree*/*strongly agree*) were used to measure satisfaction: "I am satisfied with the way my favorite team performed in this week's playoff game," "If I had to do it over again, I would feel differently about selecting this team as my favorite this week" (reverse coded), "Selecting this team as my favorite was a good choice," and "Overall, I am satisfied with the job my favorite team did this week." Coefficient alpha for the aggregated scale was .76.

Basking in Reflected Glory (BIRGing). Two items were used to measure BIRGing, each assessed on a 10-point *strongly disagree*/*strongly agree* continuum: "I feel like bragging about the team I picked as my favorite this week," and "I would be happy to let people know that I am a fan of this team." The correlation between the two items was .67 and the alpha coefficient for the summed scale was .80.

Probability of Winning. After completing the Team Identification scale for each of the participating teams, respondents were asked to divide 100 points between the two teams in accordance with each team's chances of winning the game they were about to watch. Respondents' probability estimate for the team they picked as their most preferred (i.e., favorite) was included as a covariate in subsequent analyses.

Results

Preliminary Analyses

An exploratory direct oblimin factor analysis was initially conducted to determine the dimensionality of the causal attribution scales. A visual inspection of the scree plot revealed three distinct factors with a total explained variance of 68.8%. The first factor yielded an eigenvalue of 5.00 and accounted for 41.7% of the variance, followed by factors with eigenvalues (and explained variances) of 2.20 (18.3%) and 1.03 (8.6%). Items from the locus and personal control scales loaded on the first factor, with the three external control items loading on the second factor and the stability items loading on the final factor. Given the loadings on the first factor, all items from the locus and personal control scales were summed and the new scale called internal control. The alpha coefficient for internal control was .87.

Next, we examined the data for group differences. We began by conducting a multivariate analysis of variance (MANOVA) in which each of the variables considered in the study (team identification for the preferred team, team identification for less preferred team, internal control and stability attributions, BIRGing, satisfaction, and probability of preferred team winning) was included as a criterion variable with respondent sex and conference of game watched (AFC vs. NFC). Neither a main effect for sex ($p = .251$) nor a two-way interaction ($p = .611$) was found. However, a main effect was observed for conference, $F(8, 110) = 3.35$, $p = .002$. Follow-up analysis revealed that a difference existed on stability with NFC respondents ($M = 6.06$, $SD = 2.48$) attributing the outcome to more stable causes than AFC respondents ($M = 4.24$, $SD = 2.45$), $F(5, 117) = 5.35$, $p < .001$. Interestingly, the score differential at the end of the AFC game was much smaller (4 points) than was the difference in the NFC game (10 points). No other effects were significant. Given its effect on stability, conference of game watched was included as a covariate in all subsequent analyses. A second analysis of group differences was conducted comparing respondents' ratings of team identification for their preferred team to their identification ratings with the less preferred team. The results of a paired *t* test indicated that team identification was significantly greater for the preferred team ($M = 3.55$, $SD = 1.73$) than its opponent ($M = 1.53$, $SD = .71$), $t(120) = 12.19$, $p < .001$.

Test of a Self-Serving Bias

To test the self-serving bias hypothesis, a 2 (identification level: high or low) × 2 (game outcome: win or loss) × 3 (attribution item: internal control, external control, stability) multivariate analysis of covariance (MANCOVA) was conducted. The two covariates were: conference of game watched (NFC or AFC) and respondents' probability estimate of their favorite team's chances of winning. Identification level and game outcome were between subjects and attribution item was within subject. Identification levels were determined on the basis of a median split of respondents' team identification scores for their favorite team. As expected, those in the high-identification group scored significantly higher on team identification ($n = 61$; $M = 5.00$, $SD = 1.12$, range = 3.4–6.80) than did those in the low-identification group ($n = 60$; $M = 2.08$, $SD = .67$, range = 1–3.20), $t(119) = -17.33$, $p < .001$. Cell mean scores for all measures included in the study by identification level and game outcome are displayed in Table 1.

Regarding the covariates, as discussed earlier in the group differences analysis, conference of game watched influenced stability, $F(2, 114) = 10.29$, $p < .001$. Differences in the within-subject attribution items were also observed for probability of winning, $F(2, 114) = 4.55$, $p = .013$. Probabilities were positively associated with internal control ($r = .29$, $p = .001$) and stability ($r = .19$, $p = .034$), and negatively related to external control ($r = -.25$, $p = .005$). No between-subject difference based on probability of winning was found for the mean score of all the attribution items ($p > .60$). A main effect for the overall mean of the attribution items was found however for game outcome, $F(2, 114) = 32.53$, $p < .001$. The only significant two-way interaction found involved within-subject differences in attribution items by game outcome, $F(2, 114) = 32.53$, $p < .001$. However, this

Table 1 Descriptive Statistics for Ratings of Attribution Items and Summary Judgments by Level of Team Identification and Game Outcome

	Low Identification				High Identification			
	Loss (n = 30)		Win (n = 30)		Loss (n = 31)		Win (n = 30)	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
External Control	5.43	1.92	5.14	1.88	5.08	2.29	4.61	2.03
Internal Control	5.79	1.54	6.32	1.79	6.09	1.74	7.67	1.78
Stability	4.36	1.89	5.93	2.44	3.67	1.95	8.11	1.52
Basking in Reflected Glory (BIRGing)	3.77	1.95	4.90	2.44	5.94	2.48	7.67	2.67
Satisfaction	6.35	1.91	7.85	1.62	7.15	1.83	8.55	2.05
Team Identification for Preferred Team	2.08	0.60	2.09	0.74	5.15	1.23	4.85	1.00
Team Identification for less Preferred Team	1.45	0.64	1.39	0.50	1.59	0.87	1.69	0.78
Probability of Preferred Team Winning	56.90	21.03	54.47	16.66	62.16	19.38	70.97	15.50

Note: Scale range for external control, internal control, stability, BIRGing, and satisfaction was 1–10. Scale range for team identification for preferred team and less preferred team was 1–7. Scale range for probability of preferred team winning was 0–100.

effect was qualified by the significant hypothesized three-way (Identification Level × Game Outcome × Attribution Item) interaction, $F(2, 114) = 6.10$, $p = .003$.

Figure 1 illustrates the nature of the three-way interaction. The only identification-level differences found were for those whose favorite team won. As hypothesized, highly identified fans were more likely to attribute a winning effort to stable, $F(1, 115) = 14.90$, $p < .001$, and internal causes, $F(1, 115) = 4.91$, $p = .029$, than were lowly identified fans. However, contrary to what we expected, no identification level difference was found for external control following a loss ($p = .671$). In fact, no identification differences were observed for any of the attributions in the loss group (all p's > .10). Thus, our results are consistent with a self-serving bias—but only for those who saw their favorite team win.

We next considered the extremity of responses in attribution ratings between winners and losers within each level of team identification. As hypothesized, the difference between highly identified winners and losers on stability, $F(1, 115) = 79.68$, $p < .001$, and internal control, $F(1, 115) = 10.05$, $p = .002$, were substantially greater than were outcome differences for low-identification fans on stability, $F(1, 115) = 10.85$, $p = .001$, and internal control, $F(1, 115) = 1.66$, $p = .20$. No difference was found for external control ($p = .84$). In spite of the latter, the results clearly indicate that when compared with low identifiers, the attributions of those high in identification are much more affected by game outcome.

Mediation Tests

Before conducting tests of mediation, we investigated whether group differences existed for each of the summary judgments. The results of a 2 (identification level: high or low) × 2 (game outcome: win or lost) MANCOVA with conference of

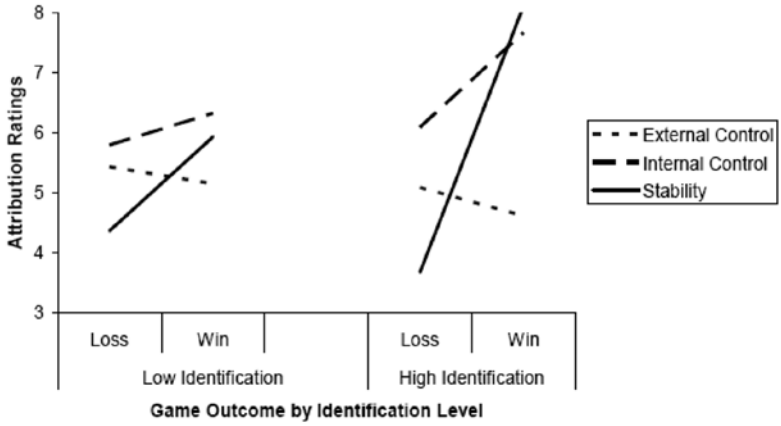

Figure 1 — Results of Identification Level × Game Outcome × Attribution Item interaction.

game watched and probability of winning as covariates, and BIRGing and satisfaction included as dependent variables indicated no interaction effect ($p = .571$). However, expected main effects were found for identification level, $F(2, 114) = 14.10$, $p < .001$, and game outcome, $F(2, 114) = 8.90$, $p < .001$. Follow-up tests revealed that high identifiers ($M = 6.79$, $SD = 2.70$) had higher BIRGing scores than did low identifiers ($M = 4.33$, $SD = 2.26$), $F(1, 115) = 25.73$, $p < .001$. In regard to game outcome, winners ($M = 6.28$, $SD = 2.89$) scored higher on BIRGing than did losers ($M = 4.87$, $SD = 2.47$), $F(1,120) = 10.40$, $p < .001$. Winners ($M = 8.20$, $SD = 1.86$) also scored higher on satisfaction than did losers ($M = 6.76$, $SD = 1.89$), $F(1, 120) = 16.76$, $p < .001$. The multivariate results also revealed that the conference covariate was significant, $F(2, 114) = 6.68$, $p = .002$. Specifically, those watching the NFC game ($M = 7.72$, $SD = 1.93$) were more satisfied than were those watching the AFC game ($M = 6.91$, $SD = 2.08$), $F(2, 115) = 4.62$, $p = .034$.

Mediation is thought to exist when (a) the purported predictor (attribution item) is related to the mediator (team identification), (b) the predictor is related to the criterion variable (BIRGing or satisfaction) in the absence of the mediator, (c) the mediator has a significant unique effect on the criterion, and (d) the effect of the predictor on the criterion is reduced upon the addition of the mediator to the model. To test for mediation, a series of hierarchical regressions were conducted (Baron & Kenny, 1986). Given that identification differences were found on only two causal attributions and only in the win group, our analysis focuses on just the attributions of internal control and stability in this group. Our guiding hypothesis is that team identification will mediate the effect of causal attribution on BIRGing but not its effect on satisfaction with the team's performance. Consistent with our earlier analysis, conference of game watched (NFC vs. AFC) and probability of winning were entered in the first step of all regression analyses as covariates.

The results of the mediation tests are summarized in Table 2. Each section of the table corresponds with the steps outlined in the previous paragraph for testing mediation. The top rows in the table, section (a), depict the direct effect of each causal attribution on team identification. Section (b) in the table shows the direct effect of each attribution on the two criterion variables in the absence of a team identification effect. Next, section (c) indicates the direct effect of team identification on each criterion. Finally, section (d) depicts the mediated effect of the predictor on each criterion. Consistent with our hypothesis, using the Aroian version of the Sobel test suggested by Baron and Kenney (1986), team identification mediated the influence of stability on BIRGing ($z = 2.82$, $p = .005$) and also mediated the direct effect of internal control on BIRGing ($z = 2.37$, $p = .018$). Moreover, as shown in Table 2, the previously significant influence of stability on BIRGing was fully mediated by team identification, and the effect of internal control on BIRGing was greatly reduced in the presence of team identification. Also consistent with our hypothesis, results of Sobel tests indicated nonsignificant effects for stability ($z = 1.80$, $p = .072$) and internal control ($z = 1.64$, $p = .100$) on satisfaction. Referring to Table 2, the mediated effect of each attribution on satisfaction was quite similar to the unmediated effect.

Table 2 Results of Mediation Tests

	Mediator: Team Identification			Criterion Variable: Basking in Reflected Glory (BIRGing)			Criterion Variable: Satisfaction		
	β	*t*	*p*	β	*t*	*p*	β	*t*	*p*
(a) Predictor's effect on mediator (unmediated effect)									
—Internal Control	.31	2.64	.022						
—Stability	.38	3.29	.002						
(b) Predictor's effect on criterion									
—Internal Control				.45	3.42	.001	.39	3.26	.002
—Stability				.32	2.25	.029	.40	3.34	.002
(c) Mediator's effect on criterion				.71	5.75	<.001	.30	2.26	.028
(d) Predictor's effect on criterion in the presence of the mediator (mediated effect)									
—Internal Control				.26	2.20	.032	.33	2.64	.011
—Stability				.06	0.44	.665	.34	2.61	.012

Discussion

The current research contributes to the literature on sports spectators by focusing on the moderating and mediating roles played by team identification in regard to causal attributions and summary judgments about the game experience. In extending the work of Wann and Schrader (2000), we used a more well-established set of scales to measure the dimensions of causal attribution, statistically controlled for respondents' pregame expectations about a favorite team's chances of winning, and collected data on team identification before rather than following the game. Yet, in spite of these adjustments, our results were nevertheless quite similar to those of Wann and Schrader. A self-serving bias was found for the causal dimensions of internal control and stability for highly identified fans following a favorite team's victory. Compared with those low in team identification, highly identified fans were more likely to attribute the win to causes deemed to be under the internal control of the team. In addition, high identifiers believed that the same game outcome would occur again if the two teams were to play in the future.

The results of our research clearly demonstrate a self-serving pattern of attributions after a team win. We had originally expected to also find a self-serving response between high and low identifiers following a loss such that the former would be more likely to attribute the outcome to forces under the external control of the team (e.g., other team, injury of key athletes, referees, etc.). However, no such effect was observed. Such a finding is contrary to the results reported by Wann and his colleagues (Wann & Dolan, 1994; Wann & Schrader, 2000) which indicated that high identifiers are more likely to attribute losses to external causes. However, it should be noted that "external" in the context of their studies referred to a locus of causality characteristic rather than an attribution of external control. In our research, we found that the items measuring locus loaded on a common factor with personal control. As a result, these items were combined into a single measure of internal control. It may be that the external control dimension used in this study did not tap the same underlying dimension as did the locus measures used by Wann and his colleagues. Another possibility is that the level of attachment respondents had with the teams included in this study was less than might have otherwise been had a team from their own university or city been competing. Thus, future research may want to replicate the current study by including only "home-town" fans. In any event, our results indicate that the ego enhancement derived from self-serving attributional responses following a win were more important than were the attributions related to ego protection following a loss.

Our results also demonstrate the response extremity associated with team identification. Among high identifiers, the difference between winners and losers on internal control and stability ratings were substantially greater than the same differences for those low in team identification. Quite simply, the attributions made about a team's performance are felt more strongly—win or lose—when fans are psychologically aligned with a team. The cognitive unit formation existing between the fan and team allows for an extended notion of self (Ortony, Clore, & Collins, 1988) which inevitably leads highly identified fans to take outcomes more personally than lowly identified fans. Funk and James (2001) referred to this

level of unit formation in terms of allegiance, an influential internal state characterized by durable and enduring attitudes that are favorably biased toward the team.

The current research also provides interesting insights into how causal attributions affect summary judgments of a game experience. For winners, we found that the influence of stability on BIRGing was fully mediated by team identification and that the impact of internal control on BIRGing was partially mediated by team identification. In contrast, no such mediation effects were observed when the summary judgment was satisfaction with the team's performance. The results indicate that a causal attribution that is interpreted in favorable terms reinforces the personal self-esteem derived by fans from a connectedness to the team and this, in turn, is transferred to a BIRGing reaction. Satisfaction, on the other hand, does not rely on an association with the team. Instead, an attribution of the causes contributing to an outcome has a direct effect on satisfaction. Thus, causal attribution is distally related to BIRGing through team identification and proximally related to satisfaction.

From a managerial perspective, what is most compelling from our results is the importance of team identification in affecting how fans react to game outcomes. To enhance fans' identification with a team, sport managers should actively seek out opportunities for fans to interact with the team and other fans. For example, Green Bay Packers fans were allowed to become part owners by purchasing stock in the team. Although not redeemable, this symbolic effort strengthened fans' connection with the team. Another example is the minor league baseball Schaumberg Flyers that allows fans to pick the starting lineup using the web before each game. Teams may also engage fans by offering them opportunities to interact with other fans. This can be done through actual events organized by the team (e.g., autograph and picture sessions, midnight madness events) or through the creation of online virtual communities. It is also possible for managers to develop a sense of identification in young fans through teaching clinics or by funding leagues that promote youth participation in the activity. Creating an affinity with a sports team in youngsters guarantees a future generation of fans.

Sporting events represent a unique form of experiential consumption. Rather than a show performance (e.g., professional wrestling, theater) that is scripted and acted out to entertain an audience, competitive sporting events are a type of unscripted skill performance in which the uncertainty of the eventual outcome is emphasized (Deighton, 1992). The focus is on the event's realism and the primary intention of the performers (i.e., athletes) is to win the contest. However, outcome uncertainty creates a sense of suspense only when fans care about how things will turn out (Vorderer, Wulff, & Friedrichsen, 1996). It is here where team identification makes its greatest contribution to the fan experience. Simply stated, increased levels of team identification equate to greater caring about the outcome which, in turn, leads to heightened levels of suspense. It is in these feelings of suspense that fans derive their greatest pleasure from watching a sporting event. It is of paramount importance, therefore, that managers appreciate the role played by team identification because it is the source of fan passion and is therefore directly relevant to understanding the fan experience.

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