SOCIO-PSYCHOLOGICAL ATTENDANCE DETERMINANTS FOR A TEAM IN THE NATIONAL BASKETBALL ASSOCIATION

by

JESSE RAPPOLE

(Under the Direction of Thomas A. Baker III)

ABSTRACT

This study examines socio-psychological factors influencing consumers' attendance of a National Basketball Association (NBA) team's game because understanding attendance determinants remains critical to the financial success of spectator sports. Sport consumption research has focused on team identification, motivation, and constraints in many contexts. Recent studies show a trend of examining their effects in combination through incorporation of negotiation strategies as theorized in active leisure research. Limitations in this literature are inattention to non-attendee populations and samples biased toward high identification levels. The author is not aware of any prior studies comparing non-attendee and attendee groups' perceptions of team identification, motivation, constraints, and negotiation strategies for attendance.

Team identification, motivation, constraints, and negotiation were measured using Likert type scales to test their relationships with participants' attendance behavior. A single behavioral measure asking how many games each participant attended during the regular season was used. Those attending no games form a control group for comparison of attendees' and non-attendees'

perceptions of the variables. Data were collected from May 2 through June 21, 2013 in a southeastern United States NBA team's home state with 566 usable responses returned.

First, it was hypothesized that each factor accounts for variance in attendance behavior. Hypothesis two is that these factors' combined effects account for additional variance in attendance as compared to their individual effects. The third hypothesis is that negotiation strategies mediate the relationships of motivation and constraints, respectively, with attendance. Hypothesis four proposed that group differences in perception of team identification, motivation, constraint, and negotiation factors exist between attendees and non-attendees.

Regression analyses revealed significant bivariate correlations between each independent variable and attendance as well as a significant increase in attendance variance accounted for when all variables were entered. Mediation by negotiation of both motivation and one constraint variable's (commitments) respective relationships with attendance were supported. A two-group analysis of variance identified significant differences in perception of team identification, motivation, several constraint variables, and negotiation strategies between groups. Perception of two constraint variables, commitments and lack of someone to attend with, did not differ significantly between groups of non-attendees and attendees.

INDEX WORDS: Sport consumption, Basketball, Team attachment, Motivation, Constraints, Negotiation, and Attendance

# SOCIO-PSYCHOLOGICAL ATTENDANCE DETERMINANTS FOR A TEAM IN THE NATIONAL BASKETBALL ASSOCIATION

By

JESSE RAPPOLE

B.S., The University of North Carolina at Chapel Hill, 2005

J.D., Washington and Lee University School of Law, 2009

A Dissertation Submitted to the Graduate Faculty of The University of Georgia

in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2013

# SOCIO-PSYCHOLOGICAL ATTENDANCE DETERMINANTS FOR A TEAM IN THE NATIONAL BASKETBALL ASSOCIATION

by

JESSE RAPPOLE

Major Professor: Thomas A. Baker III

Committee: Ted A. Baumgartner
Billy Hawkins
James J. Zhang

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2013

TABLE OF CONTENTS

# LIST OF TABLES

Page

CHAPTER 1

# Introduction

For several decades, increasing understanding of spectator sport attendance consumption behavior has been a critical pursuit among sport management scholars and practitioners alike. Thorough knowledge of the various socio-psychological game attendance determinants would allow marketers to tailor their efforts exactly for their intended audience. The ability to predict attendance demand for any given event with high accuracy would allow price maximization for the fixed supply of seats at every venue. As the sport industry continues to grow and become more financially competitive, this pursuit remains key.

## Background

A long line of sport consumption research has emphasized the importance of understanding what influences attendance behavior. Team identification, also frequently referred to as team attachment, is recognized as one of the most critical influences on spectator sport consumption (Kwon, Trail, & Lee, 2008; Robinson & Trail, 2005; Trail, Kim, Kwon, Harrolle, Braunstein-Minkove, & Dick, 2012; Trail, Robinson, Dick, & Gillentine, 2003; Wann & Branscombe, 1990, 1993). Team identification has also been repeatedly identified as having a strong correlation with spectator sport consumption motivation in several of these studies. The strong relationship between motivation and identification could lead some scholars to argue that these variables be considered in a single factor. However, this study follows the tradition of defining and considering team identification as a separate attendance influence (Kwon & Armstrong, 2004; Madrigal, 2006; Robinson & Trail, 2005; Trail et al., 2003).

Sport marketing studies have proposed and tested many categories of motivation factors positively correlated with attendance (Funk, Filo, Beaton, & Pritchard, 2009; Kim, Greenwell, Andrew, Lee, & Mahony, 2008; Robinson & Trail, 2005; Trail & James, 2001; Wann, 1995). However, none of the long line of spectator sport motivation studies to date explained much more than half of their respective samples' variance in consumption behavior.

In hopes of gaining a more complete understanding of consumer behavior, a body of leisure and recreation consumer behavior studies turned attention to negative determinants of activity participation called constraints (Crawford & Godbey, 1987; Crawford, Jackson, & Godbey, 1991; Godbey, Crawford, & Shen, 2010; Jackson, Crawford, & Godbey, 1993; White, 2008). Application of constraint theory in the spectator sport context soon followed (Kim & Trail, 2010; Pritchard, Funk, & Alexandris, 2009; Trail, Robinson, & Kim, 2008). These studies increased knowledge of those constraints that are relevant in the spectator sport context but faced limitations regarding explanation of the combined effects on attendance of constraints and motivation factors. It is therefore necessary to turn again to the active leisure participation context for suggestions.

Recent literature shows a trend of studying motivation and constraints together as related constructs mediated by negotiation strategies (Hubbard & Mannell, 2001; Lock & Filo, 2012; Pritchard et al., 2009; Son, Mowen, & Kerstetter, 2008; Trail & Kim, 2011). The study at hand extends this approach in the spectator sport context by integrating theories of motivation and constraints mediated by negotiation strategies for attendance.

While Jackson et al. (1993) elaborated on the negotiation proposition in the leisure context, Hubbard and Mannell (2001) emphasized the scarcity of research testing motivation's role in the constraint negotiation process, excepting the 1997 work by Carroll and Alexandris.

Consequently, Hubbard and Mannell (2001) examined ways "in which constraint, negotiation, and motivation could be interconnected and, in turn, linked to participation" in the leisure activity context (p. 146), finding that negotiation strategies mediate constraints to participation. Son et al. (2008) are among several authors who retested Hubbard and Mannell's (2001) empirically supported models in the leisure context with similar results, adding weight to the theory of negotiation as mediator of motivation and constraints to activity participation.

A common limitation of prior studies in this area is their inattention to non-participant populations. Early sport consumer behavior studies primarily highlighted attendee motivations. However, Lock and Filo (2012) note the importance of studying non-attendee consumer behavior (p. 187) and the dearth of literature addressing this population. Hubbard and Mannell (2001) as well as Son et al. (2008) each required participant awareness of activities for inclusion in their studies. Their narrow focus on populations already knowledgeable about the leisure activities studied prevented generalizations to broader markets and likely biased responses in favor of high motivation. In the present study, the responses from consumers previously unaware of or uninterested in spectator sport offerings are considered critical for sport managers and marketers to recognize preferences of this currently untapped market segment.

**Statement of the Problem**

Rein, Kotler, and Shields (2006) identified five challenges facing the modern spectator sport industry. A trend identified among Americans shows more people spending their discretionary income on recreation activities unrelated to spectator sports. Zhang, Smith, Pease, and Jambor (1997) pointed to substitute forms of entertainment (e.g., participant sports, television, movies, concerts, bars, and restaurants) as significant negative influences on spectator sport game attendance. Additionally, overcrowding within the sport marketplace makes it more

difficult for each entity to attract consumers. A third challenge is the continually decreasing amount of leisure time enjoyed by the average American. Especially in a difficult economy when some are forced to work longer hours to succeed, free time for relaxation and leisure activities grows scarce. This scarcity is directly tied to the fourth challenge facing the spectator sport industry, cost. Many organizations have raised ticket prices to generate more revenue from a decreasing number of fans.

In 2006 the average NBA ticket cost was $47.13 (Sports Business, 2007). By 2010 the average price of an NBA ticket had risen to $48.08 (Klayman, 2010) and between 2012 and 2013 it advanced 3.5% to $50.99 (Helin, 2013). Unfortunately for sport managers, raising ticket prices to stabilize revenues may also prevent some consumers from attending. The final challenge to spectator sport attendance consumption relates back to the wealth of entertainment options. Constantly evolving and expanding media outlets are making it easier for fans to follow their teams from afar. They can enjoy other leisure activities or continue working while simultaneously watching their favorite team on television, computer, phone, or tablet at a very low cost relative to ticket prices.

In the face of a crowded market, rising ticket prices, expanding substitute consumption media options, and increasing leisure alternatives, sport managers and marketers must find ways to raise consumer demand for attendance. The key to accomplishing this objective lies in gaining a more comprehensive grasp of all the socio-psychological factors influencing spectator sport attendance.

**Purpose of the Study**

This study examines socio-psychological factors influencing consumers' attendance of a National Basketball Association (NBA) team's game in order to augment understanding of

attendance determinants, which are critical to the financial success of spectator sports. The research focuses on an NBA team both because of the potentially large economic impact professional sport franchises have on a city and because the season timing and geographic availability made data collection possible. As in most professional sport leagues, NBA teams depend on game attendance as a revenue stream to help cover operating costs and generate profits. It is therefore crucial for team marketers and managers to increase their knowledge of the socio-psychological attendance determinants and how those factors relate to each other. Sport consumption research has explored attendance determining factors in depth across many spectator sport contexts, resulting in identification of the most salient motivations and constrains to attendance. This study builds on knowledge of spectator sport team identification, motivations, and constraints by integrating theories of negotiation from leisure participation research and investigating group differences between attendees and non-attendees.

**Significance of the Study**

The significance of this study lies in the successful integration of motivation, constraint, and negotiation strategy theories as applied to the spectator sport context. Prior attempts to adapt leisure participation motivation, constraint, and negotiation theories to the spectator sport context have suffered several limitations. The balance proposition proposed by Jackson et al. (1993) in which "both initiation and outcome of the negotiation process are dependent on the relative strength of, and interactions between, constraints on participating in an activity and motivations for such participation" (p. 9) was extended to the spectator sport context by Pritchard et al. (2009). The models empirically tested by the latter, however, gave inconclusive results, thus requiring conceptualization of alternative models.

Trail and Kim's (2011) study built on this line of research and found significant direct relationships for motivation and constraints variables with attendance intentions. They proposed models to test interactions between motivation and constraints as well as possible negotiation effects. Their negotiation proposition model did not fit their data well and significant interaction effects were only identified among a select few items within the motivation and constraint factors, not the composite constructs (Trail & Kim, 2011). It is likely that consumers perceive many different constraints in varying degrees, with as few as one strong constraint sufficient to prevent attendance. This likelihood suggests that further exploration of relationships between specific constraint factors, motivation, and negotiation strategies, as carried out in this study, is necessary.

Another of the present study's important contributions to the sport management literature results from the inclusion of a large contingent of non-attendees in its sample. While existing team identification, motivation, and constraints to sport consumption measures have been identified as valid and reliable predictors of attendance intentions among existing fan bases, populations either not aware of or not interested in attending spectator sports have been largely ignored outside of Lock and Filo's (2012) research. The study at hand addresses this limitation through a two-group analysis of variance between attendees and non-attendees for each item.

## Hypothesis Development

### *Hypothesis One*

Based on the findings of prior work by Robinson and Trail (2005), Kim and Trail (2010), Trail and Kim (2011), Funk et al. (2009), Funk, Beaton, and Alexandris (2012), Hubbard and Mannell (2001), Son et al. (2008), as well as Pritchard et al. (2009), it is hypothesized that each factor – team identification, motivation, constraints, and negotiation – has a direct effect on

attendance behavior. Each of these proposed bivariate relationships has been empirically supported in prior spectator sport or leisure recreation research. It is proposed here that these four factors account for consumption behavior in the NBA spectator sport context as well.

*Hypothesis 1a: Team identification has a direct positive effect on attendance behavior.*

*Hypothesis 1b: Motivation has a direct positive effect on attendance behavior.*

*Hypothesis 1c: Constraints have a direct negative effect on attendance behavior.*

*Hypothesis 1d: Negotiation has a direct positive effect on attendance behavior.*

*Hypothesis Two*

This study extends the literature by examining the combined effects of team identification, motivation, constraints, and negotiation factors on attendance behavior in the NBA context. While each factor is theoretically related to attendance, motivation and constraints are predicted to have opposing effects. Negotiation strategies are expected to have opposing impacts on attendance relative to constraints as well. Additionally, team identification and motivation factors are likely to have high correlations and may overlap considerably in the attendance variance explained by each. To gain a more comprehensive understanding of consumers' attendance decisions, one must consider the combined effects of all influential factors. It is proposed that considering all independent variables simultaneously will account for the greatest portion of attendance variance.

*Hypothesis 2: Team identification, motivation, constraints, and negotiation factors combine to predict more variance in attendance behavior than any single variable.*

*Hypothesis Three*

The third hypothesis tested is that constraint and motivation effects on attendance are each partly mediated by negotiation strategies in the NBA context. Negotiation is included in

hypotheses one and two as a variable directly affecting attendance intentions, but initiation of negotiation strategies requires that both motivation and constraints exist. Theoretically, it is not possible to negotiate constraints that are not present. Similarly, if there is absolutely no motivation for consumption, then there will be no initiation of negotiation strategies. Therefore direct correlations between motivation and constraints, respectively, with negotiation are expected. Hypothesis three proposes that those mediating relationships identified by Hubbard and Mannell (2001) and Son et al. (2008) of negotiation with each of constraints and motivation, as are found in the active leisure participation context, also exist in the NBA spectator sport attendance context. Theory holds that some consumers will not experience constraints and others will have little or no motivation for attendance. In these instances, neither motivation nor constraints will be mediated by negotiation. Therefore, hypothesis three states that negotiation partly mediates effects of motivation and constraints on attendance.

*Hypothesis 3a: Negotiation partly mediates the relationship between motivation and attendance.*

*Hypothesis 3b: Negotiation partly mediates the relationship between constraints and attendance.*

*Hypothesis Four*

The fourth hypothesis is derived from Lock and Filo's (2012) theory concerning the importance of understanding non-attendee populations' sport consumption behavior. They point to a lack of research including the elusive market of non-attendees and resulting dearth of knowledge concerning their motivation, constraints, and negotiation perceptions. The assumption is that they have no team identification, are not motivated by the same factors as attendees, and with little motivation for attendance, they are unlikely to perceive many constraints. Non-

attendees are also presumed not to engage in negotiation strategies to allow attendance. Hypothesis four is that group differences in the perception of team identification, motivation, constraints, and negotiation between non-attendee and attendee populations exist.

*Hypothesis 4: Attendees of NBA basketball games do not perceive team identification, motivation, constraints, and negotiation factors in the same way that non-attendees do.*

**Summary of Study Objectives**

This research builds on team identification, motivation, and constraints work in the spectator sport context by empirically testing an adapted model introducing the negotiation principle as theorized by Hubbard and Mannell (2001) and supported by Son et al. (2008). Additionally, the study contributes to knowledge of group differences in team identification, motivation, constraints, and negotiation perceptions between attendees and non-attendees of NBA games. Improving understanding of spectator sport consumer attendance from multiple perspectives to gain a more comprehensive knowledge of socio-psychological determinants is the purpose of the study. This objective is pursued by systematically analyzing the relationships among each of the independent variables (team identification, motivation, constraints, and negotiation) and attendance frequency for a population including both attendees and non-attendees.

Explanation and development of the theories underlying this study follow in the literature review section covering prior sport consumption, team identification, motivation, constraints, and negotiation studies. Discussion of the methodology employed for this research is included after the literature review. The details of data analyses compose the next section which will be followed by results, discussion, and conclusions generated from the study.

# CHAPTER 2

## Literature Review

The following literature review summarizes relevant research developing theoretical explanations for sport consumer attendance and leisure activity behavior influences considered in this study. It begins with a brief business overview of the NBA to provide context.

### NBA Business Overview

The NBA owners and players agreed to a new collective bargaining agreement (CBA) in 2011 after a lengthy lockout shortened the season. Owners claimed that player salaries were too high in comparison with revenue generation for many of the teams. The Memphis Grizzlies, for example, had reported net losses for 10 straight years (Forbes.com, 2013). In the new CBA, the highest revenue generating teams agreed to provide more financial support to lower revenue teams as a competitive balance-preserving measure. The CBA now appears to be a success for league owners. During the shortened 2011-2012 season the league average operating income was $11.9 Million -- the highest average ever reported by Forbes, which began tracking the information in 1998 (Forbes.com, 2013).

Team values have also increased dramatically with two teams, the New York Knicks and Los Angeles Lakers, now worth over $1 Billion each. The league average team value is up 30% from 2011, to $509 Million. However, the immense value of NBA teams does not come without steep costs. The Knicks are currently in the middle of a $980 Million renovation project (Forbes.com, 2013). The Brooklyn Nets play in a $1 Billion new arena. In order to continue

raising team values these teams and many others paying for renovations and new stadiums will need to maximize spectator consumption, and thereby revenues.

**Sport Consumption**

Sport consumption, like any consumption market, comprises behavioral, affective, and cognitive aspects undertaken to fulfill psychological, social, and cultural desires (Karg & McDonald, 2011). Specifically, sport consumption as considered here is attendance at a type of contested skill performance where the competitors try to obtain victory though demonstration of athletic excellence (Madrigal, 2006). Skill performances have been defined as "displays of competence occurring in naturalistic settings that emphasize the event's realism" (Madrigal, 2006, p. 268; citing Deighton, 1992). Madrigal (2006) went on to differentiate skill performances from other performance types which are "usually predictable or ritualistic whereas skill performance is characterized by tension and uncertainty about the eventual outcome" (p. 268).

Early sport consumption research examined attendance factors including promotions, stadium amenities, accessibility, economic factors, and more to determine industry demand. Socio-demographic characteristics of sport consumers were a core interest among early sport consumption studies as well (Baade & Tiehen, 1990; Zhang, Pease, Hui, & Michaud, 1995; Zhang, Smith, Pease, & Lam, 1998). The primary output products for sport consumption are broadcasting rights and ticket sales, with many secondary products that include concessions, licensed apparel, parking, and media products (Zhang, Lam, & Connaughton, 2003). Recently, the sport consumption literature has seen an explosion of online and fantasy sport consumption studies suggesting complementary relationships for each with traditional sport consumption outlets (Ha, Ha, & Han, 2013; Karg & McDonald, 2011; Shapiro, Ridinger, & Trail, 2013).

The study at hand focuses on live game attendance, as the relationship between live attendance and television consumption has been deemed reciprocal in the modern sports era (Zhang et al., 2003). Several factors with a significant influence on spectator sport consumption have been identified in previous sport management literature. Some of the most popular variables studied to date are fan identification, market demand, motivation, and constraints (Byon, Cottingham, & Carroll, 2010). Of these, consumption motivation has received the most attention thus far, since the immense value of understanding what causes consumers to consume cannot be overstated in the eyes of sport marketers. However, many scholars have proposed that motivation is heavily influenced by team identification levels.

**Team Identification or Attachment**

Team identification or attachment is recognized and measured through the lens of Social Identity Theory (SIT). SIT was defined by Stets and Burke (2000) as "a person's knowledge that he or she belongs to a social category or group" (p. 225). The formation of social identity occurs through self-categorization based on emphasizing likenesses identified with other people perceived as part of the "in-group". A simultaneous identification of dissimilarities with the "out-group" occurs and strengthens social identity (Uhlman & Trail, 2012). According to Tajfel and Turner (1986), SIT is built on the idea that self-concept is two-faceted, with personal identity and social identity components. Personal identity is derived from individual characteristics including interests, abilities, and appearance. Social identity stems from group categories related to demographic memberships such as sex or race as well as organizational affiliations exemplified by employment, educational institutions, religions, and teams (Onorato & Turner, 2004).

When an individual identifies with a team (or any organization), he develops a sense of belonging or unanimity with the in-group for that team. The organization's in-group consists of

players, coaches, management, and fans in the case of a team. As identification with a team grows, individuals begin defining themselves in terms of their affiliation with the organization (Mael & Ashforth, 1992). As Fink, Trail, and Anderson (2002) stated, "Members become identified with an organization when they embody the attributes they ascribe to their organization into their own self-concepts" (p. 196). Fink et al. (2002) elaborated on this concept through the words of Dutton, Dukerich, and Harquail (1994), who explained the commitment process as the evolution of people's attachment through integration of the organization's characteristics as their own. At high levels of identification, the defining attributes of the team or organization become personally defining for the individual.

Anderson and Stone (1981) related teams to emblematic symbols of a community, which can serve as representations of community membership through team identification. "As this sense of belonging develops, the positive consequences of association increase, fostering sentiments of group membership with other individuals" (Robinson & Trail, 2005, p. 60). It is through this aspect of fandom that social identity is strengthened. Therefore several sport management scholars have focused solely on attachment or team identification as a crucial predictor of sport consumption behavior.

Trail, Anderson, and Fink (2000) provided a definition of identification popular in the sport context: "An orientation of the self in regard to other objects, including a person or group, that results in feelings or sentiments of close attachment" (p. 165-166). Several early studies of sport identification focused on theoretical relationships between team identification and consumption. Wann and Branscombe (1990) explored impacts of team identification on differentiation of "die-hard" and "fair-weather" fans. Die-hard fans are considered the most loyal and continue supporting a team no matter how poorly it may be performing. Fair-weather fans,

however, tend to evidence their support for a team only when it is winning frequently. Wann and Branscombe (1990) theorized that die-hard fans' consumption behavior is unlikely to fluctuate, and so fair-weather fans are responsible for attendance variation related to winning or losing seasons. Murrell and Dietz (1992) agreed with this theory and found team identification directly correlated with fan support.

Wann and Branscombe's (1990) study focused on team identification's relationships with concepts they defined as basking in reflected glory (BIRGing) and cutting off reflected failure (CORFing). The findings suggested that highly identified fans BIRG more and the least identified spectators CORF more. Wann and Branscombe's (1990) results supported their theory that high team identification levels predict loyalty regardless of performance and low team identification is associated with waning support during periods of poor performance.

More recent BIRGing and CORFing research has strengthened support for their relationship with team identification. Kwon et al. (2008) reported that effects of vicarious achievement on BIRGing and CORFing are mediated by team identification levels. In each of their supported models, increases of 35-45% in BIRGing and CORFing predicted variance were found when team identification was entered as a mediating variable (Trail et al., 2012).

Wann and Branscombe (1993) continued their team identification research by developing the Sport Spectator Identification Scale (SSIS) and reported significant prediction of multiple spectator sport consumption factors. According to the study, team identification was directly related to attendance of both home and away games, willingness to pay higher ticket prices, as well as waiting longer in line for tickets regardless of game type (regular season, playoff, or championship) (Wann & Branscombe, 1993). This work was followed and extended by Mitrano (1999) as well as Sutton, McDonald, Milne, and Cimperman (1997). Each reported that

identification levels are related to fan behavior, with higher identification levels correlated to a stronger sense of team attachment and belongingness.

Building on prior sport marketing research based in SIT, Laverie and Arnett (2000) suggested that prior sport experiences form role identities. They found support for team identification influencing behavioral intentions and attendance directly. These findings spurred a multitude of research fine-tuning accurate and reliable measures of team identification (or attachment) to further explore its relationships with attendance and other future consumption behaviors (James & Trail, 2008; Theodrakis, Wann, & Weaver, 2012; Trail et al., 2003; Trail, Anderson, & Fink, 2000, 2002, 2005). The Trail et al. (2000, 2002, 2003, & 2005) studies specifically incorporated Laverie and Arnett's (2000) work while theorizing and generating models for testing several proposed sport consumption variable relationships. As they explored the roles of a multitude of variables proposed to determine future behavioral intentions, team identification was considered a critical component. The Trail et al. (2005) results supported direct and indirect impacts of team identification on future behavioral intentions, with indirect influences being mediated by fan self-esteem. As noted by Shapiro et al. (2013), numerous studies have repeatedly identified team identification as a significant influence on attendance and related spectator sport consumption variables. It therefore seems safe to say that team attachment is a critical factor for sport marketers to monitor and nurture.

Where motives are considered an extension of "basic human 'needs' (McDonald, Milne, & Hong, 2002; Robinson & Trail, 2005), points of attachment reflect a 'psychological connection' toward a certain entity (Kwon & Armstrong, 2004)" (Woo, Trail, Kwon, & Anderson, 2009, p. 40). The Points of Attachment Index (PAI) was first proposed by Robinson and Trail in 2002 as a tool to measure the relationships among motives and multiple points of

attachment in college athletics. Trail et al. (2003) utilized the PAI in conjunction with the MSSC to identify different motivational factors for fans and spectators with varying points of attachment.

The Robinson and Trail study proposing the PAI and demonstrating the scale's validity and reliability was initiated in 2002 and published in 2005. The PAI has seven subscales, one for each point of attachment: (1) the players, (2) the coach, (3) the community, (4) the sport, (5) the university, (6) the team, and (7) the level of the sport. Each PAI subscale contains three items, resulting in a 21-item scale (Robinson & Trail, 2005). The combination of MSSC and PAI items has been successfully employed in several spectator motivation studies, repeatedly demonstrating sound psychometric properties (Kim & Trail, 2010; Kwon & Armstrong, 2004; Robinson & Trail, 2005; Trail et al., 2003).

Team identification is chosen as a control variable in this research because it is the most relevant attachment point in the professional sport context. Support for the relationships between team identification, motivation, and spectator sport attendance consumption is clear. Shapiro et al. (2013) highlighted the critical nature of understanding team identification level for predicting future intentions and actual attendance in the spectator sport context. Any study of attendance determinants would be incomplete without taking team attachment into consideration. Therefore, the study at hand employs a single item measure of team identification to control for level of attachment while exploring other proposed attendance determinants. "I consider myself a dedicated fan of the 'Team'" was utilized as adapted by Kim and Trail (2010) from Trail et al.'s (2003) PAI. As noted above, correlations between team attachment and motivation have been identified in many spectator sport contexts, which renders this relationship is of particular concern in the study at hand.

**Motivation**

Spectator sport consumption research has repeatedly identified motivation as a particularly salient variable impacting attendance behavior. This study uses the definition of motivation recently articulated by Trail and Kim (2011): "the influences that account for the initiation, direction, intensity, and persistence of behavior" (p. 62). The majority of consumer behavior motivation studies build on Maslow's (1943) hierarchy of needs (or motives) progressing from physiological, to safety, to belongingness, to esteem and, finally, to self-actualization.

Maslow's (1943) theory was generated through his evaluation of known facts and clinical experiences in an attempt to explain human motivation. Physiological needs form the foundation of Maslow's hierarchy based on the fact that a human deprived of food, safety, love, and esteem is likely to need food foremost. Other desires would take a back seat to the physiological need for food in such a case. However, the hierarchical nature of human needs is demonstrated by the fact that once physiological hungers are satisfied new "higher" needs emerge almost immediately. When physiological needs are constantly met they stop acting as determinants or organizers of behavior (Maslow, 1943).

The next level of needs that is likely to emerge when physiological concerns are met is safety. Maslow (1943) used children to exemplify the need for safety and stability, pointing to terrified children clinging to parents as protectors in response to threatening stimuli. As adults most humans have gained knowledge of their surroundings and the many protections of modern, organized society, thus satisfying the safety need to a large degree. While many are still motivated by safety preservations such as job security and insurance, safety as an active motivator is depressed and higher order needs once again emerge.

According to Maslow (1943), when physiological and safety needs are not pressing, the need for emotional love will take precedence. While a starving man may regard all others as competition for food and a child see strangers as danger, those who are sated and feel safe long for a sense of belonging and the affection of friends and family. This is the first level of Maslow's (1943) hierarchy that is generally considered as a possible motivation for sport consumption. Social aspects and the sense of belonging often associated with spectator sport attendance should be the strongest motivators according to Maslow's (1943) theory as applied to sport consumption. However, sport is only one of an almost infinite number of opportunities for humans to pursue a sense of belonging and affection. Therefore, the need for love may also work as a constraint to sport attendance when friends and family are not interested in attending.

Whether an individual satisfies the need for love, affection, and belonging through spectator sport consumption or any other activity, Maslow (1943) contends that he will then become focused on the need for esteem. He defined two categories of esteem needs including "the desire for strength, for achievement, for adequacy, for confidence in the face of the world, and for independence and freedom" as well as "for reputation or prestige [defining it as respect or esteem from other people], recognition, attention, importance or appreciation" (Maslow, 1943, pp. 381-382). A long line of sport consumption research has been devoted to understanding how esteem needs motivate spectator sport attendance through the theory of BIRGing (Funk, Ridinger, & Moorman, 2003; Robinson & Trail, 2005; Sloan, 1989; Trail, Kim, Kwon, Harrolle, Braunstein-Minkove, & Dick, 2012; Wann, 1995). However, the motivating factor of esteem can also act as a constraint when a team is not successful, which may lead to CORFing, or if the person is not knowledgeable about the sport. Someone with a limited knowledge of the sport may avoid attending games where their lack of knowledge could be put on display. As noted

above, team identification has also been found to have a strong effect on BIRGing and CORFing behavior. This again points to the importance of studying the relationships among team identification, motivation, and consumption behavior.

Assuming an individual is able to satisfy his need for esteem through sport consumption or otherwise, Maslow's (1943) hierarchy suggests that he would then become more aware of a need for self-actualization. In other words, people are naturally suited for various activities and must pursue their potential. This highest order need is also, therefore, the least likely to be satisfied because, as Maslow (1943) stated, "The clear emergence of these needs rests upon prior satisfaction of the physiological, safety, love, and esteem needs" (p. 383). He continued to explain that these relatively satisfied people are the most capable of pursuing and expressing creativity. As it relates to sport consumption, the people who have satisfied their more basic needs are free to pursue satisfaction of self-actualization through the aesthetic qualities, sense of excitement, and escape provided by spectator sport attendance.

Sloan (1989) is credited with first adapting Maslow's hierarchy to the spectator sport context for conceptualizing the motives of sport consumers. Wann (1995) built on this conceptual framework in developing a scale for measurement of sport fan motives to determine their relative importance in the decision making process. The resulting 23-item Sport Fan Motivation Scale (SFMS) included eight motivation factors. These factors are labeled: eustress, self-esteem benefits, escape, entertainment, economic factors, aesthetic qualities, group affiliation, and family needs. Despite Wann's indication that the scale possessed validity and reliability in psychometric testing, some have criticized the SFMS for lack of content validity and appropriate documentation of scale development methods (Trail & James, 2001). The SFMS stands as a valuable initial empirical test of sport consumption motivation constructs. The

validity concerns are addressed in future studies utilizing the motives operationalized in the SFMS to create scales with improved psychometric properties.

Soon after introduction of the SFMS, Kahle, Kambara, and Rose (1996) published the results of their Fan Attendance Motivations (FAM) scale development and empirical testing. Their approach varied from Maslow's (1943) hierarchical theory as they focused on Kelman's (1958) attitudinal influence theory. Kahle et al.'s (1996) study used constructs of camaraderie, competitiveness, and team attachment to predict game attendance motivation. Theoretical justifications provided by Kahle et al. (1996) for these motivation factors were thorough, but their data did not fit the proposed model well in terms of psychometric reliability and validity tests. However, more comprehensive motivation scales have adopted these variables with empirical tests indicating validity and reliability for predicting internal motivation (Milne & McDonald, 1999; Trail & Kim, 2011).

Milne and McDonald (1999) combined theories from Wann (1995) and Kahle et al. (1996) to develop a 37-item Motives of the Sport Consumer (MSC) scale. The MSC turned out to be overly comprehensive for study of spectator sport motivations; it contained several recreational sport participation items which confounded certain spectator measures. Specifically, complications in statistical analysis caused by the overlapping participation and spectator variables led to debatable convergent and criterion validity (Trail & James, 2001). As a result, while the MSC development contributed critical knowledge to the sport consumption motivation literature, it needed refinement before it could be considered an accurate and valid measure of spectator motivation.

In 2006 Madrigal published the Fan Dimensions or FANDIM scale to measure sport consumption after testing it in comparison to Bloch's (1981) 17-item Involvement with a Product

Class (IPC) scale and Wann's (1995) SFMS. Madrigal's (2006) "best fitting empirically supported model was one represented by two higher-order factors, each comprised of three distinct first order factors" (p. 287). The higher order factor of Autotelism is represented by fantasy, flow, and evaluation while personalities, physical attractiveness, and aesthetics compose the first order factors of Appreciation in the FANDIM scale. The findings of Madrigal's (2006) work contribute appreciably to the overall knowledge of motivational factors related to spectator sport consumption. Madrigal's (2006) testing of the scale's psychometric properties revealed internal consistency, test-retest reliability, and discriminant validity within conventionally accepted ranges. While FANDIM proved to be a valid and reliable measure of "the dimensions along which sporting events are consumed" (Madrigal, 2006, p. 270), the focus of this study is on the role of motivational factors in determining consumers' purchase decisions. Therefore, the author turns to other scales more appropriate for this context.

Trail and James' (2001) comprehensive Motivation for Spectator Sport Consumption (MSSC) scale combined the factors demonstrated to be most relevant to spectator sport consumption motivation in a similar multidimensional single-factor approach. Building on Trail et al.'s (2000) motivation theory, Trail and James (2001) constructed a model and tested the MSSC. With nine motivation factors, each proposed to independently have a direct impact on sport consumption, their data fit the model well and psychometric testing indicated acceptable validity and reliability of the scale. The nine motivation factors included in the complete MSSC are achievement, acquisition of knowledge, aesthetic qualities of the game/sport, social interaction, drama, escape, family, physical attractiveness, and appreciation of physical skills. All of the factors included were previously identified in sport consumption and demand literature as important psychological motivations.

The theoretical work of Trail et al. (2000) brought these previously identified factors together in a harmonious fashion by selecting the most salient variables for the spectator sport context. Trail and James (2001) operationalized a parsimonious scale to measure the nine motivation factors, and the MSSC was born. Continued use and testing of the MSSC to further motivation research in a wide array of sport consumption contexts has demonstrated the scale's accuracy and reliability repeatedly (Kim & Trail, 2010; Robinson & Trail, 2005; Trail & Kim, 2011).

Both the study at hand and Trail and Kim's (2011) study incorporate items derived from the Sport Interest Inventory (SII). The SII was originally proposed in 2002, but it was Funk et al. (2003) who tested an extended version of the scale and utilized it to explain 48% of spectator support for golf variance. The remaining 52% of golf support variance that could not be explained using the SII suggested the need for a more comprehensive measure.

Sport management scholars continued exploring consumption factors from many perspectives, hoping to better explain consumers' attendance behavior. Fink et al. (2002) used SIT to develop motivation measures which were later adopted by Trail et al. (2002) and incorporated in the Venue Service Experience Survey (VSES). Trail et al. (2002) elaborated on Zhang et al.'s (1998) as well as Milne and McDonald's (1999) theories of venue service satisfaction to operationalize the VSES. Psychometric testing of the resulting scale showed acceptable indications of validity and reliability (Trail et al., 2002). Although initially conceived to measure gender variance in perception of venue and service satisfaction, the VSES was modified by Trail and Kim (2011) for their purposes as well. The VSES was integrated by Trail and Kim (2011) while developing a scale to measure motivation and constraints constructs.

As noted by Woo et al. (2009), prior studies indicate that individual motives for attending spectator sports are highly correlated, suggesting that they be grouped into a single multidimensional factor (Robinson & Trail, 2005; Trail et al., 2003; Trail & James, 2001). Despite recent motivation and constraint research by Trail and Kim (2011) categorizing internal and external motivation as separate factors, the consolidated approach is preferred here, for it lends itself more naturally to analysis of antecedents and outcomes.

For the purposes of this study, one particularly attractive motivation measurement option is Funk et al.'s (2009) SPEED scale. As stated by Funk et al. (2009), it "represents a concise 10-item instrument with sound psychometric properties to measure and explain why people attend spectator sport contests" (p. 134). According to Funk et al. (2009), their SPEED scale incorporates relevant aspects of earlier sport consumption motivation scales in the creation of a reliable and valid measurement tool. The SPEED scale was named for its five factors – socialization, performance, excitement, esteem, and diversion – as well as for its concise design intended to increase response rates. By reducing the factors considered to determine motivation, the SPEED scale lends itself to "a more parsimonious examination of the constructs' relationship to antecedents and outcomes (Laverie & Arnett, 2000)" (as cited in Funk et al., 2009, p. 133). The SPEED scale was recently modified and retested by Funk et al. (2012).

Focusing on theoretical support for motivation conceptualization, Funk et al. (2012) used Self-Determination Theory (SDT) to revise the previously mentioned SPEED scale. When viewed though the SDT lens, the regulation of specific sport consumer motives is a product of individual needs and socio-contextual considerations that represents an individual's motivational orientation (Funk et al., 2012, citing Deci & Ryan, 1985). Individual needs (intrinsic) combine with socio-contextual needs (extrinsic) to determine an individual's motivation for consumption.

Funk et al.'s (2012) revised SPEED scale for sport consumption motivation captured both intrinsic and extrinsic motivation factors to explain over 60% of game attendance variance in their study. The scale demonstrated construct and discriminant validity in CFA testing (Funk et al., 2012). The resulting instrument contained 15 items divided into five categories of socialization, diversion, performance, esteem, and excitement.

Each of the measures above focused on positive sport consumption determinants. Despite their many contributions to understanding and defining the most salient measures of motivation, a major piece of the spectator sport consumption puzzle is still missing. More recent sport consumption motivation research has turned its focus to online consumption in various forms, and motivation scale development continues. However, for purposes of this study the SPEED (2012) scale thoroughly captures the intended aspect of motivation for spectator sport attendance. Therefore it is time to turn to negative determinants of spectator sport attendance in hopes of gaining a more thorough understanding of this consumer behavior.

**Constraints**

The "factors that impede or inhibit an individual from attending a sporting event" is the definition of constraints applied in this study (Kim & Trail, 2010, p. 191). Derived from the definition commonly accepted in leisure studies literature, "factors that … limit the formation of leisure preferences and/or inhibit or prohibit participation and enjoyment in leisure" (Jackson, 2000, p. 62), the language is just slightly modified for the spectator context.

This spectator sport specific definition is chosen for three reasons: 1) it is clear, concise, and directly states the factor being considered; 2) this definition is easily understood by laypersons, practitioners, and scholars alike; and 3) this language is widely accepted among sport management researchers. Each aspect of the chosen definition is imperative to give sport

management practitioners a quick understanding of the research and allow them to translate the theory into practice (Kim & Trail, 2010).

Decision theory has long recognized that humans consider positive and negative factors during their thought process. Studies of choice behavior have demonstrated a tendency by humans to minimize losses rather than focus on maximizing gains. This practice is called loss or risk aversion (Tversky & Kahneman, 1991). Consideration of the negative factors impacting sport consumption behavior is not a recent development in the field (Baade & Tiehen, 1990; Zhang et al., 1995). However, defining constraints and conceptualizing them as a separate construct from motivation factors is a more recent trend in the sport management literature (Kim & Trail, 2010; Pritchard et al., 2009; Trail et al., 2008; Trail & Kim, 2011).

Crawford and Godbey (1987) initially proposed three separate categories of constraints labeled as intrapersonal, interpersonal, and structural in the leisure recreation literature. Crawford et al. (1991) built on the three constraint category theory and generated a hierarchical model of leisure constraints. The theory explained that leisure consumers need to overcome various constraints at each of the levels in order to participate in an activity. Jackson et al. (1993) improved this hierarchical model by adding the concept of negotiation to explain how a consumer might overcome one level of constraints and advance to the next level. In this theoretical framework consumers must overcome all constraints at each level through negotiation in order to participate in a leisure activity. Repeated testing and extension of Jackson et al.'s (1993) constraint negotiation model in active leisure participation studies has strongly supported the theory (Carroll & Alexandris, 1997; Godbey et al., 2010; Hubbard & Mannel, 2001; Petrick, Backman, Bixler, & Norman, 2001; Son et al., 2008).

It was not until recently that sport management scholars started adapting constraints theory for the spectator sport context. Trail et al. (2008) simplified intrapersonal and interpersonal constraints by combining them into one internal constraint construct defined as internal psychological cognitions that deter behavior. They also redefined structural constraints, or the social and environmental factors that prevent or deter people's leisure consumption behavior (Crawford et al., 1991), as "external constraints". The modified definition of "social or environmental aspects that prevent or decrease the likelihood of the individual performing the behavior (e.g. cost, weather, lack of transportation)" (Kim & Trail, 2010, p.194) provides a more logical fit in the spectator sport context.

Kim and Trail (2010) operationalized constraint items applicable in the spectator sport context using theory from Trail et al. (2008) and the VSES (Trail et al., 2002) as well as reversed items from the MSSC to extend the line of research initiated by Crawford et al.'s (1991) work. Although many of their proposed items indicated reliability, internal consistency, and discriminant validity as constraint measures in repeated psychometric testing (Kim & Trail, 2010; Trail & Kim, 2011), high correlations among the proposed independent variables were indicated.

As suggested above, generating a multidimensional single-factor scale to allow more efficient analysis of antecedents and outcomes for constraints is preferred over the multi-factor approach. For this reason, the present study combines the external and internal constraint items suggested by Kim and Trail (2010; 2011). The "No interest from others" factor is eliminated due to the low Cronbach's alpha and average variance extracted (AVE) values reported outside traditionally acceptable ranges by Trail and Kim in both the 2010 and 2011 studies. The resulting proposed multidimensional single-factor scale for constraints includes: commitments, cost, leisure alternatives, accessibility, lack of knowledge, lack of success of the team, and lack of

someone to attend with. The refined multidimensional single category subscale is proposed for use in conjunction with elements of the SPEED scale for motivation and a multidimensional single-factor negotiation subscale adopted from the active leisure recreation consumption literature.

**Motivation & Constraints**

Theoretical support for inclusion of motivation and constraint factors simultaneously to explain consumer behavior can be traced to several psychological and behavioral studies (Tenenbaum & Eklund, 2007; Tversky & Kahneman, 1991; White, 2008). Models of consumer behavior neglecting either aspect of the attendance decision process cannot hope to fully explain much more than half the dependent variable variance. Jackson et al. (1993) theorized a balance proposition in which "both initiation and outcome of the negotiation process are dependent on the relative strength of, and interactions between, constraints on participating in an activity and motivations for such participation" (p. 9). Pritchard et al. (2009) extended Crompton, Jackson, and Witt's (2005) research on constraints proposed to moderate motivation for sport consumption. However, the models empirically tested by Pritchard et al. (2009) gave inconclusive results, thus requiring conceptualization of alternative models.

Kim and Trail (2010) responded by proposing a reconfiguration of motivation and constraints theorized relationships with attendance intentions. They adapted the leisure and recreation theories of negotiation (Hubbard & Mannel, 2001; Jackson et al., 1993; Petrick et al., 2001) and the balance proposition (Carroll & Alexandris, 1997) to conceptualize a new motivation and constraints model. In doing so, Kim and Trail (2010) noted a difficulty of motivation and constraint research which stems from the fact that categorization of some factors depends on context. Certain motivation variables such as team performance could be viewed as a

constraint by disappointed fans when the team is losing consistently. This possibility emphasizes the importance of understanding and clarifying context when conceptualizing and identifying motivation and constraint factors (Kim & Trail, 2010).

While the results of Kim and Trail's (2010) study indicated sound psychometric properties for the proposed scale and a reasonable model fit (p. 198), external motivators did not account for significant attendance variance. Although Kim and Trail's (2010) model was supported by the negotiation and balance propositions theoretically, the operationalization of the constructs provided only weak evidence for application of these theories in the spectator context. The study did however lay a foundation upon which sport management researchers can continue to explore the determinants of spectator sport attendance.

Trail and Kim (2011) soon continued building on their 2010 study of motivation and constraints' attendance impacts by proposing and testing three model variations. Although they maintained a dual categorization of constraints and motivation, each divided into internal and external constructs, the 2011 study utilized a modified scale.

Two out of three alternative models proposed and tested in Trail and Kim's (2011) study fit the data during empirical testing. The first model (T&K Model 1), which proposed each internal and external motivation and constraint construct having a direct bivariate relationship with attendance intentions, fit the data. The second model (T&K Model 2) tested in the 2011 study attempted to incorporate Crawford et al.'s (1991) hierarchical theory of constraints and negotiation, but did not fit the data. The third model (T&K Model 3) was proposed based on Pritchard et al.'s (2009) motivation and constraint theory combined with that of Kim and Trail (2010). T&K Model 3 allowed testing internal and external constraints as moderators of the internal and external motivation effects on attendance intentions.

Trail and Kim's (2011) testing of T&K Model 3 (containing four sub-models) demonstrated multiple significant interactions. It appeared that internal constraints moderate the attendance effects from both categories of motivators and external constraints moderate the relationship between external motivation and attendance as tested. However, this finding was based on moderation analysis using only specific motivation and constraint items as representatives of the latent construct. Trail and Kim (2011) interpreted the results as empirical evidence that constraints moderate the effect of motives on attendance intentions in accordance with theoretical explanations provided by Crompton et al. (2005) and Pritchard et al. (2009). Some might argue that the study only identified specific constraint and motivation factors as having significant interaction effects. Therefore, further exploration of relationships between the constructs and each of the factors they comprise is necessary to increase understanding of these concepts.

Although acceptable model fit and scale validation testing were reported by Kim and Trail (2010) and again with slight modification of items and models by Trail and Kim (2011), neither study explained the majority of variance in attendance intentions. Even with positive and negative aspects of spectator sport consumers' decision-making process considered, something was missing. Simple inclusion of motivation and constraint variables in attendance prediction models does not satisfactorily explain consumer attendance behavior as previously conceptualized in the spectator sport context. It is believed by the author of this study that Trail and Kim's (2011) second model (T&K Model 2) represented a theoretically sound conceptualization of the negotiation principle with limitations in the application and testing that prevented a good fit with their data. The present study attempts to address these limitations

through incorporation of negotiation as an independent variable, following the example of leisure and recreation scholars.

**Negotiation**

Despite Trail and Kim's (2011) rejection of T&K Model 2 depicting a negotiation process through hierarchical levels of constraints, the theory remains practically sound. As stated by Jackson et al. (1993), consumers must have a process for overcoming constraints. If not, every minor perception of a negative influence on consumption would prevent consumer action. This is clearly not the case, as is demonstrated by several leisure constraint studies (Alexandris, Funk, & Pritchard, 2011; Crawford & Godbey, 1987; Crawford et al., 1991; Hubbard & Mannell, 2001; Son et al. 2008). In active leisure participation literature the negotiation principle has been clearly articulated and empirically tested with relatively consistent results regarding the existence of correlations among motivation, constraints, negotiation strategies, and behavioral outcomes (Alexandris et al., 2011; Hubbard & Mannell, 2001; Schroeder, Fulton, Lawrence, & Cordts, 2012; Son et al., 2008; White, 2008; Wilhelm Stanis, Schneider, & Russell, 2009). Hubbard and Mannell (2001) first proposed and tested four models operationalizing motivation, constraint, and negotiation constructs in four possible relationships.

The models proposed and tested by Hubbard and Mannell (2001) are labeled the Independence Model, Negotiation-Buffer Model, Constraint-Effects-Mitigation Model, and Perceived-Constraint-Reduction Model. In each model a direct negative effect of constraints on participation and positive effect of motivation on participation were presumed. The Independence Model also proposed a direct negotiation effect on participation. This model most closely approximated the balance proposition as tested and supported by Carroll and Alexandris (1997). The Independence Model indicated significant correlations between each of the

constraint and negotiation constructs and participation. Contrary to Carroll and Alexandris' (1997) findings, motivation did not have a significant effect on participation for Hubbard and Mannell's (2001) data. This finding may have been related to the manner in which motivation was measured.

The Negotiation-Buffer Model proposed negotiation as a moderating variable affecting the relationship between constraints and participation (Hubbard & Mannell, 2001). Interaction testing of this model was not significant, indicating no moderation effect existed in their data.

The Constraint-Effects-Mitigation and Perceived-Constraint-Reduction Models proposed two alternative mediated relationships among the variables. The only difference was the direction of effect between constraint and negotiation. Structural Equation Modeling (SEM) analysis revealed that each model had an acceptable fit with the data when the non-significant relationship directly between motivation and participation was removed (Hubbard & Mannell, 2001). The fit of the Constraint-Effects-Mitigation Model, representing negotiation as full mediator between motivation and participation as well as partial mediator of constraints to participation, was the best for their data (Hubbard & Mannell, 2001).

The Perceived-Constraint-Reduction Model proposed that constraints partly mediate negotiation effects on participation while also including the fully mediated relationship between motivation and participation. This model predicted slightly less total variance in participation and demonstrated marginally less ideal indications of model fit (Hubbard & Mannell, 2001).

Although the narrow context and resulting sample studied by Hubbard and Mannell (2001) precludes generalizations to broader populations, the empirical support for negotiation acting as a mediator of motivation and constraints' effects on consumption is strong. Loucks-Atkinson and Mannell (2007) extended constraint negotiation knowledge using social-cognitive

theory as developed by Bandura (1977, 1982, 1986), with self-efficacy perception as a critical influence on an individual's ability to negotiate constraints and thereby affect motivation and behavior.

Following the recommendations of Hubbard and Mannell (2001) as well as Loucks-Atkinson and Mannel (2007), White (2008) drew from the self-efficacy theory of social cognitive behavior to further explain the negotiation process. The resulting study focused on negotiation-efficacy as a means of understanding relationships among motivation, constraints, negotiation, and participation. While the sample studied by White (2008) is a rare instance of random sampling of a broad population in this area of literature, and the proposed structural model fit the data well, not enough exploration of this concept in the spectator sport context has been completed to allow extension of White's model at this time. However, the White (2008) research further clarified the complex interrelation and importance of motivation, constraint, and negotiation variables for determining consumer behavior.

During the time that White (2008) was examining motivation, constraint, negotiation, and negotiation-efficacy constructs in the outdoor recreation context, Son et al. (2008) provided additional support for Constraint-Effects-Mitigation theory by extending Hubbard and Mannell's (2001) framework into a different context. Son et al. (2008) also proposed slight variations of Hubbard and Mannell's (2001) models and a new conceptualization of the balance proposition derived from Jackson et al.'s (1993) theory. The balance proposition model was used to test whether motivation influenced every other variable. This model did not fit the data well and no significant interaction term was present, indicating that the proposed moderation effect on constraints to participation does not exist in the data tested for Son et al.'s (2008) active leisure context.

Initial testing of the Constraint-Effects-Mitigation and Perceived-Constraint-Reduction Models replicated from Hubbard and Mannell (2001) indicated marginally adequate fit with the data for each model. However, after re-specifying the relationships between specific constraint and negotiation variables, the new models demonstrated data fit very similar to the indices found by Hubbard and Mannell (2001) (Son et al., 2008). Son et al. (2008) then eliminated non-significant paths identified through backward stepwise regression. The reduced Constraint-Effects-Mitigation and Perceived-Constraint-Reduction Models were identical with no direct relationship in either direction between constraints and negotiation (Son et al., 2008). However, negotiation was identified as a mediator of motivation to participation and constraints demonstrated a significant direct impact on participation. The resulting model was labeled the "Dual Channel Model" and represented the best overall fit with Son et al.'s data (2008).

The research reviewed above supports the existence of various significant relationships among motivation, constraints, negotiation, and behavioral outcomes. However, as previously noted by Alexandris et al. (2011), "Due to their different methodologies, measurement scales, and statistical models used, it is difficult to make direct comparisons among the studies and generalize their findings" (p. 59). Therefore this study attempts to extend motivation, constraint, and negotiation research into the spectator sport context by utilizing spectator sport specific sub-scales to measure motivation and constraints as two separate constructs, each proposed to influence attendance through mediation by negotiation strategies measured with a modified version of Hubbard and Mannel's (2001) multidimensional single-factor subscale.

# CHAPTER 3

## Methods

The study was designed to examine team identification, motivation, constraints, and negotiation factors in a professional spectator sport context building on existing theories of attendance and leisure participation consumption behavior (Alexandris et al., 2011; Funk et al., 2012; Trail et al., 2003, 2012; Trail & Kim, 2011, Hubbard & Mannell, 2001; Pritchard et al., 2009; Son et al., 2008; Wann & Branscombe, 1990, 1993; Zhang et al., 1995). Primary sample data were collected from a broad population targeted to represent the potential adult market residing within the home state for a specific NBA team to examine many attendance factors simultaneously. While delimitations of this research prevent generalizations about the attendance determinants of the team studied to other seasons, NBA teams, or sport franchises, it is hoped that a foundation will be laid to allow scholars to extend the framework to a broader population.

### Instrumentation

As this study attempts to capture a comprehensive understanding of many attendance determinants simultaneously, the scale necessary to measure multiple constructs would have threatened the response rate if the total number of factors and items were not carefully managed. If each construct was measured with several multidimensional factors, as was done in prior studies examining each of the constructs considered here, the resulting scale for this study would have led to very low response rates caused by the length of the survey (Edwards, Roberts, Clarke, DiGuiseppi, Pratap, Wentz, & Kwan, 2002). Therefore, a procedure utilized by Cronin, Brady, and Hult (2000) was adopted to consolidate the number of total items measured. Thorough

examination of several multi-item scales used to measure team identification, motivation, constraints, and negotiation, respectively, guided selection of items measuring each factor here. The final items considered were chosen from five prior studies based on face validity and confirmatory factor analysis results provided for each scale as used in prior research. The items demonstrating the highest standardized correlation coefficient for behavioral intentions prediction in five prior studies were selected to represent their respective factors in this study.

*Team Identification/Attachment*

A single item was used to measure team identification/attachment, which serves as a control variable for the study at hand. Team identification was chosen as the point of attachment most relevant in this context based on the professional sport setting and prior research identifying strong correlations between team attachment and attendance (Shapiro et al., 2013). The item used, variable name, and correlation coefficient are: I consider myself a dedicated fan of the "NBA Team" (Team identification, .89). The item utilized a seven point Likert type scale to indicate respondents' level of agreement with the statement. This item was chosen based on its high standardized correlation coefficient for predicting attendance in Kim and Trail's (2010) spectator sport consumption study.

*Motivation*

The five motivation items employed here (Socialization, Performance, Excitement, Esteem, and Diversion) to measure motivation as a multidimensional single factor were selected from Funk et al.'s (2009, 2012) SPEED scale. The SPEED scale was chosen for its concise yet comprehensive nature. The scale indicated reliability and validity in two rounds of psychometric testing by Funk et al. (2009, 2012) and has strong theoretical support grounded in SDT.

Responses were given on a Likert type scale ranging from 1 (completely disagree) to 7 (completely agree).

The specific items used were each chosen based on the strength of their standardized correlation coefficients for consumption prediction in prior spectator sport studies. Each of the motivation items below demonstrated the largest standardized correlation coefficients in both Funk et al.'s (2009, 2012) studies. The items used, variable names, and their previous standardized correlation coefficients are: I enjoy the chance to socialize with others at games (Socialization, .89); I enjoy the beauty and grace of NBA basketball (Performance, .92); I enjoy the excitement associated with games (Excitement, .82); I feel a personal sense of victory when the team wins (Esteem, .93); and Attending a basketball game provides me with a break from my daily routine (Diversion, .92).

*Constraints*

The proposed constraints construct was initially measured with seven items selected from Kim and Trail's (2010) as well as from Trail and Kim's (2011) studies to form a multidimensional single factor. The Lack of someone to attend with and Lack of team success items originally developed by Trail et al. (2008) and the Lack of knowledge item derived from the MSSC are each used as adapted by Trail and Kim (2011). One VSES (Trail et al., 2002) item (Accessibility) and three Trail et al. (2008) items (Cost, Commitments, and Alternatives) were previously adapted by Kim and Trail (2010, 2011) and are modified here for the NBA context. Each constraint item utilized a Likert type 7-point scale for participants to indicate their level of agreement with the statement. The Lack of team success item was reverse coded to serve as a response validity check.

The specific items selected were each chosen based on the previously shown strength of their standardized correlation coefficients for predicting consumption in the spectator sport context. The items used, variable names, and their previous standardized correlation coefficients are: If the team does not win often, I will still attend games (Lack of team success, .94); Lack of friends to go to the game with me discourages me from attending games (Lack of someone to attend with, .92); I don't understand basketball strategy (Lack of knowledge, .89); Inaccessibility of the arena discourages me from attending games (Inaccessibility, .86); The cost of attending games discourages me from attending (Cost, .95); I prefer going to a movie, bar, or restaurant over attending games (Leisure alternatives, .80); Work, school, or social commitments prevent me from attending games (Commitments, .77).

As the motivation and negotiation sub-scales utilize five and four items, respectively, to form multidimensional single factors, narrowing the constraints items down to the four or five most salient for the specific NBA team in question was planned. It is unlikely that constraints to attendance at any given venue for any team are likely to be the same even within a specific league owing to variations in accessibility, ticket prices, team performance, etc. The initial use of "extra" constraints items was therefore advantageous. Once data collection was complete, the reliability and inter-item correlations of the constraints sub-scale were examined. A Chronbach's alpha value of .569 indicated the composite constraints construct lacked reliability. To determine which constraints variables accounted for the most variance in attendance, a multiple regression of attendance on all constraints items was run. Lack of success, Lack of someone to attend with, Lack of knowledge, Leisure alternatives, and Commitments were identified as significantly (alpha = .05) correlated with attendance. However, the Chronbach's alpha value of .438 for a

composite multidimensional single factor constraints scale using these variables guided the decision to utilize each item as an independent constraints measure in this context.

*Negotiation*

The negotiation construct was measured as a multidimensional single factor using four items modified from Hubbard and Mannell's (2001) negotiation strategy scale as used by Son et al. (2008). Each of these studies reported acceptable validity and reliability of the negotiation subscale as used in the active leisure participation context. The terminology is adjusted here for the NBA spectator sport context and some active recreation specific items were omitted. The negotiation strategy items used, variable names, and their previous standardized correlation coefficients are: I try to be more organized to make time for attending basketball games (Time management, .79); I try to budget my money for attending basketball games (Financial management, .76); I try to improve my knowledge of basketball (Knowledge acquisition, .80); and, I try to find people with a similar interest in basketball (Interpersonal coordination, .66). Response options were modified from a Likert type 5-point scale to a similar 7-point scale, ranging from (1) Strongly Disagree to (7) Strongly Agree.

*Socio-demographics*

The socio-demographic information collected includes seat type, age, annual income, and gender. The items utilized and corresponding variable names are as follows: When you attended games your seat was most often upper level, lower level, in a luxury box, or courtside? (Seat type); How old are you? (Age); Please select the range within which your annual household income falls (Income); and, Are you a Male or Female? (Gender). This information is used to identify and describe the respondent population.

*Behavioral Measure*

Attendance was the only behavioral measure used. Every respondent was asked to indicate the total number of games they attended during the 2013 regular season. A single measure was used to focus on current season attendance behavior rather than past seasons which may not be recalled as accurately by respondents or future attendance intentions which are likely to be affected by currently unknown factors.

*Complete Questionnaire*

Prior to data collection the complete questionnaire was reviewed by a panel of experts including NBA marketing and ticket sales professionals as well as sport management scholars. After completing minor revisions to the scale as suggested by industry professionals concerning the socio-demographic item categories, data collection began. The final questionnaire is included in Appendix A.

**Data Collection**

Data collection focused on generating a representative sample of the adult population residing in the home state of an NBA team located in the southeastern United States. While time and financial resource constraints necessitated the use of targeted in-person survey solicitation and snowball sampling via email and social media, a large sample representing a broad population mitigates the expected response bias limitation associated with these convenience sampling techniques. Despite the impossibility of making causal inferences based on findings from a non-random sample, efforts to avoid sample bias included pursuit of paper-and-pencil survey responses from attendees outside the arena as well as in public spaces such as malls and train stations, where awareness of sport offerings was not assumed.

On the day of each home game during the playoffs, potential participants were solicited in the food court adjoining the arena and surrounding parking lots for several hours prior to tip-off. These participants were assumed likely to have attended prior games during the regular season although it is not uncommon for first time attendees to emerge during the playoffs. To find participants less likely to have attended a game, potential respondents were solicited at group running events, and shopping mall food courts. Additionally, study participants were solicited via emails and social media. Email addresses obtained through personal and professional contacts were solicited with directions to forward the survey link to absolutely any adult residing in the state. Facebook, Twitter, and LinkedIn were each used to post the survey link with instructions for participating and for forwarding the link to other potential participants.

Every email contained a link to the survey in addition to a brief summary of the study and request to forward the email. The initial email solicitation list included approximately 500 addresses from personal and professional contacts for potential participants residing within the state. Everyone on the list was reminded weekly to complete and forward the survey regardless of their interest in NBA basketball. Explanations of the purpose and student dissertation nature of the study were provided along with instructions for completion of the survey in writing and/or verbally. All surveys were closed the last day of the NBA season (June 21, 2013) after 132 paper and pencil questionnaires and 463 digital responses were collected. Incomplete and unvaried responses were eliminated during data cleaning.

**Sample**

The targeted and snowballing sample of adults residing in a specific southeastern U.S. state was surveyed. The target sample was solicited to be representative of the adult market population for an NBA franchise located in the state. Efforts were made to ensure that the sample

represents a broad range of adults within the geographic market for the NBA team. A total of 595 surveys were collected with 566 usable questionnaires remaining after removal of incomplete and unvaried responses. Socio-demographic data for the sample indicated participants were 57.1% male and 42.9% female. When compared to national and state demographics provided by the U.S. Census Bureau, it was determined that the data represent a unique population. State information indicates that 51.2% of the population is female and the national breakdown is 50.8% female. It is apparent that females are underrepresented in the sample. Complete socio-demographic descriptive statistics are presented in Table 1.

Table 1. Frequency distributions for demographic variables (N=566).

| Variables | Categories | Frequency (%) | Cumulative (%) |
|---|---|---|---|
| Gender | Male | 57.1 | 57.1 |
| | Female | 42.9 | 100.0 |
| Age | 18-24 | 45.8 | 45.8 |
| | 25-34 | 27.7 | 73.5 |
| | 35-44 | 10.1 | 83.6 |
| | 45-54 | 9.4 | 92.9 |
| | 55-64 | 6.0 | 98.9 |
| | 65-74 | 0.9 | 99.8 |
| | 75 or older | 0.2 | 100.0 |
| Annual Household Income (U.S. Dollars) | 0-25,000 | 24.7 | 24.7 |
| | 25,001-50,000 | 14.5 | 39.2 |
| | 50,001-75,000 | 16.6 | 55.8 |
| | 75,001-100,000 | 16.6 | 72.4 |
| | 100,001-150,000 | 16.4 | 88.9 |
| | 150,001-200,000 | 5.1 | 94.0 |
| | Over 200,000 | 6.0 | 100.0 |
| Seat Type | No games attended | 40.6 | 40.6 |
| | Upper Level | 29.9 | 70.5 |
| | Lower level | 24.6 | 95.1 |
| | Luxury box | 3.2 | 98.3 |
| | Courtside | 1.8 | 100.0 |

The age breakdown for the sample makes it even more evident that the state and national populations are not accurately represented. For the nation, 11.1% of all people are between ages 18 and 24. For the state where data were collected, only 10.0% of the population is 18 – 24 years old. In the sample the most represented age group was 18-24 with 45.8% of participants in this category. 27.7% of participants were between the ages of 25 and 34, 10.1% reported being 35-44 years old, 9.4% were 45-54, 6% in the 55-64 range, and 1.1% of the sample were 65 years or older. The fact that participant ages are skewed heavily towards the younger categories, with 18-24 year olds severely over represented, is a bias likely caused by over sampling student populations.

The same over representation of student populations in the sample is recognizable in the annual household income data. The mode frequency for annual income was the $0 - $25,000 category, which contained 24.7% of respondents. The $25,001 - $50,000 range included 14.5% of participants, 16.6% reported annual household income between $50,001 and $75,000, another 16.6% fell in the $75,001 - $100,000 category, 16.4% responded $100,001 - $150,000, and the remaining 11.1% claimed earning $150,001 or more for the year. These results align logically with participants' typical seat location responses. While 40.6% of respondents did not attend any games, 29.9% reported sitting in upper level (the least expensive) seats most of the time. There were slightly fewer participants who typically sat in lower level seats (24.6%), a small number of luxury box attendees (3.2%), and barely any courtside patrons (1.8%) as such seats are very expensive.

**Delimitations**

The focus of this study was limited to one NBA team and did not include other sport franchises in the geographic area nor NBA teams in other markets. The factors found to impact

attendance behavior cannot be generalized to other teams or sports. For example, accessibility of the arena will necessarily vary based on the arena (or stadium) in question. The effects of a team's success (or lack thereof) on attendance behavior should fluctuate based on their win/loss record.

Additionally, data was only collected at the end of the 2012/2013 season and therefore may only be representative of the factors influencing attendance during that time period. If the team signs several new players during the off-season, it could have a variety of effects on the motivation and constraints perceived, including but not limited to increases or decreases in team success, esteem, or the beauty and grace with which the game is played.

# CHAPTER 4

## Analyses

### Measurement Reliability and Validity

All usable responses were analyzed using SPSS 20 to identify ranges, means, standard errors of the mean, standard deviations, skewness, and kurtosis for each variable. These scores were used to check for normal distribution and homoscedasticity. Skewness and kurtosis thresholds at an absolute value of 3.0 were used to determine the normality of distribution as recommended by Chou and Bentler (1995). All independent and demographic variables indicated a normal distribution by this standard. Complete descriptive statistics are presented in Table 2.

Table 2. Descriptive statistics for sample (N=566).

| Item | Mean | Standard Error of the Mean | Standard Deviation | Variance | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| I enjoy the chance to socialize with others | 4.9647 | .06643 | 1.58046 | 2.498 | -.865 | .198 |
| I enjoy the beauty and grace of NBA basketball | 4.8004 | .07449 | 1.77217 | 3.141 | -.582 | -.640 |
| I enjoy the excitement associated with games | 4.8940 | .06765 | 1.60951 | 2.591 | -.750 | -.038 |
| I feel a personal sense of victory when the team wins | 4.2297 | .07680 | 1.82710 | 3.338 | -.273 | -.894 |
| Attending provides me with a break from my daily routine | 5.2085 | .06774 | 1.61157 | 2.597 | -1.118 | .683 |
| Motivation Composite | 24.097 | .28174 | 6.70275 | 44.927 | -.680 | .080 |
| Reversed lack of success | 5.9700 | .05667 | .80144 | .642 | .054 | -1.439 |
| Lack of someone to go with me discourages me from attending | 4.9170 | .07855 | 1.86874 | 3.492 | -.684 | -.574 |

Table 2 continued

| | | | | | | |
|---|---|---|---|---|---|---|
| I don't understand basketball strategy | 2.5459 | .07083 | 1.68508 | 2.839 | 1.094 | .240 |
| Inaccessibility of the Arena discourages me from attending | 3.3269 | .07288 | 1.73385 | 3.006 | .258 | -.990 |
| Cost discourages me from attending | 3.9046 | .07000 | 1.66529 | 2.773 | -.047 | -.867 |
| I prefer going to a movie, bar, or restaurant over attending | 4.7102 | .07466 | 1.77618 | 3.155 | -.507 | -.698 |
| Work, school, or social commitments prevent me from attending games | 4.4770 | .07294 | 1.73522 | 3.011 | -.624 | -.626 |
| I try to be more organized to make time for attending | 3.2756 | .06892 | 1.63967 | 2.689 | .372 | -.651 |
| I try to improve my knowledge of basketball | 4.3763 | .07575 | 1.80208 | 3.248 | -.398 | -.843 |
| I try to find people with a similar interest in basketball | 4.1572 | .07534 | 1.79232 | 3.212 | -.326 | -.908 |
| I try to budget my money for attending games | 3.0212 | .07308 | 1.73855 | 3.023 | .527 | -.786 |
| Negotiation Composite | 14.8304 | .24434 | 5.81297 | 33.791 | -.049 | -.575 |
| I consider myself a dedicated fan of the team | 3.2208 | .07986 | 1.89988 | 3.610 | .459 | -.995 |
| Indicate the total number of home games you attended during the 2012-2013 season | 2.19 | .236 | 5.620 | 31.580 | 4.753 | 25.177 |
| When you attended games your seat was most often | 3.6025 | .06733 | 1.60174 | 2.566 | -.803 | -1.025 |
| How old are you? | 2.0548 | .05414 | 1.28800 | 1.659 | 1.189 | .554 |
| Are you a Male or Female? | 1.4293 | .02082 | .49542 | .245 | .286 | -1.925 |
| Select the range within which your annual household income falls | 3.2491 | .07663 | 1.82309 | 3.324 | .347 | -.898 |
| Attendees=2,Non-attendees=1 | 1.5018 | .02104 | .50044 | .250 | -.007 | -2.007 |

All items were measured on a Likert type scale ranging from 1 to 7.

In addition to the significance tests available to assess normality, scatter plots were used. White (2008) noted that large sample sizes (greater than 200) often lead to variables indicating significant skewness or kurtosis that do not actually deviate enough to affect the analysis because the standard errors of each increase with total sample size. This could lead to rejection of a true null hypothesis despite only slight normality deviations. Following the suggestion of Tabachnick and Fidell (2007), White (2008) used frequency histograms to compare expected normal probability plots (P-P plots) with actual data values. "In P-P plots, the scores are ranked and sorted and compared to an expected normal value for each case. The expected value is the z-score for a case with that rank, which would hold in a normal distribution and the normal value is the z-score of the actual distribution" (White, 2008, p. 352). The observed scores fell along the expected z-score diagonal lines in the P-P plots for each variable, indicating a normal distribution.

The assumption of homoscedasticity was tested by plotting the standardized residuals on the regression standardized predicted values in SPSS 20 as suggested by Osborne and Waters (2002). "Slight heteroscedasticity has little effect on significance tests; however, when heteroscedasticity is marked it can lead to serious distortion of findings and seriously weaken the analysis thus increasing the possibility of a Type I error" (Osborne & Waters, 2002). The plots indicated through the evenly scattered data points that error variance is evenly distributed at all levels of the independent variables.

Chronbach's alpha values were obtained for each construct using SPSS to determine the internal consistency of each factor. Chronbach's alpha values were compared with the .70 - .90 range recommended by Nunnally and Bernstein (1994) to determine the internal consistency of each factor as was done by Funk et al. (2012). Chronbach's alpha values were .856 for the

Motivation sub-scale, .569 for Constraints, and .853 for Negotiation. While Motivation and Negotiation values indicate measurement reliability of the proposed multidimensional single-factor scales, the Constraints sub-scale value does not.

Attendance was then regressed on all constraints items to determine which ones are significant attendance influences in this context. Five constraint variables (Lack of team success, Lack of someone to attend with, Lack of knowledge, Leisure alternatives, and Commitments) had significant inverse correlations with attendance as theoretically predicted. Reliability analysis of the modified multidimensional single-factor constraints sub-scale including these five items indicated a Chronbach's alpha of .438. These findings suggested that each constraints variable be considered independently rather than as the composite construct initially proposed.

The discriminant validity of the sub-scales was tested by examining correlations between all items that made up each of the motivation and negotiation constructs. Kline (2005) suggested that discriminant validity exists when all inter-factor correlations are below .85. The Motivation inter-factor correlations ranged from .442 to .687. No two Negotiation item correlations exceeded .726. Therefore, the discriminant validity of these two sub-scales was accepted.

The four hypotheses proposed were then tested for acceptability using regression and analysis of variance (ANOVA) analyses. Techniques suggested by Preacher and Hayes (2004) as well as Baron and Kenny (1986) for calculating total, direct, and mediation effects of multiple variables using multiple regression were followed. Comparison of attendee and non-attendee group perceptions was accomplished with an ANOVA. It is assumed that the larger the sample size, the smaller the mean of errors for each observation tending towards zero (Pedhazur, 1997). It is further assumed that errors associated with the dependent variable are not correlated with independent variables because they are fixed factors (Pedhazur, 1997).

**Hypothesis One Testing**

Simple linear regression analysis was employed to test each element of hypothesis one. This type of analysis allows examination of the effect a change in one independent variable has on a dependent variable (Pedhazur, 1997). The equation for simple linear regression with one independent variable is therefore represented as: $Y = a + bX$. SPSS 20 was used to estimate the regression equation for the data and each independent variable. SPSS 20 calculations were based on the principle of least squares, so that the squared errors of prediction are lowest and prediction maximized (Pedhazur, 1997).

SPSS 20 was used to evaluate the proposed relationships between each independent variable and attendance. First, the dependent variable, attendance, was regressed by itself systematically on each independent variable (Team identification, Motivation, Lack of team success, Lack of someone to attend with, Lack of knowledge, Inaccessibility of arena, Cost, Leisure alternatives, Commitments, and Negotiation) to test the attendance variance accounted for by each. Prior to the regression on negotiation, attendance was regressed on all constraints variables simultaneously to determine which ones are most salient in this context.

*Regression 1: Y(Attendance) = a + bX(Team identification)*

*Regression 2: Y(Attendance) = a + bX(Motivation composite)*

*Regression 3: Y(Attendance) = a + bX(Lack of team success)*

*Regression 4: Y(Attendance) = a + bX(Lack of someone to attend with)*

*Regression 5: Y(Attendance) = a + bX(Lack of knowledge)*

*Regression 6: Y(Attendance) = a + bX(Inaccessibility of arena)*

*Regression 7: Y(Attendance) = a + bX(Cost)*

*Regression 8: Y(Attendance) = a + bX(Leisure alternatives)*

*Regression 9: Y(Attendance) = a + bX(Commitments)*

*Regression 10: Y(Attendance) = a + $bX_1$(Lack of success) + $bX_2$(Lack of someone to attend with) + $bX_3$(Lack of knowledge) + $bX_4$(Inaccessibility of arena) + $bX_5$(Cost) + $bX_6$(Entertainment alternatives) + $bX_7$(Commitments)*

*Regression 11: Y(Attendance) = a + bX(Negotiation composite)*

The Pearson product-moment correlation coefficient (r), attendance variance accounted for by each independent variable ($r^2$), regression coefficient (*b*), and significance of each prediction equation (F) at alpha level .05 were noted (Pedhazur, 1997).

**Hypothesis Two Testing**

Multiple regression analysis using SPSS 20 was utilized to test the second hypothesis. The same core principles of simple regression analysis remain in multiple regression analysis. The difference lies in the number of independent variables considered in the regression equation. Multiple regression analysis refers to cases in which two or more independent variables contribute to the variance of a dependent variable.

An important assumption of multiple regression analysis is that the independent variables are not correlated. When this assumption holds, calculation of the squared multiple correlation ($R^2$) is simply a matter of adding the $r^2$ for each independent variable considered. However, it is likely that the independent variables considered here are correlated to varying degrees, as is typically the case in quasi-experimental designs (Pedhazur, 1997). Therefore, hypothesis two testing is necessary to determine if unique portions of variance in attendance are accounted for by each independent variable or if they overlap.

Game attendance was regressed on each independent variable simultaneously using SPSS 20 to calculate the multiple correlation (R) as an indication of the goodness of the equation

proposed in hypothesis two. The F value for the entire prediction equation was used to determine if the combined independent variables account for statistically significant variance in attendance at alpha level .05 (Pedhazur, 1997). The squared multiple correlation ($R^2$) was used to determine the total attendance variance accounted for by Team identification, Motivation, Lack of team success, Lack of someone to attend with, Lack of knowledge, Leisure alternatives, Commitments (constraints variables identified as significant predictors in hypothesis one testing), and Negotiation entered simultaneously (Pedhazur, 1997).

*Regression 12: Y(Attendance) = a + $bX_1$(Team identification) + $bX_2$(Motivation composite) + $bX_3$((Lack of team success) + $bX_4$(Lack of someone to attend with) + $bX_5$(Lack of knowledge) + $bX_6$(Leisure alternatives) + $bX_7$(Commitments) + $bX_8$(Negotiation composite)*

Each independent variable's regression coefficient (*b*) and associated t-test of significance at alpha level .05 were examined to determine the most relevant attendance determinants (Pedhazur, 1997).

**Hypothesis Three Testing**

The next step was testing hypothesis three, that negotiation mediates the relationships of motivation and constraints respectively with attendance. Mediating variables "account for the relation between the predictor and the criterion" (Baron & Kenny, 1986, p. 1176). According to Baron and Kenny (1986), four conditions must be met to identify a significant mediating effect. The first condition is that the independent variables each have a statistically significant impact on attendance when analyzed as was done in hypothesis one testing. The second requirement is that the independent variables identified as having a statistically significant impact on attendance also affect negotiation (the proposed mediator) significantly in a second set of regression equations

testing the independent variables' respective correlations with negotiation (Baron & Kenny, 1986). This will be accomplished by regressing negotiation on each independent variable selected after hypothesis one testing and evaluating the $r^2$ and F test (alpha level .05) values for each equation (Pedhazur, 1997).

*Regression 13: Y(Negotiation) = a + bX(Motivation composite)*

*Regression 14: Y(Negotiation) = a + bX(Lack of someone to attend with)*

*Regression 15: Y(Negotiation) = a + bX(Commitments)*

Each independent variable found to significantly correlate with both attendance and negotiation must then demonstrate an additional significant indirect impact on attendance in the third round of equation testing, where each will be entered sequentially with negotiation (Baron & Kenny, 1986).

*Regression 16: Y(Attendance) = a + $bX_1$(Motivation composite) + $bX_2$(Negotiation)*

*Regression 17: Y(Attendance) = a + $bX_1$(Commitments) + $bX_2$(Negotiation)*

The final condition for identification of a mediator is that the independent variable have a significantly reduced impact (as indicated by a significant $R^2$ change at alpha level .05) on the dependent variable when negotiation is controlled in the third set of regression equations tested (Baron & Kenny, 1986). However, there are limitations to this method of mediation analysis, such as low statistical power, which suggest other approaches may be more appropriate.

Preacher and Hayes (2004) advise using SPSS to conduct "a more powerful strategy for testing mediation" (p. 719). Their two-step approach requires only that an effect be present to be mediated (i.e. X is significantly correlated with Y) and that the indirect effect be statistically significant in the direction predicted by the mediation hypothesis (Preacher & Hayes, 2004, p. 719). Preacher and Hayes (2004) provide an SPSS Custom Dialog file that allows "estimation of

the indirect effect of X on Y through M (the proposed mediating variable) and … formally tests the significance of the indirect effect both parametrically and non-parametrically, while simultaneously providing the output relevant to assessing mediation with the Baron and Kenny criteria" (p. 719). This study utilized the Preacher and Hayes (2004) SPSS Custom Dialog to test mediation hypotheses using both methods. Results of these analyses were compared for consistency with those found via the Baron and Kenny (1986) method.

**Hypothesis Four Testing**

Hypothesis four was tested using a two-group ANOVA conducted in SPSS 20. All participants who attended at least one game during the 2012-2013 season formed the Attendee group. All remaining participants who had not attended any games during the season formed the Non-attendee group. Groups were compared on every item listed on the survey.

An alpha level of .05 was used for all comparisons. The null hypothesis used in the ANOVA was that the groups are equal in mean score. In ANOVA an F ratio is automatically calculated as a test statistic for the null hypothesis. SPSS 20 calculated an F ratio and significance value for each item, allowing easy identification of which items differ in mean score.

# CHAPTER 5

## Results

### Hypothesis One Testing

*Hypothesis one-a*

Hypothesis one proposed that each independent variable considered in this study affects attendance. When attendance was regressed on team identification using SPSS 20, the resulting least squares estimation model indicated an r value of .468 and accounted for almost 22% of attendance variance as demonstrated by the $r^2$ value of .219. The F test for the simple linear regression of attendance on team identification was statistically significant at alpha level .05. The team identification regression analysis results are presented in Table 3.

Table 3. Results of attendance on team identification regression (N=566).

| Factor | r | $r^2$ | Std. Error of the Estimate | a | Unstandardized Coefficients | | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| | | | | | b | Std. Error | | |
| Team identification | .468 | .219 | 4.969 | -2.268 | 1.386 | .110 | 158.548 | .000 |

*Hypothesis one-b*

When attendance was regressed on motivation using SPSS 20, the resulting r value was .349, suggesting that motivation accounts for about 12% of attendance variance as indicated by the $r^2$ value of .122. The F test for the simple linear regression of attendance on motivation

was statistically significant at alpha level .05. The attendance on motivation regression analysis results are presented in Table 4.

Table 4. Results of attendance on motivation regression (N=566).

| Factor | r | $r^2$ | Std. Error of the Estimate | a | Unstandardized Coefficients | | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| | | | | | b | Std. Error | | |
| Motivation | .349 | .122 | 5.271 | -4.857 | .293 | .033 | 78.247 | .000 |

*Hypothesis one-c*

The constraints construct lacked sufficient reliability to consider the items as part of a multidimensional single-factor, so attendance was regressed on each item as independent variables in the analysis of hypothesis one. Each of the constraint variables significantly accounted for slight variations in attendance behavior when tested individually. Table 5 presents the results of separate attendance regressions on each constraints variable.

Table 5. Results of attendance on each constraint variable individually regressions (N=566).

| Factors | r | $r^2$ | Std. Error of the Estimate | a | Unstandardized Coefficients | | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| | | | | | b | Std. Error | | |
| Lack of team success | .296 | .087 | 5.373 | 6.107 | -.970 | .132 | 54.055 | .000 |
| Lack of someone to attend with | .217 | .047 | 5.490 | 5.409 | -.654 | .124 | 27.976 | .000 |
| Lack of knowledge | .183 | .034 | 5.529 | 3.751 | -.612 | .138 | 19.623 | .000 |
| Inaccessibility of arena | .212 | .045 | 5.496 | 4.484 | -.688 | .133 | 26.630 | .000 |
| Cost | .197 | .039 | 5.515 | 4.787 | -.664 | .139 | 22.721 | .000 |
| Leisure alternatives | .400 | .160 | 5.156 | 8.151 | -1.265 | .122 | 107.238 | .000 |
| Commitments | .238 | .056 | 5.463 | 5.640 | -.770 | .132 | 33.769 | .000 |

Attendance was then regressed on all constraint variables simultaneously. The complete model significantly (F = 26.822) accounted for over 25% ($R^2$ = .252) of attendance variance, but t-tests of the individual variables revealed only five significant correlation coefficients. Lack of team success (b = -.613), Lack of someone to attend with (b = -.401), Lack of knowledge (b = -.280), Leisure alternatives (b = -.776), and Commitments (b = -.417) each accounted for a significant portion of variance in attendance based on t- tests at alpha level .05. The remaining constraint variables did not significantly affect attendance variance and are therefore not considered in hypothesis two testing. Table 6 provides results information for the attendance on all constraint variables multiple regression.

Table 6. Results of attendance on all constraint variables multiple regression (N=566).

| Factors | R | $R^2$ | Std. Error of the Estimate | a | Unstandardized Coefficients b | Std. Error | t | Sig. |
|---|---|---|---|---|---|---|---|---|
| | .502 | .252 | 4.891 | 14.200 | | | | .000 |
| Lack of team success | | | | | -.613 | .134 | -4.590 | .000 |
| Lack of someone to attend with | | | | | -.401 | .117 | -3.420 | .001 |
| Lack of knowledge | | | | | -.280 | .126 | -2.218 | .027 |
| Inaccessibility of arena | | | | | -.229 | .131 | -1.749 | .081 |
| Cost | | | | | -.144 | .137 | -1.050 | .294 |
| Leisure alternatives | | | | | -.776 | .135 | -5.734 | .000 |
| Commitments | | | | | -.417 | .133 | -3.141 | .002 |

*Hypothesis one-d*

The fourth factor proposed to affect attendance in hypothesis one is negotiation. When attendance was regressed on negotiation using SPSS 20, the resulting r value was .401 and the

model accounted for 16.1% of attendance variance as indicated by the $r^2$ value of .161. The F test for the simple linear regression of attendance on negotiation was statistically significant at alpha level .05. The attendance on negotiation regression analysis results are presented in Table 7.

Table 7. Results of attendance on negotiation regression (N=566).

| Factor | r | $r^2$ | Std. Error of the Estimate | a | Unstandardized Coefficients | | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| | | | | | b | Std. Error | | |
| Negotiation | .401 | .161 | 5.152 | -3.555 | .388 | .037 | 108.089 | .000 |

**Hypothesis Two Testing**

Hypothesis two builds on hypothesis one by testing the combined influence of all factors considered simultaneously. It was proposed that the combination of all variables entered simultaneously will predict more total variance than any individual factor considered alone. A summary of results for the least square estimation multiple regression analysis is presented in Table 8. The multiple regression of Attendance on Team identification, Motivation, Lack of team success, Lack of someone to attend with, Lack of knowledge, Leisure alternatives, Commitments, and Negotiation was significant (F = 34.414) at alpha level .05. The factors combined to account for 33.1% ($R^2$ = .331) of attendance variance. Motivation (b = .045) did not have a significant regression coefficient at alpha .05 when all variables were entered in the multiple regression. Only two constraint variables accounted for significant unique attendance variance: Lack of someone to attend with (b = -.443) and Commitments (b = -.643). Team identification (b = .754) and Negotiation (b = .159) also accounted for significant unique attendance variance at alpha level .05.

Table 8. Results of attendance on team identification, motivation, lack of team success, lack of someone to attend with, leisure alternatives, commitments, and negotiation multiple regression (N=566).

| Factors | R | $R^2$ | Std. Error of the Estimate | a | Unstandardized Coefficients b | Std. Error | t | Sig. |
|---|---|---|---|---|---|---|---|---|
| | .575 | .331 | 4.626 | 3.319 | | | | .000 |
| Team identification | | | | | .754 | .148 | 5.012 | .000 |
| Motivation | | | | | .045 | .050 | .898 | .369 |
| Negotiation | | | | | .159 | .049 | 3.253 | .001 |
| Lack of team success | | | | | -.231 | .141 | -1.637 | .102 |
| Lack of someone to attend with | | | | | -.443 | .115 | -3.856 | .000 |
| Leisure alternatives | | | | | -.211 | .148 | -1.428 | .154 |
| Commitments | | | | | -.643 | .123 | -5.217 | .000 |

**Hypothesis Three Testing**

Hypothesis three proposed that negotiation mediates the respective effects of motivation and constraint variables on attendance. The results indicate that negotiation mediates the respective effects of motivation and the commitments constraint on attendance.

*Hypothesis three-a*

Following the steps suggested by Baron and Kenny (1986) for testing proposed mediation effects of negotiation using multiple regression analysis yielded statistically significant results for motivation's and commitments' indirect effects on attendance. Motivation and negotiation were significantly (alpha = .05) correlated ($r^2$ = .435), thus satisfying the first requirement of Baron and Kenny's (1986) approach. When team identification was removed from the regression equation, motivation correlated ($r^2$ = .122) significantly (alpha = .05) with attendance as required in Baron & Kenny (1986) mediation analysis step two. Also necessary for identification of a

mediator, negotiation was found to have a significant (alpha = .05) correlation ($r^2$ = .161) with attendance. When motivation and negotiation were both entered in the regression equation an additional ($R^2$ Change = .051) significant (alpha = .05) indirect impact on attendance was identified. The final condition for identification of negotiation as a mediator of motivation's effects on attendance was met as motivation had a reduced direct impact (as indicated by the regression coefficient change from b = .293 to b = .125) on attendance after controlling for negotiation effects (Baron & Kenny, 1986). The summary of results for negotiation mediating motivation's effects on attendance analysis using the Baron and Kenny (1986) method are included in Table 9.

Table 9. Results for Baron and Kenny (1986) regression analysis of negotiation mediating motivation's effects on attendance (N=566).

| Regressions | R | $R^2$ | $\Delta R^2$ | Std. Error of the Estimate | Unstandardized Coefficients | | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| | | | | | b | Std. Error | | |
| Negotiation on Motivation | .660 | .435 | | 4.373 | .572 | .027 | 434.344 | .000 |
| Attendance on Motivation | .349 | .122 | | 5.271 | .293 | .033 | 78.247 | .000 |
| Attendance on Negotiation | .401 | .161 | | 5.152 | .388 | .037 | 108.089 | .000 |
| Attendance on Motivation and Negotiation | .417 | .173 | .051 | 5.118 | Mot .125<br>Neg .292 | .043<br>.049 | 59.082 | .000 |

*Hypothesis three-b*

Commitments and negotiation were significantly (alpha = .05) correlated ($r^2$ = .010), satisfying the first requirement of Baron and Kenny's (1986) approach, when the proposed mediation of constraint variables on attendance was tested. However, lack of someone to attend with was not significantly correlated ($r^2$ = .000) with negotiation at alpha level .05. Therefore,

negotiation mediation of the relationship between lack of someone to attend with and attendance is not supported by the data. Commitments correlated ($r^2$ = .056) significantly (alpha = .05) with attendance as required in Baron and Kenny (1986) mediation analysis step two. As noted above, and necessary for identification of a mediator, negotiation was found to have a significant (alpha = .05) correlation ($r^2$ = .161) with attendance. When commitments and negotiation were both entered in the regression equation, an additional ($R^2$ Change = .183) significant (alpha = .05) effect on attendance was identified. The final condition for identification of negotiation as a mediator of commitments' effects on attendance was met, as commitments had a reduced impact (indicated by the regression coefficient change from b = -.770 to b = -.912) on attendance after controlling for negotiation effects (Baron & Kenny, 1986). Results of mediation testing using Baron and Kenny (1986) suggested methods to determine whether negotiation mediates the effects of any constraint variables on attendance are presented in Table 10.

Table 10. Results for Baron and Kenny (1986) regression analysis of negotiation mediating constraint variables' effects on attendance (N=566).

| Predictors | R | $R^2$ | $\Delta R^2$ | Std. Error of the Estimate | Unstandardized Coefficients | | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| | | | | | B | Std. Error | | |
| Negotiation on Commitments | .102 | .010 | | 5.788 | .341 | .140 | 5.919 | .015 |
| Negotiation on Lack of someone to attend with | .006 | .000 | | 5.818 | .020 | .131 | .023 | .880 |
| Attendance on Commitments | .238 | .056 | | 5.463 | -.770 | .132 | 33.769 | .000 |
| Attendance on Negotiation | .401 | .161 | | 5.152 | .388 | .037 | 108.089 | .000 |
| Attendance on Commitments and Negotiation | .489 | .239 | .183 | 4.910 | Com -.912<br>Neg .415 | .120<br>.036 | 88.519 | .000 |

After testing the proposed mediating effects of negotiation using the Baron and Kenny (1986) approach, the hypothesis was retested utilizing the method and SPSS Custom Dialog suggested by Preacher and Hayes (2004). The descriptive statistics for mediation analysis using the Preacher and Hayes (2004) Custom Dialog are presented in Table 11. Visual comparison of the descriptive statistics reported in the Custom Dialog output with those found in the initial analysis revealed no differences.

Table 11. Descriptive statistics for mediation testing using Preacher and Hayes (2004) suggested Custom Dialog method (N=566).

| Variable | Mean | Standard Deviation |
|---|---|---|
| Attendance | 2.194 | 5.620 |
| Motivation | 24.097 | 6.703 |
| Commitments | 4.477 | 1.735 |
| Lack of someone to attend with | 4.917 | 1.869 |
| Negotiation | 14.830 | 5.813 |

Correlation coefficients produced using the Preacher and Hayes (2004) Custom Dialog that are necessary for mediation testing using the Baron and Kenny (1986) approach are provided in Table 12. The results are consistent with those found using the traditional multiple regression approach to Baron and Kenny (1986) mediation testing.

The Preacher and Hayes (2004) Custom Dialog analysis results indicated significant indirect effects of motivation and negotiation on attendance, which supports, the hypothesized mediation by negotiation. Commitments and negotiation also had a significant indirect impact on attendance according to the Preacher and Hayes (2004) analysis. In congruence with the Baron and Kenny (1986) mediation testing, the lack of someone to attend with and negotiation indirect

Table 12. Preacher and Hayes (2004) Custom Dialog output for mediation testing with Baron and Kenny (1986) approach (N=566).

| Variables | b | Std. Error of the Estimate | t | Sig. |
|---|---|---|---|---|
| Attendance on Motivation | .293 | .033 | 8.846 | .000 |
| Negotiation on Motivation | .572 | .027 | 20.841 | .000 |
| Attendance on Negotiation controlling for Motivation | .292 | .049 | 5.931 | .000 |
| Attendance on Motivation controlling for Negotiation | .125 | .043 | 2.935 | .004 |
| Attendance on Commitments | -.770 | .132 | -5.811 | .000 |
| Negotiation on Commitments | .341 | .140 | 2.433 | .015 |
| Attendance on Negotiation controlling for Commitments | .415 | .036 | 11.629 | .000 |
| Attendance on Commitments controlling for Negotiation | -.912 | .120 | -7.617 | .000 |
| Attendance on Lack of someone to attend with | -.654 | .124 | -5.289 | .000 |
| Negotiation on Lack of someone to attend with | .020 | .131 | .151 | .880 |
| Attendance on Negotiation controlling for Lack of someone to attend with | .389 | .036 | 10.738 | .000 |
| Attendance on Lack of someone to attend with controlling for Negotiation | -.661 | .113 | -5.869 | .000 |

effects on attendance were not significant when tested using the Preacher and Hayes (2004) approach. The indirect effect results from mediation testing using the Preacher and Hayes (2004) suggested method and Custom Dialog are presented in Table 13.

**Hypothesis Four Testing**

Hypothesis four proposed that attendees and non-attendees perceive team identification, motivation, constraints, and negotiation differently. The hypothesis was tested using a two-group

Table 13. Results for mediation testing using Preacher and Hayes (2004) Custom Dialog output method (N=566).

| Model | Indirect Effects | Sig. of Indirect Effect |
|---|---|---|
| Motivation effects on attendance mediated by Negotiation | .167 | .000 |
| Commitments effects on Attendance mediated by Negotiation | .142 | .018 |
| Lack of someone to attend with effects on Attendance mediated by Negotiation | .008 | .880 |

ANOVA. Results of the ANOVA indicate that attendees and non-attendees differ significantly (alpha = .05) in their perception of all but two independent variables. The constraint variables Lack of someone to attend with and Commitments did not indicate significant between-groups variance at alpha level .05. Congruent with theoretical expectations, attendees had higher mean scores for team identification, motivation, and negotiation factors. Mean scores for each constraint variable were higher among non-attendees. Comparison of socio-demographic variables demonstrated only one significant difference between groups, that males were more likely to have attended at least one game than females. A summary of the one-way ANOVA results is presented in Table 14.

Table 14. Summary of attendee vs. non-attendee one-way ANOVA results (N = 566).

| Factor | Variable | Group | N | Mean | F | Sig. |
|---|---|---|---|---|---|---|
| Motivation Composite | | Non-attendees | 282 | 20.957 | 157.469 | .000 |
| | | Attendees | 284 | 27.215 | | |
| | Socialization | Non-attendees | 282 | 4.351 | 99.478 | .000 |
| | | Attendees | 284 | 5.574 | | |
| | Performance | Non-attendees | 282 | 4.174 | 80.096 | .000 |
| | | Attendees | 284 | 5.422 | | |

Table 14 continued

| | | | | | | |
|---|---|---|---|---|---|---|
| | Excitement | Non-attendees | 282 | 4.234 | 113.265 | .000 |
| | | Attendees | 284 | 5.549 | | |
| | Esteem | Non-attendees | 282 | 3.560 | 86.908 | .000 |
| | | Attendees | 284 | 4.894 | | |
| | Diversion | Non-attendees | 282 | 4.638 | 80.215 | .000 |
| | | Attendees | 284 | 5.775 | | |
| Negotiation Composite | | Non-attendees | 282 | 12.230 | 140.104 | .000 |
| | | Attendees | 284 | 17.412 | | |
| | Time management | Non-attendees | 282 | 2.592 | 117.825 | .000 |
| | | Attendees | 284 | 3.954 | | |
| | Knowledge acquisition | Non-attendees | 282 | 3.865 | 49.047 | .000 |
| | | Attendees | 284 | 4.884 | | |
| | Interpersonal coordination | Non-attendees | 282 | 3.468 | 97.246 | .000 |
| | | Attendees | 284 | 4.842 | | |
| | Financial management | Non-attendees | 282 | 2.305 | 114.558 | .000 |
| | | Attendees | 284 | 3.732 | | |
| Lack of team success | | Non-attendees | 282 | 4.557 | 57.664 | .000 |
| | | Attendees | 284 | 3.514 | | |
| Lack of someone to attend with | | Non-attendees | 282 | 4.940 | .083 | .773 |
| | | Attendees | 284 | 4.894 | | |
| Lack of knowledge | | Non-attendees | 282 | 2.947 | 33.645 | .000 |
| | | Attendees | 284 | 2.148 | | |
| Inaccessibility of arena | | Non-attendees | 282 | 3.539 | 8.526 | .004 |
| | | Attendees | 284 | 3.116 | | |
| Cost | | Non-attendees | 282 | 4.103 | 8.064 | .005 |
| | | Attendees | 284 | 3.708 | | |
| Leisure alternatives | | Non-attendees | 282 | 5.500 | 138.064 | .000 |
| | | Attendees | 284 | 3.926 | | |

Table 14 continued

| | | | | | |
|---|---|---|---|---|---|
| Commitments | Non-attendees | 282 | 4.564 | 1.407 | .236 |
| | Attendees | 284 | 4.391 | | |
| Team identification | Non-attendees | 282 | 2.259 | 193.071 | .000 |
| | Attendees | 284 | 4.176 | | |
| Age | Non-attendees | 282 | 2.039 | .084 | .772 |
| | Attendees | 284 | 2.070 | | |
| Gender | Non-attendees | 282 | 1.518 | 18.447 | .000 |
| | Attendees | 284 | 1.342 | | |
| Annual household income | Non-attendees | 282 | 3.308 | .596 | .440 |
| | Attendees | 284 | 3.190 | | |

All item responses were indicated on a Likert type scale ranging from 1 to 7.

# CHAPTER 6

## Discussion

The following discussion proceeds from the findings regarding each research hypothesis to the practical implications of the results. It concludes with limitations of this study that must be addressed before generalization to a broader population is possible. Each research hypothesis discussed relates to the overarching purpose of the study, gaining knowledge about the determinants of attendance for an NBA team.

### Findings

*Hypothesis 1*

Hypothesis one proposed that each of the factors considered has an effect on attendance. A series of regression analyses of the relationships between each variable and attendance identified significant impacts on attendance by each independent variable, which supports hypothesis one. Team identification had the strongest correlation with attendance and a direct positive relationship. Motivation and negotiation composites each had positive correlations with attendance as well. Each constraints variable indicated a significant inverse bivariate correlation with attendance.

As mentioned in the methods chapter above, the proposed constraint construct lacked sufficient convergent validity to be used as a composite construct in the analysis. For this reason, the variables were each treated as separate factors. However, it is likely that several constraints factors might account for the same variance in attendance behavior. Accordingly, after testing each constraints variable individually, a multiple regression analysis was run with all constraints

variables entered simultaneously. The results of this analysis indicated significant correlation coefficients between attendance and five constraints variables. Commitments, lack of someone to attend with, lack of knowledge, leisure alternatives, and lack of team success each demonstrated a significant negative correlation coefficient for attendance. Cost and inaccessibility of the arena did not account for significant unique variance in attendance when considered simultaneously with the other constraint variables.

*Hypothesis 2*

Hypothesis two proposed that considering all independent variables (team identification, motivation, negotiation, and constraint variables) simultaneously would predict greater attendance variance than any individual independent variable. Hypothesis two was supported by the data. When attendance was regressed on all independent variables the total variance in attendance predicted was 33.1%. The greatest portion of attendance variance predicted by any single factor was 21.9% (team identification). Team identification, negotiation, lack of someone to attend with, and commitments each accounted for significant unique variance in attendance behavior when considered together.

Perhaps the most interesting take-away from these results was the fact that motivation did not account for significant variance in attendance behavior when entered with team identification and the other independent variables. Team identification and motivation demonstrated high covariance with each other and, in the multiple regression analysis, team identification accounted for the most unique variance in attendance while motivation was not a significant factor. This suggests that the variance in attendance behavior attributed to motivation effects in the simple linear regression of attendance on motivation is also accounted for by team identification. Additionally, several constraint variables did not have significant correlation coefficients for

attendance when all independent variables were entered. Commitments and lack of someone to attend with were the only significant constraints variables accounting for attendance variance in the multiple regression analysis.

*Hypothesis 3*

Hypothesis three proposed that the effects of motivation and constraints, respectively, on attendance are mediated by negotiation. This hypothesis was supported for motivation and commitments but not for the other constraint variables. Hypothesis three was tested twice, one time using the Baron and Kenny (1986) approach and again using a Custom Dialog and method developed by Preacher and Hayes (2004). Both mediation testing methods yielded the same results. These findings lend strong support to the proposed mediating relationships as adapted from the active leisure participation context. The NBA spectator consumer market studied negotiates their commitment constraints to allow attendance when motivation is high.

*Hypothesis 4*

Research hypothesis four proposed that attendees and non-attendees differ in their perception of team identification, motivations, constraints, and negotiation strategies. The data supported this hypothesis with regard to all but two variables. Commitments and lack of someone to attend with did not vary significantly between groups of attendees and non-attendees. This suggests that understanding the effects of these two constraint variables on attendance is especially critical given that they affect non-attendee behavior in much the same way as that of attendees.

Consonant with expectations, the attendee group mean scores for team identification as well as each motivation and negotiation variable were higher than non-attendee means. The non-attendee group's mean scores were higher than attendee means for each constraint variable,

which also makes theoretical sense. However, the fact that differences between attendee and non-attendee mean scores for commitments and lack of someone to attend with were small and likely attributable to random chance is interesting. Those who are highly motivated to attend games and frequently do are just as susceptible to these constraints as potential consumers who did not attend any games all season. Meanwhile, the other five constraint variables were perceived considerably less by attendees than non-attendees.

**Practical Implications**

The findings of this study can assist sport managers and marketers in several ways. Information about differences and similarities between groups of attendees and non-attendees can be used to guide market segmentation strategies. Regardless of game attendance behavior, the population studied perceives commitments and lack of someone to attend with as constraints to attendance. This is particularly relevant given that these same variables were the only significant constraints to attendance when all independent variables were entered as predictors.

Some may suggest that these variables are beyond the control of sport marketers. Yet, it might be possible to reduce the effects of lacking someone to attend with by providing discounts on the purchase of multiple tickets. Finding someone to attend with would be easier if one could afford to purchase their friend's ticket. While cost was not a significant constraint to attendance when all constraints were considered together, reducing cost might nonetheless be a way to reduce the effects of lacking someone to attend with.

Another strategy suggestion to reduce the effects of lacking someone to attend with involves the use of social media. Perhaps an alert could be linked to various social media outlets notifying friends/followers via the chosen medium that a person has purchased tickets for a game.

Others would then know that they have someone to attend with if they proceed to purchase a ticket.

Commitments are perhaps a more difficult constraint to approach when considering how to overcome or reduce the direct effects they have on attendance. However, as identified in hypothesis three testing, negotiation strategies mediate the effects of commitments on attendance. As motivation and negotiation demonstrated a strong correlation, highly motivated fans are likely to negotiate schedule conflicts in their personal and work lives to allow game attendance. Increasing the motivation for attendance probably would not decrease the perception of commitments as a constraint to attendance, but it might drive people to negotiate around those commitments to allow more game attendance.

The findings of this study also suggest that team identification is a crucial attendance determinant. Demonstrating the highest correlation with attendance when each variable was considered individually and remaining a significant factor when all independent variables were considered, team identification should be an area of continued focus for sport marketers. The wealth of literature identifying direct relationships among team identification, motivation, and attendance is supported by this study. Finding means to build team identification is probably sport managers' most important route to ensuring game attendance revenue.

Prior research has identified many ways in which sport marketers can nurture the bonds of team identification. Some popular options include promotional giveaways that encourage BIRGing through team-licensed apparel and memorabilia as well as community outreach programs that connect consumers with the players and coaches directly while fostering a positive image of generosity and service. The value of strengthening team identification is also one reason why teams should take action to ensure good behavior among their employees.

Consumers are more likely to identify with and encourage children to follow positive role models than those who make headlines for criminal or socially unacceptable behavior.

The mediating effects of negotiation between motivation and commitments, respectively, with attendance should also be of interest to sport marketers. While they cannot control consumers' schedules, they may be able to decrease the constraining effects of commitments by increasing their motivation to negotiate them. Perhaps directly influencing consumers' ability to negotiate commitments is also possible. Providing services such as restaurants, free wireless internet, or perhaps even small conference rooms where attendees could step away to conduct business calls might allow more people to attend games even when they have committed to have dinner with a friend or when required to find a quiet space to work or participate in a brief meeting. The findings of this study suggest that investing in the facilitation of negotiation strategies could help reduce the effects of commitment constraints on attendance.

**Limitations**

Known limitations of the study include the convenience sampling method, inclusion of only one NBA team's market for the target population, as well as lack of a previously tested comprehensive scale measuring team identification, motivation, constraints, and negotiation simultaneously in the spectator sport context. Of these, the lack of a random sample is perceived to be the greatest limitation. Random sampling is a critical assumption of all experimental research and therefore this study can only support or contradict theories as they apply to the unique population represented in the study. It is possible that the convenience sample is biased, meaning that findings of this study cannot be generalized to other populations.

Furthermore, the focus on a single NBA team also prevents generalization to a broader population. Even if the convenience sample is not biased, it is likely that NBA attendance

consumers in other markets perceive different constraints. For instance while arena accessibility may be a major constraint in some markets, other arenas may be particularly convenient for the majority of fans to access. This is just one example out of many possible differences in attendance determinants among NBA teams.

Another limitation of concern is the inability to confirm the reliability and accuracy of the scale utilized. As this study is exploratory in nature, the research relies on adaptation of several scales from different contexts for use in combination here. While the sub-scales have been psychometrically tested in similar contexts previously, they have never been used as combined here. It is suggested that the findings of this study are viewed with caution and that the scale be re-tested for reliability and validity with a random sample using confirmatory factor analysis to assess the psychometric properties.

**Suggestions for Future Research**

Given the limitations of the study at hand, the importance of continuing this line of research is magnified. The most obvious suggestion is to administer the survey to a truly random sample. Only then will generalization to broader populations be possible. In order to draw conclusions about consumer attendance behavior across multiple NBA teams, the study would have to be extended to several different NBA markets. Once data have been collected from a random sample spanning several NBA markets, the validity and reliability of the measures should be tested using confirmatory factor analysis. Only then will the results be trustworthy for drawing conclusions that can be applied with confidence by sport managers in practice. For the sake of theoretical discussion about future lines of research focus, the following suggestions assume that the findings of this study are generalizable within the NBA spectator context.

The fact that commitments and lack of someone to attend with are perceived in a similar manner (regardless of whether a person attends any games or not) suggests that the effects of these variables on attendance should be further explored. While perception of the other factors considered in this study followed expectations and differed between groups of attendees and non-attendees, commitments and lack of someone to attend with did not. Identification of means to reduce these constraints would affect previously untapped market segments and prior attendees alike.

The need for research focused on these specific constraint variables is further supported by the identification of each as having a significant correlation with attendance when all factors were entered in the multiple regression analysis. This suggests that commitments and lack of someone to attend with are particularly salient attendance determinants that account for variance not attributable to other factors.

Given the strong positive correlations among team identification, motivation, negotiation, and attendance, it is quite plausible that a positive feedback loop containing each of these factors exists in the NBA spectator context. While further study is necessary to determine the accuracy of this proposition, the study at hand demonstrates the relevance of each variable to consumption behavior. Continuing to build on the foundation of work laid by Trail and many others studying the relationships among points of attachment, motives, and attendance consumption behavior is strongly encouraged. In particular, it would be interesting to test motivation as a possible mediator of team identification effects on attendance. Incorporation of negotiation as a second mediating variable, with constraints as yet another intervening factor, would also be intriguing.

# CHAPTER 7

## Conclusions

### Hypothesis One

Hypothesis one proposed that team identification, motivation, constraints, and negotiation each have bivariate correlations with attendance. Hypothesis one is accepted, as each proposed attendance determinant significantly correlated with attendance in the theorized directions stated above.

*Hypothesis 1a: Team identification has a direct positive effect on attendance behavior.*

*Accepted.*

*Hypothesis 1b: Motivation has a direct positive effect on attendance behavior.*

*Accepted.*

*Hypothesis 1c: Constraints have a direct negative effect on attendance behavior.*

*Accepted.*

*Hypothesis 1d: Negotiation has a direct positive effect on attendance behavior.*

*Accepted.*

### Hypothesis Two

Hypothesis two proposed that team identification, motivation, constraints, and negotiation account for more variance in attendance when considered together than any single factor. Hypothesis two is accepted, as the combined effects of team identification, negotiation, commitment constraints, and lack of someone to attend with constraints accounted for 33.1% of

attendance variance while team identification (21.9%) accounted for more variance in attendance than any other single factor.

*Hypothesis 2: Team identification, motivation, constraints, and negotiation factors combine to predict more variance in attendance behavior than any single variable.*

*Accepted.*

**Hypothesis Three**

Hypothesis three proposed that negotiation mediates the effects of motivation on attendance and the effects of constraints on attendance. Hypothesis three-a is accepted, as negotiation met all criteria for identification as a mediator of motivation effects on attendance under both Baron and Kenny (1986) and Preacher and Hayes (2004) suggested analysis techniques. Hypothesis three-b is accepted for the specific constraint variable commitments. Due to the lack of internal consistency for the proposed multidimensional single-factor constraints scale, each constraint variable was considered separately. Commitments was the only constraint variable identified as having effects on attendance mediated by negotiation.

*Hypothesis 3a: Negotiation partly mediates the relationship between motivation and attendance.*

*Accepted.*

*Hypothesis 3b: Negotiation partly mediates the relationship between constraints and attendance.*

*Accepted for commitments; rejected for other constraint variables.*

**Hypothesis Four**

Hypothesis four proposed that each independent variable is perceived differently by attendees when compared to non-attendees. Hypothesis four is accepted for team identification,

motivation, negotiation, lack of team success, lack of knowledge, cost, inaccessibility of arena, and leisure alternatives. Hypothesis four is rejected for lack of someone to attend with and commitments, as these constraint variables are perceived at similar levels by attendees and non-attendees.

> *Hypothesis 4: Attendees of NBA basketball games do not perceive team identification, motivation, constraints, and negotiation factors in the same way that non-attendees do. Accepted for team identification, motivation, lack of team success, lack of knowledge, cost, inaccessibility of arena, leisure alternatives, and negotiation; rejected for lack of someone to attend with and commitments.*

**Summary**

The findings of this study support the relevance of team identification, motivation, constraints, and negotiation factors for determining NBA attendance behavior. Team identification accounts for more variance in attendance than any other single factor but consideration of multiple attendance determinants accounts for additional attendance variance. The data suggest that approximately 33% of attendance variance for the NBA team studied can be attributed to team identification, negotiation, commitments, and lack of someone to attend with factors. Negotiation strategies serve as a mediating variable between motivation and attendance as well as between commitments and attendance. Commitments and lacking someone to attend with are the constraint factors accounting for the most variance in attendance behavior and are perceived just as much by non-attendees as attendees. Further exploration of the relationships among these variables and how to increase attendance through their manipulation is necessary to develop a more comprehensive knowledge of NBA attendance determinants.

# REFERENCES

Alexandris, K., Funk, D. C., & Pritchard, M. (2011). The impact of constraints on motivation, activity attachment, and skier intentions to continue. *Journal of Leisure Research, 43*(1), 56-79.

Anderson, D. F., & Stone, G. P. (1981). Sport: A search for community. In S. L. Greendorfer & A. Yiannakis (Eds.), *Sociology of sport: Diverse perspectives: 1st annual NASS Conference proceedings* (pp. 164-172). West Point, NY: Leisure Press.

Baade, R. A., & Tiehen, L. J. (1990). An analysis of major league baseball attendance, 1969-1987. *Journal of Sport & Social Issues, 14*(1), 14-32.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122-147.

Bandura, A. (1986). Fearful expectations and avoidant actions as coeffects of perceived self-efficacy. *American Psychologist, 41*(12), 1389-1391.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Bloch, P. H. (1981). An exploration into the scaling of consumers' involvement with a product class. *Advances in Consumer Research, 8*(1), 61-65.

Byon, K. K., Cottingham, M., & Carroll, M. S. (2010). Marketing murderball: The influence of spectator motivation factors on sports consumption behaviours of wheelchair rugby spectators. *International Journal of Sports Marketing & Sponsorship, 12*(1), 76-94.

Carroll, B., & Alexandris, K. (1997). Perception of constraints and strength of motivation: Their relationship to recreational sport participation in Greece. *Journal of Leisure Research, 29*(3), 279-299.

Chou, C. P., & Bentler, P. M. (1995). Estimates and tests in structural equation modeling. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 37-55). Thousand Oaks, CA: Sage Publications, Inc.

Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences, 9*(2), 119-127.

Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences, 13*(4), 309-320.

Crompton, J., Jackson, E., & Witt, P. (2005). Integrating benefits to leisure with constraints to leisure. In E. Jackson. (Ed.), *Constraints to leisure*. State College, PA: Venture Publishing.

Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing, 76*(2), 193-117.

Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*(2), 109–134.

Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly, 39*(2), 239-263.

Edwards, P., Roberts, I., Clarke, M., DiGuiseppi, C., Pratap, S., Wentz, R., & Kwan, I. (2002). Increasing response rates to postal questionnaires: Systematic review. *British Medical Journal, 324*(7347), 1183-1185.

Fink, J. S., Trail, G. T., & Anderson, D. F. (2002). An examination of team identification: Which motives are most salient to the existence? *International Sports Journal, 6*(2), 185-207.

Funk, D. C., Beaton, A., & Alexandris, K. (2012). Sport consumer motivation: Autonomy and control orientations that regulate fan behaviours. *Sport Management Review, 15*(3), 355-367.

Funk, D. C., Filo, K., Beaton, A. A., & Pritchard, M. (2009). Measuring the motives of sport event attendance: Bridging the academic-practitioner divide to understanding behavior. *Sport Marketing Quarterly, 18*(3), 126-138.

Funk, D. C., Ridinger, L. L., & Moorman, A. M. (2003). Understanding consumer support: Extending the Sport Interest Inventory (SII) to examine individual differences among women's professional sport consumers. *Sport Management Review, 6*(1), 1-31.

Godbey, G., Crawford, D. W., & Shen, X. S. (2010). Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research, 42*(1), 111-134.

Ha, J. P., Ha, J. H., & Han, K. (2013). Online sport consumption motives: Why does an ethnic minority group consume sports in a native and host country through the internet? *International Journal of Sport Management, Recreation, & Tourism, 11*, 63-89.

Helin, K. (2013). Average NBA ticket passes $50, up 3.5% from year before. *NBC Sports: Pro Basketball Talk.* Retrieved from: http://probasketballtalk.nbcsports.com/2013/02/14/average-nba-ticket-passes-50-up-3-5-from-year-before/.

Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences, 23*(1), 145-163.

Jackson, E. L. (2000). Will research on leisure constraints still be relevant in the twenty-first century? *Journal of Leisure Research, 32*(1), 62-69.

Jackson, E. L., Crawford, D. W., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure Sciences, 15*(1), 1–11.

James, J. D., & Trail, G. T. (2008). The relevance of team identification to sport consumption behavior intentions. *International Journal of Sport Management, 9*(4), 427-440.

Kahle, L. R., Kambara, K. M., & Rose, G. M. (1996). A functional model of fan attendance motivations for college football. *Sport Marketing Quarterly, 5*(4), 51-60.

Karg, A. J., & McDonald, H. (2011). Fantasy sport participation as a complement to traditional sport consumption. *Sport Management Review, 14*(4), 327-346.

Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution, 2*(1), 51-60.

Keppel, G., & Wickens, T. D. (2004). *Design and analysis: A researcher's handbook* (4th ed.). J. Heffler (Ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Kim, Y. K., & Trail, G. T. (2010). Constraints and motivators: A new model to explain sport consumer behavior. *Journal of Sport Management, 24*, 190-210.

Kim, S., Greenwell, T. C., Andrew, D. P. S., Lee, J., & Mahony, D. F. (2008). An analysis of spectator motives in an individual combat sport: A study of mixed martial arts fans. *Sport Marketing Quarterly, 17,* 109-119.

Klayman, B. (2010). NBA average ticket prices down 2 years in a row. *Reuters.* Retrieved from: http://www.reuters.com/article/2010/11/24/us-nba-ticketprices-idUSTRE6AN5BR20101124.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.

Kwon, H. H., & Armstrong, K. L. (2004). An exploration of the construct of psychological attachment to a sport team among college students: A multidimensional approach. *Sport Marketing Quarterly, 13*(2), 94-103.

Kwon, H. H., Trail, G. T., & Lee, D. H. (2008). The effects of vicarious achievement and team identification of BIRGing and CORFing. *Sport Marketing Quarterly, 17*(4), 209-217.

Laverie, D. A., & Arnett, D. B. (2000). Factors affecting fan attendance: The influence of identity salience and satisfaction. *Journal of Leisure Research, 32*(2), 225-246.

Lock, D., & Filo, K. (2012). The downside of being irrelevant and aloof: Exploring why individuals do not attend sport. *Sport Management Review, 15*(2), 187-199.

Loucks-Atkinson, A., & Mannell, R. C. (2007). Role of self-efficacy in the constraints negotiation process: The case of individuals with fibromyalgia syndrome. *Leisure Sciences, 29*(1), 19-36.

Madrigal, R.C. (2006). Measuring the multidimensional nature of sporting event performance consumption. *Journal of Leisure Research, 38*(3), 267-292.

Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*(2), 103-123.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396.

McDonald, M. A., Milne, G. R., & Hong, J. (2002). Motivational factors for evaluating sport spectator and participant markets. *Sport Marketing Quarterly, 11*(2), 100-113.

Milne, G. R., & McDonald, M. A. (1999). *Sport marketing: Managing the exchange process.* Sudbury, MA: Jones and Bartlett Publishers.

Mitrano, J. R. (1999). The “sudden death" of hockey in Hartford: Sports fans and franchise relocation. *Sociology of Sport Journal, 16*(2), 134-154.

Murrell, A. J., & Dietz, B. (1992). Fan support of sport teams: The effect of a common group identity. *Journal of Sport & Exercise Psychology, 14*(1), 28-39.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.

Onorato, R. S., & Turner, J. C. (2004). Fluidity in the self-concept: The shift from personal to social identity. *European Journal of Social Psychology, 34*(3), 257-278.

Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation, 8*(2), 1-9.

Pedhazur, E. J. (1997) *Multiple regression in behavioral research* (3rd ed.). C. P. Klein (Ed.). Toronto, Ontario Canada: Thomson Learning.

Petrick, J. F., Backman, S. J., Bixler, R., & Norman, W. C. (2001). Analysis of golfer motivations and constraints by experience use history. *Journal of Leisure Research, 33*(1), 56-70.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717-731.

Pritchard, M. P., Funk, D. C., & Alexandris, K. (2009). Barriers to repeat patronage: the impact of spectator constraints. *European Journal of Marketing, 43*(1), 169-187.

Rein, I., Kotler, P., & Shields, B. (2006). *The elusive fan: Reinventing sports in a crowded marketplace*. New York: McGraw-Hill.

Robinson, M. J., & Trail, G. T. (2005). Relationships among spectator gender, motives, points of attachment and sport preference. *Journal of Sport Management, 19*(1), 58-80.

Schroeder, S. A., Fulton, D. C., Lawrence, J. S., & Cordts, S. D. (2012). An application and extension of the constraints-effects-mitigation model to Minnesota waterfowl hunting. *Human Dimensions of Wildlife: An International Journal, 17*(3), 174-192.

Shapiro, S. L., Ridinger, L. L., & Trail, G. T. (2013). An analysis of multiple spectator consumption behaviors, identification, and future behavioral intentions within the context of a new college football program. *Journal of Sport Management, 27*(2), 130-145.

Sloan, L. R. (1989). The motives of sports fans. In J. H. Goldstein (Ed.), *Sports, games, and play: Social and psychological viewpoints* (2nd ed., pp. 175-240). Hillsdale, NJ: Lawrence Erlbaum Associates.

Son, J. S., Mowen, A. J., & Kerstetter, D. L. (2008). Testing alternative leisure constraint negotiation models: An extension of Hubbard and Mannell's study. *Leisure Sciences, 30*(3), 198-216.

Sports Business (2007). NBA ticket prices up 3.6% this year; fan cost index up 2.6%. *Sports Business Daily, 41*. Retrieved from: http://www.sportsbusinessdaily.com/Daily/Issues/2007/11/Issue-41/The-Back-Of-The-Book/NBA-Average-Ticket-Prices-Up-36-This-Year-Fan-Cost-Index-Up-26.aspx.

Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly, 63*(3), 224-237.

Sutton, W. A., McDonald, M. A., Milne, G. R., & Cimperman, J. (1997). Creating and fostering fan identification in professional sports. *Sport Marketing Quarterly, 6*(1), 15-22.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Pearson Education.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (7-24). Chicago, IL: Nelson-Hall Publishers.

Tenenbaum, G., & Eklund, R. (2007). *Handbook of sport psychology*. Hoboken, NJ: John Wiley & Sons, Inc.

Theodrakis, N. D., Wann, D. L., & Weaver, S. (2012). An antecedent model of team identification in the context of professional soccer. *Sport Marketing Quarterly, 21*(2), 80-90.

Trail, G. T., Anderson, D., & Fink, J. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management, 1*(3), 154-180.

Trail, G. T., Anderson, D., & Fink, J. (2002). Examination of gender differences in importance of and satisfaction with venue factors at intercollegiate basketball games. *International Sports Journal, 6*(1), 51-64.

Trail, G. T., Anderson, D., & Fink, J. (2005). Consumer satisfaction and identity theory: A model of sport spectator conative loyalty. *Sport Marketing Quarterly, 14*(2), 98-111.

Trail, G. T., & James, J. D. (2001). The motivation scale for sport consumption: Assessment of the scale's psychometric properties. *Journal of Sport Behavior, 24*(1), 108-128.

Trail, G. T., & Kim, Y. K. (2011). Factors influencing spectator sports consumption: NCAA women's college basketball. *International Journal of Sports Marketing & Sponsorship, 13*(1), 60-82.

Trail, G. T., Kim, Y. K., Kwon, H. H., Harrolle, M. G., Braunstein-Minkove, J. R., & Dick, R. (2012). The effects of vicarious achievement on BIRGing and CORFing: Testing moderating and mediating effects of team identification. *Sport Management Review, 15*(3), 345-354.

Trail, G. T., Robinson, M. J., & Kim, Y. K. (2008). Sport consumer behavior: A test for group differences on structural constraints. *Sport Marketing Quarterly, 17*(4), 190-200.

Trail, G. T., Robinson, M. J., Dick, R. J., & Gillentine, A. J. (2003). Motives and points of attachment: Fans versus spectators in intercollegiate athletics. *Sport Marketing Quarterly, 12*(4), 217-227.

Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference dependent model. *Quarterly Journal of Economics, 106*(4), 1039-1061.

Uhlman, B. T. & Trail, G. T. (2012). An analysis of the motivators of Seattle Sounders FC season ticket holders: A case study. *Sport Marketing Quarterly, 21*(4), 243-252.

Wann, D. L. (1995). Preliminary validation of the sport fan motivation scale. *Journal of Sport & Social Issues, 19*(4), 377-396.

Wann, D. L., & Branscombe, N. R. (1990). Die-hard and fair-weather fans: Effects of identification on BIRGing and CORFing tendencies. *Journal of Sport & Social Issues, 14*(2), 103-117.

Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology, 24*(1), 1-17.

White, D. D. (2008). A structural model of leisure constraints negotiation in outdoor recreation. *Leisure Sciences, 30*(4), 342-359.

Wilhelm Stanis, S. A., Schneider, I. E., & Russell, K. C. (2009). Leisure time physical activity of park visitors: Retesting constraint models in adoption and maintenance stages. *Leisure Sciences, 31*(3), 287-304.

Woo, B., Trail, G. T., Kwon, H. H., & Anderson, D. (2009). Testing models of motives and points of attachment among spectators in college football. *Sport Marketing Quarterly, 18*(1), 38-53.

Zhang, J. J., Lam, E. T. C., & Connaughton, D. P. (2003). General market demand variables associated with professional sport consumption. *International Journal of Sports Marketing and Sponsorship, 5*(1), 33-55.

Zhang, J. J., Pease, D. G., Hui, S. C., & Michaud, T. J. (1995). Variables affecting the spectator decision to attend NBA games. *Sport Marketing Quarterly, 4*(4), 29-39.

Zhang, J. J., Smith, D. W., Pease, D. G., & Jambor, E. A. (1997). Negative influence of market competitors on the attendance of professional sport games: The case of a minor league hockey team. *Sport Marketing Quarterly, 6*(3), 31-40.

Zhang, J. J., Smith, D. W., Pease, D. G., & Lam, E. T. C. (1998). Dimensions of spectator satisfaction toward support programs of professional hockey games. *International Sports Journal, 2*(2), 1-17.

APPENDIX A

**Survey**

Please indicate your level of agreement with each of the following statements by selecting the appropriate corresponding number. Responses range from 1 (*Strongly Disagree*) to 7 (S*trongly Agree*).

Strongly Disagree Disagree Neutral Agree Strongly Agree
1 2 3 4 5 6 7

| **Item** | **Response** |
|---|---|
| I enjoy the chance to socialize with others at [NBA team] games | 1 2 3 4 5 6 7 |
| I enjoy the beauty and grace of NBA basketball | 1 2 3 4 5 6 7 |
| I enjoy the excitement associated with [NBA team] games | 1 2 3 4 5 6 7 |
| I feel a personal sense of victory when the [NBA team] win | 1 2 3 4 5 6 7 |
| Attending a basketball game provides me with a break from my daily routine | 1 2 3 4 5 6 7 |
| If the [NBA team] do not win often, I will still attend games | 1 2 3 4 5 6 7 |
| Lack of someone to go to the game with me discourages me from attending [NBA team] games | 1 2 3 4 5 6 7 |
| I don’t understand basketball strategy | 1 2 3 4 5 6 7 |
| Inaccessibility of [NBA team] Arena discourages me from attending [NBA team] games | 1 2 3 4 5 6 7 |
| The cost of attending [NBA team] games discourages me from attending | 1 2 3 4 5 6 7 |
| I prefer going to a movie, bar, or restaurant over attending [NBA team] games | 1 2 3 4 5 6 7 |
| Work, school, or social commitments prevent me from attending [NBA team] games | 1 2 3 4 5 6 7 |
| I try to be more organized to make time for attending basketball games | 1 2 3 4 5 6 7 |
| I try to improve my knowledge of basketball | 1 2 3 4 5 6 7 |
| I try to find people with a similar interest in basketball | 1 2 3 4 5 6 7 |

| | |
|---|---|
| I try to budget my money for attending basketball games | 1 2 3 4 5 6 7 |
| I consider myself a dedicated fan of the [NBA team] | 1 2 3 4 5 6 7 |
| Please indicate the total number of [NBA team] home games you attended during the 2012-2013 season. | _____ |
| When you attended games your seat was most often (select one): | 1(Lower level); 2(Luxury box); 3(Courtside); 4(Upper Level); 5(No games attended) |
| How old are you? (Please select the range within which your age is included) | 1(18-24); 2(25-34); 3(35-44); 4(45-54); 5(55-64); 6(65-74); 7(75 or older) |
| Please select the range within which your annual household income falls (all values in American Dollars): | 1(0-25,000); 2(25,001-50,000); 3(50,001-75,000); 4(75,001-100,000); 5(100,001-150,000); 6(150,001-200,000); 7(Over 200,000) |
| Are you a Male or Female? | 1(Male) 2(Female) |
| Please write or type your home zip-code in space provided: | _____ |