

COGNITIVE SCALING, EMOTIONS, TEAM IDENTITY AND FUTURE  
BEHAVIOURAL INTENTIONS: AN EXAMINATION OF SPORTING  
EVENT VENUES

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COGNITIVE SCALING, EMOTIONS, TEAM IDENTITY AND FUTURE  
BEHAVIOURAL INTENTIONS: AN EXAMINATION OF SPORTING  
EVENT VENUES

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EVENT VENUES

David Spencer Martin

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## VITA

David Spencer Martin, son of Dr. Warren and Wendy Martin was born on July 19, 1978 in Ames, Iowa. A graduate of Mountain Brook High School in Birmingham, Alabama, David attended Auburn University where he graduated with a Bachelor of Science in Hotel and Restaurant Management. After working in several management positions in the hospitality industry, David then re-enrolled at Auburn University to pursue both a Masters of Science Degree and a Doctor of Philosophy Degree in the subject area of Hotel and Restaurant Management.

DISSERTATION ABSTRACT  
COGNITIVE SCALING, EMOTIONS, TEAM IDENTITY AND FUTURE  
BEHAVIOURAL INTENTIONS: AN EXAMINATION OF SPORTING  
EVENT VENUES

David Spencer Martin

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Sporting event venues represent a unique segment of the overall tourism industry that has, in recent times, started to gain limited interest from researchers (Madrigal, 2000; Theodorakis, Kambitsis, Laios & Koustelios, 2001; Kurtzman, 2005; Kouthouris & Alexandris, 2005). One common theme in the research has been the unique place that sporting events hold in the overall tourism industry (Kurtzman, 2005; Kurtzman & Zauhar, 2005; Doshi, Schumacker & Snyder, 2001). Sporting event venues represent a highly sophisticated mix of services, emotions, advertising and a physical plant that can also become part of the overall experience. In addition to the problems that service providers regularly encounter throughout the industry as a whole, sporting event venues have their own sets of problems distinct from other segments of the hospitality industry (O'Neill & Getz, 1997). One of these is the lack of control that managers of sporting

event venues have on the outcome of the game, which has been found in previous research to have an effect on the customers evaluation of service quality and satisfaction (Brady, Voorhees, Cronin & Bourdeau, 2006). As researchers have strived to explore the satisfaction construct with-in sporting event venues, they have borrowed scales previously developed and tested in other segments of the hospitality industry (Costa, Glinia & Drakou, 2004; O'Neill and Getz, 1997; Kouthouris & Alexandris, 2005). The results from the research has been mixed and some researchers have theorized that in light of the distinctive nature of sporting event venues that new scales, developed specifically for sporting event venues, need to be developed (Kouthouris & Alexandris, 2005; Laverie & Arnett, 2000). This research partially addresses this issue with the development and testing of a new cognitive scale intended to be a more accurate measure of cognitive satisfaction in sporting event venues.

This scale has been developed for use in any sporting event venue, at any level (high school, college or professional) with minimal changes in wording and orientation. In addition this research strives to understand the relationship between customer satisfaction, team identity and future behavioural intentions in an effort to not only understand what satisfies consumers of sporting event venues, but to also realize the goal of increasing future attendance levels and profits. Another contribution of the research is the application of emotional scaling to sporting event venues in an effort to gain a better understanding of the role that emotions play in the formation of satisfaction and future behavioural intentions

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# **CHAPTER I**

## **INTRODUCTION**

### **Aims and Objectives**

This research reports on efforts to gain a better understanding of satisfaction, future behavioral intention and emotions in the context of sporting event venues. Therefore, the overriding goal of the study is to develop and test a new instrument intended to measure customer satisfaction in any sporting event venue. Secondly, this research will endeavor to gain a better understanding of the role that emotions play in the formation of satisfaction and future behavioral intentions. Thirdly, the impact of team identity will be examined in its relation to the formation of satisfaction, emotional output and future behavioral intention.

The research reviews the literature pertaining to each of the key research constructs and addresses the relationship between the more affective component of the satisfaction construct, future behavioral intention and consumers' satisfaction with the sporting event venue itself. As a matter of research protocol, several hypotheses were developed and will be presented for analytical testing. The theoretical backing for each hypothesis will be presented as well as the statistical evidence that lends support to, or rejects each. Finally, it is intended that this project will serve as the basis for more research in the area of event management. Specifically, the utilization of the cognitive scale developed in this study in other sporting event venues.

## **Significance**

There is now an extensive body literature which conceptualizes the customer satisfaction construct and its relationship to the service quality construct (Wycoff, 1984; Lee & Hing, 1995; Lam, Wong & Yeung, 1997; Pizam & Ellis, 1999; Kandampully & Suhartanto, 2000; Bowen & Chen, 2001; Barsky & Nash, 2002; Mowen, 1995). Disconfirmation models, which contend that service quality and satisfaction can be conceptualized as the difference between what a consumer expects to receive and his or her perceptions of actual delivery, have come to dominate the literature on service quality and satisfaction. As this satisfaction literature has grown and matured, a concerted effort to develop scales applicable to a variety of service settings has occurred, and while still on-going, this effort has generated several tools such as the SERQUAL scale, absolute measures of satisfaction and Gronroos' Service Quality Model (Parasuraman, Zeithaml & Berry, 1985; Cronin & Taylor, 1994; Gronroos, 1983, 2001). Naturally, as sporting event venues have become more and more important in both economic terms and in the lives of a growing portion of the population, research on the satisfaction of consumers in these unique settings has grown.

Previous researchers in the area of sporting event venues have attempted to use cognitive based scales to measure customer satisfaction (Kouthouris & Alexandris, 2005; Laverie & Arnett, 2000; Kurtzman & Zauhar, 2005; Price, Arnould & Deibler, 1995; O'Neill, Getz & Carlsen, 1999; Thwaites, 1999; Hirt, Zillmann, Erickson & Kennedy, 1992; Costa, Glinia, & Drakou, 2004; Knop, 2004; Theodorakis, Kambitsis, Laios & Koustelios, 2001; Enriquez, Osuna & Bosch, 2004; Dale, Iwaarden, Wiele & Williams,

2005) but despite these efforts only one cognitive satisfaction scale has been developed specifically for sporting event venues, with mixed results (Theodorakis, Kambitsis, Laios & Koustelios, 2001). Previous research has also had mixed results in applying techniques borrowed from other service sectors, such as importance performance scaling (O'Neill, Getz & Carlsen, 1999) and the commonly used SERVQUAL scale (Kouthouris & Alexandris, 2005; Martin, O'Neill & Palmer, 2007). Because of the unique nature of sporting event venues this lack of a scaling instrument designed specifically for such situations is a definite weakness in the literature as a whole.

With this in mind, the overall focus of this research will be to develop an evaluative measure of customer satisfaction at sporting event venues and then verify it using both exploratory and confirmatory statistical methods. In addition, emotional scaling will be used in an effort to explain more of the satisfaction construct as well as future behavioral intention, than when using cognitive scaling alone. Also of note will be the incorporation of a scale that measures how much the respondent identifies with the home team, and if the level of identification plays a role in emotional output, future behavioral intention and the cognitive assessment of satisfaction.

### **Research Questions**

Based on the unique nature of sporting events, and the relative lack of scale development in the sporting event research this study will aim to answer several questions that are pertinent to sporting event management. First is the question of emotional scaling and how much, if any, of the variance that it will explain in regards to cognitive satisfaction and future behavioral intentions? Second is how well the newly developed cognitive scale will perform in terms of its ability to explain satisfaction in a

sporting event venue? Third is what role does team identity play in satisfaction, emotions and the future behavioral intentions of patrons of sporting events? Implications from the findings for academics will be addressed and finally, managerial implications of the study will be developed specific to the site tested and recommendations of how to improve service quality and cognitive satisfaction will be presented.

### **Limitations**

While every effort to minimize limitations has been made, there is no doubt that this project does have flaws. The following section is intended to reveal some of those flaws in an effort to avoid the same mistakes in future research.

Certainly one of the major flaws is the sample group itself. While an effort was made to attain a sample group that was representative of the entire population that attends home football games, the high number of student respondents is not a truly accurate representation of the total population. This calls into question the results of this study and how well it can be applied to the entire population that attends such events.

Another limitation was the inability of the researcher to collect surveys after one of the two home losses. While this was in the original plan from the outset, factors out of the researchers control led to this situation, the main issue being the weather during and immediately after one of the home losses. Convincing potential respondents to fill out a survey after their favorite team has just suffered a loss is difficult, however doing so in the midst of thunder, lighting and the pouring rain is something altogether more difficult. Because of this lack of response, the researcher was unable to generate enough surveys after home losses in order to run comparison analyses.

A third limitation was that there was no opportunity to afford for non-response/late response bias. While an effort was made to remedy this problem, the inability of the researcher to procure another group of respondents separate from the original sample group prevented such an effort.

A fourth limitation includes a lack of comparable information in regards to the team identity scale. In essence, while the level of team identity for the fans in attendance of the home Auburn games has been measured, there is no way to compare these levels with other respondents from other schools. With no way to compare these levels it is hard to determine if the fans measured in this study are highly identified, have a low level of team identification, or are somewhere in-between.

A fifth limitation involves the manner in which the surveys were administered, which was immediately following the conclusion of the game. As part of the survey process, respondents were asked to remember their pre-game and during game emotional output. Because the fans may have still been actively involved in the emotions generated from the outcome of the game, it may have been difficult for them to remember their emotional state during the pre-game time period. In addition, this may have caused confusion in the respondents when it came to assessing their during-game emotional output as well. This is one possible explanation for the poor performance of the emotional scale in this study.

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter has several goals, which center on reviewing the literature surrounding the main constructs used in this study. The first section will broadly cover the tourism industry along with event management and special events, and include some of the tourism industries key drivers. Next, sports tourism will be defined along with the economic impact that sports have in the tourism industry. Critical success factors in the tourism industry will be discusses which will then lead to the defining of satisfaction and an examination of some satisfactions key antecedents and measurement tools. Finally, emotions will be briefly introduced and defined, and pertinent literature between emotions and sporting event venues will be covered

#### **Tourism, Event Management and Special Events**

One of the unique aspects of the current study is subject matter itself, a sporting event venue and it's interaction with the consumers that frequent the local. In order to set the stage for the remainder of Chapter II a discussion of the broader terms of tourism, event management and special events must be conducted in an effort to understand where it is that sports tourism falls within these three different terms. In addition some of the general drivers of satisfaction in event management will be developed in an effort to help explain what leads to satisfied consumers inside sporting event venues.

## **Tourism Defined**

While defining tourism and all of the unique sectors of the tourism industry is out of the overall scope of this project, it does warrant limited attention in that event management, special events and of course sporting events fall under the realm of tourism. Defined here as leisure consumption and participation with travel and accommodation (Williams & Buswell, 2003) tourism can be seen as having three elements including travel, accommodation and participation in activities at the destination. Included in the evaluation of the third element (participation) one must also consider impact from social, economic and environmental points of view (Williams & Buswell, 2003). Certainly sporting events can be clearly seen as falling under the general realm of tourism in that they incorporate all three of the elements listed above with fans traveling from both far and near, increased levels of accommodations and in the participation of the sporting event itself. One segment of the tourism industry that has been recognized as distinct that sporting events may fall under is that of leisure tourism. While the lines between tourism and leisure tourism may be blurred somewhat, the two are separate in that the motivations of some tourists are to experience a form of leisure (Williams & Buswell, 2003). These motivations may come in the form of participating in a specific activity, such as hiking in the Alps, consuming services offered by spas or wellness centers, or the observation of sport as a form of entertainment. Sometimes referred to as special interest travel, this form of travel is often times pursued by individuals that have a shared interest which is used to establish a common bond among other people that are like minded, leading to a mutual sense of trust and anticipation for the experiences that are to come (Plog, 1991). While such special interest travel has been around for along time (for example religious

pilgrimages) there has been a specialization of this market. The connection between sports and special interest travel is an interesting one, with fans often times following their team into enemy territory for away games and providing what is commonly referred to as the home court advantage at home games. The connection between fans can be a strong one, which may involve the wearing of clothing items that advertise the team logo, travel and participation in activities associated with the team and even specialized social greetings specific for each team and its fans.

Whatever the case may be, sporting event venues, and the activities both inside and surrounding the venue are in their own-right an important part of the overall tourism market. While broadly viewed as a part of leisure tourism, it does become necessary to narrow the point of focus even further in order to assess, among other things, the drivers of customer satisfaction in such venues.

### **Event Management**

As leisure tourism has grown so has the interest that it has received from both researchers and academic institutions (Montgomery & Strick, 1995). As a result the market has been broken down into several different segments, one of which has relevance here, event management. Defining what an event is has been an on-going process and helps to illustrate the growth and change that events and event management has gone through in the past 20 years. Events have been previously defined as a “cultural, artistic, sporting, or other special or unique activity that is organized to attract and be attended by the general public, free of charge or for a fee” (Metelka, 1986, p. 37). Another, more recent definition is as follows “affair; effect; happening or notable occurrence” (Getz, 1991). While both definitions have their support in the literature, sporting events can be

seen as falling under an even more refined segment of event management, which is special events. Getz, (1991, p. 342) defines special events as “a onetime or infrequently occurring event outside the normal program or activities of the organizer; for consumers, leisure, social or cultural opportunity outside the normal range of choice or beyond everyday experience.” Another view presented by Goldblatt (1990, p. 2) recognizes that special events are always planned, always arouse expectations and that they are usually motivated by a reason for celebration. The author continues in defining special events as “recognizing a unique moment in time with ceremony and ritual to satisfy specific needs.” While sporting events can be seen as following under the definitions presented for either events or special events, some have attempted to classify sporting events, or sports tourism as their own, unique sector of the tourism industry.

### **Sport Tourism Defined**

Several attempts to define sport tourism have been made, and while no consensus in the literature has been achieved, two main definitions have been used by previous researchers. In one, sports tourism has aptly been defined as “the use of sports for touristic endeavors” (Kurtzman, 2005, p. 49). While simplistic, this definition contains the essence of what sports tourism really is; consumers traveling both long and short distances in order to observe or participate in some form of a sporting event. These types of events can range greatly from professional sports such as football, soccer, baseball, basketball and hockey, to collegiate level and even high school level sporting events. Other derivations include what have been labeled mega sporting events and include items such as the Olympics, the Super Bowl and World Cup Soccer (Higham, 1999).

Additional categories for sporting events include: sports resorts, sports cruises, sports attractions, sports adventures and sport tours. (Kurtzman, 2005).

One researcher has defined sport tourism as “including all forms of active and passive involvement in casually or in an organized way for noncommercial or business/commercial reasons that necessitate travel away from home and work locally” (De Knop, 2004, p. 305). Inherent in this definition is the idea that sport tourism can be divided into two categories; travel to participate in sport and travel to observe sport (De Knop, 2004).

Another definition developed by previous researchers (Standeven & De Knop 1997, p. 147) is “travel for non commercial (holiday) or for commercial (non-holiday/business) reasons to participate in or observe sporting activities.” Interestingly enough, there has been no consensus reached in terms of a standard definition of what sports tourism is and how it is defined. This may be due to the general lack of research in the area compared to other social sciences, its relative newness in terms of its importance and economic impact and the fact that sports tourism itself has been changing and evolving rapidly in recent years.

### **Impact of Sporting Events**

In line with the definitions of sports tourism and of central importance is the economic impact these sporting events have on their local communities. Doshi, Schumacker & Snyder (2001, p. 2) define the economic impact of special events (a category under which sporting events fall) as “the net impact of money originating from outside the region and the money that stays in the local economy. It represents the incremental spending above and beyond what would be expected in the region if the

event was not held.” While this definition touches on the economic impact represented by spending from consumers that would normally not be in the area, it does not specifically touch on the increased spending that may occur by the local populous in response to the actual sporting event. For example, tailgating at college football games is a commonly practiced event, not only by visitors, but by permanent residents as well. Such tailgating activities often times include the purchase of special items for the actual tailgating event such as folding chairs, portable grills, generators, folding tables, mobile awnings, satellites, etc.

In addition, the actual amount of food and beverage purchased at local grocery stores or from catering facilities (for example barbeque houses) for one tailgate is well above what would normally be purchased when the sporting event does not occur. Certainly this increase in spending by the local population and by visitors outside of the area has a substantial and dramatic impact on the local economy.

When considering the economic impact that sporting events may have, one also has to consider the recurring nature of the event. For example, college football teams now play 12 regular season games a year, with seven of those being home games. These seven weekends represent a predictable and reliable increase in the number of people in the region, and the amount of money being spent at local venues. These set dates give the operators of hotels and other outlets advantages when it comes to the amount of demand for items such as hotel rooms and thus allows for a dramatic increase in the average price. Professional sports represent an even higher number of regular season home games, with the possibility of playoff games at the home team’s arena.

Certainly there are many motivations to hosting such a sporting event and Turco (1998, p. 3) has identified three main reasons as to why communities host sporting events: “to provide local entertainment, to enhance community pride and to stimulate spending in the host economy.” The author continues to state that of the three purposes, that the economic factor is the primary motive because “the ability to determine the economic impact of sporting events is of great value to sport providers and destination marketers in any community since the outcome may be the deciding factor in future resource allocation decisions regarding their services.”

While this may be the case in terms of professional sports teams there is a question as to how well this theory applies in terms of collegiate sports, especially college football. While college football for most Division I-A teams is profitable, the main motivation for universities to supporting these activities goes much farther than their economic impact. Items such as enhancing community pride, providing a rallying point for alumni, students, faculty and the local population, media exposure for the university and the maintaining of tradition come to mind.

Adding to the importance of sports tourism are the larger numbers from the tourism industry as a whole. Tourism is a trillion dollar industry and most recently the World Tourism Organization (2001) stated that the tourism sector has increased 4.1% since 1998. More specifically, sport is a multi-billion dollar industry world wide and has become a dominant and defining force in the lives of millions of people globally. Global sports sponsorships have reached \$20 billion, and it is estimated that by the end of 2006 that over \$7 billion will be spent on new sports facilities in the USA alone (Kurtzman,

2005). Recently, the Dallas Cowboys began building a new stadium that will cost a little over 1 billion dollars to construct.

Specific benefits of sports tourism on a community include: high media coverage, employment (both long and short term), profiles a city, taxation benefits, infrastructure development, economic impact, direct spending, hotel room nights, entertainment sites, development and the overall growth in tourism (Kurtzman, 2005). When viewed as an important and profitable segment of both special events and the tourism sector as a whole, it is no wonder that the issue of customer satisfaction has started to take center stage.

### **Critical Success Factors in Tourism and Special Events**

Like any business, the tourism industry and special events seek to be a profitable exchange of money and services. In order to achieve this goal it has been recognized by both managers and researchers that there are critical factors that in today's competitive and rapidly changing world can mean the difference between success and failure. Certainly the study and refinement of these success factors has been going on since the work of early quality writers such as Juran, Deming and Crosby and has been evolving ever since. Because sporting event venues fall under special events, and in a much larger sense, the tourism industry as a whole, it becomes important to review a few of these critical success factors.

### **Service Quality in the Tourism Industry**

While the issue of service quality, or a lack of it, is something that consumers struggle with on a daily basis, it is of particular interest to the tourism industry. One of the reasons for this emphasis is the idea that when providing a level of service that is

excellent and that continually meets the needs of the consumer that the organization will establish a reputation for excellence (Peters, 1987). This reputation of excellence has several positive factors including the ability to charge more for the same services that competitors offer, the ability to retain market share during the entry of new competitors into the market place and the establishment of life long consumers (Peters, 1987).

Considering the competitive nature of the tourism industry and the high cost of attracting a new customer as compared to retaining a current one, the true importance of service quality comes into focus (Blodgett, Wakefield & Barnes, 1995).

### **Service Quality and Leisure Tourism**

Some would argue that the study of service quality and leisure tourism is based on interaction analysis. The key is to break down the elements of that interaction in an effort to discover in what ways the interactions affect the resulting levels of service quality and satisfaction. These interactions have been broken down into two sub groups, contextual interaction and human interaction (Williams & Buswell, 2003). Contextual interaction is simply the interaction between the customer and the physical setting of the leisure tourism experience and has been conceptualized by several authors as the servicescape, which will be addressed later on in this chapter.

### **Unique Nature of Services**

The idea that services in general are unique unto themselves when compared to more traditional goods is not a new one, it has been recognized that tourism, hospitality, and leisure services have a number of characteristics that distinguish them from physical goods (Berry, Zeithaml & Parasuraman, 1985; O'Neill, 1992). These differences add to

the difficulty of providing and maintaining a high level of service quality, retaining customers and increasing profits year to year.

### **Intangibility**

First and foremost, tourism services are primarily intangible. This means that these services do not have a physical dimension: they cannot be touched, seen, tasted, felt, heard, or smelled in the same way as goods can be before they are purchased.

However tourism services do have a tangible aspect to them. Hotel rooms, beds, and food are examples. The implication for this intangibility is that hospitality services cannot be displayed, sampled, tested or evaluated before purchase (Bagozzi, Gopinath & Nyer, 1999).

### **Inseparability of Production and Consumption**

Another issue that makes service quality so hard to attain is the simultaneous production and consumption of services. Tourism services cannot be produced in one place, transported for sale to another, sold and then consumed in yet another location.

Tourism services are often times simultaneously sold, produced and consumed in the same location. Adding to the difficulty is that service is very labor intensive. Getting every employee of a hotel or restaurant to do the right thing at the right time is a huge challenge (Reisinger, 1992; Berry, Zeithaml & Parasuraman, 1985).

### **Heterogeneity**

Tourism services also suffer from a high level of heterogeneity. Services vary in standard and quality over time because they are delivered by people to people and are a function of human performance. Each service experience is different because it varies

from producer to producer and from customer to customer. Also important to note is that customers differ in both their needs and expectations (Reisinger, 1992).

### **Consistency**

For several reasons it is very hard to consistently provide the same level of service over a period of time. Employee performance varies from hour to hour, day to day, year to year. Another issue is the willingness of the customer to accurately communicate his or her needs and wants. Unlike manufactured goods, inconsistencies in service cannot be eliminated in, as they often can be with physical goods, mainly because there is a lack of uniform, objective standards according to which tourism service performance and quality can be assessed (Iwaarden, Wiele & Williams, 2005).

### **Perishability**

Tourism services cannot be stored, frozen, or saved in a bank until they are needed. They are also short-lived. A hotel room that is not filled for the night is lost revenue in much the same way that an empty seat on an airline flight is also potential profit lost. Tourism services must be consumed at the time that they are produced, or they are lost (Iwaarden, Wiele & Williams, 2005).

A third factor that has been found to affect the formation of satisfaction in special events is the value received for time and money (Intel, 2001; Bailey & Hall, 1998). The increase in the number of hours worked by employees' means that they have less time to spend on travel and leisure. Not only does this mean that they are now placing a greater amount of importance on the performance of the service or the event to satisfy them, but that they also have tighter zones of tolerance when it comes to the value that they receive from their travel choices. In essence, because consumers are increasingly short on time,

special events such as football games, that when including travel, represent relatively long periods of time, must deliver in terms of satisfying the consumer and thus justifying the use of time and money associated with the event. This becomes even more relevant when one considers the economic importance the sporting events have. Maybe the most controllable and important part of the services industry in the consumers' eyes is the service that they receive. Naturally service providers want to get everything right the first time. But real life experience and common sense tell us that this does not happen all of the time. In addition the unique nature of services that has been previously highlighted only adds to the difficulty of providing quality service. Service Recovery is now becoming an important tool in the tourism industries arsenal when it comes to gaining a true competitive advantage (Strauss, 2002; Ruyter & Wetzels, 2000).

### **Service Recovery**

Research has shown that a key factor that influences consumers' choice of retailers and other service providers is service quality (Blodgett, Wakefield & Barnes, 1995). Getting things right is of course the best way to prevent all of the negative activates mentioned above (Ruyter & Wetzels, 2000). Unfortunately, mistakes are inherent to the features of service (Ruyter & Wetzels, 2000), and thus it is imperative that service providers take advantage of the opportunities presented to them. Service recovery is the response to that opportunity. Effective service recovery is also a key to gaining an advantage on the competition. As stated above, the negative effects on profitability and consumer loyalty that upset customers can have on a business is dramatic. But a service provider can counter act those actions by responding to a customer's complaint in an

effective manner. One of the most important keys to providing excellent service recovery is convincing the consumer to let you try.

Unfortunately, most upset guests do not complain to the organization itself. Instead they vow to never return again and tell others about their negative experience. Retailers and service providers should encourage customers who are dissatisfied to seek redress so that they will then have a chance to remedy those problems and retain those consumers' business. Research has indicated that customers that complain to the offending service provider are much less likely to participate in negative word of mouth activities than those that do not complain at all. In one study 77% of all non complainers engaged in negative word of mouth. Conversely, only 48% of complainants engaged in negative word of mouth after attempting to seek redress from the service provider (Blodgett, Wakefield & Barnes, 1995). In other words the tourism industry can greatly reduce the level of its bad press just by encouraging consumers to complain. Making complaining both easy and obvious to the guest is very important. The more comfortable guests feel about voicing their opinion, and the more open the guest perceives that the service provider is to that opinion, will largely determine how many of these opportunities a service provider can expect. Researchers have consistently found that dissatisfied consumers who perceive a high likelihood of success are apt to seek redress (Singh, 1990; Richins, 1987; Day & Landon, 1976). In effect a successful service recovery plan can be seen as an important tool for the tourism industry as a whole when it comes to maintaining consumers perceptions of service quality.

Another important development in the research of the tourism industry is the need to understand the changing nature of the industry itself. The management of the leisure

and tourism experience, with implications for service quality, is assuming greater significance as the industry is growing in size, sophistication and complexity (Williams & Buswell, 2003). The industry is more global, more specialist more competitive and more professional. The industry has a diverse range of organizations and contexts and its product development is becoming more commodified and based on a multifaceted experience. Consumers are discerning and demanding and increasingly view leisure and tourism as more than a product or service. Consumers are now looking to the tourism industry to provide an experience (Williams & Buswell, 2003). This increase in the complexity of the tourism industry as well as the changes in the expectations of the consumer means that managers and academics must address the issues of service quality and satisfaction within the industry.

### **Importance of Satisfaction**

The importance of service quality in the tourism industry has already been addressed earlier in this chapter, along with its connection to satisfaction. While satisfied customers are the goal of any business sensitive to its relative importance, it is beneficial to analyze exactly what satisfied customers mean in terms of business results for the services industry. Based on the ever changing expectations of consumers of special events, the unique nature of services and the growing economic impact of sports tourism it becomes necessary for both managers and academics to gain a better understanding of what drives satisfaction in sporting event venues and the resulting levels of future behavioral intentions. This is inline with the research conducted thus far in the services industry as a whole which has recognized the fact that customer satisfaction is a key part to any business success. Several models, such as the service profit chain (Heskett, Jones,

Loveman, Sasser & Schlesinger, 1994) and the Gronroo's service quality model (1983), have been developed for use in the services industry which only further highlights the importance that service quality and satisfaction have on the services industry. Other researchers in the service industry have indicated that service quality and the satisfaction derived from the level of service quality are becoming the single most important differentiating factor in virtually every business environment, not least in the tourism sector (O'Neill & Palmer, 2004). While the exact relationship between service quality and satisfaction has been debated (see Oliver, 1981; O'Neill, 1992 for a review) the connection between the two concepts have been well established by both researchers and managers (Oliver, 1981; Brady & Cronin, 2001; Berry, Zeithaml & Parasuraman, 1985).

In much the same way that satisfaction affects the hospitality industry as a whole, it also affects the patrons of sporting event venues. Similar to a hotel, sporting event venues provide a wide range of services including food and beverage, security, medical assistance, restrooms, service interactions with the staff and a host of other, tangible factors relating to the physical plant itself. Because of these similarities, sporting event venues are susceptible to the same drawbacks of providing poor services, or a poorly maintained physical plant, as are other service organizations. Operators and managers of sporting event venues provide a host of different services and a physical plant that is directly involved in the overall satisfaction evaluation by the spectators. In essence, this combination of services and physical plant makes sporting event venues unique in the world of services and as such there is a direct need to understand the unique drivers of satisfaction at these venues. In addition to the unique nature of services that have been described previously, sporting events themselves have several unique factors.

## **Unique Nature of Sporting Events**

Managers and operators of sporting event venues must deal with several issues unique to sporting event venues. The first is that the operators have no control over the quality of play on the actual field (O'Neill, Getz & Carlsen, 1999). The game play is determined by the coaches, players and officials and thus the outcome is determined on the field and not by the managers of sporting event venue. Despite this lack of control, the outcome of the game is tied to customer perceptions of service quality and thus must be addressed when conducting research in sporting event environments (Brady, Voorhees, Cronin & Bourdeau, 2006).

Certainly the outcome of the game will have a direct bearing on the fans in attendance, those cheering for the home team, or visitors from the opposing team. From a controversial ending, to a low level of competitiveness between the two competing teams, managers and operators are forced to focus on the other aspects that are under their control, but even these items are unique to sporting event venues. O'Neill, Getz & Carlsen, (1999, p. 158) comment:

events do contain tangible elements, such as food, beverages and other products sold or given away, but are essentially a service in that they consist of intangible experiences of finite duration within a temporary, managed atmosphere. As with all services, this experiential produce is very hard to control.

Other issues include the Servicescape of the actual venue (Bitner, 1990), the manner in which sporting event venues are utilized (high use over a short period of time), the use of volunteer labor and a host of other issues associated with large crowds of

people entering and exiting a confined space. Kurtzman & Zauhar (2005), present the idea that while attending a sporting event that consumers step into a magic environment with its own time system, taboos, traditions, mannerisms and heroes and as such may evaluate service quality differently than they would in any other service encounter.

### **Satisfaction and Loyalty**

Oliver (1997) states “Like emotion and satisfaction, loyalty is another concept that is easy to discuss in everyday conversation, but becomes more obtuse when it is analyzed for meaning” Oliver, p. 389). Some have given a simple definition of loyalty as “Loyalty is a customers’ predisposition to repurchase from the same firm again” (Edvardsson, Johnson, Gustafsson & Strandvik, 2000, p. 918). However, a more detailed meaning is needed for the purpose of this project. As such the following definition will be used for the entirety of this project. “Customer loyalty is a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite situational influence and marketing efforts having the potential to cause switching behavior” (Oliver, 1997, p. 392). Oliver goes on to explain that loyalty has four distinct phases that once fulfilled lead to the deeply held commitment stated above. As such a discussion on these four stages will now be presented as outlined in Oliver, 1997).

### **Cognitive Loyalty**

In the first of these loyalty phases, the information base available to the consumer compellingly points to one brand over another. This stage will be referred to as cognitive loyalty, or loyalty based on cognition only. This one factor, however, does not make a customer loyal. It is but one phase necessary to achieve such a state.

### **Affective Loyalty**

The next phase of loyalty is based on affect. Affect is connected to satisfaction through both cognition and attitude. In this stage the consumer has either a positive or negative feeling or attitude toward a specific brand or product. The reason that it must come after cognitive loyalty is that this phase must be based on some kind of prior interaction, experience or any other basis on which an attitude can be based. Hence some form of cognition must occur in regards to the brand or product first.

### **Conative Loyalty**

Conative loyalty, or in other words, the behavioral intention dimension of loyalty is influenced by changes in affect toward the brand. Conation implies an intention or commitment to behave toward a goal in a particular manner. Conative loyalty, then, is a loyalty state containing the deeply held commitment to buy, noted in the definition.

### **Action Loyalty**

Study of the mechanism by which intentions are converted to actions is referred to as action control. In the action control sequence, the motivated intention in the previous loyalty state is transformed into readiness to act. The action control paradigm proposes that this is accompanied by an additional desire to overcome obstacles that might prevent the act. Action is perceived as a necessary result of engaging both these states. If this engagement is repeated, action inertia develops, thereby facilitating repurchase. Readiness to act is analogous to the deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, whereas overcoming obstacles is analogous to re-buying despite situational influences and marketing efforts having the potential to cause switching behavior (Oliver, 1997).

Unfortunately, there are also obstacles to consumer loyalty as well. The current research identifies two main concepts pertaining to the blocking of loyalty.

### **Consumer Idiosyncrasies**

Consumer idiosyncrasies can be thought of as things that consumers do for no other reason than to do them. Often times, choices are made and the consumer themselves can not explain why one product or service was made over another. An example would be variety seeking. Until all the different varieties of a service or a product has been sampled, or once one has distinguished itself as superior in every way, then loyalty cannot be developed (Oliver, 1999). Another example would be children who as they grow have different needs. As the child grows, the need for diapers no longer exists. Thus there is no repurchase and no loyalty to that company. Another example would be a smoker who quits smoking. In all these cases, aspects of consumer behavior that is totally out of the control of the product of service provider can sometimes, and often times do, lead to the impediment of brand or product loyalty. Other research has also indicated that a loyal customer is much more forgiving for a product defect, or small lapse in service. Bolton (1998, p. 45) states “experienced customers are less sensitive to such losses because they tend to weigh prior satisfaction levels heavily.” The cost of replacing disgruntled consumers already highlighted, this further supports the key role that customer loyalty plays.

### **Switching Incentives**

It has been suggested that loyalty is irrational (Oliver, 1997 & 1999). Because of this competitors’ can and do take advantage of this position, engaging consumers through persuasive messages and incentives with the purpose of attempting to lure them away

from their preferred offering. These verbal and physical enticements are the obstacles that brand or service loyalists must overcome. These switching incentives exist in different ways depending on what part of the loyalty stages is being addressed. The cognitive stage is the most easily changed through both direct and inferred information. Things like lower prices, better features and so forth are examples of how the cognitive thoughts of one product compared to a competitors' product can be changed. Because the affective is so closely tied to the cognitive stage, any kind of dissatisfaction arising from the cognitive part of the evaluation may now result in a bad attitude or negative feeling towards the usually preferred product. Things such as deterioration of performance (both real and imagined) and variety seeking are examples. In the conative realm, the actual loyalty to the buying intention is attacked. In effect neither of the previous two stages of loyalty have been changed or persuaded. Instead the competitor is taking a more direct approach. Claims of better performance, more features, even a better price have not been addressed. Instead, counter argumentative competitive messages have been used. Other examples include induced trial stimulus. Coupons, sampling and point of purchase promotions have all been utilized by companies in the past with much success (Oliver, 1999). Now that a better understanding of loyalty and obstacles to achieving it has been presented, the importance and potential impact of loyalty on a firm requires more discussion.

### **Importance of Loyalty**

The impact that loyalty can and does have on the business effectiveness of firms today can not be understated and because satisfaction affects loyalty, as described above, the next step is now to explore why loyalty is and can be so important.

Satisfaction affects loyalty and retention, which in turn increase revenues and lowers operating costs to increase profitability. In support of this argument, research using national satisfaction indices in both Sweden and the US shows that satisfaction has a significant positive impact on market value as well as accounting returns. But according to the satisfaction-performance logic, much of the effect of satisfaction on profits and sales growth is mediated by increased customer loyalty (Edvardsson, Johnson, Gustafsson & Strandvik, 2000, p. 917).

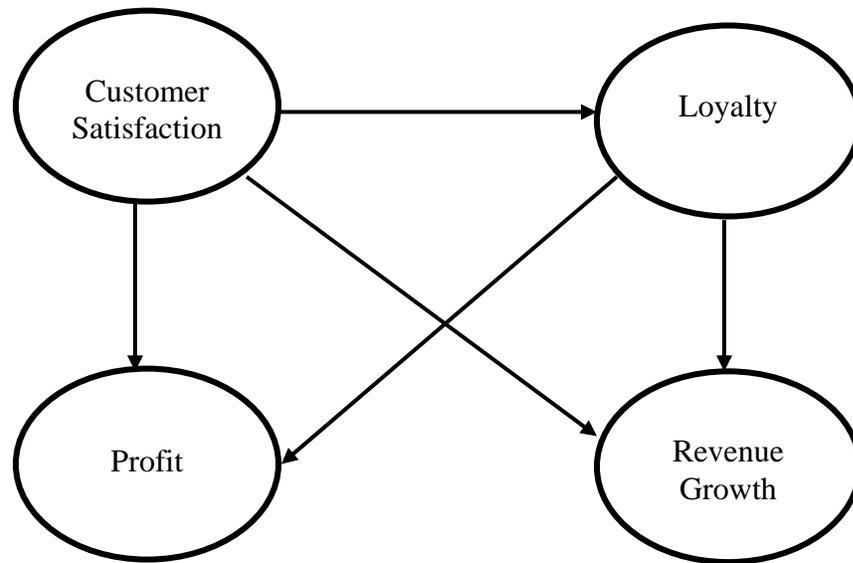
The satisfaction performance logic rests on the impact that satisfaction and loyalty have on different sources of customer-related costs and revenues. The logic argues that customer costs tend to be front-loaded or occur early in a firms' relationship with a customer, while profits tend to be back loaded or accrue only after a customer is loyal for some time. According to Edvardsson, Johnson, Gustafsson & Strandvik (2000) there are six factors that affect overall costs, revenues and resulting cash flows:

- **Acquisition Costs.** The costs of customer acquisition include incentive programmes, awareness advertising, prospecting costs, and the creation of internal customer accounts and records, all of which occur early in a firm's relationship with a new customer. Low acceptance of, or response rates to, tactics designed to sign up new customer create significant expenses before customers generate any revenues.
- **Base Revenues.** Over each time period that a customer is satisfied and remains loyal, the firm receives base revenue from that customer. This base revenue is

more evenly distributed the more frequent the purchase-consumption repurchase cycle, such as the monthly rate on a phone bill.

- **Revenue Growth.** As customers remain satisfied and loyal, opportunities arise to generate increased revenues. This revenue growth comes from two general sources, the cross-selling of additional products or service and an increase in purchase volume or account penetration. For example, a satisfied insurance customer may increase the size of existing policies while also adding new policies to cover other insurance or financial needs.
- **Operating Costs.** While revenues should grow, operating costs related to the purchase-consumption-repurchase cycle should decrease. The more a firm gets to know customers, their habits, problems and preferences, the easier and less costly it should be to serve them. This would include knowing what types of problems tend to occur on customers' vehicles, how they like their meals prepared, or when they want their hotel room serviced.
- **Customer Referrals or Word of Mouth.** Firms that generate outstanding levels of satisfaction and loyalty generate customer referrals and positive word of mouth. The referrals and word of mouth, in turn, generate additional sales revenues from friends and family.
- **Price Premiums.** Existing customers tend to pay a price premium compared with newer customers. Satisfied, loyal customers are more likely to be in a habitual or repeat purchase mode of behavior as opposed to a mercenary, problem solving mode. As a result, they are less likely to take advantage of price discounts as through a coupon or a bonus for switching to a competitor

**Figure 1 – Loyalty profit chain**



Source: (Edvardsson, Johnson, Gustafsson & Strandvik, 2000)

The authors support the effectiveness of this model by stating, “The overall result is a per customer profit stream that increased over time. The more loyal the customer and the longer the customer is retained, the more sales and profits the customer generates” (Edvardsson, Johnson, Gustafsson & Strandvik, 2000, p. 919). Bolton agrees when she states:

The calculations in this article show that changes in customer satisfaction can have important financial implications for the organization because lifetime revenues from an individual customer depend on the duration of his/her relationship, as well as the dollar amount of his/her purchase across billing cycles. Specifically, small increases in retention rates can have a dramatic effect on the profits of a company because the cost of retaining

an existing customer is less than the cost of acquiring a new customer, existing customers tend to purchase more than new customer, and there are efficiencies in dealing with existing customers rather than new customers (1999, p. 46).

As can be seen from above, the impact that satisfaction and its role in the formation of loyalty play a key role in the continued success of business. Combine this with the especially competitive nature of the services industry and the unique nature of services in general, and the relevancy of studying satisfaction becomes clear. Because of the unique nature of sporting event venues, the loyalty of fans' attending such events has been measured, but in a very unique way. Instead of measuring a fans loyalty to the venue itself, instead previous researchers have measured the loyalty of the fan to the team.

### **Team Identity**

The degree to which fans identify themselves with a certain group or sports team has been examined by previous researchers in an attempt to explain spectators satisfaction, attendance and intentions to purchase the products of corporate sponsors (Madrigal, 1995; Madrigal, 2000; Laverie & Arnett, 2000; Dale, Iwaarden, Wiele & Williams, 2005). Borrowing heavily from the psychology literature, Madrigal (1995, 2000) presents the idea that fan-ship is a form of social alliance. This view suggests that discrete social categories such as organizational memberships, age, cohorts and religious groups often become incorporated inextricably with a person's sense of self. Such a person is likely to say that the group is a part of me. For those most highly identified, self-categorization involves the private acceptance of the group's norms, values and goals

which, in turn, leads to prototypical behavior. These individuals usually display an increased awareness of the expectations of other group members, and will strive to meet those expectations. In addition, highly identified sports fans view team success and failure as personal success and failure (Madrigal, 2000). More importantly, the results of Madrigal's (2000) study support the idea that highly identified sports fans are more likely to purchase corporate sponsors of their favorite team. While the central focus of this project is not to examine fans' identity levels and their intent to purchase certain items, the idea that fans may place a different amount of importance on the different services offered by the venue based on their level of identity with the team is an intriguing one. The question of how much does fan identity influence; if at all, the cognitive evaluations of satisfaction has been assessed in a recent study conducted by Brady, Voorhees, Cronin & Bourdeau (2006). In their study, respondents were separated into two categories, high involvement and low involvement, after which the mediating role that valence plays on satisfaction was assessed. The results indicated that identity was a mediating factor of customer satisfaction, with the outcome of the game playing a larger role in the evaluation of satisfaction for fans' classified as low involvement and less of a role for highly identified fans (Brady, Voorhees, Cronin & Bourdeau, 2006). These results support the idea that the level of fan involvement does, in combination with the game outcome, effect a fans' evaluation of satisfaction and so must be accounted for.

Another study conducted by Madrigal (1995) also sought to explain consumer satisfaction in sporting event venues by incorporating team identity, but did not directly link it with the outcome of the game. Instead, the quality of the opponent and the level of

disconfirmation along with the level of team identity was used in order to help explain the final amount of satisfaction.

Yet another study (Laverie & Arnett, 2000), separated involvement into two distinct phases, situational involvement and enduring involvement. These two items, in combination with overall satisfaction and attachment were then used to explain fan attendance and their intent to come back in the future. In essence all three studies have approached the role of team identity in three distinct ways and one (Laverie & Arnett, 2000), has broken team identity down into both short term and long term classifications. While all three studies had significant findings in terms of explaining fan satisfaction and attendance, the differences in approaches used by the researchers on serves to highlight the need to conduct more research in this area.

### **The Importance of Satisfaction in Tourism and Special Events**

Research in the area of tourism and special event management has often times focused on the importance of satisfaction and service quality as a means of remaining competitive and profitable. Several factors have played a role in the need to better understand what satisfies the consumer of tourism and special event functions and how satisfaction has changed in the eyes of the consumer.

One of those factors has been termed hyperreality by previous researchers (Rojek, 1993; Brown, 1995). In essence this phenomenon is viewed as the blurring between reality and the replication of the real world. Museums and heritage centers represent past events and eras while theme parks re-create different parts of the world on one site and some attractions are based on fictional characters or television series and films. Simply stated, the unrealistic representations of the outside world by theme parks such as Disney

World are what consumers now expect in addition to high standards of provision and customer care. Understanding what these levels are in the eyes of the consumer plays a key role in the ability of a special event to meet the expectations of its patrons. The idea that different consumers do have different expectations is not new, and has been conceptualized via a consumer's zone of tolerance (Zeithaml & Bitner, 2000).

### **Zones of Tolerance**

An important development in the evolution of satisfaction has been the development of the zones of tolerance theory. In essence, it has been found that customers hold several different types of expectations about service. The first, desired service, is best thought of as the level of service that the customer hopes to receive. This is a combination of what the customer believes can be and should be provided in the context of customer service and service quality. The next, lower level of expectation is what can be called the threshold of acceptable service, termed adequate service. In the end, this is the level of service that the customer will accept (Zeithaml & Bitner, 2000). If conceptualized as points on a line, the space between the two points (adequate service and desired service) can be thought of as the zone of tolerance. If service drops below the adequate service point, the minimum level considered acceptable, customers will be frustrated and their satisfaction with the company undermined. If service performance exceeds the top point, desired service, customers will be very pleased and probably quite surprised as well (Zeithaml & Bitner, 2000).

Different customers will have different zones of tolerance. Some customers will have narrow zones of tolerance, requiring a tighter range of service from providers, while other customers have a larger zone of tolerance. Typically, time can play a factor in this

narrowing or expanding zone of tolerance. Busy customers, who are tight on time, or running late for a meeting or an airline flight, will have very tight zones of tolerance. On the other hand, a business traveler that arrives at the airport in plenty of time to catch a flight will be much more relaxed, and thus have a much wider zone of tolerance. Another factor that is more company controlled is price. It has been found that higher prices do not necessarily drive up expectations, but the adequate services level may increase, thus causing the overall zone of tolerance to become smaller (Zeithaml & Bitner, 2000; Hoyer & MacInnis, 2001). Zones of tolerance will also vary depending on the service dimensions.

In essence, the more important the factor, the narrower the zone of tolerance is likely to be. Customers are likely to be less tolerant about unreliable service, broken promises and service errors than other service deficiencies. Of course, it is the consumer that is going to determine which parts of the service provided are the most important and which ones are secondary. For example, a sports fan that is very dedicated to the team may place a very high level of importance on the ability to buy paraphernalia associated with their team in the confines of the actual sporting event venue. In contrast, a spectator that is attending the game as more of a social activity may be more concerned with how long the line for the bathroom is. The idea that importance is a determinant of a zone of tolerance can also be broadened to the overall evaluation of satisfaction. In other words, the level of importance and what is most important to the consumer is going to greatly affect the level of satisfaction achieved. Because different consumers place importance on different aspects of the service encounter, it is important for the service provider to understand which aspects are the most important in the eyes of the consumer. As can be

seen from the example above, zones of tolerance are always dictated by the consumer, and the factors that influence how the consumer defines their zone of tolerance are very situational.

Another issue directly affecting the tourism industry as a whole, and special events are the ever increasing expectations of consumers. Because of the unique nature of the services industry, some have argued that no other business feels the effect more of changes in consumer expectations, than the services industry (Schor, 1998; Williams & Buswell, 2003). One reason for this may lie in the unique nature of services themselves and the difficulties of providing services, especially in a setting as unique as a sporting event venue.

### **Satisfaction Defined**

The development of a working definition of satisfaction has been evolving since the early 1970's. Since then, one definition, presented by Oliver (1991, 1992, 1993, & 1997), has been the one most prominently used by researchers. Oliver states that, "Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under-or-over fulfillment" (Oliver, 1997, p. 13). Inherent to this definition are several key points.

First, a satisfaction evaluation results at the end of the consumers' processing activities and not necessarily when product and service outcomes are observed. This allows for both rapid judgments of products that are consumed relatively quickly, as well as judgments of the satisfaction resulting from products with lengthy consumption periods. This does not, however, mean that consumers cannot make some form of

satisfaction evaluation during any part of the consumption process. In actuality, satisfaction evaluation starts from the moment that consumption begins, and as such, some form of evaluation can be given while the overall assessment of satisfaction is being developed.

Secondly, satisfaction can be viewed in terms of singular events leading up to a consumption outcome and as a collective impression of these events. Moreover, consumers can be satisfied or dissatisfied with the level of satisfaction received. The idea that a guest could be satisfied but still unhappy with the end result leads to the theory that expectations play a large role in the evaluation of satisfaction. For example, a college football fan that can only attend one of the team's home games a year will expect to have a wonderful overall game day experience. Because this is the only game that the fan will be able to attend, the expectations that the fan has are very high. While the fan may experience a decent level of enjoyment, when compared to the expectations of a fantastic experience, the end evaluation may be one of dissatisfaction. If this level of decent service had been received during any other game, the end result may have been positive, but because the expectation of phenomenal service was present, adequate service was found to be disappointing.

### **Satisfaction Research in Sporting Event Venues**

Recently, researchers from the field of sports management and marketing have started to conceptualize and measure the two constructs of service quality and customer satisfaction. These researchers have followed their colleagues from other service sectors (banking, insurance, hospitality, financial and health services) and have presented studies that model service quality in various sport settings. The vast majority of this research has

examined service quality in participant/recreation sport settings-usually sport and fitness centers. In contrast to these studies of participants, research in other parts of the sports industry-in which the consumer enjoys sport as a spectator-relatively few research papers have been presented in the literature. The limited research in this sector of the sports industry is negatively related to the tremendous social and economic impact of professional spectator sports today-especially in view of the fact that several theoretical papers have highlighted the importance of one of these constructs (service quality) for professional sports clubs. The concept of the other construct, customer satisfaction, has also received little attention from sport management researchers (Theodorakis, Kambitsis, Laios & Koustelios, 2001). This lack of research is disturbing when one considers the large amount of research that has concluded that customer satisfaction may be the most important aspect of the services industry (Parasuraman, Zeithaml & Berry, 1985; Westbrook & Oliver, 1991; Mano & Oliver, 1993; Churchill & Surprenant, 1982). Van Leeuwen, Quick & Daniel (1999, p. 187 ) state: “sport management researchers have neglected the study of customer satisfaction, event though the literature has suggested that satisfied customers are significant to organizational prosperity.”

### **Measures of Satisfaction**

Because of the importance of both service quality and satisfaction to the services industry particular attention has been placed on the development of accurate measures of both by researchers and managers. Two schools of thought have emerged from the development and testing of such scales, most of which has centered on the well known SERVQUAL scale (Berry, Zeithaml & Parasuraman, 1985). First conceptualized as 10 points Berry, Zeithaml and Parasuraman (1985) reduced this original scale to five

determinates of satisfaction, which is expressed via the acronym RATER. RATER stands for the five dimensions that Berry, Zeithaml & Parasuraman found to be especially important in the eyes of the consumer (O'Neill, 1992). The SERVQUAL instrument is one of the most commonly used constructs when attempting to measure service quality and satisfaction. In essence the five elements of the RATER model are:

- **Reliability:** Ability to perform the promised service dependably and accurately.
- **Assurance:** Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- **Tangibles:** Physical facilities, equipment, and appearance of the location.
- **Empathy:** Caring, individualized attention, and appearance of personnel.
- **Responsiveness:** Willingness to help customers and provide prompt service.

Berry, Zeithaml & Parasuraman believe that these five dimensions are a concise representation of the core criteria that customers employ in evaluating service quality (O'Neill, 1992). This scale is considered to be an indirect or disconfirmation measure of service quality and satisfaction (Yuksel & Rimmington, 1998). This approach seeks to explore the relationship between customers' pre-purchase expectations and their perceptions of service performance. As consumers evaluate the levels of the service performance, they typically cannot help but compare that performance to what they expected. In turn, these expectations provide a baseline for the assessment of a customers' level of satisfaction. These models contend that service quality can be conceptualized as the difference between what a consumer expects to receive and his or

her perceptions of actual delivery. They suggest that product and service performance exceeding some form of standard leads to satisfaction while performance falling below this standard results in dissatisfaction (Wilkie, 1990; Wells & Prensky, 1996; Oliver, 1997). According to Mowen (1995) this expectancy disconfirmation approach helps explain consumer perceptions of service quality as well as consumer satisfaction judgments. SERVQUAL has been extensively researched to validate its psychometric properties and has been applied in a wide variety of sectors (Lewis 1987; Lee & Hing 1995; Ryan & Cliff 1997; Lam, Wong & Yeung 1997). Customers are asked to self-complete each section of the survey on the basis of a seven point Likert scale which extends from 1 (strongly disagree) to 7 (strongly agree). Measures of service quality can be derived by subtracting the expectation scores from perception scores, which can also be weighted to take account of the relative importance of each quality dimension. In turn these importance scores allow managers to focus attention where it is likely to have most impact or where it is most needed. The scores across all the questionnaires are summed and averaged to find a score for each question. The results of the questions within each dimension are then averaged to obtain a score for each dimension which can then be used to highlight how well an organization is performing in light of customer expectations.

The benefits derived from this approach are clear and may be summarized as follows:

- SERVQUAL gives management a clear indication of how the company is performing in the customer's eyes both individually and en mass.
- It helps prioritize customer needs, wants and expectations by identifying what is most important in the customer's eyes. As stated this information can be gleaned from the weighting of individual dimensions.

- It allows the organization to set an expected standard of performance that can then be communicated to all staff and patrons.
- It can also identify the existence of any gaps between customers and providers and thereby helps focus improvement efforts by directing organizational energies at closing these gaps.

While the SERVQUAL technique has attracted a lot of attention for its conceptualization of quality measurement issues, it has also attracted considerable criticism. Some researchers have debated whether the dimensions of SERVQUAL are consistent across industries; others have suggested better wording for some of the scale items (Babakus & Boller, 1992). In addition, researchers have asked whether the calculated difference scores (the difference between expectations and evaluation) are appropriate from a measurement and theoretical perspective (Brown, Churchill & Peters, 1993). From a measurement perspective, there are three psychometric problems associated with the use of difference scores: reliability, discriminant validity and variance restriction problems. A study by Brown et al., (1993) found evidence that a number of psychometric problems arise with the use of SERVQUAL; they recommend, instead, use of non-difference score measures which display better discriminant and nomological validity. As mentioned above, other researchers have suggested a need for better wording for some of the scale items (Bolton & Drew 1991). Customers find it hard to differentiate between many of the scale items, particularly when “negative forms of questions are used” (Hope & Muhlemann, 1997, p. 288). There has also been debate surrounding the practicalities of administering the instrument, principally about whether it is practical to ask consumers about their expectations of a service immediately before consumption and

their perceptions of performance immediately after the service encounter. Customers may become tiresome or distressed as a result of being asked to complete both surveys. Some analyses have therefore used combined single scales to measure gaps (Carman, 1990; Babakus & Boller 1992). It has been suggested that expectations may not exist or be clear enough in respondents' minds to act as a benchmark against which perceptions are assessed (Andersson, 1993; Iacobucci., Grayson, & Omstrom, 1994). Furthermore, it is argued that expectations are only formed as a result of previous service encounters, that is, perceptions feed directly into expectations (Kahneman & Miller 1986; Teas, 1993). Consequently, customers have a tendency to circle strongly agree or very important for all aspects. Of particular interest is the fact that the SERVQUAL scale is solely based on cognitive interpretations of service, and does not reflect any of the affective elements.

It therefore seems apparent from this more recent research that SERVQUAL encapsulates only certain aspects of service quality, and that it fails to capture other potentially less controllable components that may have a greater impact upon evaluations of the quality of the service provision (Coulthard, 2004, p. 483).

Other researchers have also questioned the use of the SERVQUAL instrument when it comes to the measurement of service quality and satisfaction. For instance, Carman (1990) argues that SERVQUAL is not a generic measure that can be applied to any service. It should be customized to the specific service. Babakus & Boller (1992) also maintained that the dimensionality of service quality may depend on the type of services under study. In addition, in their empirical analysis, perceptions-only measures had higher correlations with an overall service quality measure and with complaint

resolutions scores than did the SERVQUAL measures. This finding was also supported in studies by Cronin and Taylor (1992).

Cronin and Taylor (1992) argued that SERVQUAL confounds satisfaction and attitude. They stated that service quality can be conceptualized as similar to an attitude, and can be operationalized by the adequacy-importance model. In particular they maintained that performance instead of performance-expectation determines service quality and thus developed an alternative measurement tool, SERVPERF, which concerns only performance. Here a more direct approach is used, in which a summary judgment scale is used to measure confirmation and disconfirmation. Thus avoiding the necessity of calculating difference scores, since the respondents can be asked directly the extent to which the service experience exceeded, met or fell short of expectations. In their empirical study, SERVQUAL appeared to have a good fit in only two of the four industries examined, whereas SERVPERF had an excellent fit in all four industries. A similar result was obtained from regression analyses (Lee, Yoo & Lee, 2000; Cronin & Taylor, 1992)

### **Application of SERVQUAL to sporting event venues**

As was highlighted earlier, there has been a considerable lack of research concerning fan satisfaction at sporting events when one considers the importance that these events play in the economic health of the communities that they occur in. However, a few studies have applied the commonly used SERVQUAL scale to different events in an attempt to better understand the determinants of consumers' satisfaction (O'Neill, Getz & Carlsen, 1999; Ralston & Crompton, 1988; Crompton & Love, 1995). O'Neill, Getz and Carlsen (1999) used a 21 item direct disconfirmation design that was based on

the previously validated SERVQUAL scale. Dimensions addressed by this scale include assurance, empathy, reliability responsiveness and the more tangible elements of the event experience. Items that were found to be of particular importance included the cleanness of the restrooms, the size and speed of the lines for vendors, the amount of seating, and the distance from the available parking and the actual venue. While this particular event was held outdoors, these same items can be considered very important in regards to developing a scale specifically for a sporting event venue.

In a 2001 study, Theodorakis, Kambitsis, Laios and Koustelios applied their previously developed SPORTSSERV instrument. This scale is also based on the ever popular SERVQUAL scale and contains the following five dimensions: Access, Reliability, Responsiveness, Tangibles and Security. Findings from this study found that all five dimensions were positively correlated with overall customer satisfaction. However, regression analysis revealed that reliability (Beta score of .715) and tangibles (Beta score of .286) exerted the strongest influence on overall satisfaction. The other dimensions (access, responsiveness and security) had very low levels of influence on the overall satisfaction of the respondents. Another limitation presented by the authors is the fact that the fans identification with the team was not measured and neither was the outcome of the game (win vs. loss).

### **Servicescape**

Because of the intangibility and variability of services in general it has often been hypothesized that consumers turn to the more tangible aspects of their service encounter (Jamal & Naser, 2001; Wakefield & Blodgett, 1994). Support for this idea comes from empirical evidence suggesting that the tangible and physical surroundings of the service

environment can have a significant impact on customers' perceptions of service quality (Wakefield & Blodgett, 1999; Jamal & Naser, 2001). Sometimes referred to as the servicescape, these items are the physical plant of the stadium in which the actual service is being provided. Items such as overall appearance, elevators, signage, bathrooms, vendor stations, seating and others are evaluated by the consumer. The positive or negative evaluation of these items (and others) will then, in part, help to determine the overall evaluation of satisfaction. For example, a fan that is concerned about not missing any game play will place a great importance on the number of restrooms and how quickly the lines for those restrooms move. This is opposed to a fan who may be attending the game for primarily social reasons, in which case line delays that cause them to miss part of the game are not as important as the actual cleanliness of the restrooms themselves.

### **Servicescape in Sporting Event Venues**

While highlighted previously, servicescape has been applied directly to sporting event venues and as such deserves more attention. Servicescape has been found to play a key role in the formation of consumer satisfaction in sporting events venues (Wakefield & Blodgett, 1994, 1996). The reason for this is the fact that consumers spend a relatively large amount of time when engaged in a sporting event, as opposed to most other service encounters. For example, when going through the drive through of a bank, a customer may only spend a couple of moments interacting with the facility and service providers of that bank. On the other hand, customers may spend up to five hours or more inside a sporting event facility. Research has indicated that in such instances that the perceived quality of the servicescape plays an important role in determining whether or not consumers are satisfied (Wakefield & Blodgett, 1994, 1996). More specifically the

authors state “the layout and design of a stadium or arena may partly determine whether sports fans will stay for the entire game or exit to avoid congestion at crowded games (Wakefield & Blodgett, 1996, p. 45).

Bitner (1992) identifies three primary dimensions of the servicescape that influence customers holistic perceptions of the servicescape (or perceived quality) and their subsequent internal (satisfaction with the servicescape) and external responses (approach/avoidance, staying repatronage). These dimensions are:

1. Ambient conditions (weather, temperature, air quality, noise, music, odors).
2. Spatial layout and functionality (the way in which equipment and furnishings are arranged, and the ability of those items to facilitate consumer’s enjoyment).
3. Signs, symbols and artifacts (signage and décor are used to communicate and enhance a certain image or mood, or to direct customers to desired destinations).

More specifically the following five dimensions have been identified as important in the leisure service context (Wakefield & Blodgett, 1996):

1. Layout accessibility-refers to the way in which furnishings and equipment, service areas and passageways are arranged, and the spatial relationships amount these elements (Bitner, 1992). An effective layout will provide for ease of entry and exit, and will make ancillary service areas such as concessions, restrooms and souvenir stands more accessible.
2. Facility aesthetics-A function of architectural design, as well as interior design and décor, both of which contribute to the attractiveness of the servicescape. From an external viewpoint, as customers approach or drive by restaurants,

casinos, stadiums and other leisure services, they are likely to evaluate the attractiveness of the exterior of the facility. Once inside the service facility, customers of leisure services often spend hours observing (both consciously and subconsciously) the interior of the facility. These evaluations are apt to influence their attitudes toward the place. In addition to the appeal of the facility's architectural design, customers may be affected by the color schemes of the facility walls, facades, floor coverings and seats. Unpainted or dull colored facades, seats and steps may be relatively unattractive compared with brightly colored walls seats and steps. Other aspects of the interior design, such as ornamental signs, banners, pictures and other fixtures, may also service to enhance the perceived quality of the servicescape.

3. Seating comfort-is likely to be a particularly salient issue for customers of leisure service settings who must sit for a number of hours observing or participating in some form of entertainment. Seating comfort is affected by both the physical seat itself and by the space between the seats. Some seats may be comfortable/uncomfortable because of their design or condition (new vs. deteriorating, padded vs. non-padded, bench seats vs. seats with backs). Seats may also be comfortable/uncomfortable because of their proximity to other seats; customers may be physically and psychologically uncomfortable if they are forced to sit too close to the customers next to them. Cramped seating quarters are likely to be perceived as displeasing and of poor quality. The amount of space between rows of seats is also an important dimension, in that it affects the ease with which customers may exit their seats to use

ancillary service areas. Furthermore, when rows are too narrow other customers are frequently forced to stand or sit in their seats to let other customers pass by.

4. Electronic equipment and displays-deliver and enhance the primary service offering. For example, high quality projection and sound systems at football stadiums are intended to enhance the overall viewing experience for all fans and also display information and entertain customers during gaps in the primary service offering (in between plays or periods at sporting events). This type of electronic display can play an important part in the servicescape because it makes waiting times more pleasurable. For example, in sports settings modern graphic scoreboards can be used to generate excitement in between innings or periods. Besides providing game scores and player information, some scoreboards allow for sports trivia quizzes, instant replays and highlight videos that keep customers entertained throughout the event.
5. Cleanliness-is an important part of the servicescape, especially in those situations in which customers must spend several hours in the leisure service setting. Many consumers implicitly associate cleanliness with the quality of the servicescape. For example, whether or not floors and carpets are clean, whether restrooms are polished and disinfected, whether or not concession areas are kept clean, and whether garbage cans are overflowing or if they are continually emptied, etc will affect the perceived quality of the service facility.

In their 1996 study, Wakefield and Blodgett, found that all five of the servicescape factors had a positive effect on the perceived quality of a sporting event venue. Perceived quality had a positive effect on satisfaction, which in turn had a positive effect on the length of time customers desired to stay in/at the leisure service and on their repatronage intentions.

### **Core Service and Employee Service**

As was mentioned earlier, the interaction between service quality and the leisure tourism industry has been broken down across two separate domains, one being the physical plant (servicescape) and the other being the interaction between the consumer and the service provider. Inherent to this human interaction is the role of the core service and the employee. Here the core service is defined as the processes by which the service is delivered, whereas the employee service refers to the behaviors or performances of the employees in the delivery of the service (Grace & O’Cass, 2004). The authors go on to comment:

Where there is consensus within the literature that both the core service and employee service influence the customers’ perception of value and their level of satisfaction with the service, some advocate that increasing emphasis should be placed on the interpersonal dimensions of the service offering (Grace & O’Cass, 2004, p. 453).

As can be seen from this quote, the core service is important, but the employee service also plays a crucial role. This emphasis on the role of employees can also be tied to the general intangibility of services as a whole. Because of this, consumers look at the behavior of the employees as a means of evaluating their overall satisfaction level

(Stauss, 2002; Jamal & Naser, 2001). This human interaction can also be seen as being affected by the service recover process, which has been addressed earlier in this chapter. As the service process breaks down, consumers are increasingly more reliant on the service that they receive from their service provider. The ability of this service provider to overcome the initial breakdowns in service and rectify the situation is key.

### **Introduction to Emotions**

The importance of customer satisfaction in the service industries has been well researched and documented, with various scales being developed to measure the cognitive aspect of this construct (Oliver, 1997; Parasuraman, Zeithaml & Berry, 1994; Cronin & Taylor, 1992). Another determinant of satisfaction that has until recently been largely ignored by researchers is the role that emotions play in the formation of satisfaction. As was mentioned earlier, one of the criticisms of the SERVQUAL scale was that it only addressed the cognitive aspects of satisfaction (Coulthard, 2004). Previous research has overwhelmingly focused on cognitive components of customer Satisfaction and much of this has used some form of disconfirmation to compare perceived levels of performance with some form of benchmark standard (Liljander & Strandvik, 1997; Yu & Dean, 2001). While these studies have concluded that there is a significant relationship between service quality, customer satisfaction and future behavioral intention, the validity of the findings is now being questioned in that they relate solely to measures of this more cognitive component of the satisfaction construct (Liljander & Strandvik, 1997; Yu & Dean, 2001). Service quality and satisfaction are believed to contain an affective (emotional) component without which customers' responses cannot be fully accounted for (Liljander & Strandvik, 1997). A growing body

of literature clearly indicates that the positive and negative emotions that consumers associate with the service play an important role in subsequent satisfaction and future behavioral intention (Allen, Machleit & Kleine, 1992; Oliver, 1993; Richins, 1997; Barsky & Nash, 2002). Indeed, it is now widely accepted that customer satisfaction levels and longer term behavioral intention are to some extent influenced by consumer emotion during the pre-actual and post-consumption stages of the service encounter (Oliver, 1997; Cronin, Brady & Holt, 2000; Barsky & Nash, 2002). While the connection between emotions and satisfaction has been recognized by both managers and academics, most current forms of satisfaction research do not address emotional output (Liljander & Strandvik, 1997; Yu & Dean, 2001). Other researchers have noted that affective reactions deserve specific study in regards to their interactions with consumption stimuli because consumer emotions may be as essential as cognitive processes to fully understanding consumer behavior (Mattila & Wirtz, 2000). In addition, researchers have indicated that because the consumer is more actively engaged in a service encounter and thus has more investment in that interaction, consumer emotions would be more significantly engaged by some service encounters than by advertisements or even many product purchases (Price, Arnould & Deibler, 1995). Affect has also been found to be an important dimension of the service experience, as well as a determinant of consumer satisfaction (Mattila & Wirtz, 2000). The impact that emotions play in the formation of consumer satisfaction, therefore, cannot be ignored by any researcher trying to maximize his or her understanding of the satisfaction construct.

Despite the connection between customer satisfaction, future behavioral intention, service quality and emotions few studies have addressed these issues in the literature

when it comes to sporting events (Theodorakis, Kambitsis, Laios & Koustelios, 2001). This presents a dangerous situation for the operators of such venues when one considers the need to attain a competitive advantage through the understanding of consumer needs and providing services that meet those needs in an effective and efficient manner (Theodorakis, Kambitsis, Laios & Koustelios, 2001).

### **Emotions and Service Encounters/Satisfaction.**

Modern research on the role that emotions play in the formation of satisfaction has indicated that emotion(s) can play two different roles when it comes to satisfaction. The first is affect as a mediator. Oliver (1997) as well as Oliver & Westbrook (1993) propose that emotion can be a mediator between cognitive evaluations, such as perceived product performance, or disconfirmation of some comparison standard and satisfaction. When a service is seen as consisting of several different attributes which can be evaluated by the consumer during and after consumption, each of these service attributes, or evaluations of service attributes, may also be seen as a potential source of negative or positive affect (Liljander & Strandvik, 1997). In effect when a product fails to live up to a customers' needs or expectations, it is thought that they will respond with negative emotions (Oliver, 1997, Oliver & Westbrook, 1993). The opposite is also true in that when a product is perceived to exceed expectations, positive emotions will then occur.

The second role that emotion is thought to play in satisfaction is as an independent variable. In other words it is believed that by adding an affective element to a cognitive construct, that more of satisfaction can be explained than by either construct on its own. (Liljander & Strandvik, 1997; Liljander & Bergenwall, 2004, Mattila & Wirtz, 2000).

Unlike the previous theory, which bases the resulting emotions on the product performance, (much more common in a reactive service setting) some researchers have suggested that, instead of the product performance that the ability of the product to elicit certain emotional responses is the actual basis on which the satisfaction judgment is made. In much the same way that disconfirmation works for cognitive aspects of a service encounter, the same idea can be applied to emotions as well. Thus, if a certain emotion(s) is expected as part of the consumption process a comparison at the end of service will be made, and then a satisfaction judgment will be rendered. For example, a movie patron that attends a movie because they enjoy experiencing the emotion fear in a relatively safe setting, will base his/her satisfaction with the movie experience on the movie's ability to invoke the fear emotion. So, if the movie patron is, in fact, scared by the movie, then a confirmation of the expected emotions has been met or exceeded and the guest is satisfied. On the other hand, a movie patron with the same expectations, but finds the movie to be not the least bit frightening, would not have his/her expectations met and will have a dissatisfying experience (Phillips & Baumgartner, 2002).

Another approach is very simple and consists of a more performance-based idea towards emotions. In this theory, if consumers perceive that product performance is good, then they will experience positive emotions, whereas if they perceive that performance is bad, they will experience negative emotions (Westbrook, 1987).

An interesting addition to the role that emotions play in satisfaction is the idea that emotions are a result of some cognitive process. Oliver (1997) proposes this idea as an act of appraisal. Appraisal being the evaluation of the significance or worth of an event. Oliver goes on to state:

That when evaluating an event in life, two elements of cognition come into play. The first is perceived knowledge, what is believed to be fact. The second is a judgment of what this knowledge means from the standpoint of ones personal well-being. Thus, facts are evaluated on the basis of their significance for goals and aspirations, and it is this appraisal which gives events emotional significance. In essence, knowledge is compared to goals and emotions results (Oliver, 1997, p. 319).

This theory runs concurrent to the idea that the importance of a service encounter or product will directly affect the level of disconfirmation caused by the service or the product. The importance of the event at hand will play a direct role in the degree to which an emotion is experienced. This now leads to some of the different structural models of emotions.

In order to meet those needs, managers need effective tools when it comes to measurement (Price, Arnould & Deibler, 1995). This need is heightened even more when one considers the unique nature of sporting event venues and the fact that the marketers and managers of sporting events have very little control over the quality of the actual sporting event itself. (Theodorakis, Kambitsis, Laios & Koustelios, 2001; O'Neill, Getz & Carlsen, 1999). Sporting events present a unique service research setting, with a great number of consumer/system interactions across a wide range of services. Sports tourism has been recognized by researchers as a definitive segment of the tourism industry and as such the quality of the service provided will have either a positive or negative effect on future behavioral intentions, word of mouth and/or the strength of the relationship between the customer and the service provider (Kouthouris & Alexandris, 2005).

As was highlighted in the previous section, the economic impact of sporting events on the communities that they are held in can be very large indeed. Globally, sports tourism is a growing part of the overall tourism industry and as such there is a need to understand what makes the consumers attending sporting events satisfied, outside of the actual outcome of the game or match.

### **Emotion Defined**

A review of psychology research reveals that a precise definition of the word emotion is all but impossible to find.

Numerous definitions of emotions have been proposed in the psychology literature and no consensus on any given definition has been reached. In view of the lack of research on consumption emotions it may be harmful to use a too narrow definition of the concept at this stage of research (Liljander & Bergenwall, 2004, p. 4).

Desmet (2003) has noted difficulties of definition and suggests that before we can measure emotions, we must first be able to characterize emotions and distinguish them from other states. Affective processes are usually operationalized as emotions and feelings that are related to actions (Wrightsmann & Sanford, 1975) and as humans; we are instinctively creatures of emotion. A broad definition is given by Oliver (1997, p. 294) who suggests that, "Emotion includes arousal, various forms of affect and cognitive interpretations of affect that may be given a single description." Other researchers (Bourne & Russo, 1998) have devised even more complicated definitions of satisfaction. The aforementioned authors believe that emotions are based on several aspects, some of which are inherent to the person experiencing the emotion, such as biological or cognitive

factors. Also contributing to emotions are outside influences, such as society and peers. Bourne and Russo (1998) continue with their description of emotions, highlighting the fact that physiological changes always accompany emotions. Interestingly enough the authors also comment on the fact that emotions can also differ based on how you think about a certain situation. Oliver (1997, p. 294) sums up this problem in the following:

Problems of definition may now be understood in terms of where emotion stops and where cognition begins. The greater the amount of cognitive interpretation required, the more cognitive the emotion becomes. A sense of achievement is a case in point. Perhaps this is why disagreement exists in the literature.

Adding to the confusion is the idea that emotions are in fact not completely universal. Different cultures that speak different languages may have differences in opinion about how emotions are expressed, interpreted, and defined. While it has been hard for researchers to define emotions in general, a much narrow definition has been developed for consumption emotions.

### **Consumption Emotion**

Consumption emotions refer to the set of emotional responses elicited specifically during product usage or consumption experiences, as described either by the distinctive categories of emotional experience and expression (joy, anger and fear) or by the structural dimensions underlying emotional categories, such as pleasantness/unpleasantness, relaxation/action, or calmness/excitement. Consumption emotion is distinguished from the related affective phenomenon of mood on the basis of

emotions relatively greater psychological urgency, motivational potency, and situational specificity (Oliver & Westbrook, 1991).

### **Reactive and Goal Directed Emotions**

Another important part of understanding emotions is the differentiation between reactive and goal directed emotions. Goal directed emotions are emotions that are derived from a situation that is meant to inspire specific emotions. An example would be a scary movie or an amusement park. Important to note is that in certain settings, emotions that are usually thought of to be negative (fear or disgust) can in fact be used as the basis for a positive overall evaluation. For example, a person that goes to a scary movie expects and anticipates to be scared by the movie. Failure to do so by the movie would result in a negative experience. On the other hand, reactive emotions are just that, a reaction to a service encounter, or product performance. These emotions are not necessarily anticipated, but are instead formed at the time of the actual consumption. These emotions can be positive, negative, neutral, or some combination of them all. In regards to sporting event venues, one can see how both goal directed and reactive emotions may come into play in such a setting. Certainly fan attendance is based on the anticipated positive emotions (goal directed) associated with their team's victory in the actual game. The opposite being the negative emotions generated by the teams loss, even if it was expected. Certainly the wide variety of service interactions between the fan, the physical plant, the employees and the services offered inside the stadium may also generate either positive or negative reactive emotions. The combination for the potential of both goal directed and reactive emotions again serve to illustrate the unique nature of sporting event venues, and point to the idea that without emotional scaling, not as much of the

satisfaction construct can be explained as could be when using emotional scales.

Liljander & Bergenwall (2004, p. 3) state:

However, it should also be observed that all services may arouse unplanned reactive emotions in the consumer. In addition, different segments of consumers may react with different emotions to the same service, and because of service variability, one consumers' perceived service quality and experienced emotions may vary from one service encounter to another.

As the previous quote points out, emotions have many of the same complications that service quality and satisfaction do, especially when it comes to trying to accurately define, measure, and evaluate them in a service setting.

### **Measuring Emotion**

In an effort to incorporate the measurement of emotions in service encounters previous researchers have had a tendency to borrow and adapt measures as developed by emotion theorists (Hosany, Ekinei & Gilbert, 2005). A review of these scales reveals the lack of a consistent approach when it comes to the measurement of emotion (Hosany, Ekinei & Gilbert, 2005). Popular scales to date include Izards' Differential Emotions Scales (Izard, 1977); Mehrabian and Russell's PAD Scale (Pleasure-arousal-dominance); Watson, Clark and Tellegen's (1988) Positive Affect and Negative Affect Scales (PANAS) and Russell's Circumplex Model of Affect, (1980) which has been adopted for this study. The first is Izards' Differential Emotions Scales (Izard, 1997), which is a shortened version of the original scale (Izard, 1972). It consists of ten emotions:

- Interest-Excitement

- Happiness-Joy
- Surprise-Astonishment
- Sadness-Grief
- Anger-Rage
- Disgust-Revulsion
- Fear-Terror
- Contempt-Scorn
- Shame-Shyness
- Guilt-Remorse.

Important to note is that the first two emotions are positive, the third is neutral (surprise) and the remaining seven are negative. These basic emotions can be experienced individually, or in some combination, such as anger, disgust and contempt. These three are often times referred to as the Hostility Triad (Oliver, 1997, Liljander & Strandvik, 1997, Liljander & Bergenwall, 2004). This scale is operationalized in the following way: Customers are typically asked to what extent, on a scale ranging from never to very often, that they have experienced these emotions. While this scale is the most common in consumer satisfaction studies, it does have its critics. Most notable this scale has been criticized for the predominance of negative emotions 7 out of 10 are considered negative. Furthermore, because the outcome of the actual game is either strongly positive (a victory) or strongly negative (a loss) the imbalance of Izard's scale towards the negative leaves it unusable in this setting.

Mehrabian and Russell's PAD Scale (1974) has been primarily used in marketing research to assess emotional response to different types of marketing stimuli (Richins,

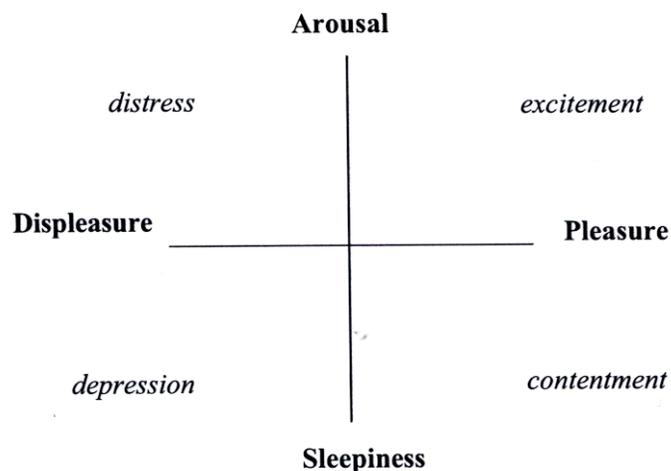
1997). While this scale's strength lies in its ability to measure consumers responses to store environments, its ability to asses service settings in which there is a high level of consumer to seller contact has been questioned (Richins, 1997). Furthermore, this scale does not actually measure the specific emotion generated such as fear or happiness. Instead it assesses the perceived pleasure, arousal and dominance elicited by a set of environmental stimuli. It contains 18 semantic differential items, six each for pleasure, arousal and dominance (Mehrabian & Russell, 1974). The need to distinguish the exact emotion and the degree to which that emotion was generated by the game day experience was considered central to the overall nature of the current research, thus rendering this scale unacceptable in a sports arena.

The PANAS Scale which was developed by Watson , Clark and Tellegen (1988) in a response to what they saw as a lack of both reliable and valid scales when it came to measuring emotions at that time (Watson, Clark & Tellegen, 1988). The authors discuss the fact that several studies had anomalous and inconsistent findings, with some studies finding the Positive Affect and Negative Affect to have low or nonsignificant correlations with one another, while other studies found the same scales to be highly correlated. With this in mind the authors set about developing a scale that more accurately measured the emotions of the respondents. Based on the author's focus group work and subsequent work with their student respondents, a scale with high levels of reliability and validity was developed. However this scale, in the words of the authors, more accurately measured the mood of the respondents and did so over time (Watson, Clark & Tellegen, 1988). While the PANAS scale preformed well, it can be viewed as an overall evaluation of the respondent's mood, with factors from the past year influencing the responses.

While this scale definitely has its worth in certain research settings it was deemed unusable in the setting for this particular research. This was based on the fear that a scale incorporating influences from up to a year ago would cause confusion and overlapping in the minds of the respondents.

### **Russell's' Circumplex Model of Emotions**

According to Russell (1980), the interrelationships between different types of emotions are best described by a spatial model in which eight affective components are organized in a circular arrangement of pleasure-displeasure (misery), arousal-sleepiness, excitement-depression, and contentment-distress. Two of these pairs, pleasure-displeasure (misery) and arousal-sleepiness, are the main bipolar dimensions. The emotions fall on a circle in a two-dimensional space in a compass like manner.



**Figure 2-Circular Model of Emotions Source: (Russell, 1980)**

The emotions excitement, depression, contentment and distress help to define the quadrants of the space. According to Russell, all words of affect can be defined as a combination of degree of pleasure and degree of arousal. For example, excitement is defined as a combination of high pleasure and high arousal, and contentment as a

combination of high pleasure and low arousal. Polar coordinates for 28 affect words were created by giving the categories assigned scale coordinates based on their theoretical circular ordering. Russell found support for the two bipolar dimensions from several other studies on both verbal and non-verbal emotional expressions. He also presented examples of his own work that supported the circular order of emotions. (Russell, 1980; Liljander & Bergenwall, 2004; Liljander & Strandvik, 1997; Oliver, 1997; Mano & Oliver, 1993). This model was used as the basis for the emotional construct of this study. It was operationalized in a manner where the respondent was asked to rate the degree to which each emotion was experienced using a five point Likert Scale. Respondents were asked to do this for two distinct periods in time, the time period leading up to the game (tailgating) and then during the actual game.

### **Emotional Research in Sporting Event Venues**

While previous research utilizing emotional scaling in a sporting event venue is limited, one study conducted by Martin, O'Neill and Palmer (2007), sought to apply the previously discussed Russell's Circumplex model of emotions to a college football stadium. The main goal of the study was to examine what effect, if any, that emotional output had on the formation of overall customer satisfaction and future behavioral intention.

In order to accomplish this goal, a series of multivariate regression analysis were conducted with overall customer satisfaction and future behavioral intention as the dependant variables. The independent variables were emotional satisfaction and cognitive satisfaction, which was based on a modified SERVQUAL scale. A second battery of multivariate regression analysis was conducted with the same dependant variables,

however this time; only cognitive satisfaction was used as the independent variable. Results were then compared to assess the impact that emotional scaling had in explaining more of the variance in regards to overall customer satisfaction and future behavioral intention. When including emotional satisfaction, an adjusted R square of .470 was achieved with overall customer satisfaction as the dependent variable. In contrast, when only utilizing cognitive satisfaction as the independent variable, an adjusted R square of .440 was realized. In essence, the introduction of the emotional satisfaction allowed for only a minimal gain in terms of explaining overall customer satisfaction. Similar results were found for future behavioral intention. While these results do lend credence to the idea that emotional output does have an effect on overall customer satisfaction and future behavioral intention, the increases in explanation, while statically significant, was limited. The authors indicated that more research was needed in order to address these low levels of effect and pondered the idea that other factors may be contributing to overall customer satisfaction and future behavioral intention.

### **Summary**

This chapter has highlighted the pertinent literature in regards to the major constructs that form the basis of this study. Elements such as customer satisfaction, sporting event venues, team identity, servicescape and emotions have been defined and elaborated on. The next step is to now develop the theoretical framework that will later be tested, as well as the research hypothesis that will also be tested using both exploratory and confirmatory statistical techniques.

## **CHAPTER III**

### **METHODS**

#### **Research Considerations**

The basic goal of every business is to be profitable, and this concept certainly holds true for the managers and purveyors of sporting event venues as well. As has been highlighted earlier, in order to be profitable managers and organizations must have a clear understanding of what causes their customers to be either satisfied or dissatisfied.

However, because of the unique nature of sporting event venues, it becomes necessary to tailor the research to these venues. In relation to this project the end goal is to develop a cognitive scale specifically for sporting event venues, measure its reliability and validity and assess its ability to explain a consumers' cognitive satisfaction and future behavioral intention. In addition, this research will examine the effect of team identity and emotions on both customer satisfaction and future behavioral intention.

#### **Research Hypotheses**

Previous research in the area of event management and sporting event venues have used different methodology in order to evaluate customer satisfaction in these unique service settings. Some have used importance performance scaling (O'Neill, Getz & Carlsen, 1999) while others have applied the previously validated SERVQUAL scale or a closely related version of it (Theodorakis, Kambitsis, Laios & Koustelios, 2001; Kouthouris & Alexandris, 2005; Martin, O'Neil & Palmer, 2007). Other researchers have

investigated the impact that the physical plant has on the consumers (Wakefield & Blodgett, 1999, 1996, 1994). Some have borrowed heavily from the psychology literature and applied theories like team identity and emotions (Fisher & Wakefield, 1998; Madrigal, 2000, 1995; Wann & Branscombe, 1993). Based on the previous research that has highlighted the unique nature of sporting event venues and the lack of a cognitive scale developed specially for such arenas the researcher found it necessary to develop and then test a new scale that would be applicable to event sporting event venue with only slight modifications. Founded on the previously validated SERVQUAL scale (Parasuraman, Zeithaml & Berry, 1985) the scale developed here is anticipated to have a different number of dimensions than the five factor structure supported by the SERVQUAL scale. Formally known as RATER, the five factors included in the SERVQUAL scale are: reliability, assurance, tangibles, empathy and responsiveness. Based on the focus group work conducted in this project and on previous research the EVENTSERV scale is anticipated to have three more factors than the SERVQUAL scale. As such this now leads to the first hypothesis.

- H1- A different factor structure will be found for the EVENTSERV scale than the five factor structure SERVQUAL scale.

Certainly another important aspect of any new instrument is to simply assess the reliability and validity of such a scale. If such a scale is going to be used again it must display the proper amount of reliability in every application that it is used. This is true not only for a newly developed cognitive scale, but for any scales that are used when conducting survey research. Previous researchers have established that the minimum

level of reliability for studies in the social sciences is .50 (Pedhazur, E.J., & Schmelkin, 1991). With that in mind the second hypothesis has been developed.

- H2-All scales, measuring both cognitive and emotional output will display a minimum reliability level of .5

In line with H1 and the overall scope of this project is assessing what role, if any, emotions play in the formation of cognitive satisfaction. Previous researchers have indicated that emotions generated during the service encounter can and do have a role in the formation of the final satisfaction evaluation (Lijander & Strandvik, 1997; Yu & Dean, 2001; Oliver, 1997; Barsky & Nash, 2002). However these findings were based on survey work done in other parts of the service industry and not in sporting event management. In their 2004 study, Martin, O'Neill & Palmer, found that emotions did play a positive role in the formation of customer satisfaction and future behavioral intention. Thus it may be beneficial to assess what role that the positive emotions generated from both the pre-game and during-game time periods play in the formation of cognitive satisfaction. Emotional output in this instance has been based on the lack of negative emotions observed throughout the course of the study. Briefly the inability to attain enough surveys after a home loss (negative emotional output) limited the results to only the positive emotional states of the respondents.

- H3-Positive emotions generated from the game day experience will make a positive improvement to the overall model of cognitive satisfaction

Another key part of a fans' evaluation of satisfaction has been determined to be how much they identify with their team (Fisher & Wakefield, 1998; Madrigal, 2000, 1995; Wann & Branscombe, 1993). A seven item scale developed by Wann and

Branscombe (1993) has been used to assess the level of identification that a fan has with their team. Previous validation has occurred with a different sport than the current study (basketball vs. football) and in a different area of the country (Mid-west and North-east vs. the South-east). Because previous research has indicated that the level of importance a consumer associates with the service or product being evaluated will play a role in subsequent satisfaction evaluations, it stands to reason that the level to which a fan identifies themselves with the team will play a role in the formation of cognitive satisfaction and future behavioral intentions. Team identity has been utilized in previous research in order to help explain a consumer's satisfaction (Brady, Voorhees, Cronin & Bourdeau, 2006) and their future behavioral intention (Madrigal, 1995; Wann & Branscombe, 1993). Some have used the team identity as a direct indicator of future behavioral intention (Madrigal, 1995; Wann & Branscombe, 1993) while others have used it as a mediating variable reliant on the outcome of the actual game (Brady, Voorhees, Cronin & Bourdeau, 2006). As such the following hypothesis has been developed for testing.

- H4-The level of a respondent's identity with the team will affect the resulting levels of cognitive satisfaction and future behavioral intention.

As stated throughout the previous chapters, one of the main goals of this research is to evaluate the emotional output of the respondents, and then assess the emotional scales ability to explain more of the variance in future behavioral intention, in conjunction with the newly developed cognitive scale.

- H5-More of the variance for future behavioral intention will be explained when using emotional scaling, than with team identity alone.

## **Methodological Overview**

As the idea behind this project began to take hold and form, it was quickly realized that there were several problems that had to be overcome in order to end with a successful result. Most notable was the need to administer surveys to a portion of the population that would be representative of the entire population that typically attends a home football game, which is held in a location that is a dedicated sporting event venue. In addition to gaining a representative sample group, the venue was chosen for several reasons that were in-line with the main research questions. These were the fact that college football represents a highly emotional event that plays an important role in the lives of the fans in attendance. Furthermore, the large variety of service interactions between the consumer and the physical plant, the employees and the goods/services that they offer allowed for the evaluation of consumer satisfaction and their future behavioral intention. As such, the different types of research used in the design framework, the research sample, the research instrument and the research procedures will be addressed in the latter part of this chapter.

## **Qualitative and Quantitative Research**

According to Leedy and Ormrod (2005, p. 95) these two different research methods can be defined in the following ways:

quantitative research is used to answer questions about relationships among measured variables with the purpose of explaining, predicting and controlling phenomena. In contrast, qualitative research is typically used to answer questions about the complex nature of phenomena, often with

the purpose of describing and understanding the phenomena from the participants' point of view.

Another important difference between the two is that quantitative research is most often times used in an effort to either accept or reject specific hypotheses. On the other hand qualitative research does not look to explain specific hypotheses, but instead may help in the formation of hypotheses, which then must be tested using quantitative research. Qualitative research was used in this project in the form of several focus groups. This research was conducted in-order to construct a survey instrument that would as accurately as possible, measure the game-day experience, in the eyes of the consumer. In addition to ensuring that the measurement instrument is not only understood by the respondents, but also covers as many factors in their game day experience as possible, the qualitative research conducted in this study also allowed for the development of the EVENTSERV scale. The next step in the project after concluding the qualitative research and constructing the survey was to make use of quantitative research in order to test the ideas developed through the focus group work. This testing took shape in the form of both exploratory and confirmatory statistical testing and included: reliability testing, factor analysis, multivariate regression and structured equation modeling. The central aims of this work was to either support or reject the main research hypotheses.

### **Cross-sectional Studies**

A cross-sectional survey is perhaps best explained as being a snap shot in time. It is an evaluation given from any participant in the consumption process being evaluation and usually focuses on the most recent consumption episode (Leedy & Ormrod, 2005). Certainly one advantage of a cross-sectional survey is the fact the measurement

instrument only needs to be administered once, and as opposed to a longitudinal study does not have to be administered to the same people at different times. Such a design encourages participation based on the fact that the respondent will only have to fill out the survey one time and makes administration of such projects through different media types such as mailings and email much more effective. However, cross-sectional studies do suffer from the fact that they are only evaluating their chosen phenomena at a specific point in time. In essence, this limits the results of the study in both their application to the larger population and in the sense that evaluations are constantly occurring and being changed. Even the amount of time since the service encounter occurred and the survey administration may change or distort the respondent's evaluations. (For example, surveying guests the day after they check out of a hotel, compared to surveying them 6 months after their stay). Because of the projects need to capture a sample that is representative of the entire population and the need to attain as large of a sample group as possible, a cross sectional design was used in this project.

### **Research Setting**

Certainly using a venue that was accessible, provided an array of different services and that would allow for an emotional experience for its patrons became key in terms to fulfilling the goals for this project. As such, this study was set in the confines of Jordan-Hare Stadium. Located on the campus of a mid-sized southern university, Jordan-Hare seats approximately 86,000 patrons. Due to the highly emotional aspect of college football, the importance that it plays in the lives of its spectators and the large number of different services that such a venue must provide made Jordan-Hare an ideal choice of location for the study. In addition, the fact that there are seven home games a year

allowed for the observance of both victories and losses by the home team. The actual surveys were administered by both the researcher and undergraduate students that were trained in how to administer the surveys. Immediately following the conclusion of the game, the surveys were administered to the respondents once they had departed Jordan-Hare Stadium. Because the researcher wanted to achieve an accurate picture of the total population that attends football games at Jordan-Hare, the only criteria used for selecting respondents was their attendance on the recently concluded game, and their age (respondents are required to be over the age of 19 in order to participate in such research without a parent or guardians approval).

### **Focus Group Work**

The first focus group was conducted with a class of approximately 12 students. This class was chosen based on the experience of the class members in attending home football games, and the even split between males and females in the class. University demographics indicate that there is an almost even split between the number of males and females attending Auburn University and as such a class that was also equally split between the two sexes was deemed important. In addition, the class of students also contained sophomores, juniors and seniors, which based on priority ticket sales, are the most common segments of the student population that attend home football games. During the time in which the focus group was being conducted, the class was tape-recorded so that the responses of the subjects could be checked for accuracy later on. In addition, detailed notes about the subjects and their reactions to questions and the survey instrument. The first group was used as an opportunity to introduce the research subject in broad terms, and ask the subjects several open ended questions pertaining to what

activities they participate in while attending a home football game, their interactions with the staff, vendors and security. Other topics included the physical plant itself, and the behavior of other fans. After analyzing the results of the first focus group and organizing the information into factors that were representative of the information gathered a second focus group was used in order to implement what is commonly referred to as the card sorting technique. The same 12 students that were used in the first focus group, were again used for the second focus group. This was done in order to make sure that the information gathered from these students was represented in the 8 factors developed by the research. The students were broken up into three groups, and each group was given note cards that had the different factors that had been previously generated by the first focus group. The group was then asked to identify which factors they felt were relative to their game day experience and which factors were not. During this process it was determined by the focus group that 8 specific factors were relative to their game day experience. In conjunction with this information and previous research a 32 item questionnaire intended to measure the 8 factors identified by the two focus groups was completed. The third focus group, which again was the same class of 12 students, was given the 32 questions and note cards with the 8 previously identified factors on them and asked to place each question under the corresponding heading (factor). In this way it was confirmed that the respondents not only understand the question, but are able to identify which factor each question was addressing. This was done to not only test the clarity of the questions in the mind of the respondents, but to also evaluate the 8 factors. The final step was to administer the survey instrument as it would be for the actual survey administration. The students were asked to fill the survey out and then address any issues

with wording, grammar, layout and design, confusion with the scales or any other issues with the survey. Changes based on these responses included the wording of several questions, the layout of part of the survey and the size of the font used on the entire questionnaire. These changes were made in an effort to ensure as little confusion as possible on the part of the respondents in order to attain the best results possible. Other focus groups were also conducted by the researcher in a non-classroom setting. This type of focus group work occurred twice and was conducted with a mixture of students, alumni, parents of Auburn students and general fans of the football program. The selection of these focus group members was based on their experience in attending games at Jordan-Hare Stadium and the fact that they represented the other parts of the population attending home football games not addressed in the previous three focus groups. While the card sort technique was not applied in these settings, the general framework and goals were the same with these more informal focus groups as with the class of students. The main goal of these groups was to assess the survey after the changes made based on the recommendations from the class room focus group had occurred and re-confirmed that any issues of importance pertaining to the group's game day experience were covered in the survey.

### **The Research Sample**

For this project, the research sample, or the participants selected for survey administration, was based on two criteria. The first was that the respondent had attended the most recent football game. The second was that they were above the age of 19. This age limit criteria was maintained in order to receive approval for this project from the Internal Review Board of Auburn University. This approach was used in an effort to gain

a sample that was as representative of the general population that attends these games as possible. Not only does this increase the application of the results to the larger population that attends football games in Jordan-Hare stadium, but it also allowed the researcher access to very large number of potential respondents. Surveys were administered by both the researcher and students that had been trained in how to properly administer the surveys. The majority of surveys were collected in the first 48 hours after the conclusion of the game. The surveys were administered immediately following the game, and over the course of the following few days. The completed surveys were then turned in for data entry by the first Tuesday morning following the Saturday game. This was done in order to minimize any effects that time might have had on both the evaluation of the respondent's game day experience and their overall evaluation of satisfaction.

### **Adequacy of Sample Size**

The importance of the sample size, or in other words, the number of actual usable surveys collected, is very important when it comes to the statistical methods used to analyze the data collected. In statistical terms, there are two types of errors that can occur, therefore, certain precautions need to be taken in order to minimize their potential effect. The first is known as Type I Error. It is defined as "the probability of rejecting the null hypothesis when actually true, or in simple terms, the chance of the test showing statistical significance when it actually is not present" (Hair, Anderson, Tatham & Black, 1998, p. 10). In order to combat this problem, the researcher sets the alpha level, the acceptable limits for error, usually at .05. The second type of error is called Type II error. This is defined as "the probability of failing to reject the null hypothesis when it is actually false" (Hair, Anderson, Tatham & Black, 1998, p. 11). Mediated by both of

Type I and Type II error is the power, or the probability of correctly rejecting the null hypothesis when it should be rejected. Because Type I and Type II errors are inversely related, as Type I error becomes more restrictive (moves closer to zero), the Type II error increases. Reducing Type I errors therefore reduces the power of the statistical test. Complicating the matter is the fact that power is not only dependent on the alpha level; in fact it is determined by the following three factors:

- **Effect Size-** The probability of achieving statistical significance is based not only on statistical considerations but also on the actual magnitude of the effect of interest, or a difference of means between two groups, or the correlation between variables in the population, termed the effect size. A larger effect size is more likely to be found than a smaller effect and thus to impact the power of the statistical test. Effect sizes are defined in standardized terms for ease of comparison. Mean differences are stated in terms of standard deviations, so that an effect size of .5 indicates that the mean difference is one-half standard deviation. For correlations, the effect size is based on the actual correlation between the variables.
- **Alpha-** As already discussed, as alpha becomes more restrictive, power decreases. This means that as the researcher reduces the chance of finding an incorrect significant effect, the probability of correctly finding an effect also decreases.
- **Sample Size-** At any given alpha level, increased sample size always produces greater power of the statistical test. But increasing sample size can also produce too much power. By increasing the sample size, smaller and

smaller effects will be found to be statistically significant, until at very large sample sizes, almost any effect is significant (Hair, Anderson Tatham & Black, 1998; Babbie, 1992).

As can be seen from above, two of the variables affecting power are at least somewhat controllable by the researcher (alpha levels and sample size). Because both the research and student assistants were administering surveys, and the fact that surveys were administered after 4 different home football games, the number of usable surveys was 1,059. Because the surveys were administered in person, the response rate can not be calculated. Essentially the researcher asked the respondents if they would be willing to participate in the study before administering the surveys. In this way potential respondents were not given a copy of the survey and only those interested in filling a survey out were given one. In addition, because the researcher was always present to answer any questions and make to make sure that the questionnaire was filled out completely, this also reduced the number of surveys that could not be used based on incomplete questionnaires.

### **The Research Instrument**

The research instrument, or the tool used to gather the relevant data, took shape in the form of a paper-based survey. The survey was one page, front and back. The survey consisted of 20 questions that took up the entire front side as well as one quarter of the back page. The remaining space was dedicated to the 32 item cognitive scale that will be discussed in more detail in the results section. The surveys did not contain any type of identifying marks besides abbreviations which identified which game the survey was administered after. Demographic information included gender and the number of games

the respondent had attended at Jordan-Hare stadium. In addition each respondent was asked to identify which one of the following groups they felt best described them.

- **Fan of the Auburn Tigers**
- **Auburn Alumni**
- **Parent of an Auburn Student**
- **Current Auburn Student**
- **Fan of the visiting team**

The emotion section of the survey was based on Russell's (1980) Circumplex model of emotions and was measured via a five point likert type scale. The respondents were asked to rate the degree to which they experienced each of the eight emotions in conjunction with the time leading up to the game and during the actual game. The scale ranged from very low (1) to very high (5). Team identity was measured using a seven item scale developed by Wann and Branscombe (1993) entitled the Sports Spectator Identification Scale (SSIS). The seven questions ranged from ranking the importance that the home team wins, how strongly the respondent sees themselves as a fan, how strongly the respondents' friends see them as a fan, how closely the respondent follows the football team through different media outlets, how important being a fan is to the respondent, the level of dislike the respondent has for the football teams' greatest rivals and finally how frequently the respondent displayed the football teams' name or logo(s) at their place of work, in their home or on their clothing. Responses were different for each question; however the respondents were allowed to choose from 5 answers for each question representing a 5 point Likert type scale.

The cognitive scale was constructed of a 32 item scale measuring the respondent's satisfaction level, on a 5 point scale. The scale was anchored at (1) representing very dissatisfied, through to (5) which was highly satisfied. In addition to the scales described above, a one item question evaluating the fairness of the game was included, as well as two questions intended to measure the future behavioral intentions of the respondent.

### **Survey Administration**

The survey, including an informational letter that had been previously approved by the Internal Review Board of Auburn University, was administered after the conclusion of 4 home football games. The surveys were administered by trained assistants and a graduate student. Potential respondents were verbally asked for their permission to administer the paper based survey to them. Upon receiving their permission, the respondents were then given the survey with the information letter attached to it. Survey administration was limited to the first 4 days after the conclusion of the game. This was done in an effort minimize any confusion in the respondents in remembering the details of their game day experience.

### **Measurement of Variables**

The measurement of the variables was based on previously validated research methods. Selection of these different measures was based on their past performance in evaluating their intended data, applicability to the current project, ease of use and understanding by the focus group. In the case of the newly developed cognitive scale, the researcher based the scale development on a limited amount of previous research and intensive focus group work. Structured loosely around the previously validated SERVQUAL scale, this new scale incorporated 8 factors specific to sporting event venues.

These 8 factors were Employees, Access/Flow, Service Quality, Signage, Fan Behavior, Restrooms, Food and Beverage and finally, Parking. Emotional output, as well as the team identity scale was borrowed from previous research and then applied to a new research setting, namely a college football stadium.

### **Ethical Considerations**

In order to ensure that there is no breach of any ethical rules of conduct associated with the administration of this project, several precautions were taken. First and foremost was the approval and strict adherence to the rules and guidelines established by the Internal Review Board (IRB) at Auburn University. All necessary written approval was granted to the researcher before any part of the survey administration was conducted. Inherent to those guidelines were the promise of anonymity for the respondents. As such, no identifying questions were asked to the respondents and in no way can the researcher track a respondent based on his or her responses to the survey. At the completion of this project all surveys that were used in this project will be disposed of using the standard disposal methods of sensitive documents approved by Auburn University. In closing, it is felt by the researcher that the adherence to IRB guidelines and the voluntary nature of the administration has prevented any possible breaches of ethical conduct.

### **Summary**

In closing, the chapter has provided an in depth overview of the research methodology used in the execution of this project. Also included were reasons for the selection of the sample group, tools used to measure different variables, the method in which the surveys were administered, along with how the data was collected and

organized. The next chapter will contain the actual analysis of the data and the results that were produced from this analysis.

## **CHAPTER IV**

### **ANALYSIS OF RESULTS**

This chapter presents the results of the study and is divided into five sections. Section one provides a brief description of the returned questionnaires. Section two provides information on the sample characteristics. Section three provides univariate descriptions of each measurement item. Section four includes validity and reliability data and the results of the attending factor analyses. Section five presents a sequential analysis of the results pertaining to each of the key research hypotheses. As much as possible an attempt shall be made to separate the reporting of the results from the discussion and interpretation of the results, which will be reserved for the following chapter.

#### **Description of returned questionnaires**

The sample was selected from the general population that attended a series of home football game. The only criteria used in selecting the respondents were their age (according to the Internal Review Board at Auburn University, all respondents must be at least 19 years of age) and their attendance at the football game. Other than the previous two criteria, no attempt was made to screen or pre-select the respondents. Surveys were administered outside of the stadium and on various locations around the campus. Because respondents were verbally asked if they would be willing to participate in the survey before being given one, a traditional response rate can not be generated. Due to time and efficiency constraints, the researcher did not keep track of how many people verbally

turned down the request to fill out a survey. However, a rough estimate can be calculated by subtracting the number respondents from the total number of surveys produced for the survey administration. While this does not account for any lost surveys, surveys that were not included because they were improperly or partially completed, it does provide a general estimate in regards to the response rate. With 1,059 respondents and a total of 3,000 surveys produced a response rate of 35.3% was achieved. Survey administration occurred after 4 home games, with three of those games representing a win for the home team and 1 representing a loss. A total of 1,059 usable surveys were generated from the 4 survey administrations. Responses to the questionnaires were coded and the resulting data was analyzed to address the study's principal research hypotheses. Table 1 displays the number of surveys attained from each game played. The first game (WSU) was chosen because it was the first game of the season for the home team which represented the focus point of the build up during the off season. The three other games selected (LSU, Florida, UGA) were chosen because they represent top tier teams in the ultra competitive SEC. By choosing games that would be heavily attended and much anticipated the researcher was able to increase the total number of subjects available for survey administration.

Table 1-Survey Distribution according to Team Played

Team	Returned Questionnaires	Percent
WSU	277	26.2
LSU	330	31.2
Florida	366	34.6
UGA	86	8.1
Total	1059	100.0

## Sample Characteristics

Of the 1059 total respondents, Table 2 shows that almost 48% of the respondents were male, with the remaining 52% being female.

Table 2- Gender Distribution

Gender	Frequency	Percent
Male	505	47.7
Female	554	52.3
Total	1059	100.0

In addition to their gender, respondents were also asked to select which of the 5 following criteria they most associate themselves with. The criteria were as follows: Fan of the Auburn Tigers, Auburn Alumni, Parent of an Auburn Student, Auburn Student and Fan of the visiting Team. Table 3 represents the breakdown in terms of the respondent's self-assessment.

Table 3- Respondent Self Assessment

Response	Frequency	Percent
Fan of the Auburn Tigers	204	19.3
Auburn Alumni	74	7.0
Parent of an Auburn Student	33	3.1
Auburn Student	715	67.5
Fan of the Visiting Team	33	3.1
Total	1059	100.0

As can be seen from the table above, the overwhelming percentage of respondents, (67.5%) were current students enrolled at Auburn University. The next highest classification can be assigned to the fans of the Auburn Tigers representing a little over 19% of the respondents. Auburn Alumni represented 7% of the respondents with

parents of an Auburn Student and Fan of the visiting team representing the final 6% of the sample population. The overwhelming number of student respondents can be attributed to two factors. One was their general willingness to fill out the survey and the second being the distribution of surveys by trained research assistants. In terms of number of games attended, Table 4 shows that nearly 30 percent of the respondents had attended at least one game but not more than 10. Almost 27% had attended between 11-20 games with 21% attending anywhere from 21-30 games. There is a significant drop-off for the number of respondents that have attended between 31-40 games, with the percentage of people that have attended more than 41 games being 17.8%. Another factor to be considered in these numbers is the fact that 7 home games are played every year.

Table 4- Number of Games Attended

Number of Games	Frequency	Percent
0-10	313	29.6
11-20	283	26.7
21-30	222	21.0
31-40	52	4.9
41 PLUS	189	17.8
Total	1059	100.0

### **Description of Individual Measurement Items**

Attention will now turn to the different scales employed in this survey. This section will focus on the emotional scales, the team identity scale, the newly developed cognitive scale and future behavioral intention.

### **Emotional Data**

Table 5 summarizes the mean and standard deviations for each of the emotional scale items. The degree of Pre-Game emotion experienced was measured on a 5-point

Likert type scale anchored at (1) Very Low, through to (5) Very High. Each scale was comprised of eight items, representing both extremes (positive and negative) and what can best be classified as a neutral state. Three emotions (Happiness, Excitement and surprise) represent the positive affect, with Sadness, Fear and Calmness representing the negative affect. The neutral state is defined with two emotions boredom and idleness.

Table 5- Descriptive Statistics for Pre-Game emotional Data

Variable	Mean	Std. Deviation	Skewness
Happiness	4.31	.810	-1.178
Excitement	4.40	.822	-1.458
Surprise	3.04	1.252	.092
Idleness	2.14	1.071	.811
Boredom	1.65	.920	1.662
Sadness	1.43	.826	2.384
Fear	2.05	1.168	.842
Calmness	2.53	1.166	.339

Looking at the more positive side of emotion, mean values range from  $m=4.40$  for excitement to  $m=3.04$  for surprise. On the negative side of the scale mean values range from  $m=2.53$  for calmness through to  $1.43$  for sadness. On the neutral aspect mean ranges were  $m=1.65$  for boredom and  $m=1.43$  for sadness. Please note that this section of the emotional scale was intended to measure the level of emotions in the time leading up to the game. Table 6 now shows the results for emotional output during the game.

Table 6- Descriptive Statistics for During game emotional data

Variable	Mean	Std. Deviation	Skewness
Happiness	4.24	1.022	-1.472
Excitement	4.39	1.002	-1.830
Surprise	3.75	1.175	-.623
Idleness	1.97	1.086	1.032
Boredom	1.68	.987	1.579
Sadness	1.83	1.205	1.421
Fear	2.39	1.336	.531
Calmness	2.13	1.318	3.356

Again, looking at the positive side of emotion reveals that mean values ranged from m=4.39 for excitement through to m=4.24 for happiness. For the negative aspect mean scores ranged from m=2.39 through to 1.83. With the neutral element ranging from m=1.97 for idleness and m=1.68 for boredom.

### **Team Identity Scale**

By way of review, the team identity scale is a seven item scale intended to measure the degree to which an individual fan associates themselves with the home team (Wann & Branscombe, 1993). Table 7 summarizes the means and standard deviations for each of the seven items.

Table 7- Descriptive Statistics for Team Identity

Variable	Mean	Std. Deviation	Skewness
1. Importance that the home team wins	4.14	1.131	-1.566
2. How strongly do you see yourself as a fan of the Auburn Tigers	4.38	.945	-1.924
3. How strongly do your friends see you as a fan of the Auburn Tigers	4.18	1.036	-1.574
4. How closely do you follow the Auburn Tigers through other types of media	3.69	1.025	-.729
5. How important is being a fan of the Auburn Tigers to you	4.12	1.015	-1.312
6. How much do you dislike the Auburn Tigers greatest Rivals	1.98	1.013	1.069
7. How often do you display the Auburn Tigers logo at your place of work, where you live or on your clothing	3.47	1.022	-.401

It is important to note that question number 6 is reverse coded, with (1) representing the highest amount of dislike for the rivals of the Auburn Tigers and (5) representing a fondness for them. Mean scores ranged from  $m=1.98$  for question number 6 through to  $m=4.38$  for questions number 2. These scores indicate that the average fan attending the home football games at Jordan-Hare stadium are highly identified with the home team. However the two lowest mean scores revolved around following the Auburn Tigers through different types of media and displaying Auburn paraphernalia. These two criteria represent important word of mouth and sponsorship opportunities which may need to be addressed by the managers of Jordan-Hare stadium.

### **Cognitive Scale**

Table 8 summarizes the means and standard deviations for each item, measured on a 5-point likert type scale. The respondents were asked to assess their level of

satisfaction with a variety of elements pertaining to their game day experience. As has been highlighted earlier, this scale was developed in conjunction with both previous research and intensive focus group work. It is considered by the author to be a deviation from the standard approach utilized by previous researchers in similar service settings which consisted of applying the previously validated SERVQUAL scale to a sporting event venue.

Table 8- Descriptive Statistics for Cognitive Scale

Variable	Mean	Std. Deviation	Skewness
1. f & b prices at Jordan Hare Stadium (JHS)	2.44	1.141	.552
2. f & b quality at JHS	3.42	.932	-.340
3. Variety of f & b at JHS	3.34	.954	-.266
4. Cleanliness of the Restrooms at JHS	3.24	1.017	-.328
5. Number of restrooms at JHS	3.56	.952	-.688
6. Speed of lines for restrooms at JHS	3.46	.989	-.502
7. Vendor staff service at JHS	3.57	.870	-.431
8. Friendliness of the vendor staff at JHS	3.66	.864	-.448
9. Overall safety and security at JHS	3.91	.823	-.767
10. Number of security staff at JHS	3.88	.833	-.774
11. Response time of the security staff at JHS	3.65	.852	-.273
12. Friendliness of the security staff at JHS	3.48	.971	-.522
13. The amount of seating at JHS	2.86	1.270	.029
14. The amount of time to move inside JHS	2.82	1.153	.092
15. The amount of time it takes to get to JHS	3.19	1.058	-.346
16. Speed of lines for vendor stations at JHS	3.14	.998	-.147
17. Interest of the staff in solving your problems at JHS	3.11	.912	-.064
18. Availability of parking at JHS	2.43	1.184	.448
19. The time it takes to find parking at JHS	2.42	1.184	.430
20. Behavior of other spectators inside JHS	3.46	.932	-.491
21. Usefulness of signs inside JHS	3.62	.833	-.394
22. Number of signs inside JHS	3.64	.812	-.452
23. The attractiveness of signs inside JHS	3.65	.815	-.372
24. Public transportation to and from JHS	3.34	.871	-.171
25. The availability of medical personnel at JHS	3.52	.778	.005
26. The response time of medical personnel at JHS	3.48	.787	.104
27. The friendliness of the medical personnel at JHS	3.52	.770	.130
28. The pre-game/half time entertainment in JHS	3.78	.968	-.765
29. The behavior of other spectators outside of JHS	3.62	.871	-.553
30. The behavior of visiting fans inside JHS	3.34	.968	-.387
31. The behavior of visiting fans outside JHS	3.26	1.028	-.321
32. The time it takes to enter and exit JHS	2.93	1.182	-.067
33. The pre-game/post game activities outside of JHS	3.95	.926	-.830

As can be expected for most large events of this type, the availability of parking and the time to find parking had the two lowest mean scores with  $m=2.42$  and  $m=2.43$

respectively. Also tying the parking issue for the lowest mean score was the variety of the food and beverage options at JHS with a mean score of  $m=2.44$ . Two of the highest scores in terms of their means were variables 9 and 10 which addressed the overall safety and security at Jordan-Hare stadium and the number of security guards with mean scores of  $m=3.91$  and  $3.88$ .

### **Evaluation of Scale Validity, Dimensionality and Reliability**

The issue of validity addresses the question of how close a measure really comes to measuring the concept that it was designed to measure. In other words, the word validity, as applied to a test refers to a judgment concerning how well the test does in fact measure what it purports to measure. Leedy (1993) rephrases these observations and states that validity would raise such questions as: What does the test measure? Does it, in fact, measure what it is supposed to measure? How well, how comprehensively and how accurately does it measure it? In the context of the present study therefore, the question is best posed as follows: How do we know that our measures of service quality and emotion are really addressing each of these constructs and not at something else?

In an attempt to answer these key questions, this section presents an overview of the data available to assess the measurement instrument's validity. While there are many different types of validity, each addressing different aspects of the validity issue, those that shall be reported on here include both content or face validity and construct validity.

#### **Content Validity**

According to DeVellis (1991), the basic conceptual criterion a measurement scale must meet is face validity or content validity. That is, that the measure apparently reflects the content of the concept(s) in question. Put another way, if a test definitely appears to

measure what it purports to measure on the face of it, it could be said to be high in face validity. Because of the unique nature of the cognitive scale used in this project, the instruments application in the context of a game day football experience required additional review by event organizers, university teaching and research staff, students, and other fans who had attended similar events in past years. This process is in keeping with Allen's (1995) view that since the criterion for face validity is the adequacy of items in terms of content domain, review must be by appropriate experts. In short, the experts make a qualitative judgment that the procedure appears to be valid or invalid.

This was an essentially qualitative task and accomplished during the pre-season focus group phase of the research, where the key informants were brought together to develop, discuss and refine the instrument to be used. Participants were gathered from a wide range of perspectives including current students (both at the undergraduate and graduate level) alumni, general fans and even people that were not fans of the Auburn Tigers. All discussions were recorded and subsequently analyzed and cross-checked against independently transcribed notes for accuracy. While all members of the focus groups had previously been informed of the purpose of the meeting, it nonetheless proved necessary to repeat the rationale that was to guide the proceedings. Focus group members were first invited to discuss their own experiences/expectations of the Auburn game day experience and to highlight those factors that contributed to and/or detracted from the experience. Significantly, recordings identify a number of important factors that clearly stand out:

- Firstly, all respondents felt strongly that Jordan Hare Stadium event staff were largely uncaring about the quality of the Auburn game day experience. This, they felt, was reflected in a lack of service, low quality food and beverage options, and

issues with the restrooms in terms of numbers, cleanliness and how quickly the lines for the restrooms moved.

- Secondly, an almost complete lack of order pertaining to entry and exit from the stadium. There was a general feeling that more could/should be done in this respect, especially from a safety perspective.
- Thirdly, the ability to move around once inside Jordan-Hare Stadium as highlighted as an issue for the respondents. Many complained that they were “afraid” to try and make it to the restroom and back, even during the 15 minute break for halftime, and not miss some of the game play. The respondents indicated that this affected their purchasing habits of beverages and took away from their general enjoyment of their game day experience.

Upon conclusion of this session, a second focus group was conducted which utilized the information gathered in the first focus group through a technique know as card sorting. Here the different dimensions identified by the first focus group were given to the second focus group and a open discussion was again conducted. Of particular interest were the re-wording of some of the dimensions and the combination of what were previously two dimensions. A third focus group was then conducted in which all participants were provided with an initial draft of the survey instrument which was to be administered during the course of the 2006 SEC College Football season. Participants were given a brief overview of the aims and objectives of the research project for which the tool was to be used and then asked to comment on how representative it was of those factors that would affect respondent’s perceptions of service quality on the day and their emotional response to the day’s events.

The ensuing discussion addressed a range of issues including the appropriateness of scale items, item wording, scale dimensions, content of scale dimensions and measurement scales. Once again discussions were recorded and the instrument was revised in accordance with the feedback received. Principal findings recorded on the day are as follows:

- Participants were very satisfied with the dimensions that the proposed instrument was devised to measure. The unique nature of the scale, in the eyes of the focus group members, captured all elements important to them in regards to their resulting satisfaction levels.
- Participants were concerned about “complicated item wording”, particularly with respect to the rather longwinded and descriptive nature of many of the scale items. In turn this led to a shortening of many of the scale items.
- Participants had difficulty interpreting the calmness emotional variable when used to assess their emotional output during the game. The respondents were however satisfied with the variable for the pre-game measurement of emotional output.
- Participants were also concerned about the number of measurement variables and the fact that this might encourage a high non-response rate amongst the general population. Once again, there was a suggestion that item statements should be kept as brief as possible without losing the central theme of investigation. With this in mind the research instrument was shortened and was contained on one page front and back.

Based on the three different focus groups the card sorting technique and previous research a tentative 8 factor structure was anticipated for the newly developed cognitive scale. These factors were:

- **Employees**
- **Access/Flow**
- **Service Quality**
- **Signage**
- **Fan Behavior**
- **Restrooms**
- **Food and Beverage**
- **Parking**

In summary, agreement was reached that the items included on the final measurement instrument were relevant and useful to the domain of service quality, emotion and consumer satisfaction evaluation in the context of the Auburn Game Day experience.

### **Construct Validity**

According to Cohen., Swerdlik and Smith (1992), construct validity refers to a judgment about the appropriateness of inferences drawn from test scores regarding individual standings on a certain kind of variable called a construct, where a construct is best described as an informed scientific idea constructed to describe or explain behavior. Principally, the researcher investigating a test's construct validity must formulate hypotheses about the expected behavior of high scorers and low scorers on the test. In short, if the test is a valid measure of the construct, the high scorers and low scorers will behave as predicted by the hypotheses. While a number of procedures may be used to provide different kinds of evidence that a test has construct validity, the two principal procedures relate to the provision of convergent and discriminant evidence. In turn, both issues are addressed below in the context of the measurement instrument.

## **Reliability of the Measurement Instrument**

The evaluation of reliability of a measurement procedure consists of estimating how much of the variation in scores of different variables is due to chance or random error. In other words the reliability of a measure refers to its consistency (Bryman & Cramer, 1997). According to Allen (1995), such reliability measures are necessary in order to test the stability of any measure taken. For the purpose of this study the internal consistency method shall be reported. This method has been found to be appropriate for scales with multiple items and answers the question of whether each scale is measuring a single idea and hence whether the items that make up the scale are internally consistent. Formally known as Cronbach's alpha, the method calculates the average of all possible split-half reliability coefficients. While a split-half reliability test may also serve to demonstrate the internal consistency of an instrument, Cronbach's alpha is viewed as a more expedient indicator. In general the minimum accepted level for use in the social sciences is .5 or above (Pedhazur, E.J., & Schmelkin, L.P., 1991). This now leads to the second research hypothesis which stated that all scales, measuring both cognitive and emotional output will display a minimum level of reliability and validity for use in social sciences research.

While the validity has already been addressed earlier in this chapter, it now becomes necessary to assess several scales utilizing Cronbach's alpha. The scales to be tested include:

**The emotional scale (Pre-Game and During-Game**

**Team identity**

**EVENTSERV (cognitive satisfaction)**

### **Future Behavioral Intention (FBI)**

The emotional scale, which is a derivation on Russell's (1980) circumflex model of emotion, consisted of eight emotions to which the respondents were asked to assess the level or degree to which they experienced the emotions during the time leading up to the game and during the game itself. To this end the Pre-game emotional scale achieved an alpha level=.540, with the During-game emotional data achieving an alpha level =.383. When combined into one scale measuring the total emotional output for the entire game day experience an overall alpha level=.640 was achieved. Team identity, which was measured via seven questions, was also evaluated and reported an alpha level=.715. The previously discussed EVENTSERV scale recorded an alpha=.928. Finally, the two item measure of FBI achieved an alpha=.812.

### **Convergent Evidence**

According to Leedy (1993), convergence is a means of testing for construct validity, which looks to the focal effect of various methods of measuring a construct and is assessed, in part, when other measures used to measure like-constructs converge (Rubin, 1993). In other words, this form of examination explores the question: Do like measures perform similarly and as expected?

As highlighted earlier, future behavioral intention (FBI) and team identity have been found to be correlated in previous research similar to the current project (Madrigal, 1995, 2000). As such, the two items should be correlated in this project and provide a good opportunity to test for convergence and construct validity. The results found in Table 9 indicated that the two constructs are well correlated, at a significant level less than .001.

Table 9- Correlation of Cognitive Satisfaction and Team Identity

		Team Identity	FBI
Team Identity	Pearson Correlation	1	.473(**)
	Sig. (2-tailed)		.000
	N	1059	1059
FBI	Pearson Correlation	.473(**)	1
	Sig. (2-tailed)	.000	
	N	1059	1059

### Discriminant Evidence

Campbell and Fisk (1959) suggest that a measure should also exhibit discriminant validity. This implies that one should also search for low levels of correspondence between a measure and other measures which are supposed to represent other concepts (Bryman & Cramer, 1997). In other words measures of constructs that theoretically should not be related to one another are, in fact, observed to not be related to each other. This necessitated the computation of a further correlation coefficient (Person product moment) between variable measuring the respondents satisfaction with the fairness of the game and the pre-game emotional scale. This was seen as an acceptable variable to be used based on fact that the fairness of the game can be attribute to the officiating the game and is not known to the respondents until after the game has occurred. Hence, the pre-game emotion should not have any correlation with the fairness of the game. As Table 10 shows, there is a negative correlation between the two variables of -.10 which does not meet the necessary level of .40 used in social sciences research. In addition, the significance level of .739 is much higher that the acceptable standard which is .05. These

results lend support to the idea that this instrument does display proper discriminant validity.

Table 10- Correlation between Overall Service Quality (OSQ) and Fairness

		Fairness	PGEMO
Fairness	Pearson Correlation	1	-.010
	Sig. (2-tailed)		.739
	N	1059	1059
PGEMO	Pearson Correlation	-.010	1
	Sig. (2-tailed)	.739	
	N	1059	1059

### **Dimensionality of the Measurement Instrument**

While the overriding goal of the present study is to ascertain the nature of the relationship between cognitive satisfaction, future behavioral intentions, emotional output and team identity, there is also a need to test the newly developed cognitive measurement instrument for evaluating service quality within a very unique service setting, i.e. the game day experience.

### **Dimensionality of the Cognitive Satisfaction**

As has been touched on earlier in both Chapters II and III, there is a lack of specific research in the realm of sporting event venues, and specifically in college football stadiums. Within the limited amount of research conducted in similar settings the most common approach to measuring cognitive satisfaction has been conducted through the application of a modified SERVQUAL scale developed by Parasuraman, Zeithaml and Berry (1985). Mixed results have been achieved in these studies and one of the limitations of using such a scale is the unique nature of sporting events themselves

(Martin, O'Neill & Palmer, 2007; Kouthouris, & Alexandris, 2005). While the SERVQUAL scale has been applied to other aspects of the services industry and performed reasonably well, it is no wonder that issues have arisen when trying to apply it to a setting as unique and different as a college football stadium. Some of the main differences between such a setting and other, more common, service settings are the large numbers of people in a confined space, the amount of time the fans spend together in that space, the wide array of different services including both security and medical issues and the motivation for making use of such a facility. The new scale entitled EVENTSERV represents a culmination of previous research and focus group work. After conducting a series of focus groups and conducting one on one interviews, the new scale was tentatively broken down into 8 separate factors, three more than the ever popular SERVQUAL scale. These 8 factors were: Employees, Service Quality, Access and Flow, Signage, Fan Behavior, Restrooms, Parking and Finally Food and Beverage.

Table 11- Factor analysis for cognitive scale

Variable	Employees	Service Quality	Access and Flow	Signage	Fan Behavior	Restrooms	Parking	Food Beverage
1.								.715
2.								.733
3.								.725
4.								
5.						.595		
6.						.824		
7.	.554					.823		
8.	.617							
9.	.779							
10.	.776							
11.	.737							
12.	.562							
13.			.721					
14.			.739					
15.			.541					
16.							.798	
17.							.769	
18.					.426			
19.				.800				
20.				.814				
21.				.692				
22.		.494						
23.		.796						
24.		.825						
25.		.770						
26.		.532						
27.					.621			
28.					.874			
29.					.846			
30.			.521					

As Table 11 shows, each question loaded on its prescribed factor, with the minimum acceptable loading being .40 or higher. In addition, the KMO of sampling adequacy was .910 and Bartlett's test for sphericity was 18326.769, which is considered a high Chi-Square, with a significance level at the <.001. These results indicated that the data was factorable and consequently the factor analysis seen in Table 11 was generated,

minus the three questions that were removed. Table 11-A was generated in order to display the Eigenvalues, % of the variance and alpha levels for each factor

Table 11-A Eigenvalues, % of the variance and alpha levels For the EVENTSERV scale

Factor	Eigenvalues	% of the variance	alpha
Employees	10.442	32.631	.851
Service Quality	2.435	7.608	.823
Access and Flow	1.887	5.896	.813
Signage	1.730	5.407	.860
Fan Behavior	1.444	4.513	.800
Restrooms	1.192	3.725	.791
Parking	1.119	3.497	.901
Food and Beverage	1.014	3.169	.745

### **Structure of Pre-Game Emotion**

The emotional data was first examined by multidimensional scaling (Euclidean distance) which according to Norusis (1993) is the equivalent of a principal components analysis. Figure 3 shows the resulting two dimensional plots for each of the eight emotions as evaluated via the pre-game emotional output. Kruskal's stress was .01 and the squared correlation coefficient (R square) was 0.99, both indicating a very good fit.

## Derived Stimulus Configuration

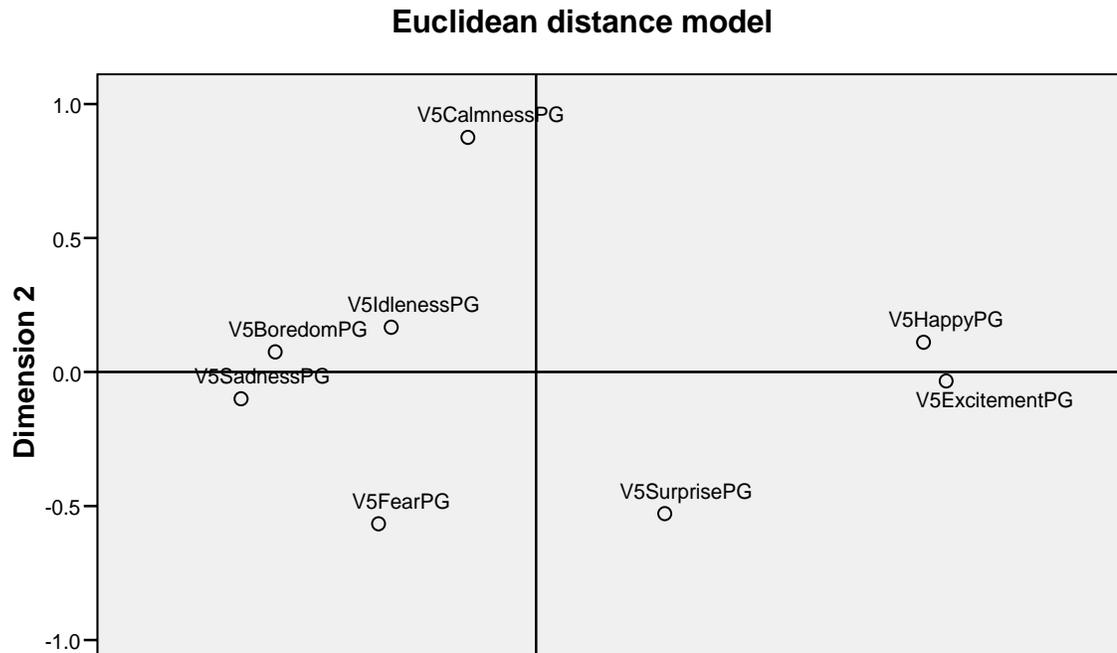


Figure 3- Multidimensional scaling of Pre-Game emotions

Looking next at the during-game emotional data the Kruskal's stress was .008 with a square correlation coefficient (R squared) of .099, again indicating a very good fit.

## Derived Stimulus Configuration

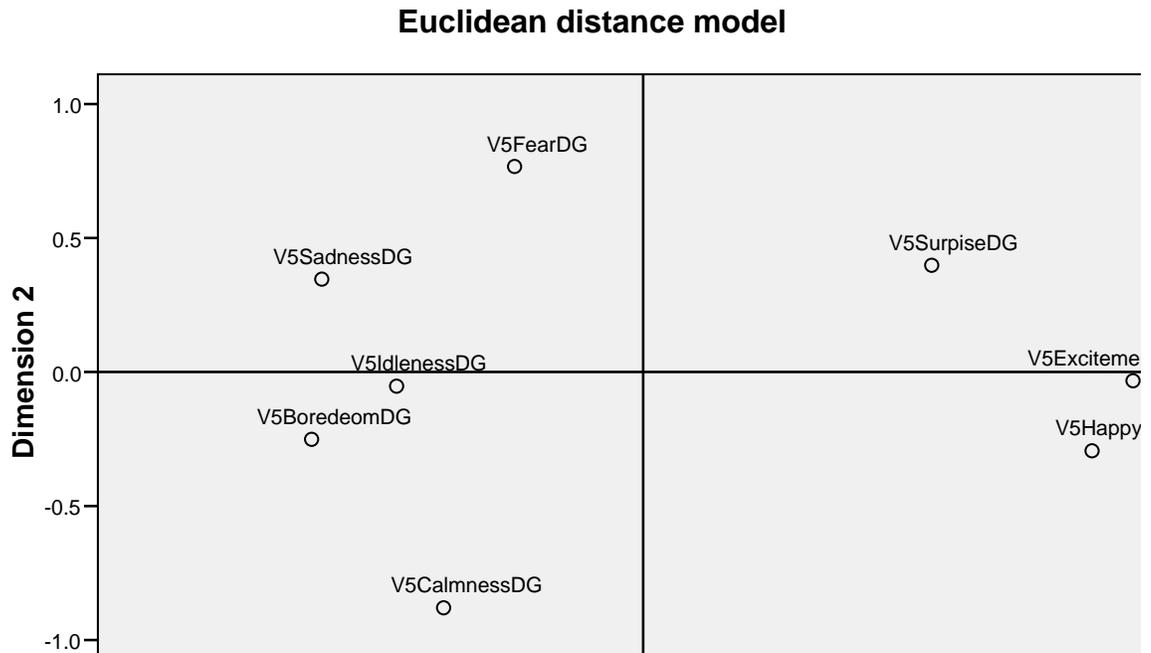


Figure 4-Multidimensional scaling of During-Game Emotions

While the results were limited by the small number of emotions included in the study, Figures 3 and 4 make it clear that Russell's (1980) circular order of affect has been supported. While not as distinct as the circular order found by Russell, the two dimensions suggested by Russell (Arousal and Pleasantness) are distinguishable in the plot. The vertical axis or Dimension 1 corresponds to his pleasure-displeasure dimension, while the horizontal axis or Dimension 2 corresponds to his arousal-sleepiness dimension.

The next step in assessing the emotional scale and its performance is to conduct a regression analysis of both the pre-game and during-game emotional output. Previous

research by Martin, O'Neill and Palmer (2007) found a two factor structure of positive and negative. This two factor structure was found to be upheld over three separate stages of administration in their repeating measure design. Table 12 highlights the results for the pre-game emotional output.

Table 12- Factor Analysis of pre-game emotion

Emotion	Negative	Positive
PGHAPPY		.851
PGEXCITEMENT		.850
PGSURPRISE		.724
PGIDLENESS	.705	
PGBOREDOM	.803	
PGSADNESS	.821	
PGFEAR	.525	
PGCALMNESS	.483	
Eigenvalue	2.716	1.932
% of variation	33.944	24.150
alpha	.720	.677

As can be seen above, the two factor structure was maintained for the pre-game emotional output. With a KMO of .687 a Chi-Square of 2646.838 and significance level of less than .001. Table 13 summarizes the results for the during-game emotion.

Table 13-Factor Analysis of during-game emotion

Emotion	Positive	Neutral	Negative
DGHAPPINESS	.916		
DGEXCITEMENT	.912		
DGSURPRISE			.716
DGIDLENESS		.783	
DGBOREDOM		.784	
DGSADNESS			.562
DGFEAR			.757
DGCALMNESS		.732	
Eigenvalue	2.985	1.428	1.283
% of variation	37.317	17.848	16.034
alpha	.87	.640	.476

As can be seen from Table 8 above, a different factor structure was found for the during-game emotional output. With a KMO of .689 a Chi-Square of 2930.748 and a significance level less than .001, the during-game emotion exhibited similar results to the pre-game emotional output except, but displayed different results in term of its actual structure. In addition, the during-game emotional scale explained 71% of the variance. Instead of the two factor structure a three factor structure was found. In addition one of the major changes involved the emotion surprise, with its departure from the positive factor to the negative factor. Maybe the best explanation for this change lies in what is expected by the fans as the game outcome. Because the home team was favored to win the entirety of its home games, especially in the eyes of its fans, it is easy to see why a surprise, which would equal a loss in the minds of the visitors, would be considered negative. Even in games that resulted in a win, there may have been a level of surprise as to the poor performance of the team in its overall level of play or coaching. The next major difference is the emergence of a third factor that was not present in the pre-game emotional output, labeled in Table 8 as neutral. Certainly there are differences in the

evaluations and motivations of pre-game activities such as tailgating and attending the actual football game, and these differences may help to explain the variations in the factor structure for pre-game emotional output as compared to during-game emotional output. One of the obvious differences and a possible explanation for the emergence of the third neutral factor may be rooted in the different time frames associated with tailgating and the actual game. During the game items such as television timeouts, halftime, time between quarters and regular timeouts provide breaks in the action. During these times the fans often sit-down and turn their attention to other things such as making use of restrooms or purchasing items from vendor stations. Because of these defined time periods of non activity on the field, emotions such as idleness, boredom and calmness can be viewed as distinct. This is in contrast to the much less formal time management of tailgating events. In this setting the only important time is the start of the game which will affect the time and duration of the tailgating activities.

### **Dimensionality of Team Identity**

Previous research has indicated that team identity is a good indicator of both cognitive satisfaction and future behavioral intentions. (Fisher & Wakefield, 1998; Madrigal, 2000, 1995; Wann & Branscombe, 1993). However the application of team identity scales has varied from the current study in both the type of sport being analyzed (Basketball vs. Football) and in its role (mediator vs. direct indicator). Because of this the exact nature of the team identity scale was analyzed via factor analysis with a Varimax rotation. As can be seen in Table 14, a one factor solution was found, with all seven questions loading well. Please note that the negative variable (rivals) is a reverse coded item and thus was expected to load as a negative factor. With a Kaiser-Meyer Olkin

(KMO) of .907 and Bartlett's test of Sphericity achieving a high Chi-Square of 4595.171 and a significance level= less than .001, the numbers would seem to support the factor rotation seen below.

Table 14- Factor Analysis of Team Identity

Variable	Factor Loading
Importance	.724
Strongly	.900
Friends	.900
Follow	.766
Fanship	.887
Rivals	-.598
Display	.726

In total, the team identity scale was able to explain 63% of the variance with the one factor attaining an Eigenvalue of 4.04 with an alpha level of .768. These results indicate that the team identity scale proposed by Wann and Branscombe (1993) is performing well and explaining an adequate amount of the variance for team identity for use in this project.

### **Testing of Research Hypotheses**

The following section will now address the five research hypotheses as they were presented in Chapter III. Several different types of statistical analyses will be conducted in order to support, or reject each of the different hypotheses.

#### **H1**

In order to test this new scale and its ability to explain cognitive satisfaction the following hypothesis was developed:

- H1- A different factor structure will be found for the EVENTSERV scale than the five factor structure SERVQUAL scale.

In order to test this hypothesis the 33 item cognitive scale was assessed using factor analysis. The data was factor analyzed making use of the VARIMAX factor rotation procedure in SPSS-X version 15. According to Allen (1995), factor analysis is a technique which is used to reduce the number of variables under analysis by combining sets of variables that appear to be measuring the same construct. In short, new variables that are composed of a set of variables are labeled factors. Similarly, Diekhoff (1992) states that factor analysis refers to a large family of related techniques, all of which examine the correlation's between a set of variables to identify those groups of variables that are relatively homogenous. Diekhoff (1992, p.334) also claims that the statistical independence of factor analysis makes "factor analysis useful as a precursor to other kinds of statistical analysis" such as univariate significant difference tests. In all cases the highest loading per item and factor is taken.

The initial factor rotation did uphold H1 with an 8 factor structure found; however upon further analysis it became apparent that there was a need to eliminate three questions from the survey. In order, these questions addressed the speed at which vendor lines moved; the ability of the staff at Jordan-Hare Stadium to solve problems and the pre-game and post-game activities inside Jordan-Hare Stadium. These questions did not load at the minimum .40 level on any of the 8 factors and thus could not be seen as contributing to the overall measure of cognitive satisfaction. In regards to the first question eliminated, a similar question used in the restroom factor addressing line speed may have caused confusion for the respondents. The second question eliminated addressed the issue of the employees' ability to solve problems. While this question did not load at the minimum .40 level, it did load on both the employee factor and the service quality factor. The wording

of this question may have lead to this cross-loading and thus rendered the question unusable in this survey. Finally, confusion by the respondents with the third question eliminated may have contributed to this problem based on the fact that it was addressing activities both outside and inside Jordan-Hare Stadium. As such Table 11 demonstrates the factor analysis with the question removed.

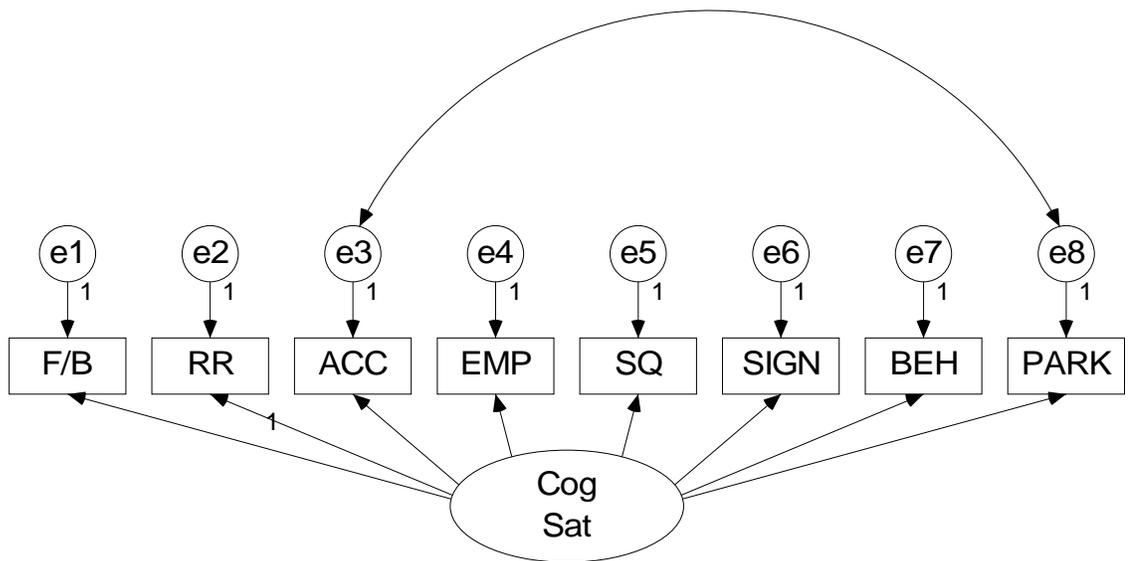
Table 11- Factor analysis for cognitive scale

Variable	Employees	Service Quality	Access and Flow	Signage	Fan Behavior	Restrooms	Parking	Food Beverage
31.								.715
32.								.733
33.								.725
34.						.595		
35.						.824		
36.						.823		
37.	.554							
38.	.617							
39.	.779							
40.	.776							
41.	.737							
42.	.562							
43.			.721					
44.			.739					
45.			.541					
46.							.798	
47.							.769	
48.					.426			
49.				.800				
50.				.814				
51.				.692				
52.		.494						
53.		.796						
54.		.825						
55.		.770						
56.		.532						
57.					.621			
58.					.874			
59.					.846			
60.			.521					

Briefly, the factor analysis has supported H1 and the 8 factor structure that was tentatively supported by focus group work was found. In addition the EVENTSERV scale was able to explain 65.4% of the variance. The next step in measuring the performance of the EVENTSERV scale is to perform confirmatory factor analysis on the scale via structured equation modeling (SEM) utilizing Amos version 7. In essence, this

process allows for the evaluation of model and how well it fits the available data. As can be seen from Figure 5 below, the eight factors for the EVENTSERVE scale were used to measure how well cognitive satisfaction explained each of the eight factors. Again these factors are Food and Beverage (F/B), Restrooms (RR), Access (ACC), Employees (EMP), Service Quality (SQ), Signage (SIGN), Behavior of other fans (BEH) and finally Parking (PARK). An additional path was drawn between the access (ACC) and parking (Park) variable based on their similarity in the eyes of the respondents. Because the access variable is assessing the ability of the respondents to gain access to Jordan-Hare Stadium, one could reason as to why the availability and location of parking would be highly correlated with the access variable. Simply put a lack of parking will directly affect the ability of consumers to gain access to the venue.

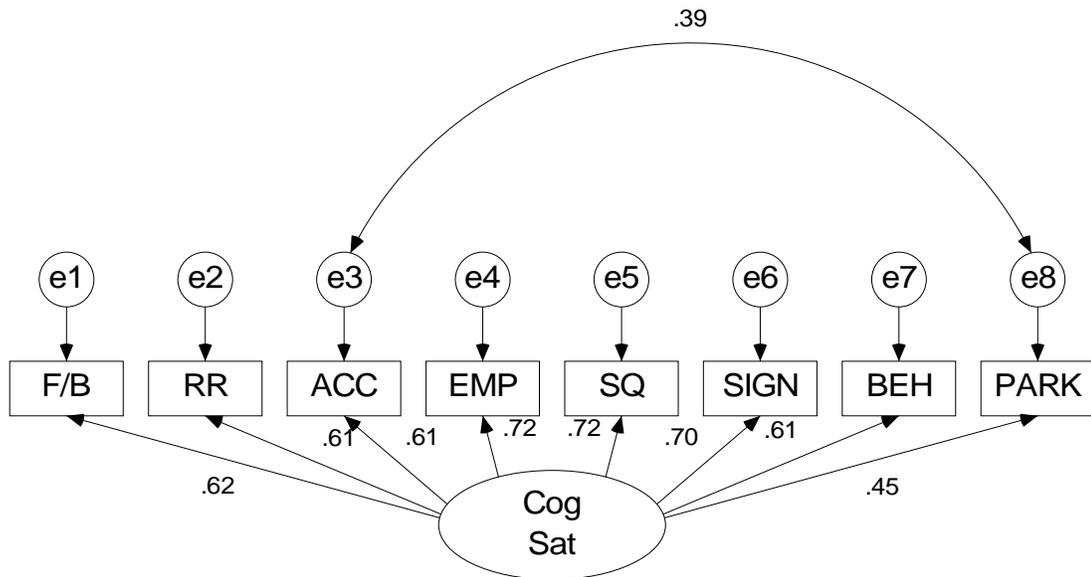
Figure 5- Path analysis of the EVENTSERVE scale



After constructing the model in Amos, estimates were run and several criteria were observed in order to assess how this model will fit the data. The first was the Chi-

square which was equal to 167.032, with 19 degrees of freedom and a p value less than .001. The CFI was .947 with the NFI being .941. Both of which surpassed the minimum required score of .900. In addition the RMSEA score of .086, which is lower than the maximum allowed of .1 also indicates that this model is indeed a good fit for the data. In addition to these goodness of fit indices, paths were generated in order to assess that each of the eight factors was contributing to the overall model. Figure 6 highlights these results.

Figure 6- Path analysis of the EVENTSERV Scale



As can be seen in Figure 6, the resulting path analysis shows that each variable is contributing well to the overall model and that the latent variable, cognitive satisfaction (COG SAT) is doing a good job of explaining the eight different factors used in the EVENTSERVE scale. The lowest observed path is that to the parking variable with a loading of .45. The results above indicated that in this instance that the EVENTSERV

scale is a good measure of cognitive satisfaction in a sporting event venue and that the resulting model is a good fit for this data set.

## **H2**

While H2 has already been partially addressed earlier in this chapter a brief review is still warranted. H2 was concerned with the statistical reliability of the different scales used to measure the major constructs in this study. Namely the emotional scale (both Pre-game and During-game) the EVENTSERV scale, the team identity scale and future behavioral intentions. By way of review the H2 was as follows: All scales, measuring both cognitive and emotional output will display a minimum reliability level of .5. Because of the unique nature of sporting event venues and the relative lack of empirical research in such a setting, analyzing the scales for validity becomes a key part of the research. This type of testing is done to ensure that the scales are performing in a way that is appropriate for use in the human sciences and can also point future researchers in the right direction when it comes to applying scales used in this study to new research projects. Formally known as Cronbach's alpha, the method calculates the average of all possible split-half reliability coefficients. While a split-half reliability test may also serve to demonstrate the internal consistency of an instrument, Cronbach's alpha is viewed as a more expedient indicator. In general the minimum accepted level for use in the social sciences is .5 or above. To this end the Pre-game emotional scale achieved an alpha level=.540, with the During-game emotional date achieving an alpha level =.383. When combined into one scale measuring the total emotional output for the entire game day experience an overall alpha level=.640 was achieved. Team identity, which was measured via seven questions, was also evaluated and reported an alpha

level=.715. The previously discussed EVENTSERV scale recorded an alpha=.928. Finally the two item measure of FBI achieved an alpha=.812.

As can be seen from the results above, all the scales measured displayed the minimum amount of reliability except for the During-game emotional scale. One reason for this may be confusion by the respondents in regards to their during-game emotional output based on emotional exhaustion. Because of the intense levels of emotions experienced by fans during a game in combination with the length of the experience (typically 3 hours or more for a home game) respondents may have been emotionally and physically drained, and thus unable to accurately remember or document their emotional state during the game. While a more detailed discussion of this issue will be conducted in Chapter IV, briefly H2 is not supported.

### **H3**

Previous research in the service industry has supported that idea that emotions generated from service encounters can and do play a role in the formation of customer satisfaction (Liljander & Strandvik, 1997; Yu & Dean, 2001; Barsky and Nash, 2002). By way of review H3 was presented as follows: Positive emotions generated from the game day experience will make a positive improvement to the overall model of cognitive satisfaction.

More specifically, a previous study by Martin, O'Neill & Palmer (2007) produced results that support the notion that emotions do play a role in the formation of cognitive satisfaction in sporting event venues. Major differences between the current study and the Martin, O'Neill & Palmer study (2007) are evident in both the sample used (students vs. general population), the nature of the survey administration (Longitudinal

vs. Cross-sectional) and the scale used to address cognitive satisfaction (modified SERVQUAL vs. EVENTSERV). This now leads to the third hypothesis which addresses the issue of emotional output and its contribution to the overall model of cognitive satisfaction.

In order to assess this relationship a correlation matrix was generated between the positive emotions from the pre-game and during-game and the eight factors of the EVENTSERV scale. Table 15 highlights the results.

Table 15- Pre-game emotions correlated with the EVENTSERV scale

		EVENTSERV	Pre-Game Emotions
EVENTSERV	Pearson Correlation	1	.207(**)
	Sig. (2-tailed)		.000
	N	1059	1059
Pre-Game Emotions	Pearson Correlation	.207(**)	1
	Sig. (2-tailed)	.000	
	N	1059	1059

As can be seen in Table 15, there is a weak correlation of .207 between the EVENTSERV scale and the pre-game emotional output. In spite of the low correlation coefficient, it is statistically significant with a P level of less than .001. Table 15 will now reveals the results of a similar correlation between the during-game emotional output and the EVENTSERV scale.

Table 16- During-game emotions correlated with the EVENTSERV scale

		EVENTSERV	During-game Emotions
EVENTSERV	Pearson Correlation	1	.133(**)
	Sig. (2-tailed)		.000
	N	1059	1059
During-game Emotions	Pearson Correlation	.133(**)	1
	Sig. (2-tailed)	.000	
	N	1059	1059

As can be seen in Table 16 a weak correlation between during-game emotional output and the EVENTSERV scale was found with a correlation coefficient of .133. This correlation was found to be significant with a P value of less than .001. A third correlation matrix was generated between the EVENTSERV scale and the overall emotional output which included both the pre-game and during-game emotional output.

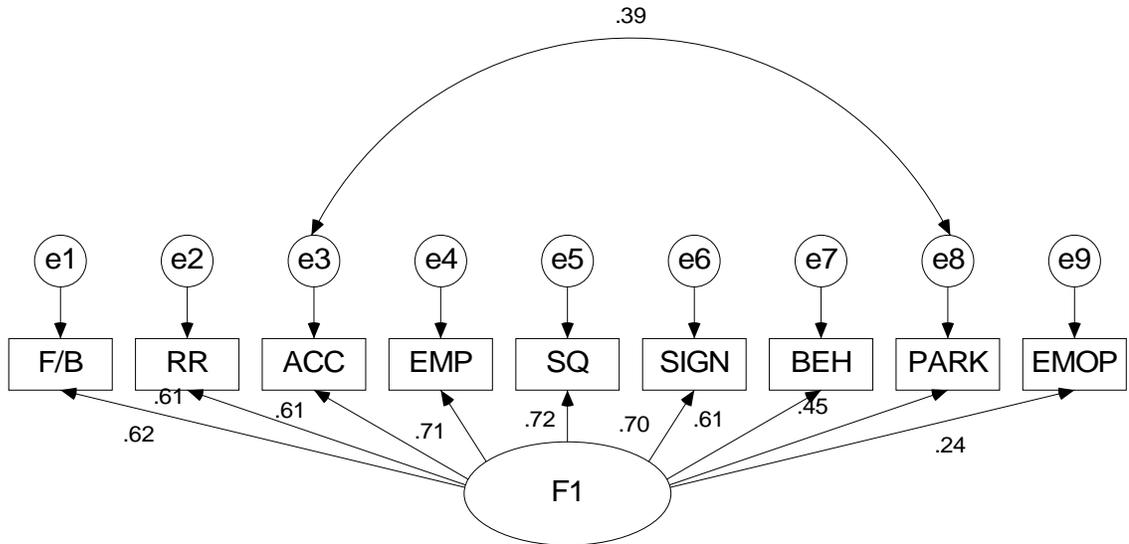
Table 17- Overall emotional output correlated with the EVENTSERV scale

		EVENTSERV	Overall Emotions
EVENTSERV	Pearson Correlation	1	.211(**)
	Sig. (2-tailed)		.000
	N	1059	1059
Overall Emotions	Pearson Correlation	.211(**)	1
	Sig. (2-tailed)	.000	
	N	1059	1059

As Table 17 shows, another weak correlation between overall emotional output and the EVENTSERV scale was achieved with a correlation of .211 with a significance level of less than .001. Based on these results, confirmatory factor analysis was conducted via structured equation modeling. This was done to assess the impact that the inclusion of the emotional output would have on the overall cognitive satisfaction model.

Based on the three correlation matrices generated in Tables 14, 15 and 16 the overall emotional output will be used in the model due to the fact that it achieved the highest correlation with the EVENTSERV scale.

Figure 7- Path diagram of EVENTSERV scale with emotional output



As can be seen from Figure 7 similar results were found when including the emotional output to the cognitive scale. In terms of goodness of fit indices, a Chi-square of 192.756 was achieved with a P value of less than .001 was achieved with 26 degrees of freedom. A CFI of .942 as well as NFI of .934 and RMSEA =.078 was observed. In comparison with the original model in which emotional output was not included a CFI of .947 as well as a NFI of .941 and a RMSEA =.086. When comparing the numbers from the two different models and in light of the weak path generated between the emotional output and cognitive satisfaction (F1) of .27 the inclusion of the emotional output into the overall model is questionable. Thus, H3 is not supported in this instance.

#### H4

Attention shall now turn to the fourth hypothesis which by way of review was addressing team identity and its relationship to both cognitive satisfaction and future behavioral intention. In order to assess these relationships the first task was to use a Pearson correlation between team identity, cognitive satisfaction and future behavioral intention. Tables 18 and 19 address these two separate calculations, with Table 18 first examining team identity and cognitive satisfaction.

Table 18- Correlation between Cognitive Satisfaction and Team Identity

		Cognitive Satisfaction	Team Identity
Cognitive Satisfaction	Pearson Correlation	1	.147(**)
	Sig. (2-tailed)		.000
	N	1059	1059
Team Identity	Pearson Correlation	.147(**)	1
	Sig. (2-tailed)	.000	
	N	1059	1059

As can be seen from Table 18, there is a weak correlation between cognitive satisfaction and team identity, despite this however, it is significant at the .01 level, indicating that there is a relationship between the two constructs. Now moving on to team identity and future behavioral intention Table 19 shows a much stronger correlation of .473 which is also significant at the .01 level.

Table 19- Correlation between Future Behavioral Intention and Team Identity

		Team Identity	FBI
Team Identity	Pearson Correlation	1	.473(**)
	Sig. (2-tailed)		.000
	N	1059	1059
FBI	Pearson Correlation	.473(**)	1
	Sig. (2-tailed)	.000	
	N	1059	1059

Further analysis into these three constructs and their relationships involves multivariate regression in order to assess how much, if any, of the variance that team identity explains in cognitive satisfaction and future behavioral intention. The first regression analysis was conducted with cognitive satisfaction as the dependent variable and team identity as the independent variable. This regression was performed first due to its low initial correlation, which would indicate that the resulting regression analysis will be poor. In fact the results support this idea with an adjusted R square of .021 with a significance level of .001. While statistically significant, team identity does a poor job of explaining any of the variance for cognitive satisfaction. A second regression was performed again with team identity as the independent variable, but this time future behavioral intention was the dependent variable. Results indicated that team identity explained an adequate amount of the variance in regards to future behavioral intention, with an adjusted R square of .223 and a significance level at the .001 level. These results may be of importance to the managers and purveys of college football stadiums, which will be discussed in more detail in Chapter V. As a whole, hypothesis H4 was partially supported, with poor results in regards to team identity and cognitive satisfaction and with adequate results with team identity and future behavioral intention.

## H5

Building on the fourth hypothesis is H5, which addressed the issue of emotional scaling and its ability in explaining more of the variance in regards to future behavioral intention than team identity alone. Previous research by Martin, O'Neill & Palmer (2007) had shown a minimal increase in the amount of variance explained in regards to future behavioral intention when incorporating emotional scaling. However those results were questioned by the authors due to the low amount of additional variance explained and the sample group used in that study (students only). In the current study, emotions were measured for two distinct time periods, pre-game and during game. The first step is addressing the correlations between the two emotional stages and FBI.

Table 20- Correlation between Pre-game emotion (PGEMO) and Future Behavioral Intention

		FBI	PGEMO
FBI	Pearson Correlation	1	.017
	Sig. (2-tailed)		.584
	N	1059	1059
PGEMO	Pearson Correlation	.017	1
	Sig. (2-tailed)	.584	
	N	1059	1059

Table 21-Correlation between During-game emotion (DGEMO) and Future Behavioral Intention (FBI)

		FBI	DGEMO
FBI	Pearson Correlation	1	-.021
	Sig. (2-tailed)		.505
	N	1059	1059
DGEMO	Pearson Correlation	-.021	1
	Sig. (2-tailed)	.505	
	N	1059	1059

As can be seen in Tables 20 and 21 both pre-game emotion and during-game emotion correlated poorly with FBI and neither achieved the minimum required significance level of .05. Because of these low correlations the research saw no need to conduct the regression analysis. Thus, these results do not support H5 and the idea that emotional scaling can be used in order to explain more of the variance in regards to FBI than using the team identity measure alone.

Chapter V will examine the results in more detail and reveal the conclusions that the author has drawn from the results gathered in Chapter IV. Included in this analysis will be potential managerial implications for the operators of sporting event venues and in this instance, the owner of Jordan-Hare Stadium, Auburn University.

## CHAPTER V

### DISCUSSION AND CONCLUSIONS

#### Summary of the Research

As highlighted earlier in the methodology section, the research associated with the project involved both qualitative and quantitative research. The qualitative research consisted of multiple focus groups and one on one interviews. The results of which were used to establish a basic understanding of what was important to consumers during their game day experience at Jordan-Hare Stadium. The quantitative research consisted of a cross-sectional study with a sample group made up of attendees at a college football game. Several constructs were measured in order to assess cognitive satisfaction, team identity, emotional output and future behavioral intention.

In order to measure these phenomena survey administration was conducted over the course of the 2006 home football season, with surveys being administered after 4 home games. This was done to ensure that enough completed surveys would be collected, and in an effort to measure not only home victories, but home losses as well. Unfortunately, due to circumstances out of the researcher's control only one of the four games selected for administration resulted in a loss for the home team. Complicating the matter was the bad weather during and after the game in the form of heavy thunderstorms. This situation made it all but impossible to gather surveys and thus only a few surveys after the home loss were gathered. This low number of responses compared

to the overall number of surveys gathered made it statistically impossible to compare and contrast different levels of emotional output, cognitive satisfaction, team identity and future behavioral intention based on a home victory vs. a home defeat.

This chapter will provide a brief restatement of each hypothesis and the findings related to each. Following this section a discussion on the performance of the actual measurement instrument as well as the implications for both the academic and practitioner communities will be conducted. This will be followed by a summary of the major contributions of the study, along with the recommendations for future research.

### **Overview of the Research**

The research has added to the overall understanding of customer satisfaction in sporting event venues with the utilization of a new cognitive scale, developed specifically for such a venue, in combination with other measures that have been found to be useful in previous research in the same area (Madrigal, 1995, 2000; Kouthouris & Alexandris, 2005; Theodorakis, Kambitsis, Laios & Koustelios, 2001). More specifically, the research has examined the role that emotions and team identity play in both satisfaction assessments and in the formation of future behavioural intentions. The motivations for conducting research in this area have several underlying themes that have emerged from the world of the services industry as a whole. Certainly one of these is the need to gain a better understanding in the formation of customer satisfaction in all segments of the hospitality industry and not least of all, in sporting event venues. While the unique nature of services and sporting events has been highlighted in Chapter II, this drive for knowledge has also been pushed by the growing economic impact that sporting events have in the overall tourism industry. One example of this growth is the X Games, which

feature alternative sports including snowboarding, skateboarding and motor-cross. First established as a small regional event, the X Games have grown into an international phenomenon, with multimillion dollar TV and endorsement deals. As the growth of sporting events has grown local and regional governments have realized the importance of attracting such events to their communities in order to increase exposure of the area and provide an important economic driver. As the numbers of events continue to grow and become more competitive in terms of number of tickets sold, corporate sponsorships and as consumers of such events become more discerning, there is a need for managers and organizers to have a clear understanding of what drives satisfaction and consumers future behavioral intentions.

While many events of this type are only held once a year or once every four years and in different locations, the attention of some researchers has turned to sporting events that are held on a more consistence basis (Madrigal, 1995, 2000). Collegiate level sports are a great example and while more frequent than mega events like World Cup soccer, their importance to the local economy and the tourism industry as a whole should not be underestimated. Due to the relative newness of the area and the general lack of research specifically dedicated to college level sporting events, there has been a lack of uniform research techniques in terms of evaluating satisfaction. Researchers have struggled in their application of scales developed in other segments of the services industry to this narrow and very specialized segment of the tourism industry. With the development of a cognitive scale that is intended for use in a variety of sporting event venues this research has taken the first step in unifying the research in a concerted effort to explain the formation of customer satisfaction and future behavioural intentions. While there is no

doubt that the scale developed needs further testing and modification it is hoped that this project can serve as the basis for scale development specific for sporting event venues.

In addition to the cognitive scale this project has also addressed a growing movement in the services industry research as a whole by applying emotional scaling to an area that has seen very little such measurement. As the application of emotional scaling to other services has grown, results have generally indicated that emotions do play a role in the formation of satisfaction and future behavioural intentions (Mattila & Wirtz, 2000; Price, Arnould & Deibler, 1995). With this realization and in combination with the growing importance of sporting event venues, this project has attempted to measure the emotional output surrounding the entire game day experience and thus expand on the explanation of both cognitive satisfaction and future behavioural intentions.

Another contribution of the research is to draw attention to some of the specific factors that drive a consumer's intention to buy tickets to the next years sporting events via a scale best described as a specialized loyalty scale. Known as team identity, this project has applied this scale in a setting, that to the researchers' best knowledge, has not been used before. For the managers and marketers of this event this information plays a crucial role in why consumers continue to frequent their venue. By measuring the level of team identity managers are able to keep the pulse of their customers and help ensure their continued patronage. In addition, any construct (in this case team identity) that contributes to the future behavioural intentions of consumers should also be examined from a standpoint of how do we increase the level of team identity in our customers?

## **Discussion of the Results**

The research has reviewed the relevant literature to date and has highlighted, among other things, the need for a scale developed specifically for sporting event venues. The results indicated that the newly developed EVENTSERV scale has done a good job of explaining the formation of cognitive satisfaction and has established 8 factors that were found to be significant in the eyes of the consumer when it comes to evaluation their game day experience. In addition, the continued patronage of the consumers has been highlighted as an important factor in the continued success of the venue in terms of revenue production. Results support the idea that the most important factor may well be the level of identity that the fan has with home team and as such should receive special attention from the managers of the venue in order to continue their current level of success, and possibly increase it. However, the results also show that highly identified fans separate themselves from their level of team identity when it comes to evaluation of goods and services associated with their game day experience. Thus managers must concern themselves with both the level of team identity and the quality of their goods and services in order to maximize revenue and ensure continued patronage.

The results of this project have also shown that more work needs to be done in understanding and explaining the emotional output of the game day experience. While the modified scale of pre-game activities worked adequately well in terms of reliability, the during-game scale did not and would not be considered statistically useful. While a more detailed discussion will be given later on in this chapter potential issue may include the inability of the respondent to accurately separate emotions between pre-game and during-game time periods, basic differences in the structure of the two different time

periods and the variable nature of certain emotions based on the individual expectations of the respondent.

### **Discussion of Hypothesis 1**

As has already been highlighted previously, one of the weaknesses in the current literature surrounding sporting event venues is the lack of a scale developed specifically for such sites. Previous research has attempted to apply scales that had been developed and validated in other service settings such as the SERVQUAL scale (Parasuraman, Zeithaml & Berry, 1985). Mixed results in previous studies (Martin, O'Neill & Palmer, 2007; Kouthouris & Alexandris, 2005) indicate the need for a scale specially designed for sporting event venues. As such, one of the main focuses of this project was the development and testing of a new scale, entitled EVENTSERV, which is intended for use in any sporting event venue. By way of review the first hypothesis was:

- H1- A different factor structure will be found for the EVENTSERV scale than the five factor structure SERVQUAL scale.

In addition to factor analysis, which was used to test the actual structure of the new instrument, other tests including reliability testing and structured equation modeling were applied in order to assess how well the factors used in the cognitive scale fit the data regarding cognitive satisfaction. Looking first at the regression analysis, the results were positive with the tentatively pre-determined 8 factor structure supported. These 8 factors were developed through a series focus groups and a review of the pertinent literature. These factors were:

- **Employees**
- **Access/Flow**

- **Service Quality**
- **Signage**
- **Fan Behavior**
- **Restrooms**
- **Food and Beverage**
- **Parking**

With the finding of 8 factors, as compared to the five factor structure found in the SERVQUAL scale, the first hypothesis has been supported. In addition, the EVENTSERV scale was able to explain 65.4% of the variance in cognitive satisfaction. This number represents an improvement over previous research in terms of explaining satisfaction in a sporting event venue (Kouthouris & Alexandris, 2005).

The second part of the analysis involved the use of structured equation modeling in order to assess how well the model of cognitive satisfaction fit the available data. In essence, a model was created with each of the eight factors that had been confirmed in the factory analysis. Each factor had between three and six questions representing them in the original 33 item scale. After removing 3 questions based on their poor performance in the factor analysis, the model was diagramed in Amos, version 7 and the corresponding estimates were calculated. The results were favorable and indicated that not only was each of the eight factors contributing to the overall model, but that the model itself was a good fit for the data. This was based on the high CFI of .947 and NFI of .941 and a low RMSEA score of .086. In addition the path coefficients for each of the eights factors were solid, ranging from the lowest coefficient of .45 to the highest which was .72 for both the service quality and employee factors.

These results indicate that the EVENTSERV scale may be a better indicator of cognitive satisfaction in sporting event venues than scales used in previous research in similar settings. Certainly the scale needs to be tested several more times before wide use of the instrument is initiated, but in its current form EVENTSERV represents the next step in scale development for sporting events management. By gaining a clearer insight into what satisfies the participants of sporting event venues owners and managers of such operations gain valuable perspective into the how and why their customers are satisfied. Satisfied customers represent a competitive advantage for any company, which could potentially lead to an increase in sales and profits. Another advantage of understanding what drives customer satisfaction in such venues can also be positively applied to the design and construction of new sporting event venues. As stadium construction grows in both scale and cost, the ability of the venue to turn a profit as quickly as possible becomes more and more important. Outside of actual ticket sales, owners and managers are now focusing in on increasing the profits generated from the sales of food and beverage, as well as other products in-side the venue. In order to maintain the balance between profits and customer satisfaction a clear understanding of what drives satisfaction must be achieved. The proposed EVENTSERV scale is intended to fulfill this goal and because it is specifically designed for sporting event venues, to provide a better understanding of cognitive satisfaction than other, less specialized scales.

As was mentioned earlier three questions had to be removed after the original factor analysis was conducted due to their low loadings on one of the prescribed 8 factors. While some possible explanations for their poor performance was given in Chapter IV, more focus group work in regards to these three questions may be needed.

Potential changes may include the exact wording of the questions as well as their location in the survey may need to be taken in order to clarify the questions in the eyes of the respondents. One question in particular may need to be broken into two separate questions in order to eliminate potential confusion in the respondents.

Based on the mean performance scores attained in the EVENTSERV scale, there are several items that warrant attention from the managers of Jordan-Hare Stadium. Certainly one of those is food and beverage prices, which had the lowest mean score of 2.44. It would seem that the respondents feel that they are paying too much in regards to their food and beverage. This issue also surfaced in focus group discussions, where the general feeling was that even though the focus group members expected to pay higher prices than they would normally, that the prices were way too high for the quality of product that they were receiving in Jordan-Hare Stadium. As was to be expected, parking is a major issue in the minds of the consumer with mean scores of 2.43 and 2.42 respectively. These low scores may also be a product of a change in the parking laws and enforcement of those parking laws by Auburn University on game days. Other items that need to be examined are the ability of the crowd to enter and exit Jordan-Hare Stadium, along with their ability to move around once inside the stadium. Crowding is going to be a problem with any event of this type, but steps need to be taken in the design and construction phase of future renovations and or new construction in order to increase the ability of people to maneuver through the stadium.

Overall, while H1 was supported and the EVENTSERV scale was able to perform well in this instance, more research is needed in order to refine the scale and test it on a different location. Applying this scale to different types of sports (basketball vs. football)

may also prove to be beneficial. The idea that different sports have different types of fans is not a new one, and thus their assessment of cognitive satisfaction may also be different. Therefore, different scales, tailored to different sports, may be needed in order to achieve the highest level of accuracy and prediction when it comes to cognitive satisfaction.

## **Discussion of Hypothesis 2**

Certainly one of the concerns that any researcher has when conducting a survey project lies with how well the instrument(s) being used in the study will perform. This project represented a unique opportunity to test several scales that had been applied to other service settings, but not to a college football stadium. Because of this new venue, simply testing several of the constructs' in terms of their performance becomes an important part of this project. By doing so it is hoped that the groundwork has been laid to apply some of these scales to other outdoor and indoor stadiums intended to house sporting events, both at the professional and collegiate level. By way of review, H2 is now presented again.

- H2- All scales, measuring both cognitive and emotional output will display a minimum reliability level of .5.

In order to test H2 the major scales used in this study were subjected to reliability testing in the form of Cronbach's alpha. In general, the minimum required value for use in the social sciences is .50. The scales that were tested are the emotional scale both pre-game and during-game, the team identity scale, the EVENTSERV scale and the two question future behavioral intention scale. Briefly, the pre-game emotional scale achieved an alpha level=.540, with the during-game emotional date achieving an alpha level =.383. Team identity, which was measured via seven questions, was also evaluated and reported

an alpha level=.715. The previously discussed EVENTSERV scale recorded an alpha=.928. Finally the two item measure of FBI achieved an alpha=.812. While these numbers indicated that in this instance, H2 has been partially supported. All of the scales, except the during-game emotional scale exceeded the minimum requirement for use in the social sciences.

One possible explanation for the poor performance of the during-game emotional scale may be the inability of the respondents to separate their pre-game and during-game emotional output. Because the survey was administered after the conclusion of the football game, respondents were asked to recall both separate sets of emotions at the same time. This may have caused confusion which is supported by the differences in the factor structure between the two sets of emotional time periods. The pre-game emotional data revealed a two factor structure after factor analysis with the during-game emotional data containing a three factor structure.

Another potential issue in all emotional scaling is the interpretation of certain emotions in terms of their overall connotation. For instance, the emotion fear, is generally thought of to be a negative emotion, however in certain situations (such as in a scary movie) the eliciting of fear is the primary goal of the movie and to not do so would result in a negative satisfaction evaluation by the consumer. This type of variability can also be seen as having a potential impact, especially in the context of a highly emotional charged setting such as a college football game. The emotion surprise might be the most troubling, with its overall evaluation being based on the expectations of each individual respondent. For example, a fan that expects the home team to win handily may be surprised (in a negative way) at the performance of the team, even if, in the end, that a

victory is achieved. The opposite case may be a fan that expects the home team to win, but is surprised (in a positive way) as to how easily the visiting team was defeated. This type of confusion may have lead to the poor performance of the during-game emotional scale, and since this study did not contain an evaluation of the respondents' expectations in relation to either the level of play or the eventual outcome, no comparison between the two sets of data can be generated.

A third item of concern is the basic differences in the structures of the two time periods evaluated the pre-game and during-game. The during-game time period is essentially out the consumers' control, with pre-ordained breaks at the end of quarters and at half time. In addition the game play can be, and often is, interrupted by time outs, injuries and TV time outs. In contrast, the pre-game time period is basically in the hands of the individual, with the only deadline being the actual starting time of the game. Once again the issue of interoperating specific emotions and if they are positive, negative or neutral comes to mind. The emotion calmness, which may be a positive experience during the pre-game activities could possibly be seen as having a negative impact if experienced during the actual game play, the emotion boredom may be another example.

As has been discussed previously, like any business, sporting event venues are required to make a profit for their operators, managers and owners. While ticket sales and luxury boxes are considered to be the main source of income, teams that are successful on the field in terms of wins and losses will, undoubtedly, maximize their profits in such areas very quickly. In other words, a highly successful team on the field will fill up the stands and the luxury boxes. In addition, long term success will also result in the ability to increase the price of admission.

However, the play of the team and the results on the field are largely out of the hands of the managers and stadium operators. This then leads the focus of managers to items that they can control, inside of such stadiums. In order to assess how well the operators of such venues are doing in terms of satisfying consumers and ensuring their continued patronage to auxiliary services, researchers need tools that will accurately and reliably assess performance levels. There may be no better way to answer the question of reliability than applying previously validated scales to this new and unique setting and then measuring their ability. In effect, this was part of the logic used in this project, and the resulting reliability numbers indicate that the constructs used in the current project do, for the most part, perform. This is important because it provides the foundation for future research in sporting event venues.

With the partial validation found of H2, the groundwork has been laid in order to further refine academics understanding of satisfaction and future behavioral intention in sporting event venues. This could potentially lead to more efficient operations, increased customer satisfaction and the maximization of profits for the managers and owners of such venues. That being said, the poor performance of the during-game emotional scale warrants more attention from researchers with possible solutions including the measurement of expectations, the application and use of different emotional scales that may be more suited to sporting event venues and the inclusion of home victories vs. home losses in order to evaluate potential emotional changes.

### **Hypothesis 3**

As has been highlighted earlier in this project, emotional output has been found to be a contributing factor to cognitive satisfaction. More specifically a previous project

conducted in a football stadium found that when emotions were combined with cognitive scaling, that more of the variance in terms of cognitive satisfaction was explained than without the emotional output (Martin, O'Neill & Palmer, 2007). Because of the impact that emotional output had on the results, it was felt by the author that it would be important to measure emotional output in the current study in an attempt to duplicate the findings of Martin, O'Neill and Palmer (2007). As such the third hypothesis is presented again.

- H3-Positive emotions generated from the game day experience will make a positive improvement to the overall model of cognitive satisfaction.

The first task in testing this hypothesis was to run a series of correlations between the emotional output and the EVENTSERV scale. Three such correlations were run with pre-game emotions and the EVENTSERV scale achieving a correlation of .207 with a significance level less than .001. The second correlation was run between the during-game emotional output and the EVENTSERV scale with similar results. A correlation coefficient of .133 was found, at a significance level less than .001. A final correlation was run between the summation of the pre-game and during-game emotional output and the EVENTSERV scale, with a correlation of .211 with a significance level less than .001. While all three of the correlations were lower than expected, there were all significant and based on the fact that the third correlation between the summation of the positive emotions and the EVERNT serve scale achieved the highest correlation of .211 it was then used for further testing via structured equation modeling. In order to further test this hypothesis the positive emotions from both the pre-game and during-game emotional output was added to the overall model of cognitive satisfaction as a ninth factor. Using

structured equation modeling the new model was tested to see if the inclusion of the emotional scaling was able to add to the overall model. As was highlighted in the analysis section, the inclusion of the emotional aspect was questionable in this instance. While the inclusion of the emotional output did increase the level of the goodness of fit indices, namely the CFI, NFI and RMSEA in a positive way, that changes were not overwhelming. In addition, the path coefficient between cognitive satisfaction and emotional output was fairly weak at .27. So while the contribution of the emotional output was statistically significant, its ability to add to the overall model of cognitive satisfaction is questionable. As has been highlighted earlier, issues with the conceptualization and application of the emotional scale may have prevented the success the third hypothesis. While the results of this project question the use of emotional scaling in sporting event venues, various other studies from other segments of the service industry do indicated that emotions do play a role in the formation of satisfaction.

One solution may be a two-step survey in which respondents fill out a short survey addressing pre-game emotional output prior to entering the stadium and then a second survey containing among other things, the emotional scale for the during-game time frame. In this way confusion by the respondent in remembering pre-game emotions may be eliminated, and provide a clearer picture of emotional output. Another strategy may be to include an expectations element which would help cut down on the confusion in interpreting the dimensions of specific emotions. In addition, one of the objectives on the onset of this project was to address differences in emotional output after home a home lose vs. a home victory. Due to circumstances out of the researcher's control, a reasonable number of surveys after the two home losses experienced by the home team

could not be attained. One of the main factors was the weather during and immediately after one of the home losses, which included thunder, lightning and large amounts of rain. Obviously the combination of the loss and the weather made administering a paper based survey difficult. This may have been another reason for the lack of contribution that emotional output made to satisfaction.

#### **Hypothesis 4**

Previous research in event management has highlighted the use of team identity in order to help explain the level association between the fan, the team, and how important that relationship is to the self-identity of said fan (Wann & Branscombe, 1993; Madrigal, 1995; Madrigal, 2000). Briefly, the overriding theory is that how much the consumer identifies with the team will affect his or hers level of involvement in terms of purchasing team related paraphernalia, following the team through different types of media, and supporting corporate sponsors of the team through the purchase of products and services. Certainly this increase in spending habits in both team related items and with corporate sponsors presents a potentially favorable situation for the team and its corporate partners in financial terms. As such, measuring the level of a consumer's identity with the team becomes important especially in regards to its ability to help explain both cognitive satisfaction and future behavioral intention. H4 is as follows:

- The level of a respondent's team identity with the team will affect the resulting levels of cognitive satisfaction and future behavioral intention.

The first step in addressing this hypothesis was to measure the level of correlation between the respondent's team identity, cognitive satisfaction and future behavioral intention. Results indicated that there was as weak correlation between team identity and

cognitive satisfaction of .147 with a significance level less than .001, while there was a strong correlation between team identity and future behavioral intention of .473 which also had a significance level of less than .001. Further analysis was conducted via two separate multiple regressions in order to assess the amount of variance explained in cognitive satisfaction and future behavioral intention by team identity. Results mirrored the correlations, in that almost none of the variance was explained by team identity in regards to cognitive satisfaction with an R square of .021 and a good amount of variance was explained by team identity in regards to future behavioral intention, with an R square of .223.

When examining the team identity scale more closely, two of the mean scores stand out in the context of this project. These questions addressed how often the fans follow the Auburn Tigers through other types of media and how often the fans display their favorite team's logo on clothing, in their place of work etc. Both these items were the only scores to achieve a mean score of less than four, and as such may deserve special attention from the managers of Jordan-Hare Stadium. One explanation of the low score for the question of following the Auburn Tigers through other types of media may be the fact that the respondents for this project are season ticket holders and as such attend almost every, or every home game and do not need to follow the team through other media types except when they play on the road and in a nationally televised game. However, because of the importance that team identity plays in the formation of future behavioural intentions, any scores that can be improved should. Also of concern is the fact that contracts with sponsors and bowl games are largely based on the perception of the teams overall fan support and the resulting opportunities for branding and marketing. The

managers of Jordan-Hare may be well served by trying to increase the level of fan involvement through different types of media including TV, the internet and radio. This could be accomplished in several ways including special programming for fans of the auburn tigers, prizes for fans who call in during certain parts of radio or TV shows and fan recognition promotions via the internet.

The next item that deserves the attention of the managers of Jordan-Hare may be the low mean score of the question regarding how often the respondents display the logo of the Auburn Tigers on their clothing. By increasing the number of fans that display the logo of the Auburn Tigers, the managers of Jordan-Hare Stadium not only gain free advertising, but also support the overall strength of being identified with the Auburn Tigers. Because one of the underlying motivations of identifying oneself with a sports team is the inclusion into a select group with shared norms and values, the more that signs of that group membership are visible, the stronger the relationship is for all fans.

One implication is that team identity is an important part of a sports organization ability to generate revenue and encourage the respondents continued patronage to the facility. In effect, the more identified a respondent is with the team and the organization, the higher the chance that the fan will not only continue to make use of the facility but that they will also recommend attendance to other people. This free marketing and word of mouth could prove to be a substantial competitive advantage form such an organization. Thus it makes sense that managers of such venues should make every effort to build the level of identity between the team and every fan. Such activities may take place in the form of public appearances by the star players and coaches, advertisements in

written, verbal and visual media, fan appreciation days and any other activities that could strengthen the bond between the fan and the team.

Another important implication of these results is that while building the level of team identity in every fan is an important part of maximizing profits and attendance, it does not however make up for a poor performance in terms of service and goods inside the stadium. The results indicated that the consumers were able to separate their high level of attachment to the team, and their evaluation of services and goods once inside the stadium. Thus managers face two dimensions, one involving team identity and the resulting long term behavior of the fan and the other being the cognitive evaluation of goods and services, which will result in their short term level of satisfaction and spending habits. By focusing on both aspects, managers can not only help to guarantee future attendance, but also maximize their customers' satisfaction levels.

For academics interested in conducting future research in similar settings the measurement of an consumers' level of identity with the team or the organization may provide a useful tool in explaining future behavioral intention while also emphasizing the importance of not only building long term relationships with fans, but also meeting their expectations in terms of services and products inside the sporting event venue. By assessing the level of team identity, academics and managers can focus potential solutions to attendance and financial problems by separating problems into two distinct categories. The first involving how much the average fan identifies with the team and the second involving the cognitive assessment of goods and services inside the actual venue. By separating and identifying problems a more effective approach can be developed to

address any all issues, which may potentially result in a savings of time, effort and money.

Overall, H4 was partially supported with team identity explaining an unacceptable amount of the variance in terms of cognitive satisfaction, but painting a much better picture in regards to future behavioral intention. Certainly one can expect that the level of team identity found in the fans that attend a college football game are going to be high, and the results support this notion. But based on the amount of variance that was explained in future behavioral by team identity it stands to reason that managers of sporting event venues should also keep tabs on what that level is and strive to increase it whenever possible. The level of team identity may also prove helpful when trying to determine the price of tickets and other special events associated with the team. The logic here being that the higher the level of team identity found in the average fan, the more they are willing to tolerate in terms of ticket prices. High levels of team identity may also help sporting teams in their negotiations with potential team sponsors.

### **Hypothesis 5**

Along the same line of H3 and one of the central objectives of this project was to asses what role that emotions played in the formation of cognitive satisfaction and future behavioral intentions. While the question of emotions and cognitive satisfaction has already been addressed in H3, attention shall not turn to their role in the formation of future behavioral intention. As was seen in H4, team identity has already been identified as a good variable when it comes to explaining future behavioral intention. H5 states:

- H5-More of the variance for future behavioral intention will be explained when using emotional scaling, than with team identity alone.

The first step in assessing the relationship between the two constructs was to correlate the emotional output for both the pre-game and post-game time periods with future behavioral intention. This was done to see if there was any difference between the two time periods and the role that they have to play with future behavioral intentions. However, after the initial correlations were calculated, it became apparent that there was not a significance relationship between the constructs. Not only were pre-game emotion and during-game emotion not correlating well, but neither correlation was significant. Based on these results a regression analysis was not run and H5 was not supported.

These results indicated that in this instance, that the best predictor of future behavioral intention is the respondent's level of identity with the team. Some of the possible limitations that were discussed in the explanation for H3 may be the cause of this lack of evidence in H5. Another possibility is the fact that the level of the perceived relationship between the respondent and the team may, in its self represent a separate emotional driver. In essence, highly identified fans may be experiencing emotional output based on the level of that relationship. For example, a highly identified fan may start experiencing excitement or anticipation at the prospect of watching their favorite team compete whether it is in person or through some other type of media. These emotions could start to be generated as soon as the previous game has ended, or with the final game of the season. Thus, in order to take this possible phenomenon into account, questions about the emotions generated by the relationship may need to be developed and included in future research in order to address this question. Difficulties may arise due to the fact that even filling out a questionnaire about a respondent's relationship with a team may inspire excitement, happiness or even anxiety about the upcoming game.

Certainly the results found when analyzing H5 also beg the question as to what other factors go into the formation of future behavioral intention? With an adjusted R square of .223 it would appear that there are other factors making a significant contribution to the explanation of future behavioral intention. Certainly there is a need to conduct more research, both quantitative and qualitative in order to develop other measures that may help to explain the variance in future behavioral intention. One issue that has not been addressed in the literature is the price and availability of tickets, which may help to explain both the level of team identity between the fan and the team and their resulting level of future behavioral intention.

### **Performance of the Research Instruments**

The EVENTSERV scale that was developed during the course of this project is a specialized measure of cognitive satisfaction in sporting event venues. The need for this scale was based on several factors including the growing economic impact of sports tourism, the inability of other scales to perform at a reasonable level and the unique nature of sports venues themselves. While the results indicated that this new scale did perform well in explaining cognitive satisfaction, they must be taken with a grain of salt. This project represents the first testing of this scale, and as such, further research is needed in order to re-confirm similar results and the 8 factor structure. Future research may also need to contain more focus group in order to further refine the specific wording of questions contained in the survey.

The lack of performance for the emotional scale applied in this project is troubling and calls into question the use of Russell's (1980) Circumplex model of emotions in sporting event venues. In addition to some of the potential issues previously

discussed, one may also infer that there is a need to develop a specialized emotional scale for sporting event venues. For many of the same reasons that a specialized cognitive scale needed to be developed, an emotional scale designed for use in the same setting may be the answer. This is based on the overall unique nature of sporting events and the rather complicated relationships that exist between the fan, the team and the actual venue. This idea may be highlighted by the idea that the actual relationship between the fan and the team, may be, in of itself, a source of emotions.

On a more positive note, the inclusion of the team identity scale made a significant contribution in terms of explaining a fans' future behavioural intention. It would seem that team identity, does have a key role to play in the formation of future behavioral intention and as such needs to be addressed by the managers and operators of Jordan-Hare Stadium. However, it should be noted that team identity did not play a role in the formation of cognitive satisfaction, meaning that having highly identified fans is not the only task of the managers. There is still a need to provide quality goods and services.

### **Major Contributions of the Study**

In summary, the work adds to the existing body of knowledge in a number of key respects:

- The newly developed EVENTSERV scale represents a specialized scale in the arena of sporting event venues. The results of this project indicate that this scale has the promise of aiding in the explanation of cognitive satisfaction in these unique contexts. This has implications for researchers interested in assessing the performance of other sporting events in

satisfying customers, while providing managers and practitioners the information they need to execute changes for the better. In addition, with a better understanding of cognitive satisfaction and what drives its formation in sporting event venues, overall satisfaction levels can be increased. This not only leads to a more pleasant overall experience for the consumer, but the opportunity for increased revenue for the events themselves. It is also hoped that the current research will aid in the execution of more research in this currently underdeveloped area.

- While the emotional scaling techniques, in this instance, did not add to the overall project in terms of supporting specific hypotheses, it did reveal the need for continued research in the area of emotions and sporting event venues. Based on previous research in other segments of the services industry, it is not far fetched to believe that emotions do have an important part to play in the formation of both satisfaction and future behavioural intentions. By testing new emotional scales, or perhaps through the development of an emotional scale for event management and sporting events, an even better picture of satisfaction and future behavioural intentions can be painted. Thus this project has provided future researchers with a starting point in terms of emotions, satisfaction, future behavioural intentions and sporting events.
- A third contribution has been the successful application of the team identity scale to a previously untested venue (college football) and its ability to explain future behavioural intentions. While the benefits of

future behavioural intentions have already been highlighted, by confirming one of its main drivers, this research has laid the groundwork for future research. In addition, this project has given the managers of sporting event venues an important tool when it comes to the evaluation and maintaining of long-term ticket sales. In addition, by measuring team identity levels efforts to increase these levels in the fans can be more focused on specific items in the scale.

- The research has also provided evidence that patrons of sporting event venues, while highly identified, are able to separate themselves from their identity with the team when it comes to the evaluation of the goods and services associated with the game day experience. This revelation has importance to both the academic world in terms of constructing models of fan satisfaction in sporting event venues, and in the conceptualization of future projects. For the managers of Jordan-Hare Stadium, it must be realized that fans are evaluating the game day experience on two basic continuums. One is with the level of team identity which seems to only affect their long terms intentions in terms of their future behavioural intentions. The second being a more short term assessment of the goods and services both inside and outside of the stadium. Despite their differences, both represent important factors in the on-going success of Jordan-Hare Stadium in terms of revenue and continued patronage.

## **Academic Implications**

The new cognitive scale developed for this project may hold the most promise in terms of new scaling in the event management literature. As has been previously stated, sporting events represent a unique service setting, and one that has received a limited amount of attention from researchers. One of the many drawbacks of this situation has been the lack of scaling designed specifically for such venues. In order to address this issue, the EVENTSERV scale was developed. Results from this project indicated that the scale performed well, and represents an improvement of previously used scales in similar settings. This new scale has provided the ground work needed to expand the research in sporting event venues by providing a flexible scale that with minimal changes can be applied to most sporting events. It has identified 8 factors that were first developed in focus group work and then confirmed through both exploratory and confirmatory statistical techniques.

Another implication for academics was the results of the team identity scale and the scales connection to future behavioral intentions. Based on the results of this study the higher the level of team identity one has with a sports team the more likely they are to not only continue attending home games, but also recommended attendance to other people. The strength of this phenomenon may be best illustrated by teams that have had long periods of limited successes, yet despite this lack of winning still manage to fill the stands for every home game. A perfect example comes from professional baseball and the Chicago cubs. The Cubs represent an organization that has not won a playoff series in a number of years and has not competed for a World Series championship in over fifty. Despite these on the field failures however, Cubs games are routinely sold out, and they

enjoy what is considered by many to be the more supportive fan base in all of baseball. This example helps to illustrate the strength that team identity can play, and how important it can be to the financial success of team. The Cubs represent an organization that manages to fill the seats and turn a profit, despite poor on the field performance. For academics wishing to understand sporting events the research has indicated that this scale is not only statistically reliable, but an excellent indicator of future behavioural intentions.

The poor results generated by the emotional scales used in this project have several implications for academics interested in conducting research in sporting event venues. The first is to question the use of Russell's (1980) Circumplex model of affect, in such a setting. While several possible reasons as to why the scale performed poorly have already been presented, maybe the simplest answer is not to question the role of emotions, but instead, how to measure them accurately? This question may be answered in several ways, but the results contained in this project strongly indicate that the use of Russell's scale was simply not appropriate in this setting.

### **Practitioner Implications**

Inherent to the research at hand are the implications specific to Jordan-Hare Stadium. These conclusions and recommendations are based on a careful analysis of the data and represent three distinct constructs, cognitive satisfaction, team identity and future behavioural intentions.

- Practitioners need to be aware of several factors, that based on the cognitive scale, are underperforming in the minds of the consumers. The first of these are the prices for food and beverage inside the stadium. With

a mean score of 2.44, this was the second lowest scoring item on the cognitive scale. This issue was also of concern in focus groups, where the respondents expressed the notion that while they expected to pay higher prices for the food and beverage in such a setting, that the prices inside Jordan-Hare Stadium were unrealistic. They felt that for the quality of the products that the prices were simply too high. The focus group members also indicated that based on these prices that they made specific plans to eat and drink as much as possible before entering the stadium, thus enabling them to go the length of the game without having to purchase the goods sold by vendors. Not only does this one aspect have a negative effect on the overall satisfaction of the guests at Jordan-Hare, but it also represents potential profits lost. By adjusting either the prices, the quality of the products or both, the managers of Jordan-Hare may very well be able to increase the amount of revenue generated from their food and beverage operations. Another issue specific to this facility was the availability of parking around Jordan-Hare Stadium. No doubt the managers of the facility are aware of this problem and potential solutions are both limited and costly. While increasing the number of parking spots may be physically impossible, the managers may want to adopt other approaches when it comes to addressing this situation. One might be to give away prizes or discounts to patrons that carpool to the game. While this concept has already found its way onto the highways of major cities such as Atlanta and Seattle, by maximizing the number of people in each

car, the total number of cars searching for a parking spot may be reduced. Finally, another item of concern for the respondents was the time that it takes to enter and exit Jordan-Hare Stadium. Once again, the managers' solutions may be largely limited by the physical plant of the existing stadium and the increased security measures that are a direct effect of 9/11. One possible solution inspired by the airline industry would be to set assigned times for ticket holder to enter the stadium based on their section and seat numbers. In essence the ticket holders with the longest distance to travel (I.E. the upper deck), would be asked to come first and allowed the most time to enter the stadium. Not only will this strategy cut down on the number of people trying to enter the gates at any one time, but it will also cut down on patrons have to walk all over each other in an effort to get to their seats. This issue, along with the parking problem should also be taken into account when considering any additions or renovations to Jordan-Hare stadium and the surrounding area. Certainly these lessons should also be applied to any new construction and may be solved through better design and engineering of the actual stadium.

- While the overall scores for the team identity scale were high, and indicated that the fans attending the games were highly identified with the team there were two scores that achieved lower overall mean sores that the rest. These questions dealt with the wearing of the team logo on clothing and hats and following the home team through different types of media. Because of the relationship found in this study between team identity and

future behavioural intents, it would serve the managers well to find ways to increase these two scores, and maintaining the current overall level of team identity. One solution may be an increased emphasis on clothing that displays the team logo, and that can also be worn in a professional, business like setting. By developing such merchandise, and making it readily available for sale to patrons at the game, managers may be able to increase the number of people wearing the team logo, and the frequency of use. In terms of increasing how closely fans follow the team through other types of media the key may be to provide incentives for the fans to follow the team. This can take shape in a variety of ways, but the focus should be on rewarding fans that follow the team through the various media outlets, including the radio, television and the internet.

### **Future Research**

Certainly one of the main objectives of any future research in sporting event venues will be the application and testing of the newly developed EVENTSERV scale. By testing this scale multiple times and across multiple settings its ability to measure cognitive satisfaction in sporting event venues can be furthered assessed. In addition, potential changes based on future focus group work and qualitative research may allow for an even more refined scale with increased performance. The results of this study seem to indicate that the scale has performed reasonably well and thus make it suitable for further testing. Another aspect of the project that was not achieved, and may be useful to both academics and managers of sporting event venues would be the assessment of differences between the major constructs after a home loss vs. a home victory. This

subject has already been addressed and it relates to this project, but the inability of gather such data for this project does not mean that it would not be possible to achieve this goal under different circumstances. A third line of potential research may be further exploration of the emotional construct and how it relates to sporting event venues. This may involve the application of different emotional scales to similar settings, or the development and testing of a new emotional scale developed specifically for sporting event venues. Along the same line of thought, one may wish to examine the emotional output generated from the actual relationship between the team and the fan. This may provide significant insight into how the relationship is formed and maintained and allow for greater knowledge in terms of branding, marketing and corporate sponsorship.

### **Conclusion**

In closing, this chapter has provided a detailed analysis of the results, from the both the academic and managerial perspective. This chapter has also highlighted the major contributions of the study along with some potential weaknesses. In addition ideas for future research have been generated with the hope of stimulating more research in the area of sporting event management. Sporting events have become an important part of people's lives around the globe. This growing segment of the tourism industry contains a unique combination of goods and services and relationships between the fans, the teams the organization and the venue. As sporting events continue to grow in their size and economic impact, both researchers and managers will need better insight into what drives the satisfaction of their guests. It is thought that this research is a step in that direction, by not only adding to the current body of knowledge, but also through the development of the EVENTSERV scale.

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