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Investigating an Evolving Leisure Experience: Antecedents and Consequences of Spectator Affect During a Live Sporting Event

Robert Madrigal
Charles H. Lundquist College of Business
University of Oregon

The paper explores the temporal nature of an evolving leisure experience. A model is proposed that investigates the antecedents and consequences of attribution-dependent emotions in the performance context of a live sporting event. Attribution-dependent emotions are those arising in response to the praiseworthy and blameworthy actions of the performers charged with delivering a performance. Antecedents of attribution-dependent affect include goal relevance and affective expectations. Consequences of attribution-dependent affect include spectators' satisfaction with the quality of the performance and their perceptions of its entertainment value. Performance satisfaction and goal relevance predict optimism about the team's chances in future games.

KEYWORDS: *Multiphasic leisure, emotion, experiential consumption, sporting events, sport spectators*

Introduction

Imagine arriving at a neighbor's house where you and a group of other alumni are going to watch a telecast of a game featuring your alma mater's basketball team. At this point in the season, each game's outcome has implications for post-season play. After getting settled, you look around the room and notice a number of different conversations in progress. Pat, a lifelong fan of the team, and Chris are talking about the upcoming game. Pat is visibly "up" for the game and is talking passionately about how exciting it will be. Chris, on the other hand, appears far less anxious over the implications associated with the outcome and even seems a little bored with having to watch the game.

Immediately upon tip-off, your team scores three unanswered baskets to go up by six points. Pat is "psyched" and telling anyone who will listen how brilliantly the team is performing. Chris also seems pleased, but is far from ecstatic. By halftime, however, the team's fortunes have turned. The team is now trailing by 19 points and has performed very poorly. Pat, at this point, is clearly agitated. Throughout the second quarter, Pat is openly frustrated and angry at the players for missing so many scoring opportunities and playing so poorly on defense. In contrast, Chris's emotional reactions while watching the same action are far more sedate.

Address correspondence to: Robert Madrigal, Charles H. Lundquist College of Business, 1208 University of Oregon, Eugene, OR 97403-1208. Phone:(541) 346-5163. Fax: (541) 346-3341. Email: rmadriga@oregon.uoregon.edu.

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> During the second half of the game, your alma mater's team has played progressively better and has pulled to within one point with seconds remaining on the clock. On an inbound pass, your team's star player steals the ball and is driving for what appears to be an easy lay-up and the win. However, fifteen feet from the basket he inexplicably trips over his own shoe laces, loses the ball, and your team ends up losing by a single point.

The preceding typifies Tinsley and Tinsley's (1986; see also Vogt & Stewart, 1998) contention that leisure is frequently characterized by ongoing experiences marked by covarying cognitive and affective (i.e., both positive and negative emotions) elements. Consideration of the temporal domain is important because it sheds valuable insight on the very essence of consumed leisure. By consumed leisure, I refer to lived recreational experiences that unfold naturally over time. It is somewhat surprising to note how little research has been reported examining people during the process of leisure consumption in spite of the evolving nature of most recreational activities. Reminiscent of the seminal work of Clawson and Knetsch (1966), the current study treats leisure as a dynamic phenomenon with a distinct temporal dimension. Although not adhering to a strict Clawsonian framework, the paper builds on its spirit by viewing a leisure experience as a process rather than a static event to be summarily evaluated at its conclusion.

Research has considered leisure experiences extending over multiple days (Hultsman, 1998; Lee, Datillo, & Howard, 1994; McIntyre & Roggenbuck, 1998; Vogt & Stewart, 1998) and over the course of a single day (Hull, Stewart, & Yi, 1992; Stewart & Hull, 1992). However, no studies were found focusing on the antecedents, in-situ emotions, and evaluative processes occurring during a single leisure experience. The type of leisure behavior considered in this study is spectators' consumption of sporting events. In contrast to participatory activities, watching a sporting event is passive and exemplifies Shivers (1979) definition of leisure as "a time of opportunity wherein the individual has the freedom to perceive and select experiences which are either worthwhile or simply gratifying" (p. 15).

The purpose of this study is to develop and test a model of sporting event consumption. It considers the extent to which spectators' summary judgments following a particular game are influenced by their emotions during the game and whether these emotions can be predicted by their pregame expectations and preferences. The paper begins with a review of the relevant literature. An overview of the model and study hypotheses are then presented followed by the methodology and results sections. The paper concludes with a discussion of the study's results and its limitations.

Background

Just as other forms of passive entertainment have seen a rapid expansion since the second half of the twentieth century (Zillmann, 2000), so too has the consumption of spectator sports. For example, the three major networks broadcast approximately 300 hours of sports programming in 1960 (Lardner,

1982). The proliferation of sports-only channels and cable broadcasters over the past four decades has led to a situation where over 1.5 million hours of sports programming were broadcast in the United States in 2001 ("Behind the Numbers. . . ," 2002). The number of people who attend sporting events annually also evidences the predominance of sports spectatorship as a leisure behavior. In 2001, approximately 490 million spectators attended one or more sporting events in the U.S. and Canada—a figure representing an average of nearly 1.6 sporting events attended for each of the nearly 309 million residents in those two countries ("Behind the Numbers. . . ," 2002).

Sporting events are a type of live, unscripted performance consumed by spectators either in person or via media. In contrast to a show performance which is a contrived event designed to elicit a response from an audience (e.g., opera, professional wrestling), competitive sporting events are an example of a skill performance because they occur in naturalistic settings that emphasize the competence of those responsible for executing the performance (Deighton, 1992). Sporting events are unique in that one team's achievements come at the expense of a competitor. The thrill of victory and agony of defeat are thought to spur the competitive spirit to such a degree that the event itself takes on the proportions of a great conflict. It comes as no surprise, therefore, that sporting events are commonly described as being hard fought battles or furious struggles rather than as games in which emotionally detached athletes attempt to determine who is the most proficient at performing a particular motor task (Zillmann, Bryant, & Sapolsky, 1989). Although skill execution is undoubtedly important for a team to accomplish its goals, it is the competitive nature of sporting events that make watching them a compelling form of leisure behavior.

Sporting events are dynamic and evolving displays that are contested within a narrowly defined set of rules with prescribed time parameters that yield, by and large, an unequivocal winner and loser. Spectators, particularly those favorably disposed toward one of the competitors (see Cialdini et al., 1976; Wann & Branscombe, 1993; Zillmann et al., 1989), have a strong desire to see their preferred team emerge victorious. Fans look forward to the impending contest, react emotionally to the actions of the athletes, and then perform a post-event assessment of the experience. For example, Madrigal (1995) has reported that pre-game expectations regarding a team's performance, identification with the team, and the quality of the opponent all contribute to post-game affect which, in turn, predicts satisfaction with the decision to attend the event. Not considered, however, was how antecedent cognitive states influence in-situ emotions and how these impact more objective evaluations (i.e., performance satisfaction, entertainment value, and optimism about future performance) of the performance.

Overview of the Model

The rationale for the current study is premised on the need to develop a better understanding of multiphasic leisure experiences (see Stewart,

1998). It proposes and tests a model that explicitly considers a set of cognitive and affective attributes experienced by people while consuming an ongoing recreation activity (see Tinsley & Tinsley, 1986). The model shown in Figure 1 predicts that sports spectators' affective expectations for a sporting event and desire to see a preferred team win a particular game (i.e., goal relevance) are each related to the frequency of positive and negative emotions felt during the first half of a basketball game. First-half affect is then related temporally to second-half affect which is, in turn, related to spectators' summary evaluations of the experience. Considered here are satisfaction judgments regarding the quality of a preferred team's play and a post hoc evaluation of the entertainment value derived from watching the sporting event. Performance satisfaction is then related directly to optimism about the team's performance in future games. The following section describes each of the constructs included in the model and presents the study's hypotheses.

Antecedents of Emotional Reactions to Sporting Event Consumption

Goal Relevance

Appraisal theories of emotion suggest that emotions arise from evaluations of events or objects in relation to people's expectations and goals (Frijda, 1986; Ortony, Collins, & Clore, 1988; Roseman, 1984). Emotions are the direct result of a subsequent evaluation and interpretation in which an actual state is compared to a desired state. In general, the desirability of seeing a particular outcome is directly related to a person's goals and has emotional consequences.[1] Consider the reactions of Pat and Chris to the basketball game described earlier. Their reactions were, for the most part, premised on their goals and expectations relative to the game's eventual outcome. For Pat—a lifelong fan—seeing the team play well and ultimately win the game was extremely desirable. Chris's interest in the game, on the other hand, was far less keen. Although each was an alumnus of the university represented by the team and had access to the same objective "data", their emotional reactions were quite different based on their goals. Given such a strong desire to see a preferred team win a particular game, it is likely that fans such as Pat will experience a greater frequency of emotions, regardless of valence, over the course of the game than will people who are less "into" the experience. Thus, it is hypothesized that:

[1]A parallel stream of research that has emerged in recent years has described goal relevance for sporting event outcomes in terms of team identification. Research examining the moderating effects of team identification has indicated that highly identified fans experience stronger emotional reactions to game outcomes than do those with lower levels of identification (Madrigal, 1995; Wann & Branscombe, 1992, 1993; Wann, Dolan, McGeorge, & Allison, 1994). Rather than focusing on the psychological connection between a fan and preferred team (i.e., identification), the current study investigates only the importance of the outcome. One would presume that a positive correlation exists between team identification and goal relevance.

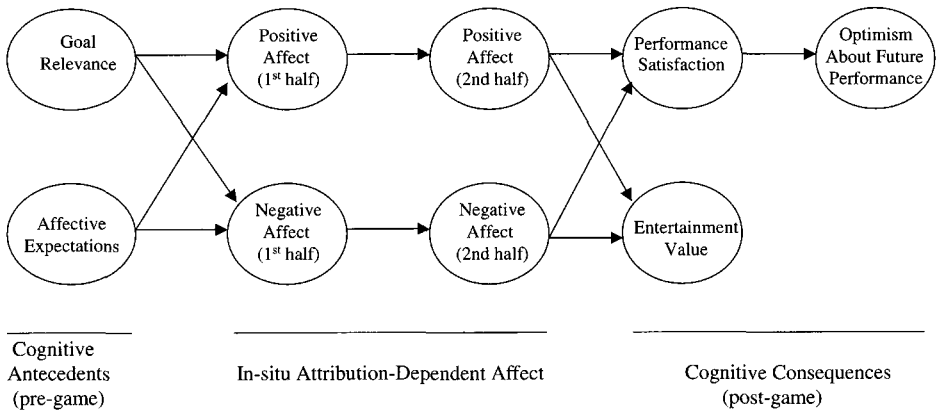

Figure 1 A Model of the Antecedents and Consequences of Attribution-Dependent Affect in the Context of a Live Sporting Event

H1: Goal relevance is positively related to the frequency of both (a) positive and (b) negative attribution-dependent emotions felt during the first half of a sporting event.

Affective Expectations

Affective expectations are concerned with "people's prediction of how they will feel in a particular situation or toward a specific stimulus" (Wilson & Klaaren, 1992, p. 3). Examples of affective expectations are how funny you think a comic will be, how much you think you might like a particular movie or restaurant, and how nervous you think you might feel before making a speech. The affective expectations framework suggests that people's affective reactions are determined with reference to prior expectations about how they think they might feel. Wilson, Lisle, Kraft, and Wetzel (1989) suggested that people's emotional reactions to some events are predicted as much by their expectations as by the information present in the situation. For the purpose of this study, affective expectations refer to the extent of enjoyment, excitement, and entertainment spectators expect to derive from watching an impending sporting event. Using the same rationale described above for goal relevance, the second hypothesis states that:

H2: Affective expectations are positively related to the frequency of both (a) positive and (b) negative attribution-dependent emotions felt during the first half of a sporting event.

A Specific Type of Affect and Its Influence on Summary Evaluations of Performance

Attribution-Dependent Emotions

Consistent with Cohen and Areni (1991, p. 191), affect is defined as a "general descriptor of a valenced state" comprised of more context-specific emotions. Rather than considering general positive or negative affect in broad terms, appraisal theory suggests that the type of emotion experienced in any given situation depends upon the substantive domain (Brown & Dutton, 1995; Frijda, 1986; Roseman, Antoniou, & Jose, 1996; Smith & Pope, 1992; Weiner, 1986). Thus, the type of emotions contributing to positive and negative affect considered here are attribute-dependent in that they arise in response to the agents (persons or objects) seen as being responsible or accountable for an action. According to Ortony et al. (1988; see also Weiner, 1986), the primary standard for evaluating the action of agents is their perceived praiseworthiness in the execution of that action. Key to this discussion is that regardless of whether the agent is in fact wholly or only partially responsible for the action, attribution-dependent emotions rely on the experiencer's appraisal of the situation (Folkes, 1988; Smith, Haynes, Lazarus, & Pope, 1993). Thus, Pat from the earlier example experienced both anger toward the team when the players' efforts were appraised as being substan-

dard and, through a process of unit formation (see Cialdini et al., 1976), pride when the team's efforts were judged to be praiseworthy.

For the purposes of this study, affect was aggregated according to first- and second-half emotions (see Results section below). Because any given spectator is likely to experience a consistent pattern of emotions across two halves of the same event (i.e., a basketball game), it is likely that the correlation between the frequency of first- and second-half emotions will be positive and significant. Thus,

H3: The frequency of positive attribution-dependent emotions felt during the first half of a sporting event is positively related to the frequency of positive emotions felt during the second half.

H4: The frequency of negative attribution-dependent emotions felt during the first half of a sporting event is positively related to the frequency of negative emotions felt during the second half.

Consequences of Attribution-Dependent Affect

Although not addressing attribution emotions per se, Deighton (1992) has argued that satisfaction with a skill performance relies on an appraisal process in which the actor's performance is evaluated against vaguely defined reference standards. Holt (1995) was more explicit in discussing the importance of standards in eliciting attribution-based affect. He noted that sports spectators use a variety of norms and baseline expectations developed over time observing the sport to judge a team or athlete's performance. As with Deighton, Holt maintains that spectators' emotional reactions arise when actual performance is compared to these standards and that this serves as the basis for satisfaction judgments with the delivery of the performance. Agents' praiseworthy actions lead to greater satisfaction with the quality of the performance, whereas blameworthy actions lead to dissatisfaction. Thus, consistent with prior research linking emotions to summary satisfaction (Dubé & Morgan, 1996; Mano & Oliver, 1993; Westbrook, 1987), the frequency of felt attribution-dependent emotions should be significantly related to satisfaction judgments. However, research investigating the temporal influence of in-situ emotions on summary judgments indicates that the final moments of an episode have the greatest effect on overall evaluations (Kahneman, Fredrickson, Schreiber, & Redelmeier, 1993). The preceding gives rise to the following hypotheses:

H5: The frequency of positive attribution-dependent emotions felt during the second half of a sporting event is positively related to satisfaction with the quality of a preferred team's play.

H6: The frequency of negative attribution-dependent emotions felt during the second half of a sporting event is negatively related to satisfaction with the quality of a preferred team's play.

It should be noted that the conceptualization of satisfaction used in this study focuses on a summary evaluation of an agent's (i.e., sports team) ability

to deliver a good performance. Hence, the appropriateness of attribution-based emotions that focus on the appraisal of the agent's actions. This view of satisfaction is qualitatively different than that of Madrigal (1995) who emphasized spectators' satisfaction with deciding to attend a particular sporting event.

In addition to performance satisfaction, watching a sporting event is also likely to lead to a summary evaluation of its entertainment value. Previous research on outcomes of experiential consumption has focused on pleasure (Price, Arnould, & Tierney, 1995), liking (Holbrook & Schindler, 1994), absorption (Wild, Kuiken, & Schopflocher, 1995), enjoyment (Eliashberg & Sawhney, 1994; Madrigal, 1995), and users' experiential responses (Lacher & Mizerski, 1994). The current study considers spectators' self reported evaluation of the sporting event's overall entertainment value. In contrast to performance satisfaction which focuses on the quality of the team/athletes' actions, entertainment value is concerned with a summary assessment of the experience itself.

It is assumed that spectators' positive affect in response to the players' actions is likely to be positively correlated with entertainment value, whereas those who experience negative feelings in reaction to the players' performance will derive less entertainment value from the game. As with satisfaction judgments, the effect of emotion on spectators' evaluation of entertainment value is expected to be temporally proximal (Kahneman et al., 1993). Thus,

H7: The frequency of positive attribution-dependent emotions felt during the second half of a sporting event is positively related to the perceived entertainment value derived from watching the sporting event.

H8: The frequency of negative attribution-dependent emotions felt during the second half of a sporting event is negatively related to the perceived entertainment value derived from watching the sporting event.

The final outcome measure included in the study is spectators' optimism about the team's chances in future games. This variable explicitly considers the extent to which performance satisfaction predicts spectators' expectations about how the team will perform in future games. Events attributable to the actions of a performer wherein the outcome is perceived as being either a success or failure should influence expectations of future success or failure by the performer. Accordingly,

H9: Satisfaction with the quality of a preferred team's play is positively related to optimism about the quality of future performances.

Method

Sample and Procedure

A convenience sample of 228 students participated in this study in exchange for extra credit. All participants were recruited from undergraduate courses. The majority of respondents were male (63%), Caucasian (79%), and in either their junior (21%) or senior (55%) year of school.

Respondents reported to the university's multimedia center to watch one of six conference basketball games involving their school's men's team (i.e., the preferred team) that was broadcast live on television (game n sizes, respectively: 64, 30, 30, 15, 29, 60). Subjects arrived 30 minutes prior to the start of the game they selected to watch and were immediately assigned to one of two studios where they received a packet containing a set of questionnaires. The number of respondents placed in each studio ranged from 15 to 32. Each studio included six televisions located throughout the room, as well as rows of tables and chairs. Respondents were invited to sit wherever they wished and act as they normally would during a game. Prior to tipoff, respondents completed a questionnaire asking about their affective expectations for the impending game and how relevant it was for them to see their school's team win this game. Instructions for each survey in the study were read aloud by a research assistant to ensure that they were understood.

The task of assessing emotions over the course of an event spanning a two-hour period represents an interesting challenge. An obvious question arises as to when consumption emotions should be sampled. A one-time summary measure of emotion collected at the conclusion of a two-hour event may not necessarily reflect what was felt during the experience because the variance in affect is obviated. It has therefore been recommended that data on affective reactions be collected across the temporal frame of a hedonic experience (Deighton, 1992; Hirschman & Holbrook, 1982; Zillmann, 1996). Following the convention of Dubé and Morgan (1996), the overall experience was segmented in this study and emotion data were collected at the end of each segment rather than just at the conclusion of the event.

The naturally occurring breaks used to segment the live game action were commercial intermissions. During the game's time outs and at the half when the broadcaster broke for a commercial, the audio on the televisions was turned down from a central location in the studio. Respondents were instructed to remove a single sheet from a separate packet and complete a set of items (some of which were unrelated to this study) that included how frequently they experienced a set of emotions during the preceding game segment (i.e., from one commercial break to the next). After completing the form, the sheet was collected and the audio turned up on the televisions. This was repeated after each commercial break for a total of nine times. Following the game, respondents completed a set of questionnaires assessing emotion frequency for the final game segment, satisfaction with the team's performance during the game, optimism about how the team might perform in future games, and the entertainment value derived from watching the game. Respondents were also given the option of responding to an open-ended question in which they were asked to list the total number of thoughts they had about why things turned out as they had in this game.

The data collection for this study began in early January. Prior to that point, the team had been undefeated in non-conference play. Data were collected for the next six games, all of which were conference matches. The team lost five games in a row and won the sixth. The point differential for

the games that were lost was, respectively, 5, 1, 3 (in overtime), 11, and 22. The victory was over a major inter-state rival and the scoring differential in this game was 10 points. Overall, 168 of the respondents watched a losing effort and 60 saw the preferred team win.

Measures

Some of the constructs considered in this study were expected to be closely related. Thus, a number of steps were taken in order to reduce response-set bias and multicollinearity problems including the use of different scale anchors, grouping items from the same scale together, spatially separating items for the various constructs, and interspersing a number of items on the questionnaire that were unrelated to this study. A brief description of each construct and its respective scaling follows.

Goal relevance (GOAL RELEV). Three semantic differential scales, each rated along a nine-point continuum, were used to measure how desirable it was to see the school's team win this game: *very undesirable/very desirable; not at all relevant/very relevant;* and *not at all important/very important.*

Affective expectations (AFF EXP). Six items were used to assess affective expectations. Respondents were asked to indicate their expectations for the game about to be played on seven-point semantic differential scales. Three of the items were adapted from Klaaren, Hodges, & Wilson (1994; *not expecting to enjoy the game/really expecting to enjoy the game; not at all excited/very excited; not looking forward to the game/really looking forward to the game*) and three were created for this study (*not at all psyched/very psyched; not expecting to be entertained/really expecting to be entertained; expecting a boring game/expecting an exciting game*). To reduce the number of parameters to be estimated in the structural model and their associated error variance, items were randomly paired and the summed score for each pair was used to create three affective expectation items that were used as input to the structural model (cf. Bagozzi & Heatherton, 1994).

Positive and negative affect (POS AFF; NEG AFF). Of interest in this study were six attribution-dependent emotions on which data were collected at nine different points during the basketball game and once at its conclusion. The specific emotion items used here were drawn from Ortony et al. (1988). Positive attribution-based affect was comprised of pride and admiration emotions likely to be felt by spectators in response to players' praiseworthy actions, whereas negative attribution-based affect features anger emotions elicited in fans by players' blameworthy actions. Positive attribution-based affect was represented by: *proud of the (team name); respect the (team name); admire the (team name).* The negative affect emotions were: *irritated with the (team name); frustrated with the (team name); and angry at the (team name).* Items were presented in a single random order with positive and negative emotions interspersed.

Each item was measured on a 9-point Likert scale assessing how frequently the emotion was felt during the preceding game segment (never/

very often). The reason for assessing frequency rather than intensity was based on an argument outlined by Oliver (1997). He recommended using intensity measures when assessing single encounters with unidimensional performance characteristics. In contrast, frequency measures are more appropriate when emotions are collected over a temporal dimension. The intensity dimension is not lost when using frequency measures if the common usage of the emotion words themselves are varied and used to represent the same underlying construct (see also Frijda, Ortony, Sonnemans, & Clore, 1992).

Satisfaction with the quality of the performance (PERF SATIS). Four items, each measured on a nine-point Likert scale (strongly disagree/strongly agree), were used to assess satisfaction with the team's performance during the game: *I am satisfied with the way (team name) performed in this game; I am satisfied with the quality of the (team name) performance; I am NOT satisfied with the (team name) performance tonight* (reverse-coded); and *I am NOT satisfied with the quality of the (team name) performance* (reverse-coded).

Entertainment value (ENT VALUE). The perceived entertainment derived from watching the game was assessed using three nine-point Likert scales (strongly disagree/strongly agree): *This game was NOT at all entertaining* (reverse-coded); *I was satisfied with the entertainment value of this game;* and *I enjoyed watching this game.*

Optimism about future performances (OPTIMISM). Optimism about the team's chances in future game performances was assessed using three items. The stem asked respondents to first consider the team's performance in the game just completed and then indicate their feelings about its chances in the conference for the remainder of the season. The items (*not at all confident/very confident; not at all hopeful/very hopeful; not at all optimistic/very optimistic*) were measured on a 13-point semantic differential scale bounded by −6 and 6 in which the midpoint was 0 (neither).

Thoughts listing. Respondents were given a blank piece of paper with fifteen boxes printed on it. They were asked to list, using one thought per box, as many thoughts as possible about how the team's actions on the court contributed to the outcome of the game just completed. They were then asked to place a plus or minus next to each of their thoughts indicating whether it was an appraisal of an action for which the team should be praised (plus) or blamed (minus).

Results

Descriptive Analysis

Table 1 features the mean scores of each of the measures across games. An initial multivariate analysis of variance was conducted in which the continuously measured variables were treated as dependent variables and game was included as a between-subjects factor. The MANOVA indicated significant differences, Wilk's = .09, $F = 7.73$, df = 85, 1001, $p < .001$. Results of univariate tests and post hoc Scheffe results are also shown in Table 1. Given

TABLE 1
Descriptive Statistics of Measures by Game (N = 228)

Variable	Game 1 (lost by 5)[1] n = 64	Game 2 (lost by 1) n = 30	Game 3 (lost by 3)[2] n = 30	Game 4 (lost by 11) n = 15	Game 5 (lost by 22) n = 29	Game 6 (won by 10) n = 60	Univariate F (p <) df = 5,222
Affective Expectations	5.25	5.40	5.27	5.24	5.29	4.93	1.12 (.40)
Goal Relevance	7.28	7.08	6.80	6.76	7.00	6.94	.69 (.70)
Angry with team—1st half	$3.16^{a,b}$	$4.58^{a,c}$	3.75	4.17	$4.79^{b,d}$	$3.35^{c,d}$	7.00 (.001)
Angry with team—2nd half	$4.40^{a,b,c}$	3.31^{a}	3.09^{b}	4.29^{d}	4.07^{e}	$2.83^{c,d,e}$	7.26 (.001)
Frustrated with team—1st half	$3.54^{a,b,c,d}$	$5.37^{a,e}$	$4.91^{b,f}$	4.71^{c}	$5.71^{d,g}$	$3.77^{e,f,g}$	13.92 (.001)
Frustrated with team—2nd half	$5.27^{a,b,c,d}$	$4.10^{a,e}$	$3.75^{b,f}$	$4.85^{c,g}$	$5.15^{d,f,h}$	$3.14^{e,g,h}$	14.10 (.001)
Irritated with team—1st half	$3.34^{a,b}$	$4.79^{a,c}$	4.16^{d}	4.36	$5.32^{b,d,e}$	$3.52^{c,e}$	9.13 (.001)
Irritated with team—2nd half	$4.80^{a,b,c}$	3.62^{a}	$3.31^{b,d}$	4.48^{e}	$4.70^{d,f}$	$3.05^{c,e,f}$	10.39 (.001)
Proud of team–1st half	$5.46^{a,b}$	$4.56^{a,c,d}$	5.18	5.23^{e}	$3.38^{b,c,e,f}$	$5.61^{d,f}$	12.33 (.001)
Proud of team—2nd half	$4.82^{a,b}$	$5.84^{a,c}$	$6.11^{b,d}$	5.17	$4.33^{c,d,e}$	5.31^{e}	5.90 (.001)
Admire the team—1st half	5.18^{a}	4.46^{b}	4.83^{c}	4.61	$3.38^{a,b,c,d}$	5.17^{d}	6.62 (.001)
Admire the team—2nd half	4.65	5.41^{a}	5.54^{b}	4.48	$3.95^{a,b,c}$	4.93^{c}	3.80 (.01)
Respect the team—1st half	5.62^{a}	5.44^{b}	5.13	5.40	$4.17^{a,b,c}$	5.62^{c}	4.07 (.01)
Respect the team—2nd half	5.27	5.93^{a}	5.81^{b}	5.03	$4.49^{a,b,c}$	5.50^{c}	2.84 (.02)
Performance Satisfaction	3.65^{a}	3.81^{b}	$4.85^{c,d}$	$2.67^{c,e}$	$2.35^{d,f}$	$5.85^{a,b,e,f}$	19.98 (.001)
Entertainment Value	$6.99^{a,b}$	$7.19^{c,d}$	$7.86^{e,f,g}$	5.44^{e}	$4.23^{a,c,f}$	$4.76^{b,d,g}$	26.95 (.001)
Optimism About Future Performance	$10.51^{a,b}$	9.21^{c}	8.90^{a}	$6.42^{b,d}$	$6.85^{c,e}$	$9.04^{d,e}$	14.84 (.001)

Note: Means with the same alphabetical subscripts indicate significant differences based on post hoc Scheffe tests ($p < .01$). Nine-point scales were used for each measure except Affective Expectations (7-point scale) and Optimism About Future Performance (13-point scale).
[1]Interpreted as preferred team lost by 5 points.
[2]Preferred team lost game 3 in overtime.

that multiple comparisons were conducted, only Scheffe tests yielding significance levels of .01 or less are noted.

The results indicate that no game differences existed for the antecedents included in the model. Looking at Table 1, it is interesting to note that the greatest between-game differences occurred in the frequency of negative attribution-dependent emotions, particularly frustration and irritation with the team. As might be expected, those watching Game 6 in which the preferred team led throughout and won by 10 points elicited a lower frequency of frustration and irritation during the game. With the exception of first-half pride in the team, which was particularly low among fans watching Game 5 (preferred team fell behind almost immediately and lost by 22), game differences were substantially less pronounced across the positive emotions. In fact, all of the significant pairwise tests for the positive emotions—except for first-half pride—involved differences with Game 5. Also noteworthy was that with few exceptions (e.g., Game 5), the within-game mean scores for the positive emotions were greater than those of the negative emotions, indicating a greater frequency of positive rather than negative emotions.

Regarding post-game evaluations, nearly all of the performance satisfaction differences involved Game 6. In contrast, the greatest entertainment value was derived from watching highly competitive games resulting in outcomes with narrow point differentials. Thus, even though the preferred team lost, the first three games were judged to be most entertaining. Optimism about future performances was greatest among spectators watching Games 1, 6, and 2.

In sum, the results of the descriptive analysis suggest that fans react differently across games. However, differences were not necessarily due to the eventual outcome of the game. Differences in positive emotions tended to be the result of how much a team lost by rather than whether the team won or lost. Similarly, optimism about the team's chances in future games was more dependent on final point differential than whether or not the team prevailed. Fans found close games that eventually ended in a loss to be more entertaining than a game in which the preferred team won. Moreover, with the exception of a game wherein the preferred team was "blown out", fans felt a greater frequency of positive than negative emotions. However, fans reacted differently based on the success of the team during the game and the final outcome. Specifically, performance satisfaction was greater following a win and the frequency of negative emotions was less during a game in which the preferred team led the entire way.

Analytical Procedure for Testing Hypothesized Model

Structural equation modeling was used to test the hypothesized model shown in Figure 1. In order to control for differences across games (e.g., opponent, final score differential, quality of play, game order, etc.), a number of the scale items were adjusted prior to model construction. Adjusted items included those used to assess emotions, performance satisfaction, entertain-

ment value, and optimism about the team's chances in the future. In contrast to the pre-game measures, which were assessed prior to the game and therefore not yet affected by game events (and also showed no between-game differences), the emotion and post-consumption variables may have been influenced by what happened in a particular game. A procedure similar to an analysis of covariance was performed in which each of the affected items was individually regressed against dummy-coded variables representing each game. The resulting residuals, now adjusted for specific game effects, were used as input to the model. Prior to testing the measurement model, each of the items was normalized in PRELIS 2.30. A check of the data indicated that the assumption of normality was not violated.

In an effort to improve the parsimony of the structural model and to reduce measurement error, the emotion data collected across the ten data points were aggregated into composite measures represented at two different points in time. Using the emotion segment scores adjusted for game differences, a summary measure of emotion frequency was calculated for each of the six emotion items for the first and second half of each game. Specifically, the sum of frequency scores provided for a particular emotion item in each of the first five game segments (which coincided with the end of the first half of the game) comprised the first-half aggregated measure of each emotion item, and the sum of frequencies for each emotion item across the final five game segments comprised the second-half measures. This yielded twelve different aggregated measures: a first- and second-half measure each for pride, respect, admiration, anger, irritation, and frustration. The inclusion of time-dependent measures necessitated the use of a two-wave structural equation model (see Jöreskog & Sörbom, 1996) in which the error variances for the same emotion item across the two time periods was allowed to covary (e.g., first-half pride was allowed to covary with second-half pride).

In addition to the chi-square statistic, a number of other fit measures were used in assessing the model. These included the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), and Bozdogan's (1987) consistent version of Akaike's information criterion (CAIC). Models with RMSEA values less than .05 (Browne & Cudeck, 1992) and CFI values greater than .90 (Bentler, 1990) are considered to provide an excellent fit to the data. The CAIC is a parsimony-based index that considers statistical goodness of fit relative to the number of parameters needed to be estimated to achieve that fit while also taking into account sample size. The CAIC protects against overfitting a model and can be used to compare competing models with preferred models yielding smaller CAIC values.

Preliminary Analysis

The purpose of the preliminary analysis was to determine whether the attribution-dependent emotions were, in fact, capturing respondents' appraisals of the action. An initial reading by the researcher of the thoughts-listing data revealed that 50 individuals either did not list any thoughts, did

not indicate thought valence, or provided irrelevant information (e.g., reasons not related to the team's praiseworthiness or blameworthiness). Thus, the preliminary analysis was conducted with a sample size of 178. However, all 228 individuals were included in the overall analysis testing the hypothesized model.

Based on their own indication of valence as noted by either a plus or minus sign provided next to the written comment, the total number of thoughts listed by the respondents about how the preferred team's quality of play contributed to the final outcome were summed into praiseworthy and blameworthy thoughts. Prior to doing this, though, each thought comment was read by two raters unfamiliar with the purpose of the study. First, the raters were asked to indicate whether the thought was something that praised or criticized the quality of the team's play. Initial interjudge reliability was 91.7%. A subsequent discussion between the judges was held to reconcile their differences. The discussion resulted in unanimous agreement. Next, the judges were asked to compare the valence of their final rating of each item to the plus or minus sign provided by the respondent. The results indicated complete agreement.

Using the game-adjusted means, four summed affect scores were calculated: one each for positive and negative emotions for the first and second halves of the game. A correlation was subsequently performed between the number of negative thoughts and each of the aggregate first- and second-half affect scores. As expected, the total number of blameworthy thoughts was significantly correlated with attribution-dependent negative emotions summed across the first ($r = .21$, $p < .01$) and second ($r = .31$, $p < .001$) halves of the games. The number of blameworthy thoughts was not related to either first- or second-half positive affect (r's $= -.02, .02$; p's $> .80$, respectively). The number of praiseworthy thoughts was not significantly related to first-half positive affect ($r = .05$, $p > .40$), but was correlated with second-half positive affect ($r = .17$, $p < .03$). The frequency of praiseworthy responses was not correlated with first-half negative affect ($r = .01$, $p > .80$). However, second-half negative affect was negatively related to number of praiseworthy thoughts ($r = -.15$, $p < .05$). These results suggest that attribution-dependent affect did reflect underlying appraisals of the preferred team's performance, particularly toward the latter stages of the game (see Kahneman et al., 1993).

Measurement Model

A confirmatory factor analysis (CFA) using data from the entire sample ($N = 228$) revealed an excellent fit to the data, $\chi^2 = 390.70$, df = 308, $p < .001$, RMSEA = .034 (p close fit = 1.00), CFI = .98, and CAIC = 1020.78. Fornell and Larcker (1981) contend that composite reliability and average variance extracted (AVE) should be assessed in order to establish measure reliability. Satisfactory composite reliability should be equal to or greater than .60 and AVE should be equal to or greater than .50 for each latent

construct (Bagozzi & Yi, 1988). Composite reliabilities ranged from .81 (goal relevance) to .95 (second-half positive affect) with a mean of .90. The mean average variance extracted per construct was .76 (range .59 to .86), which indicates that the constructs on average explained 76 percent of the variance in the measured items. Descriptive statistics for the summed measures, factor intercorrelations, and the composite reliabilities of the constructs used in the structural model are shown in Table 2.

Construct discriminant validity was established on the basis of three tests. First, no construct correlation (ψ) was within plus or minus two standard deviations of unity (Anderson, 1987). Second, one-at-a-time comparisons between the CFA and alternate models were conducted in which each construct correlation was sequentially fixed at 1.0 (Anderson & Gerbing, 1988). In each case, the CFA performed better than the alternative. Third, the average variance extracted (AVE) for each construct was greater than that construct's squared correlation (ψ^2) with any other construct (Fornell & Larcker, 1981). The results of these analyses suggest that the measures were reliable and distinct from one another.

Structural Model

The results of the tests pertaining to the structural model are shown in Table 3. The first column references the stated hypothesis of the bivariate relationship that is explicated in the second column. The third column includes the completely standardized parameter estimates for the hypothesized model and the overall goodness-of-fit indices for that model. Although providing a reasonable fit to the data, a comparison of the hypothesized model

TABLE 2
Factor Intercorrelations and Descriptive Statistics Collapsed Across Games
(N = *228*)

	Mean	Sd	1	2	3	4	5	6	7	8	9
1. Goal Relevance	7.02	1.45	.81								
2. Affective Expectations	5.19	1.04	.54	.93							
3. Positive Affect (first half)	5.06	1.53	.35	.31	.94						
4. Negative Affect (first half)	4.05	1.61	.21	.14	.10	.94					
5. Positive Affect (second half)	5.16	1.61	.19	.24	.80	.06	.95				
6. Negative Affect (second half)	3.96	1.68	.32	.27	.12	.76	.04	.94			
7. Performance Satisfaction	4.18	2.18	−.14	−.05	.25	−.22	.36	−.39	.89		
8. Entertainment Value	6.10	2.14	.06	.04	.37	.06	.45	.07	.48	.83	
9. Optimism	9.01	2.59	.26	.23	.32	−.08	.35	−.09	.39	.33	.90

Coefficients of .12 or greater are significant at the $p < .05$ level, coefficients of .17 or greater are significant at the $p < .01$ level, and coefficients of .22 or greater are significant at the $p < .001$ level. Values shown in diagonal are composite reliabilities, computed as $(\Sigma\lambda)^2/[\Sigma\lambda)^2 + \Sigma\text{var}(\epsilon)]$.

TABLE 3
Results of Model Comparisons: Completely Standardized Estimates (t-values) and Goodness-of Fit Statistics (N = 228)

Hypothesis	Path Coefficients	Hypothesized Model	Final Model[a]	Common-Methods[b]
H1a	GOAL RELEV → POS AFF (1)	.26 (2.91)	.27 (2.96)	.26 (2.88)
H1b	GOAL RELEV → NEG AFF (1)	.20 (2.20)	.21 (2.89)	.22 (2.94)
	GOAL RELEV → NEG AFF (2)		.18 (3.47)	.18 (3.40)
	GOAL RELEV → OPTIMISM		.33 (4.70)	.34 (4.38)
H2a	AFF EXP → POS AFF (1)	.16 (1.96)	.15 (1.81)	.15 (1.71)
H2b	AFF EXP → NEG AFF (1)	.04 (.50)	ns	ns
H3	POS AFF (1) → POS AFF (2)	.80 (16.95)	.80 (16.96)	.80 (17.08)
H4	NEG AFF (1) → NEG AFF (2)	.76 (14.41)	.72 (13.77)	.72 (13.64)
H5	POS AFF (2) → PERF SATIS	.38 (5.79)	.38 (5.77)	.38 (5.73)
H6	NEG AFF (2) → PERF SATIS	−.40 (−5.94)	−.42 (−6.70)	−.42 (−6.54)
H7	POS AFF (2) → ENT VALUE	.45 (6.21)	.45 (6.24)	.44 (6.09)
H8	NEG AFF (2) → ENT VALUE	.05 (.78)	ns	ns
H9	PERF SATIS → OPTIMISM	.40 (5.59)	.44 (6.26)	.43 (5.56)
	GOAL RELEV ↔ AFF EXP	.54 (6.15)	.56 (6.28)	.57 (6.23)
	PERF SATIS ↔ ENT VALUE	.34 (4.89)	.34 (4.90)	.34 (4.85)
	Chi-square (df)	467.70 (331)	434.33 (331)	380.10 (303)
	RMSEA	.040	.034	.029
	CFI	.97	.98	.99

Legend: GOAL: RELEV = goal relevance; AFF EXP = affective expectations; POS AFF (1) = positive affect, first half; NEG AFF (1) = negative affect, first half; POS AFF (2) = positive affect, second half; NEG AFF (2) = negative affect, second half; PERF SATIS = performance satisfaction; ENT VALUE = entertainment value; OPTIMISM = optimism about future performances.
[a]Model features adjustments based on modification indices.
[b]Coefficients after accounting for same-source factor variance.
Note: ns indicates a nonsignificant path coefficient.

to the CFA model using Anderson and Gerbing's (1988) two-step method suggested that there was considerable room for improvement ($\Delta\chi^2 = 60.04$, $\Delta df = 23$, $p < .001$). In addition, as shown in the third column of Table 3, two of the hypothesized paths failed to attain statistical significance at the .05 level (H2b, AFF EXP → NEG AFF (1); H8, NEG AFF (2) → ENT VALUE). These paths were therefore dropped in all subsequent models.

An investigation of the model's modification indices revealed that the model might be improved if certain restrictions were relaxed. Jöreskog (1993) has noted that modifying structural models in a post hoc fashion is acceptable if the changes can be supported on substantive grounds. Thus, model adjustments were made in a sequential fashion beginning with the path represented by the largest modification index. Each resulting model

was subsequently reevaluated and its modification indices checked. In order to avoid over-fitting the model, only paths attaining a modification index of 8.0 or greater were considered for adjustment. In addition, only models yielding an improved (i.e., lower) CAIC value were retained.

The analysis of fit indices led to two paths being added to the model. First, a path was added from goal relevance to optimism about the team's future chances. This effect is consistent with past work (see Babad, 1987; Babad & Katz, 1991) and reflects the enduring hope held by fans who have a strong preference for a particular sports team. The second path added to the model was from goal relevance to second-half negative affect. Spectators with the strongest desire to see the preferred team win experienced a greater frequency of negative emotions during the second half of the game. The path coefficients and overall fit statistics for the revised model, referred to as the Final Model, are shown in the fourth column of Table 3. No difference in chi-square existed between the Final Model and the CFA model ($\Delta\chi^2 = 26.73$, $\Delta df = 23$, $p > .10$). In addition, the Final Model yielded RMSEA and CFI values equal to those in the CFA model and a CAIC value lower than that of the CFA model.

Referring to the path coefficients for the Final Model shown in Table 3, the predicted positive effect of goal relevance on each first-half affect (H1a and H1b) was supported. Although the hypothesized path from affective expectations to frequency of first-half positive emotions was significant (H2a), affective expectations were not related to first-half negative affect (H2b). Consistent with the hypotheses, second-half positive and negative affect were each related in their respective predicted directions to performance satisfaction (H5, H6, respectively), and satisfaction predicted spectators' optimism in the team's future (H9). Whereas the predicted effect from second-half negative affect to perceptions of the game's entertainment value was not observed (H8), the hypothesized impact of second-half positive affect on perceived entertainment value was significant (H7).

Analysis of a Common-Methods Model

Given that all of the data used in this study were gathered using questionnaires, it is possible that relations between the constructs may be artifacts of a bias that leads respondents to answer all questionnaire items in a similar manner (e.g., on the left side of the item scale). In order to assess the effects of common-method variance, the Final Model was reestimated by adding a *same-source* factor to the indicators of each construct (see Netemeyer, Boles, McKee, & McMurrian, 1997). Comparing an unconstrained model in which all indicators are related to a common factor to one in which these paths are fixed (i.e., the Final Model) represents a significance test of the effects of the same-source factor.

The fit indices for the unconstrained model are shown in the right-hand column of Table 3. The difference between the unconstrained and revised models was significant ($\chi^2_{diff} = 54.23$, $df = 28$, $p < .001$), indicating the

presence of a common-method bias. Although seven of the 28 loadings on the same-source factor were significant at the .05 level or better, the loadings of these items on their respective theoretical factors all remained highly significant with little attenuation. Moreover, the path estimates in the unconstrained model all remained significant with very small differences between the two models. In sum, therefore, there was evidence of common-methods variance. However, the substantive influence of the same-source factor was minimal given that it had little impact on the Final Model's path coefficients or on the variable loadings to their theoretical factors.

Discussion

Although the passive consumption of live, unscripted performances in the form of sporting events represent a widespread form of leisure behavior, little is known about the evolving nature of the experience. Rather than consider performance in retrospect, the current study makes a unique contribution to the literature of multiphasic leisure experiences by describing antecedents and consequences of attribution-dependent emotions experienced by spectators during the consumption of an actual performance of a college basketball game. Collecting data at multiple points over the course of the performance provides an interesting perspective on a lived recreation experience.

The results reported here suggest that satisfaction with the quality of a team's performance relies on attribution-dependent emotions arising from the competency displayed by the players (Deighton, 1992). The type of emotions likely to be most prevalent among sports spectators is, therefore, agent based and dependent upon an attribution-of-responsibility (cf. Ortony et al., 1992; Weiner, 1986). Consistent with appraisal theory, goal relevance is a positive predictor of both positive and negative emotion frequency. Those who feel most strongly about seeing a favorable outcome reported more emotion, regardless of its valence. This is true not only for the frequency of positive and negative affect felt at the beginning of a basketball game, but also for the frequency of negative affect felt later in the game.

Interestingly, the impact of goal relevance on negative affect was greater at the end of the game than at the beginning. This suggests that the frequency of emotions arising in fans who care most deeply become increasingly dependent on an attribution of blame rather than praise at the later stages of a game. This led the author to wonder if a game bias existed. That is, was the correlation between goal relevance and second-half negative affect different across the six games? Accordingly, post hoc correlations between the two variables for each game were conducted. The analysis yielded the following correlations: Game 1 ($n = 64$), $r = .28$, $p < .05$; Game 2 ($n = 30$), $r = .34$, $p < .07$; Game 3 ($n = 30$), $r = .18$, $p > .30$; Game 4 ($n = 15$), $r = .32$, $p > .20$; Game 5 ($n = 29$), $r = .37$, $p < .05$; Game 6 ($n = 60$), $r = .23$, $p < .08$. The reader is reminded that the home team lost the first five games (point differentials, respectively, were 5, 1, 3, 11, and 22 points) and won

the sixth game by 10 points. What is evident from this analysis is that the correlations were similar across games. It does not appear, therefore, that the relationship between goal relevance and second-half negative affect is a function of whether the home team ends up winning or losing the game. Rather, the results suggest that for those fans who most desperately want to see their team win, emotional reactions become increasingly dependent on blameworthy assessments of the players' actions as the game progresses. This is true whether the preferred team eventually wins or loses the game. Referring back to the earlier example, this effect suggests that Pat is more likely to be angry than happy about a preferred team's performance in the latter stages of a game because greater attention is paid to the players' blameworthy actions than their praiseworthy actions. In contrast, Chris views the action more objectively than Pat and experiences emotions in a less biased fashion. Such a temporal effect has not been shown in prior research and represents an interesting point of investigation for future work in this area.

The results also highlight the importance of attribution-dependent affect in stimulating summary judgments about a skill performance. As expected, emotions arising from the praiseworthy actions of a preferred team lead to increased levels of performance satisfaction, whereas emotions tied to blameworthy actions lead to greater dissatisfaction. Rather than conceptualizing satisfaction as an outcome of a process of expectation disconfirmation (Madrigal, 1995; Oliver, 1980; Westbrook, 1987; Yi, 1990) or as a reaction to specific attributes (Oliver, 1993), the focus here was on spectators' satisfaction with the quality of an actor's (i.e., sports team) performance. Moreover, the frequency of positive attribution-dependent emotions felt during the leisure experience contributed directly to the perceived entertainment value derived from watching the performance. Spectators who experience greater levels of positive affect deemed the performance to be more entertaining. The hypothesized effect linking performance satisfaction to optimism about future performances was also observed, thus indicating that optimism relies predominately on spectators' cognitive evaluations of the performers' competence in executing the performance and not on the frequency of emotions experienced during the performance.

In addition to the hypothesized link between performance satisfaction and optimism, goal relevance also predicted optimism about the team's chances in future games. Deighton (1992) has noted that the issue of temporality is an important one in evaluations of performance events. The results found here suggest that, regardless of the frequency of attribution-dependent emotion felt during a game and satisfaction with the quality of a preferred team's performance in any one game, spectators' desire to see their team do well is positively related to future expectations. Such an effect would suggest that compared to Chris, a highly committed fan such as Pat will be more optimistic about the team's chances in future games—regardless of the events transpiring in any single game. The positive link between preferences and expectations has been described elsewhere in terms of wishful thinking. Past research has demonstrated strong support for wishful thinking

among sports fans and bettors in predictions of game outcomes (Babad, 1987; Babad & Katz, 1991). Each of these studies found that wishful thinking perseveres in spite of objective information to the contrary. For example, Babad (1987) found that spectators' wishful thinking endured even when their favorite teams were decisively behind at halftime. Moreover, explicit instructions to spectators to be objective in their predictions had little impact in moderating wishful predictions. Similarly, Babad and Katz (1991) found that wishful thinking persevered even when spectators paid money for predictions in actual bets—a situation in which bettors' self-interest should dictate maximum objectivity. Although each of these studies focused on the preference-expectancy link within the context of a single game, the results of the current research show a similar effect for future expectations after the outcome of a specific game is known.

The overall impact of affective expectations in the final model was quite modest. Although related to first-half positive affect, affective expectations were not significantly correlated with first-half negative affect. Two possible reasons for the lack of significance are considered. First, the design of the study was based on a field study using correlational analysis rather than a true experiment. Past research has generally investigated the effects of manipulated affective expectations on summary evaluations (Geers & Lassiter, 1999; Hodges, Klaaren, & Wheatley, 2000; Klaaren et al., 1994, Study 2; Wilson et al., 1989). In fact, the only article found in which affective expectations were not manipulated was the first study reported in Klaaren et al. (1994) who found that respondents' prior affective expectations about an upcoming vacation explained a significant portion of the variance in their post-vacation evaluations. One might wonder, therefore, if a better model would be one specifying direct paths from affective expectations to the summary measures of the experience. However, separate tests of mediation in which the path from affective expectations to first-half positive affect was fixed, indicated that affective expectations were not related to performance satisfaction ($\beta = -.03$, $t = -.43$) or entertainment value ($\beta = -.07$, $t = -.99$). Thus, despite using and expanding upon the same measures developed by Klaaren et al. (1994), it appears that the application of direct effects from affective expectations to positive emotion frequency provides a better fit to the data. In contrast to Klaaren et al., the results of the current study are similar to those reported by Eliashberg and Sawhney (1994) who also found a non-significant correlation between expected enjoyment of a leisure activity and post hoc enjoyment.

A second reason for a lack of significance between affective expectations and negative affect is theoretical in nature. A sporting event, like many types of performance, is consumed primarily for enjoyment. Thus, spectators are likely to focus greater cognitive attention on the praiseworthy than blameworthy actions of the performers. One need only refer to Table 1 to see that the frequency of positive attribution-dependent emotions felt during a basketball game was generally greater than that of negative emotions. Thus, it follows that people looking forward to enjoying themselves at such an event

should also experience a greater frequency of positive rather than negative affect. Clearly, negative attribution-dependent emotions are felt and their frequency is exaggerated for those caring most intensely about seeing a positive outcome; but negative affect does not appear to be a consequence of affective expectations. Interestingly, this perspective is somewhat contrary to Mitchell, Thompson, Peterson, and Cronk's (1997) "rosy view" perspective which suggests that people's expectations of pleasurable events are more favorable than their experiences during the actual event. They note that the number of negative thoughts—due primarily to distractions and disappointment—actually increases during the event. However, these negative evaluations subside with time and, within days of the event, people's memories of the event become more favorable. Obviously, the set of variables and time span considered here were different than those included in the Mitchell et al. study. Nevertheless, the apparent differences between results would be an interesting area of future research for leisure behaviorists.

Limitations

This study has a number of shortcomings that must also be acknowledged. First, as implied in the preceding paragraphs, the research depends on a one-group design without a manipulated treatment. An experimental investigation of the hypotheses would provide greater confidence in the results found here. It would be possible, for example, to design a study in which each of the antecedents considered in this study were manipulated. Respondents could then be exposed to the same emotion-laden stimuli and post-experience effects could be assessed. This approach would provide a much clearer understanding of the processes investigated in this study.

Second, this study did not explicitly consider the potential impact of emotional contagion on participants' responses. Just as the emotions experienced by a fan attending a sporting event will be on display for others to observe, so too will the fan witness the emotions of other spectators. Research has shown that it is possible for someone (i.e., receiver) to catch the emotion being experienced by another (i.e., sender) such that the emotion of the receiver converges with that of the sender (see Hatfield, Cacioppo, & Rapson, 1994; see also Totterdell, Kellett, Teuchmann, & Briner, 1998 for a discussion of mood linkage in small group settings). Although sporting events represent a type of leisure experience that is typically consumed in a socially interactive setting, the possibility that participants' reactions were influenced by the emotions of other participants was ignored. Thus, future research investigating spectator emotion would do well to consider the possibility of emotional contagion effects.

Another study limitation is that no measures were included to account for knowledge and/or prior experience with the sport. Given that fans are likely to use sport knowledge/experience as a norm against which to judge the action (Holt, 1995), it would be interesting to test whether it moderates the effect of attribution-dependent affect on satisfaction. As noted by a reviewer, a working hypothesis would be that the effect is stronger for people

more knowledgeable with the sport because their experience allows them to act more critically when judging the action.

Finally, the current study considered just one type of skill performance. Although sporting events represent an ideal context for studying the antecedents and consequences of a skill performance, future work should also consider other types of performance stimuli. Establishing the model's generalizability in other contexts represents an important next step.

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