

EXPLORING THE EFFECT OF EMOITON ON TIME-ELAPSED CONSUMER  
PECEPTIONS OF SERVIC. A REEXAMINATION OF THE SATISFACTION  
CONSTRUCT.

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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 the hospitality Industry for a little over two years 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.

## THESIS ABSTRACT

EXPLORING THE EFFECT OF EMOTION ON TIME-ELAPSED CONSUMER PERCEPTIONS OF SERVICE. A REEXAMINATION OF THE SATISFACTION CONSTRUCT.

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Customer satisfaction remains a central tenet of all relationship management efforts within the hospitality sector (Oliver, 1997). Yet, while many studies have concluded that there is a significant relationship between satisfaction and future behavioral intention, the validity of their findings is now being questioned in that they relate solely to measures of the more cognitive component of the satisfaction construct only (Liljander and Strandvik, 1997; Yu and Dean, 2001). This study will report on an ongoing attempt to place emotions at the center of hospitality based satisfaction research. It will address the question: what role do emotions play in the formation of customer

satisfaction (CS), perceptions of service quality (PSQ) and future behavioral intentions (FBI)?

The research addressed both the cognitive and affective aspects of the satisfaction construct in the context of the Auburn University Football Game Day Experience. A before-and-after (repeated measure) design was employed which sought to measure student perceptions of quality as they pertained to the Game Day experience over the course of the 2004 SEC Football season. Respondents were required to complete an inferred disconfirmation measure of service quality, as well rate their emotional state on each occasion in terms of both frequency of occurrence and degree (intensity) experience across a range of emotional variables.

The service quality scales were based largely on the previously validated SERVQUAL instrument (Parasuraman, Zeithaml & Berry, 1988), although tailored specifically to the game day experience. Participant emotion on the other hand was evaluated using Russell's (1980) circumflex model of affect. An additional single item attitudinal assessment of overall satisfaction was also collected. Future behavioral intention was assessed via three additional scaled variables designed to evaluate likelihood of future attendance, recommendation to others and continuing support for the Auburn University Football Team and venue. Questionnaire's were administered to willing participants pre-season in expectation format and on two subsequent occasions in direct performance format following two home football games.

The results show that service quality is positively associated with emotional satisfaction, which is positively associated with overall customer satisfaction and future behavioural intention. The results also support the mediating role of customer satisfaction when looking at the relationship between consumer perceptions of service quality and future behavioural intention and the fact that overall satisfaction and future behavioural intention are better explained when emotional satisfaction is considered in addition to consumers perceptions of service quality.

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## TABLE OF CONTENTS

CHAPTER I. INTRODUCTION .....	1
Aims and Objectives .....	1
Significance .....	2
Research Question .....	3
Limitations .....	4
CHAPTER II. LITERATURE REVIEW .....	6
Satisfaction .....	7
The Expectancy Disconfirmation Model .....	9
Cognitive Dissonance and Disconfirmation Theory .....	16
The Importance of Satisfaction .....	20
Customer Satisfaction and Loyalty .....	23
Determinants of Satisfaction .....	30
Service Quality .....	36
Quality Defined .....	36
Quality Evolution and its Leaders .....	39
The Core Concepts of TQM and CQI .....	43
Customer Satisfaction and Service Quality .....	45
Determinants of Service Quality .....	51
The Need for Accurate	
Measures.....	56
Inferred and Direct Measures .....	60
Emotions and Satisfaction .....	63
Emotion Defined .....	65
Reactive and Goal Directed Emotions .....	67
Emotions and Satisfaction .....	68
Classifying Emotions .....	73
Antecedents of Emotion .....	74
Measuring Emotion .....	75
Russell’s Circumflex Model of Emotions .....	76
CHAPTER III. METHODS	
Research Hypotheses .....	80
Theoretical Model .....	86
Qualitative and Quantitative Research .....	88
Research Setting .....	90

Pilot Research .....	91
The Research	
Sample.....	91
Adequacy of Sample Size .....	93
The Research Instrument .....	96
 CHAPTER IV. ANALYSIS OF RESULTS	
Description of Returned Questionnaires .....	102
Description of Individual Measurement Items .....	107
Scale Validity, Dimensionality and Reliability .....	122
The Structure of Emotion .....	143
Testing of Central Research Hypothesis .....	152
 CHAPTER V. DISCUSSION AND CONCLUSIONS	
Research Overview .....	170
Discussion of Hypotheses .....	171
Measurement instruments performance .....	184
Academic Implications .....	186
Practitioner Implications .....	189
Summary of the Contributions .....	194
Future Research .....	195
 REFERENCES .....	 197

## LIST OF TABLES

### LIST OF TABLES AND FIGURES

1. The Expectancy Disconfirmation Model .....	11
2. The Service Profit Chain .....	22
3. Customer Loyalty Model .....	29
4. Gronroos' Service Quality Model .....	48
5. Gap Model of Service Quality .....	51
6. Russell's Circumplex Model of Emotions .....	77
7. Theoretical Mode .....	87
8. Description of Questionnaire Return .....	104
9. Demographic Profile of Students .....	106
10. Descriptive statistics for stage one emotional data .....	108
11. Descriptive statistics for stage two emotional data .....	109
12. Descriptive statistics for stage three emotional data .....	113
13. Stage one analysis if importance/expectation measurement items .....	115
14. Stage one analyses of respondent performance score .....	116

15. Stage two analyses of performance-expectation score .....	119
16. Stage Three performance data .....	121
17. Correlation index .....	130
18. Correlation index of mean expectation scores .....	131
19. Factor analysis pertaining to inferred disconfirmation scores .....	136
20. Stage Two factor analysis-direct disconfirmation scores .....	138
21. Stage three factor analysis-direct disconfirmation scores .....	141
22. Stage one factor analysis-structure of emotion .....	143
23. Stage two factor analysis-structure of emotion .....	145
24. Stage three factor analysis-structure of emotion .....	147
25. Index of mean service quality/emotion scores .....	148
26. Index mean emotion scores and overall satisfaction .....	150
27. Index mean emotion scores and future behavioral intention .....	151
28. Index of mean perception scores/overall satisfaction and FBI .....	155
29. Correlation Index of Mean Service Quality/Emotions scores Stage II .....	158
30. Correlation Index of mean Emotions scores/Customer Satisfaction .....	159
31. Correlation of Index of Mean Emotion Scores/Future Behavioral Intention .....	160
32. Correlation of Mean Perceptions scores/OS and FBI .....	163
33. Theoretical Model of Central Research Hypotheses .....	168

34. Theoretical Model of Central Research Hypotheses ..... 169

## **Chapter I**

### **INTRODUCTION**

#### **Aims and Objectives**

This research reports on an ongoing attempt to place emotions at the center of hospitality based satisfaction research. The overriding objective of the study, therefore, is to add to the underdeveloped body of research on this topic within the hospitality and wider services domain. In so doing, that the results will benefit hospitality professionals to better understand the role that emotions play in shaping overall satisfaction levels and developing longer term relationships with patrons.

The research reviews the literature pertaining to each of the key research constructs and address the relationship between the more affective component of the satisfaction construct (emotional satisfaction), consumer perceptions of service quality (cognitive satisfaction), and longer term behavioral intention. In an effort to achieve this underlying objective, several research 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 the project will serve as a basis for future research, possibly enabling an even clearer understanding of the

above listed constructs as well as the discovery of other concepts that have not yet been realized.

### **Significance**

While it is widely accepted by hospitality professionals that emotion plays a crucial role in determining customer satisfaction levels, there has been a lack of studies concerning the role of emotion in hospitality satisfaction research (Barsky & Nash, 2002). While many studies have concluded that there is a significant relationship between customer satisfaction and future behavioral intention, the validity of their findings is now being questioned in that they relate solely to measures of the more cognitive component of the satisfaction construct (Liljander & Strandvik, 1997; Yu & Dean, 2001). Satisfaction however, is also believed to contain an affective (emotional) component without which customer's responses cannot be fully accounted for (Oliver, 1997; Liljander & Strandvik, 1997).

A growing body of literature now points out that the positive and negative emotions that consumers associate with the service encounter play an equally important role in subsequent satisfaction and future behavioral intention (Allen, Machleit & Kleine, 1992; Oliver, 1993; Richins, 1997; Barsky & Nash, 2002). 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).

Therefore, an understanding of the way consumers perceive their world and of how products/services are perceived and positioned in the minds of



consumers experiencing different emotional states is essential to hospitality professionals in their attempts to develop more efficient marketing strategies, and to make effective decisions on packaging and pricing. This study addresses this very issue and seeks to add to the literature by exploring the role of emotion in helping consumers form overall satisfaction and behavioural intention judgements. With this in mind, the results should prove useful in enhancing the operations of the hospitality industry for the benefit of both operators and consumers alike.

Another telling aspect of this project is the lack of research to date on the role that emotions play in satisfaction formation. In addition and to the best of this researcher's knowledge, no study has ever been conducted in the service setting selected for this project. Also significant is the design of this project which incorporates a repeated measure, longitudinal survey. The uniqueness of the setting and project design, coupled with the unparalleled level of detail provide the opportunity to make significant impact, not only in a research setting, but also in terms of real world application.

### **Research Question**

This study argues that consumer emotions pertaining to service delivery are critical to quality scores developed within disconfirmation models and to their ultimate satisfaction and future behavioral intention. The primary research question is postulated as follows: What is the relationship between consumer emotion, perceptions of service quality, satisfaction and future behavioral intention?

## **Limitations**

While every effort to minimize limitations has been made, there is no doubt that this project does have flaws. The following section is an effort to reveal these problems, not an effort to downgrade the work, but as a way to conceptualize potential revisions that could be made to future research in order to make it as accurate as possible.

One possible limitation is the sample group itself. The vast majority of the respondents were female. While the number of female respondents compared to that of male respondents was in-line with the demographic information available for the college of human sciences (where most of the surveys were administered) it does not correspond well with the overall population of the entire university. This could mean that the results are not entirely applicable to the entire student population.

Another limitation is the fact that the original plan for this study had to be changed two-thirds of the way through. From the onset, the goal was to conduct an expectations survey, a survey after a home victory and a survey after a home loss. But because of the football team's unexpected undefeated season, this was not possible. In essence this prevented a negative emotional episode to be observed. While there is no way of knowing for sure, the researcher does theorize that a home loss would have changed the results of the study.

As already addressed in the methodology section, no chance to afford for non-response/late response bias was given. While an effort was made to remedy

this problem, the inability to find a new class in which to administer the surveys prevented such an effort.

Another limitation is the fact that the modified SERVQUAL scale did not factor out. While this was expected by the researcher, it could be argued that by using a scale that does not work as it is intended, that the results may somehow be skewed. However the longitudinal nature of this study, along with the high response rate helps to diffuse this problem. As a result of these factors, the reliability and validity scores for both measures were well within the range of acceptability, based on modern statistical principles.

## **Chapter II**

### **LITERATURE REVIEW**

This chapter has several goals, which are realized in four separate sections. The first section focuses on satisfaction. Included in this section is a working definition of satisfaction, antecedents and influences on the formation of satisfaction, and the debate between satisfaction and quality. Section two is a detailed discussion on quality, which includes a clear definition of quality, the determinants of quality, the evolution of quality thinking, leaders of quality thinking, and the unique nature of services. Section three addresses the different measures used for assessing satisfaction and quality. More specifically, it includes a description of qualitative and quantitative research methods, the debate between direct and inferred measurement, SERVQUAL and SERVPERF, and weaknesses of the current measures used. This then leads to the fourth section which concentrates on emotions. This section contains a definition of emotions, the role that they play in service encounters, antecedents of emotions, the role they play in the formation of attitudes, and the tool used to measure emotions in this project.

Since the 1970's, there has been a growing effort to understand what satisfaction is, especially in the eyes of the consumer. This, in turn, has led to an

ever growing body of research directed to the complete understanding of satisfaction, how consumers come to be satisfied, and the effects that satisfaction /dissatisfaction has on businesses today. (Oliver, 1997; Barsky & Nash, 2002). As the research has matured different aspects of satisfaction have come to light, generating even more research to help explain what role if any, these different factors have on satisfaction. The development of definitions, models, determinants, mitigating factors and other variables has made satisfaction/dissatisfaction research an important part of the academic and business arena. As the business world continues to demand ways to increase profits while operating in an ever increasing level of competition, special emphasis has been placed on satisfying the customer. With this in mind, the first section of this project is dedicated to a review of satisfaction. Several different aspects of satisfaction will be approached. This will include a clear and workable definition of satisfaction as well as different models that are used to evaluate satisfaction levels in consumers. Different determinates of satisfaction, as well as its importance to the service industry will also be discussed. The effects that satisfaction has on consumers will also be addressed, mainly in the form of customer loyalty and the impact that loyalty can play in the operating profits of any organization. .

### **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, satisfaction results at the end of the consumer’s 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 anticipated satisfaction 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. If a consumer is expecting to be completely blown away by the service of a five star hotel, but only receives decent service, the end result is dissatisfaction. If this level of decent service had been received at any other hotel, the end result may have been positive, but because the expectation of phenomenal

service was present, adequate service was found to be, disappointing. The effect that expectations have on consumers evaluation of service leads to the most widely used model on consumer satisfaction, the Expectancy Disconfirmation Model.

### **The Expectancy Disconfirmation Model revealed**

As the name implies, this model uses the difference in expected performance and actual performance as a means to describe how a consumer forms an evaluation of satisfaction. In other words, this model is based on the idea that when one consumes a product or service, there are certain expectations about how the product or service will perform. Depending on if the product/service lives up to these expectations or fails completely, will in the end, lead to either satisfaction or dissatisfaction. There can also be a third state in which exactly what was expected to happen did in fact occur. This is known as zero confirmation. A brief description of each factor will be discussed (Oliver, 1997).

- Negative Disconfirmation- In this instance performance of the product or service has fallen short of what was expected by the consumer. This leads to negative disconfirmation, or dissatisfaction.
- Positive Disconfirmation- This case is the opposite of negative disconfirmation. The expectations of the consumer have been met, or even exceeded by the product performance or service rendered. This results in positive disconfirmation, or satisfaction.

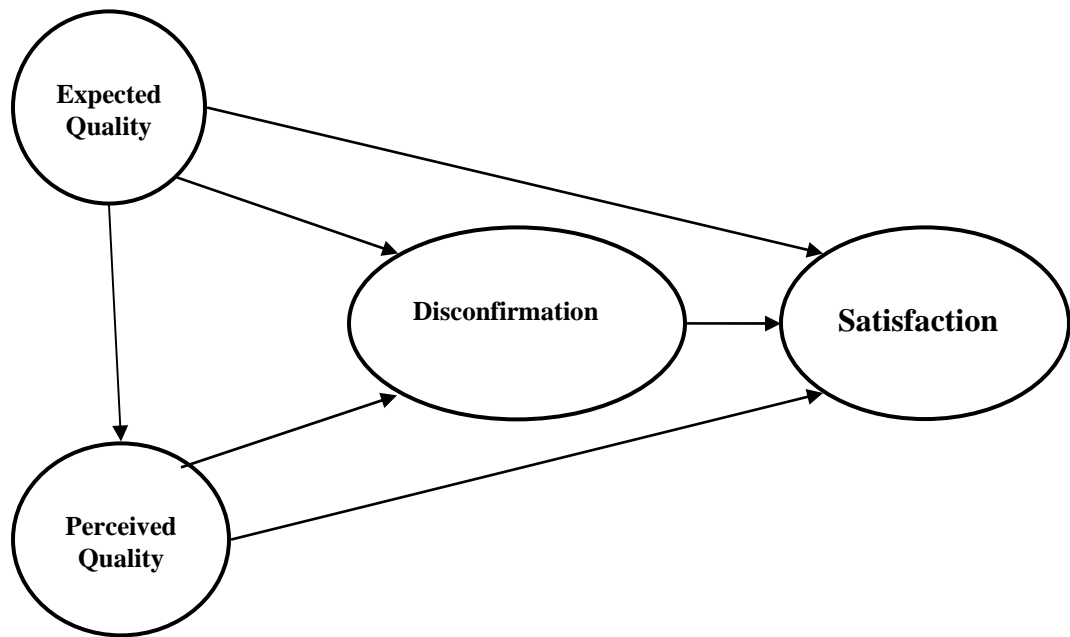
- Zero Disconfirmation- This occurs when high probability events do happen, and low probability events do not. For example having to endure low temperatures in the dead of winter, while not satisfying, is not dissatisfying because it is an expected event.

Also paramount to this model is the level of disconfirmation that has occurred. The discussion on magnitude is highlighted later in this section as to reasons why there are differences in the levels of disconfirmation experienced by the consumer. Once again, the main factor is the importance of the item causing the disconfirmation. For example, the amount of dissatisfaction occurring over a stale candy bar compared to the level of dissatisfaction occurring over a stale wedding cake highlights how the importance of the item can vary so greatly. Often times the financial cost is also very important. Something that costs a lot of money is going to cause much more disconfirmation if it breaks down, or does not perform up to expectations. On the other hand, the level of disconfirmation experienced over the malfunction of a free toy in a Cracker Jack box is minimal. As can be seen from figure 1, this relatively simple model has provided much of the foundation for the current level of understanding and research on satisfaction today. This model is one example of what is considered to be the most widely used theory to explain customer satisfaction. “Almost all consumer satisfaction models are based on some sort of comparison process, and the most widely used conceptualization, the disconfirmation-of-expectations model, and compares pre-consumption expectations with performance perceptions with performance



perceptions” (Wirtz & Bateson, 1999, p. 83). This now leads to the discussion of zones of tolerance and how they relate to satisfaction.

Figure 1. – Classic disconfirmation model



Source: (Wirtz & Bateson, 1999)

### **Zones of Tolerance**

Another important development in the evolution of the thinking on 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 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. Of course, there are differences in the zones of tolerance that individual consumers possess. (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 (Hoyer & MacInnis, 2001). For example, a business traveler may place very high importance on a wake up call in order to make it to an important business meeting, while a family on vacation may not even think about a wake up call for the entire duration of their trip. 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 effect 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 (Zeithaml & Bitner, 2000; Hoyer & MacInnes, 2001). 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.

### **Satisfaction and Variability**

The word satisfaction has its roots in the Latin words *satis* (enough) and *facere* (to do or make). When using the root words satisfaction is defined as nothing more than products or services that have the capacity to provide what is being sought to the point of being enough (Dooley, 1995). More recent

interpretations in the consumer domain, however, allow for a greater range of favorable and unfavorable responses beyond mere fulfillment. It has been observed that fulfillment, or the point at which satisfaction occurs, is sometimes unknown. While basic needs, such as hunger, have a definite level of fulfillment or satisfaction, others needs such as the need for service when staying in a hotel is in fact, unknown (Oliver, 1997). This is, in part, due to several factors associated with the variable nature of services in general. While a more detailed discussion is presented in section two, one of the main factors affecting service and thus satisfaction is the idea that service is plagued by a high level of variability or heterogeneity (Soderlund & Julander, 2003).

Variability, in the eyes of the consumer, comes from two main sources. The first source is related to variation in the consistency of the service provider's performance. This can be manifested in a wide variety of ways. The service performance in two hotels of the same name (corporate or brand name companies) may be completely different. In other words the service experienced at one hotel in city x was much better than the service experienced at a hotel with the same brand name, but located in city y. Variation may also occur on as small a level as time of day, or day of the week. In essence unpredictable levels of service cause the assessment of service quality and overall satisfaction to change (Soderlund & Julander, 2003; Oliver, 1997).

The second main source of variability refers to customer-related factors. What this means is that people evaluate their level of satisfaction differently over time. In other words, what was once considered by the consumer as a satisfying

experience may next week become a horrible encounter. This change in evaluation can be caused by many things including: new information, emotional states, attitude changes, new experiences, or a whole host of other cognitive, emotional or physiological changes (Soderlund & Julander; Oliver, 1997).

The main point here is that humans are continuously evolving, and as such how a consumer defines a satisfying experience is also in flux. This then leads to the relative difficulty of defining satisfaction in general.

As was briefly discussed above, satisfaction is defined by the consumer, but his or her definition is also constantly changing. This makes laying down a clear and workable definition a difficult task. Any definition must take into account the evolution of satisfaction and the variable nature of how it is determined. Different people view the same object, situation, or service encounter in different lights. In fact, some researchers have indicated that depending on the type of service or product being evaluated, that consumers use different processes to come to a determination of satisfaction. Phillips and Baumgartner (2002) state: “There should be instances in which the satisfaction process is more cognitive and other instances in which it is more affective” (p. 243).

Once again, the variable nature of how a consumer comes to a state of satisfaction/dissatisfaction is highlighted. Determining which consumers fall into the more cognitive approach and which ones are more likely to use an affective approach is at this point, impossible. Implicit to this theory is the idea that no two consumers will evaluate the same service or product using the same process. Two

guests standing in line at a front desk are evaluating the service that they are receiving in two completely different ways. The end result of satisfaction/dissatisfaction will be attained, but how it is being processed and measured by the two guests is, in effect, completely random (Phillips & Baumgartner, 2002). While the variable state of satisfaction does make it difficult to define, several basic concepts regarding how consumers evaluate satisfaction do make the task easier. Some of these key concepts will now be addressed.

Most of the recent models of satisfaction have been oriented towards a paradigm relating initial expectations to perceived performance of the product or service (Swan & Martin 1981; Churchill & Surprenant, 1982; Oliver, 1997; Phillips & Baumgartner, 2002; Soderlund & Julander, 2003; Schul & Schiff, 1993).

### **Cognitive Dissonance and Disconfirmation Theory**

Cognitive Dissonance is a psychological theory developed by Festinger (1957).

The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance. When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance (Festinger, 1957, p.357).

Dissonance is a state of mind in which the subject is not comfortable.

Consonance is the opposite of that state, a state of mind in which the subject is

comfortable. Another point to consider is dissonance as a motivating factor.

Festinger further states: “I am proposing that dissonance, that is, the existence of non-fitting relations among cognitions, is a motivating factor in its own right” (1957, p.357).

Festinger (1957) states: “New events may happen or new information may become known to a person, creating at least a momentary dissonance with existing knowledge, opinion, or cognition concerning behavior” (p.4).

### **Magnitude**

The amount of dissonance caused, or magnitude, is going to vary from person to person because of several factors. The biggest factor is how important the subject that is causing the dissonance is to the person experiencing it. This idea of magnitude, or importance, can also be applied to the formation of satisfaction as well. The more important the product or service experience, the more important it is going to be that satisfaction is achieved (Oliver, 1997). Some other basic examples of how dissonance might arise are as follows:

- Dissonance could arise from logical inconsistency. If a person believes that man will reach Mars in the near future and also believes that man will not be able to build a device that can reach Mars, these two thoughts are dissonant with each other.
- Dissonance could arise because of cultural standards. If a person at a formal dinner uses his hands to pick up a wayward chicken bone, the knowledge of what he is doing is dissonant with the knowledge of formal dinner etiquette.

- Dissonance may also arise because one specific opinion is sometimes included, by definition, in a more general opinion. Thus, if a person is a Democrat but in a given election prefers the Republican candidate, the cognitive elements corresponding to these two sets of opinions are dissonant with each other.
- Dissonance may arise because of past experience. If a person were standing in the rain and yet could see no evidence that he was getting wet, these two cognitions would be dissonant with one another because he knows from experience that getting wet follows from being out in the rain (Festinger, 1957, p. 14).

The most common way to achieve consonance, according to Festinger, (1957) is to find other people who feel or believe the same way that you do. Social support from other people, especially from peers, will often allow the subject to relieve even large amounts of cognitive dissonance. Peer pressure, is linked to Cognitive Dissonance. The reduction of Cognitive Dissonance can be a powerful motivator when it comes to our actions and thoughts.

Another way for a consumer to achieve consonance is to simply seek out more information that supports his/her point of view, and avoid information that goes against it (Festinger, 1957). Consumers can be reassured that their belief is correct by only reading material that is in line with their views, thus reducing their level of cognitive dissonance. In doing so the consumer would also actively avoid or discount any new information that would go against their belief(s), which could cause even more dissonance.



## **Disconfirmation Theory**

Disconfirmation Theory is based on cognitive dissonance, and is a model used to help explain how people act in response to their level of dissonance (Festinger, 1957). The important thing about this theory is that it has been developed into a powerful tool to measure the relationship between customer's pre-purchase expectations and their perceptions of service performance. When a person consumes a product, especially a service product, there is a natural tendency to evaluate that product, or service. As a basis for this measurement, the expectations that the consumer has going into the purchase are compared to the results after the purchase. Because we can measure the pre-purchase expectations and the post purchase satisfaction, we can quantify how well the product or service meets those expectations. In other words, we are talking about satisfaction. The proponents of this model (Disconfirmation Theory) suggest that product and service performance exceeding some standard leads to satisfaction while performance falling below this standard results in dissatisfaction. (Well & Prensky, 1996; Oliver, 1997).

Two separate disconfirmation models have been developed by researchers (O'Neill & Wright, 2002). Both models are used to measure satisfaction levels. The first technique is called Inferred Disconfirmation. It measures the difference between the customer's expectations and the actual performance received. To accomplish this, expectations and perceptions are measured separately producing a relative measure of how well the service has performed compared to what the consumer expected (O'Neill & Wright, 2002). The other technique is referred to

as Direct Disconfirmation. Direct Disconfirmation is meant to provide an absolute measure of performance. The service or product is measured in a manner that demonstrates how it has performed based on the customer's absolute level of satisfaction or dissatisfaction. (O'Neill & Wright, 2002).

### **The Importance of Satisfaction**

Satisfaction plays a key role in the hospitality industry. (Edvardsson, Johnson, Gustafsson & Strandvik, 2000). As the industry continues to grow and mature, the need for a competitive advantage becomes more and more important. The following section of this chapter will further highlight this importance, as well as some of the reasons why it will continue to be such a driving force in the industry as a whole.

Blodgett (1993) found that dissatisfied consumers, on average, told nine others about their negative experience, and that some businesses may lose ten to fifteen percent of their annual volume each year because of poor service. Rather than seek redress, many of these dissatisfied consumers will instead exit, meaning that they will never stay there again, and engage in negative word of mouth behavior. The end result for the service provider is lost sales and profit (Blodgett, 1993).

### **The Service Profit Chain**

The Service Profit Chain (SPC) was first developed by Heskett, Jones, Loveman, Sasser and Schlesinger in 1994. The main goal of this new model was to establish relationships between profitability, customer loyalty, employee satisfaction, loyalty and productivity (Heskett, Jones, Loveman, Sasser &

Schlesinger, 1994; Kamakrua, Mittal, de Rosa & Mazzon, 2002). The stimulus for this new approach was given in the following:

Heskett, Jones, Loveman, Sasser and Schlesinger (1994) state:

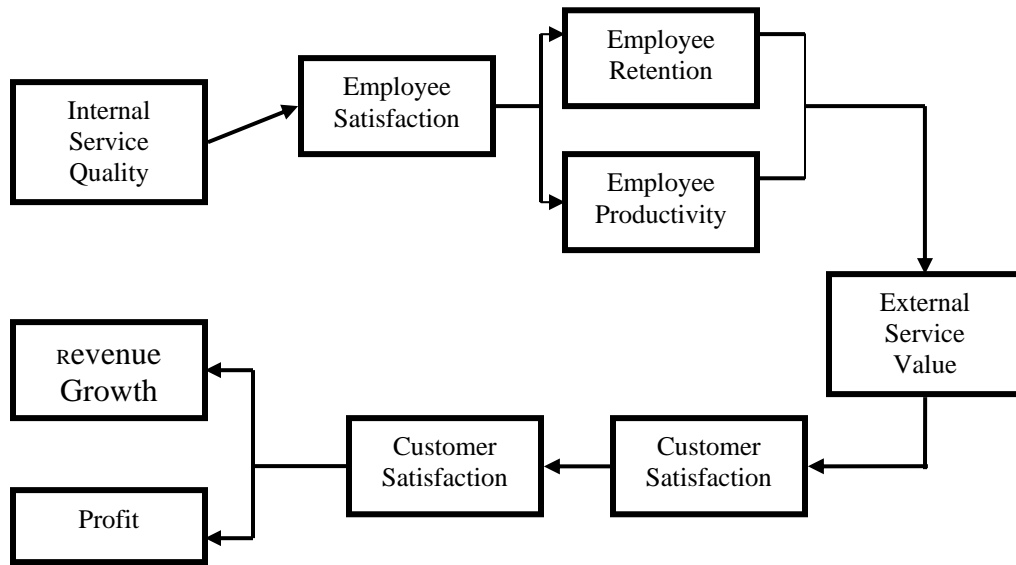
That the new economics of service requires innovative measurement techniques. These techniques calibrate the impact of employee satisfaction, loyalty and productivity on the value of products and services delivered so that managers can build customer satisfaction and loyalty and assess the corresponding impact on profitability and growth. In fact, the lifetime value of a loyal customer can be astronomical, especially when referrals are added to the economics of customer retention and repeat purchases of related products. For example, the lifetime revenue stream from a loyal pizza eater can be \$8,000, a Cadillac owner \$332,000, and a corporate purchaser of commercial aircraft literally billions of dollars (p.164).

The authors continue when they comment “The service profit chain, developed from analyses of successful service organizations, puts hard values on soft measures. It helps managers target new investments to develop service and satisfaction levels for maximum competitive impact, widening the gap between service leaders and their merely good competitors” (Heskett, Jones, Loveman, Sasser & Schlesinger, 1994, p.164). Their model consists of the following points:

- Customer Loyalty Drives Profitability and Growth.
- Customer Satisfaction Drives Customer Loyalty.
- Value Drives Customer Satisfaction.
- Employee Productivity Drives Value.

- Employee Loyalty Drives Productivity.
- Employee Satisfaction Drives Loyalty.
- Internal Quality Drives Employee Satisfaction.
- Leadership Underlies the Chain's Success.

Figure 2. –The Service Profit Chain



Source: (Heskett, Jones, Loveman, Sasser & Schlesinger, 1994)

Key to this model is the logical order that each step represents before the next step and the final goal of customer loyalty can be achieved. This starts with the environment that the employee conducts work in and continues from there. Each step in the chain must be fully realized for the entire system to work. This system provides managers and business leaders with a direct framework from which they can begin this systematic approach to employee and customer satisfaction with the end goal of increased profits.

## **Customer 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” (p. 389). Another definition of loyalty is “Loyalty is a customer’s predisposition to repurchase from the same firm again” (Edvardsson, Johnson, Gustafsson & Strandvik, 2000, p. 919). 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 rebuy or repatronize 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).

### **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 rebuy or repatronize 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 (Oliver, 1997). 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 (Oliver, 1997). Other research has also indicated that a loyal customer is much more forgiving for a product defect, or small lapse in service. Bolton (1998) states: “experienced customers are less sensitive to such losses because they tend to weigh prior satisfaction levels heavily” (p.45). With 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, competitor’s 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 to a firm requires 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 United States 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 firm's relationship with a customer, while profits tend to be back loaded or accrue only after a customer is loyal for some time.

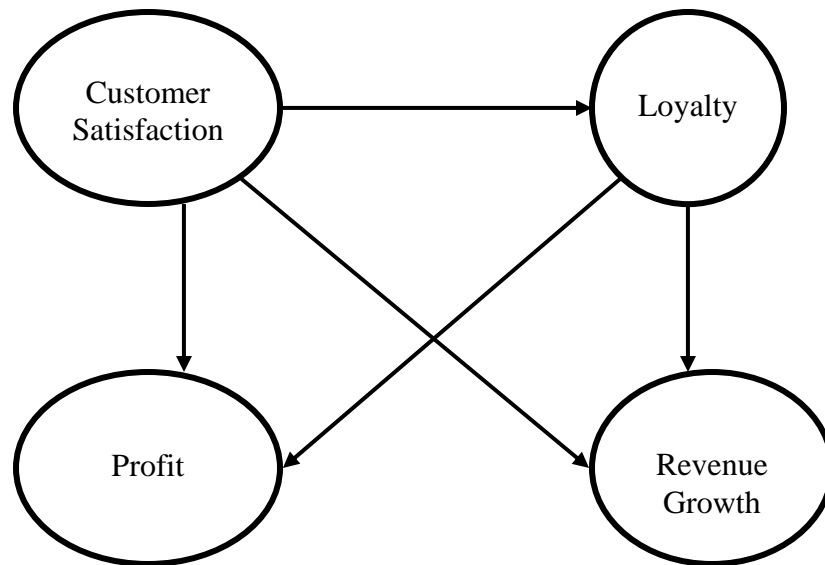
According to Edvardsson, Johnson, Gustafsson & Strandvik (2000) there are six factors that affect overall costs, revenues and resulting cash flows:

- Acquisition Costs. The costs of customer acquisition include incentive programs, 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 customers 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 3. – 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 is/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.

### **Determinants of Satisfaction**

The overall importance of satisfaction and different models/concepts of satisfaction have been highlighted. But another key aspect of understanding satisfaction is the antecedents or determinants of satisfaction. Interestingly enough, there is a debate on one of these antecedents. The idea that service quality is an antecedent to satisfaction has been questioned. In fact, it has been proposed by some researchers (see Oliver, 1981; O'Neill, 1992 for a review), that satisfaction is an antecedent of service quality. While the debate has never truly been settled, it is the author's view that service quality is in fact a determinant of satisfaction. This is based on the research conducted by Berry, Zeithaml & Parasuraman, 1985; Oliver, 1997, and O'Neill, 1992. Because of the debate

surrounding this one aspect of satisfaction/service quality, more emphasis is placed on other determinants of satisfaction.

### **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; Grace & O’Cass, 2004; Wakefield & Blodgett, 1999). 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 hotel or restaurant in which the actual service is being provided. Items such as hotel lobbies, elevators, rooms, linens, decorations, bathrooms, pools, banquet facilities 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 family on vacation that made a reservation based on the fact that the hotel has a pool will make an evaluation of that pool upon arriving at the hotel. A satisfactory experience with the pool will have a positive influence on the overall satisfaction of the hotel stay. On the other hand, a pool that is unsatisfactory will then lead to a lower overall evaluation of satisfaction. One of the mitigating factors of this evaluation will also be the importance that the particular item being evaluated is to the consumer (Grace & O’Cass, 2004; Wakefield & Blodgett, 1999).

## **Core Service and Employee Service**

Another part of any interaction between a service provider and a consumer is the actual service, or core service, provided. Also closely tied to this is going to be the service employee. Here the core service is defined as the processes by which the service is delivered, whereas the service employee 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 customer’s 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 be 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. (Grace & O’Cass, 2004; Stauss, 2002; Jamal & Naser, 2002). Another important factor in satisfaction is what happens to the consumer once something goes wrong. This process, which is referred to service recovery, or complaint satisfaction, also plays an important role in overall satisfaction.

## **Complaint Satisfaction/Service Recovery**

Complaint satisfaction, or service recovery, is defined as “the satisfaction of a complainant with a company’s response to her/his complaint” (Stauss, 2002, p. 174). While it is generally considered best to get things right the first time, the unique nature of services means that often times there is a breakdown in the service provided to a guest. When this does occur, the effort to make the guest happy and the end result of that effort will have a direct effect on the overall evaluation of satisfaction (Strauss, 2002; Ruyter & Wetzels, 2000). Normally this breakdown in service has two important elements. First is the actual dissatisfaction, resulting from some specific transaction: for example, reserving a non smoking room, but upon check-in being assigned a smoking room. In addition, it is possible that the problematic transaction occurs in an on-going relationship. This implies that there is an overall evaluation of the existing relationship when the customer is confronted with a failing transaction and the recovery reaction of the company (Strauss, 2002). Current research by Stauss & Neuhaus (1997, p. 237) has found nine attributes that consumers use to evaluate complaint satisfaction, these attributes include:

- **Adequacy/Fairness of the outcome:** Adequacy of the problem solution; fairness of the compensation offered.
- **Access:** Ease of finding a competent contact person.
- **Friendliness:** Politeness, courtesy, communication style.

- Empathy: Willingness to take the customers' perspective, understanding the customers' annoyance, individual complaint handling.
- Individual Handling: Non-standardized response that is customized to the problem and the wishes of the complainant.
- Effort: Visible effort to solve the customers' problem.
- Active Feedback: Activity to find out the best solution for the customer; notification about delays, feedback about procedures and decisions.
- Reliability: Keeping of promises.
- Speed of Response: Speed of reaction to the complaint, speed at which complaints are resolved.

These nine attributes were assigned to two dimensions: outcome complaint satisfaction and process complaint satisfaction. The differentiation is made in analogy to Gronroo's (1984) differentiation between technical and functional quality (this model will be addressed in more detail in the following section).

### **Experience**

Consumer experience or expertise has been found in previous research to be an important part of the evaluation of satisfaction (Gronroos, 1983; Jamal & Naser, 2002). This idea fits well into the zone of tolerance theory, in which the actual zone can and is different for each customer (Zeithaml & Bitner, 2000). In much the same way, the method with which the consumer is going to evaluate



their level of satisfaction is also going to be different. Experience, or lack of it, is one of these mediating factors (Gronroos, 1983; Jamal & Naser, 2002). This is the basis of the experience theory. A consumer that has a lot of experience, with staying in hotels, knows what alternatives are available to him. This allows the consumer to be more discerning, and allows them to have a much more accurate expectation of what is an acceptable level of service (narrow zone of tolerance). On the other hand, a consumer that has little or no experience traveling has much less information on which to base their comparison on (larger zone of tolerance). Thus this consumer may be comfortable receiving a level of service that the more experienced consumer would consider inadequate.

### **Emotion/Feelings**

Recent research has shown that feelings, or the emotions generated by the service encounter also play a key role in the determining of satisfaction (Grace & O’Cass; Allen, Machleit & Kleine, 1992; Oliver, 1993; Richins, 1997; Barsky & Nash, 2002; Oliver, 1997; Cronin, Brady & Holt, 2000; Liljander & Strandvik, 1997; Yu & Dean, 2001). Due to the complicated nature of the emotional construct, the role that it plays in satisfaction evaluation and the fact that emotion in its self is a completely separate construct, and will be addressed later in this literature review. It should be noted, however, that there has been a basic lack of emotional measurement when it comes to the largely cognitive measurement of satisfaction (Liljander & Strandvik, 1997, Liljander & Bergenwall, 2004).

## **Service Quality**

Quality and the drive to attain quality has been a driving force in the world since Man's ancestors roamed the land. Even the earliest cave man understood quality at its most basic level. A spear that did not kill prey was useless. This need for quality products in personal lives, in businesses and by society in general has in many ways led us to the current level of understanding and continues to push research even further. As the concept of quality has become more defined, rationalized, and researched its importance has only recently begun to be fully recognized. This now leads to the second chapter in which several goals will be realized. The evolution of quality thinking will be discussed, including the work of several of the quality guru's responsible for this evolution. A better understanding of what quality is, its relationship with service industries, and difficulties in providing quality service will also be addressed. Several different models of service quality will be revealed, along with different dimensions of service quality. The importance of customer satisfaction and its ties to service quality will be examined along with the tools used to measure these two concepts. This now leads to a discussion on the definition of quality and service quality.

## **Quality Defined**

The overall importance that quality plays in the world day is best summed up in the following statement:

Society has always been concerned about the quality of the goods and services provided to them. For the lack of poor quality, a house might have fallen on its ancient inhabitants, a fishing ship may have sunk while at sea, or a battle

may have been lost due to arms that would not work. Over the ages, though the concept of quality has developed into a discipline, a complex set of principles and assumed truths that define how the quality of good and services is to be assessed, managed, delivered and assured (Dooley, 2003, p.2).

To really understand what quality is and its importance, especially to the hospitality industry, there needs to be a clear and accurate understanding of how it is defined. Quality is something we all know of, but is hard to define because it is ultimately defined by the person(s) making the actual assessment. In other words quality is in the eye of the beholder. Further complicating the issue is how quality is evaluated. This, of course, depends on what the product being evaluated is and who is evaluating it (Oliver, 1997). Food quality is based on its taste, smell, appearance, temperature, and other factors that can be evaluated by the senses. Each one of these variables means something different to different people. A car's quality might be evaluated on resale value, acceleration, safety features, and repair rates. Once again, these variables can be viewed in contradicting ways, depending on who is evaluating the car.

Over the years numerous definitions have been proposed (Oakland, 1984). Gronroos distinguishes between technical quality (what is delivered) and functional quality (how it is delivered) (Gronroos, 2001).

### **The Difficulty with Service Quality**

It has been recognized that tourism, hospitality, and leisure services have a number of characteristics that distinguish them from physical goods (Reisinger, 1992; Berry, Zeithaml & Parasuraman, 1985; O'Neill, 1992). Not only do these

differences make the services industry unique, each one also comes with its own set of challenges that must be met by the service provider (O'Neill, 1992).

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 the hospitality services cannot be displayed, sampled, tested or evaluated before purchase (Reisinger, 1992).

Another issue that makes service quality difficult to attain is the inseparability of production and consumption. Tourism services cannot be produced in one place, transported for sale to another and sold and consumed again in yet another. Tourism services are often sold, produced and consumed in the same location, all at the same time (Reisinger, 1992). 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)

Tourism services also suffer from a high level of heterogeneity. They 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).

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 hers needs and wants. Unlike manufactured goods, inconsistencies in service cannot be eliminated in tourism services, 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 (Reisinger, 1992).

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 (Reisinger, 1992).

While these problems and others contribute to the overall difficulty of providing service quality, this has not stopped researcher's efforts to develop models that can be used to help explain what service quality is to the consumer. These models are important because they give researchers and industry leaders tools with which they can measure service quality (Gronroos, 2001; O'Neill, 1992).

### **Quality Evolution and its Leaders**

Prior to World War II, the notion of quality was based on the physical characteristics of the product. According to this product based approach, quality reflects the differences in measurable attributes of the product; the implication is

that more of an attribute may be desirable. This definition of quality is balanced somewhat by the manufacturing based view of quality, in which the manufacturer measures the quality of the product by its conformance to a predetermined set of specifications (Tenner & Petoro, 1992). The development of total quality as a management system (TQM) and continuous quality improvement (CQI) began in the United States at the turn of this century. Several individuals have played key roles in the development, implementation and dissemination of this important new approach to managing an organization (Tenner & Petoro, 1992).

Frederick Taylor is credited with being one of the first to attempt to use new approaches to improve the work of unskilled workers in industrial organizations (Tenner & Petoro, 1992). In his book, *The Principles of Scientific Management*, Taylor reveals a few elements of his management theory. They are summarized as follows:

- A Daily Task-Each person in every organization should have a clearly defined, large task which should take one day to complete.
- Standard Conditions-The worker should have standard tools and conditions to complete the task.
- High Pay for Success-Significant rewards should be paid for the successful completion of the task.
- High Loss for Failure-Failure for completing the task should be personally costly.
- Task in Large-Sophisticated organizations should be made difficult so as to require skilled, accomplished workers.

This systematic approach and the application of some basic concepts to manual work earned Taylor the title of father of scientific management (Tenner & Petoro, 1992). It was Taylor who first came up with the idea of quality inspection and who created a whole new department known as the quality assurance department. This included a group of inspectors that reported to a chief inspector who was in charge of the elimination of all defects from the product (Tenner & Petoro, 1992).

Shewhart reported that variations exist in every facet of manufacturing but that variations could be understood through the application of simple statistical tools such as sampling and probability analysis. Shewhart developed control charts to track performance over time (Tenner & Petoro 1992). This was an important step in the overall development of Total Quality Management. By looking at the performance of products over time, the manufacturer could gain a real sense of where he was, where he had been, and where he was going. It was this concept that later changed into the more encompassing idea of quality control. It was the work of Shewhart in sampling and control charts that attracted the interest of another statistician, W. Edwards Deming (Tenner & Petoro, 1992).

Deming is credited with training Japanese engineers in the 1950's and assisting them in their remarkable recovery from the devastation of World War II (Tenner & Petoro, 1992). Deming became known as an expert on sampling and was hired away from the Department of Agriculture in the late 1930's to help the Census Bureau institute a new sampling approach for collecting census data. Deming, who studied under Shewhart, realized that the statistical tools used at the

plant were equally applicable at the office. In the post World War II economy, Deming realized that quality was taking a back seat to production. He also realized that he had been teaching engineers, not the managers responsible for the enterprise. Deming summarized his concepts and principles in a series of fourteen points and seven deadly diseases (Tenner & Petoro, 1992). These can be summarized as follows:

Quality is primarily the result of senior management actions and decisions and not the result of actions taken by workers. Deming stresses that it is the system of work that determines how work is performed and only managers can create the system. Managers are in charge of allocating resources, providing training to workers, selecting the equipment and tools that workers use and providing the plant and the environment necessary to achieve quality (Tenner & Petoro, 1992). Deming also believed strongly in the use of statistical measures to implement quality control.

Joseph Juran, who was also employed by Bell Laboratories, was familiar with the work of Shewhart (Tenner & Petoro, 1992). Like Deming, he also became involved with the rebirth of the Japanese Manufacturing industry after World War II (Tenner & Petoro, 1992). He took three fundamental managerial processes used to manage finances and applied them to managing quality. The three elements of the Juran Trilogy are: Quality Planning, Quality Control and Quality Improvement.

- Quality Planning - “A process that identifies the customers, their requirements, the product and service features the customers expect,



and the processes that will deliver those products and services with the correct attributes and then facilitates the transfer of this knowledge to the producing arm of the organization.”

- Quality Control - “A process in which the product is actually examined and evaluated against the original requirements expressed by the customer. Problems detected are then corrected.”
- Quality Improvement - “A process in which the sustaining mechanisms are put in place so that quality can be achieved on a continuous basis. This includes allocating resources, assigning people to pursue quality projects, training those involved in pursuing projects, and in general establishing a permanent structure to pursue quality and maintain the gains secured.” (Tenner & Petoro, 1992, p.20-21).

These men and several others provided the basic ideals and framework of what would become the concepts of Total Quality Management and Continuous Quality Improvement.

### **The Core Concepts of TQM and CQI**

The core concepts of TQM include customer focus, process improvement and total involvement (Oakland, 1984). Customer focus is just that, focusing on what the requirements, needs, and expectations of the customer, and then meeting these needs. Accurate assessment of the customer and the variables listed above is also key. Process improvement, or continuous improvement, is built on the premise that work is the result of a series of interrelated steps and activities that result in an output. Constant attention to each of the steps in the process is

necessary to reduce the variability of the output and improve the reliability of the process (O'Neill, 2000). Total involvement begins with the active leadership of senior management and includes efforts that utilize the talents of all employees in the organization to gain a competitive advantage in the marketplace. Employees at all levels are empowered to improve their outputs by coming together in new and flexible work structures to solve problems, improve processes, and satisfy customers. Suppliers are also included and, over time, become partners by working with empowered employees to the benefit of the organization.

Another important part of TQM and CQI is quality assurance (Oakland, 1984). Quality assurance is:

broadly the prevention of quality problems through planned and systematic activities including documentation. These will include the establishment of a good quality management system and the assessment of its adequacy, the audit of the operation of the system and the review of the system itself (Oakland, 1984, p. 17).

Another aspect of CQI is the use of benchmarking. Benchmarking is nothing more than observing others performing duties or tasks and then using the best parts of their operations to further improve your operations (Chamblis, 2003).

The real driving force for this development in quality thinking was a post-World War II economy where consumers could choose from a full array of goods and services. The relative openness of U.S. markets to all foreign firms meant that the U.S.-managed firms were subjected to increasingly intense competition from emerging economies with lower wage rates, from economies whose

employees enjoy a lower cost of capital, and from economies whose employees have a different work ethic. These conditions, coupled with the fact that American consumers will always choose those goods and services that best meet their full range of requirements, means that American managers must provide quality products (Tenner & Petoro, 1992).

### **Customer Satisfaction and Service Quality**

When it comes to customer satisfaction, the most widely used model is the disconfirmation approach, in which satisfaction is related to the variation between a customer's pre-purchase expectations and their post-purchase perceptions of the actual service performance. According to disconfirmation theory, the extent of satisfaction or dissatisfaction that a customer has with a particular service encounter is determined by the difference between the customer's expectations of performance and the actual perceived performance of the service (Oliver, 1997). Any difference between them is referred to as disconfirmation. There is a large amount of research suggesting that service quality is a vital antecedent to customer satisfaction (Berry, Zeithaml & Parasuraman, 1985; Cronin and Taylor, 1992; O'Neill, 1992). There is also strong evidence to suggest that satisfaction may be a vital antecedent of service quality (Oliver, 1981; O'Neill, 1992). This makes both of them important to today's hospitality professional (O'Neill, 1992).

### **Importance of Service Quality and Satisfaction to the Hospitality Industry**

Service quality and satisfaction derived from 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). Increasing

competition within the hotel industry has led to a very real demand for competitive advantages. Price was once the determining factor between hotels and hotel chains. While price differences are still found in the industry, disparities in price are now primarily based on the specific hotels service level and targeted customer. The internet has played a major role in the equaling out of price differences within specific market segments. This means that hotels now have to focus on other aspects that are important to the consumer to differentiate themselves from the competition. The most controllable and important part of the hotel industry in the consumers' eyes is the service that they receive.

O'Neill (1992) agrees when he states:

in an attempt to achieve sustained competitive advantage, hospitality organizations are now investing quite heavily in a host of service quality improvement initiatives. By and large the majority of these initiatives have found form through the British Standards Institute, the European Quality Award, the Malcolm Baldrige National Quality Award, the Edwards Deming Prize, or derivatives thereof. In addition, the hospitality industry has also been investing quite heavily in raising quality standards through human resource development. Such initiatives include the Investors in People Award, the Welcome Host Initiative, and various vocational qualification schemes (p. 167).

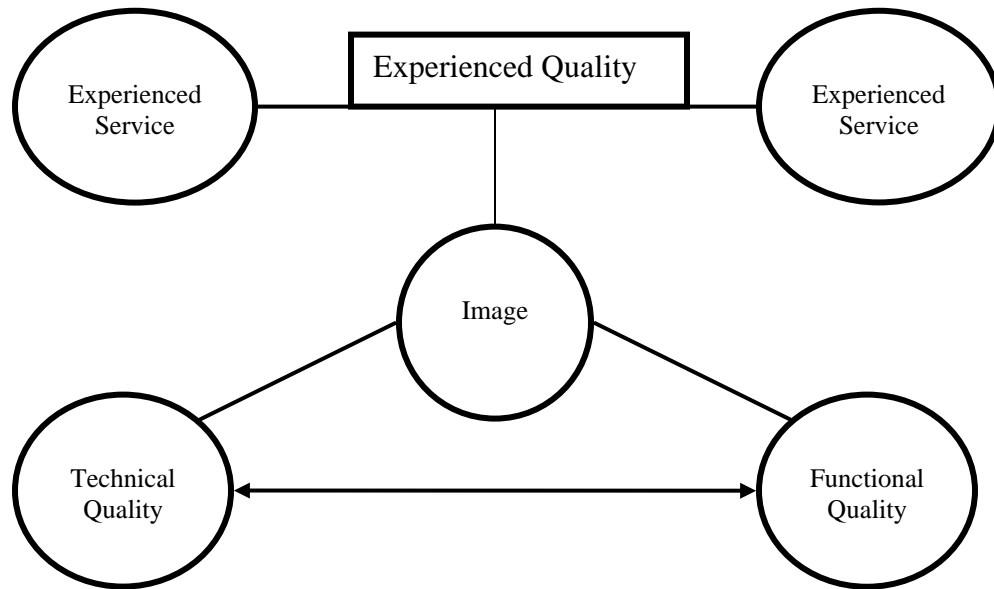
### **Gronroo's Service Quality Model**

One of the first service quality models developed by Christian Gronroos in 1983 provided the groundwork for many of the working models that we have

today. It consists of two main parts, Technical Quality and Functional Quality that, when coupled with a third dimension image, leads to Experienced Quality. Depending on the expectations that the consumer had, and how the experienced quality measures up in the end will determine the overall level of satisfaction (Gronroos, 1983).

- Technical Quality is nothing more than what the customer actually receives from the interactions with the firm providing the service. Examples would be a hotel guest that gets a room and a bed to sleep in. The quality of that bed and the room, will, according to Gronroos, have an affect on the overall quality experience (Gronroos, 2001).
- Functional Quality is the way in which the technical quality is transferred to the guest. How the customer is treated while being given access to the technical aspect of the interaction is very important to the overall evaluation of service quality. Also important is the image, or reputation of the firm providing the service.

Figure 4. Service Quality Model



Source: (Gronroos, 2001)

The important role of reputation, or image, can be seen in the hospitality industry with the advent of the branding phenomenon and the emergence of huge hospitality corporations and their marketing efforts. The combination of both technical goods, which are tangible, and Functional Quality, which is intangible, leads to the overall satisfaction level (Gronroos, 2001). O'Neill (1992) explains:

Quality evaluations are both process and output based. They derive from the service process as well as the service outcome. The manner in which the service is delivered may thus be a crucial component of the service from the customer's point of view. To put it another way, it is not just what is delivered but how it is delivered that determines the customer's overall perception of service quality ( p. 168).

## **The Gap Model of Service Quality**

Another important model in the world of service quality is the Gap Model, which was developed by Parasuraman, Zeithaml and Berry in 1985. It identifies five gaps, one of which is external, defined as the difference between the expected service and the perceived service and four internal gaps, or factors which explain or contribute to a failure in the delivery of the expected service quality (Rosen, 2003). These internal gaps as presented by Rosen (2003) are the following:

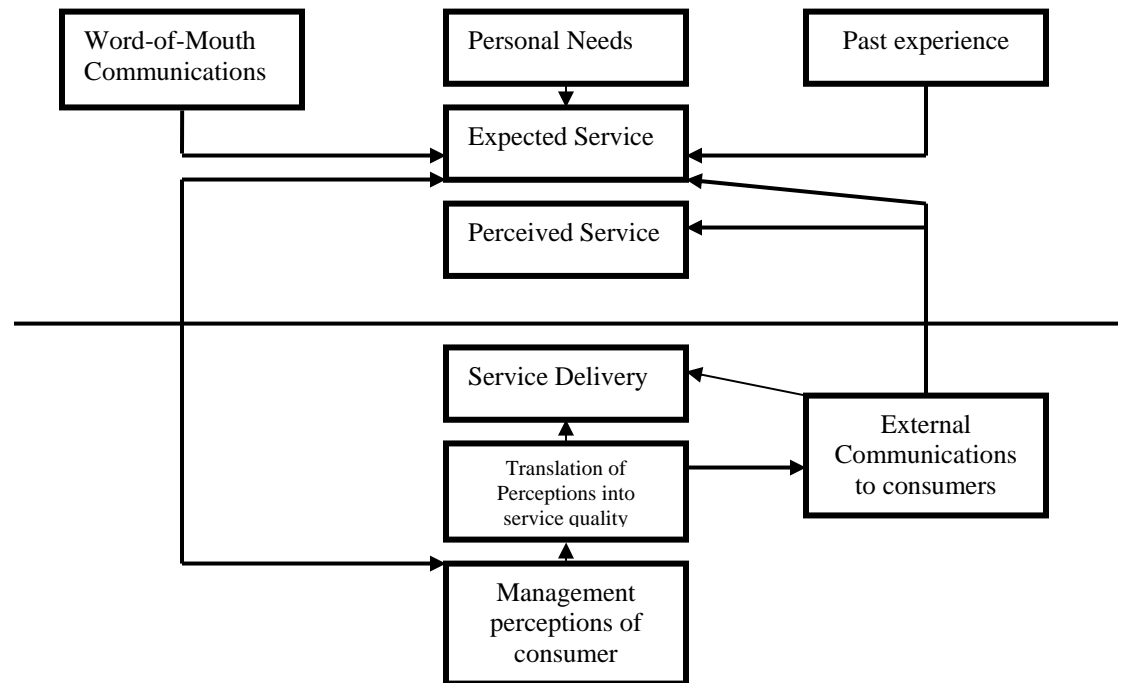
- Gap 1: Consumer expectation- Management perception gap. In this case management does not correctly perceive or interpret consumer expectation when formulating the service delivery policy. In other words, the company attempts to satisfy a wrong or non-existent need or interest. Three main reasons, according to this model, can explain this lack of adjustment between a company and its customers. Firstly, managers may think that they understand their customers' needs and do not invest in market research. Secondly, managers spend too little time in gaining first-hand knowledge of their customers, and thirdly, number of layers of management which can interfere the flow of objective information.
- Gap 2: Management Perception- Service quality specification gap. This gap reflects managements' incorrect translation of the service policy into rules and guidelines for employees. Possible explanations for this gap include the presence of sub-standards for tangibles, sub-standards for employee qualifications and sub-standards for process

designs. Other factors include managements' focus on short-term profit and cost reduction rather than on quality; second, the absence of formal quality programs; third, lack of task standardization and fourth, the perception of lack of feasibility for meeting customer's expectations.

- Gap 3: Service quality specification- Service delivery gap. In this case, employees do not correctly translate rules and guidelines into actions. Lack of teamwork, poor employee job fit, inadequacy of tools or technology and of supervisory systems, role ambiguity, and role conflict are all factors that account for this gap.
- Gap 4: Service delivery- External communications gap. In this case, the external communications, or in other words, the promises made to customers; do not match the actual service delivery. The propensity to over promise, together with ineffective horizontal communication between those responsible for the company's external communications and the front office employees, can explain customer disappointment because the promised service did not match the expected service.



Figure 5. Gap Model of Service Quality



Source: (Rosen, 2003)

As was stated earlier, defining quality and service quality is an elusive task, but the advent of quality models has aided in the assessment of how a consumer might judge the quality of a service provided to them. Now that some of the actual models have been researched, the next step is to define the exact determinants of quality and service quality in the eyes of the consumer.

### **Determinants of Service Quality**

As research on quality and service quality progresses, the need for a clear vocabulary with which to discuss quality in strategic terms is needed (Garvin, 1984). These dimensions of service quality, or criteria for measuring quality in the eyes of the consumer, provide researchers and operators both a common

language and a list of measurable items that lead to the satisfaction of consumers'.  
Some of the different determinants will now be discussed.

### **Eight Dimensions of Quality Model**

The eight dimensions of Quality Model, which were developed by Garvin (1984), will be explained using eight points. They represent eight dimensions thought to be used by the consumer when coming to a conclusion on service quality.

- Performance- Performance refers to a product's primary operating characteristics. Because this dimension of quality involves measurable attributes, brands can usually be ranked objectively on individual aspects of performance.
- Features- Features are the bells and whistles of products and services, those characteristics that supplement their basic functioning. To many customers, superior quality is less a reflection of the availability of particular features than of the total number of options available. Often choice is quality: buyers may wish to customize or personalize their purchases.
- Reliability- This dimension reflects the probability of a product malfunctioning or failing within a specified time period. In terms of providing service, reliability is more a measure of consistency across the same brand. For example, the service received at one Hampton Inn will be the same as the service that you get at another Hampton Inn in another city.

- Conformance- Conformance is the degree to which a product's design and operating characteristics meet established standards. This dimension owes the most to the traditional approaches to quality pioneered by experts like Juran.
- Durability- A measure of a product's life, durability has both economic and technical dimensions. Technically, durability can be defined as the amount of use one gets from a product before it deteriorates. In the service industry, this dimension does not translate well because of the unique nature of service in general (see above).
- Serviceability- Serviceability is the speed, courtesy, competence, and ease of repair. Consumers are concerned not only about the product breaking down, but also about the time before service is restored, the timeliness with which service appointments are kept, nature of dealing with service personnel, and the frequency with which service calls or repairs fail to correct outstanding problems. This point, though not directly, does apply to service providers. Because a bad service experience its self cannot be repaired like a broken automobile, some form of restitution, apology or service recovery must be taken by the firm to re-establish the satisfaction of the guest. Obviously the way in which this effort is conducted is going to have an effect on over all service evaluation, future behavioral intention, and word of mouth.
- Aesthetics- Aesthetics is nothing more than how a product is rated as by the five senses: sight, hearing, taste, smell and touch. While service

its self cannot be evaluated with the five senses, some of the products associated with that service can be. These might include the room, the bed the lobby, the food from room service, or other variables.

- Perceived Quality-Consumers do not always have complete information about a product's or service's attributes; indirect measures may be their only basis for comparing brands. A perfect example would be a guest staying in a hotel who thought there was a pool located on the premise. Upon check-in the guest is informed that there is in fact no pool at all and as such is not satisfied with his experience (Garvin, 1984).

According to Garvin (1984), these eight dimensions provide a framework from which a company can base its efforts to increase quality. They are flexible and depending on the product, the company and the consumers may or may not be applicable in every circumstance.

### **Ten Determinants of Service Quality Model**

Another important model, also developed by Berry, Zeithaml and Parasuraman (1985) is the ten determinants of service quality model. These points include:

- Reliability- Which involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means that the firm honors its promises.
- Responsiveness- Concerns the willingness or readiness of employees to provide service, it also involves timeliness of service.

- Competence- This means possession of the required skill(s) and knowledge to perform the service.
- Access- This aspect involves approach-ability and ease of contact.
- Courtesy- This involves politeness, respect, consideration and friendliness of contact personnel.
- Communication- This means keeping customers informed in language they can understand. It also means listening to customers.
- Credibility- This involves trustworthiness, believability and honesty. It also includes having the customer's best interests at heart.
- Security- Is the freedom from danger, risk, or doubt. This also means physical safety, financial security, and confidentiality.
- Understanding the Customer- Means making the effort to understand the customer's needs and wants.
- Tangibles- These are the physical aspects of the service (hotel room, or the bed).

One of the conclusions drawn by the authors when developing this model is that consumer perceptions of service quality result from comparing expectations prior to receiving the service and actual experiences with the service. If expectations are met, service quality is perceived to be satisfactory; if unmet, less than satisfactory; if exceeded more than satisfactory (Berry, Zeithaml & Parasuraman, 1985). From this work, came a new model and a new way in which to measure service quality, and overall consumer satisfaction. The development

of this model and others is a reflection of the need to accurately understand what is going on inside the consumer's head.

### **The Need for Accurate Measures**

The importance of service quality on a firm's performance has in turn pointed to the need for accurate measures of quality, and more importantly, how the customers themselves measure quality relative to the service that they receive.

The rapid development of the service industries and the inevitable rise in competition between rival companies has resulted in an increasing need for service providers to identify gaps in the market in order to improve service provision and retain customers. In the service sector, the provision of high-quality customer service is of fundamental and paramount importance.

Objective methods by which to assess the quality of service provision are therefore vital for attaining and retaining high-quality services (Coulthard, 2004, p. 479).

The development of models and measures that can provide a clear and accurate picture of quality and related service quality cannot be underestimated. Without these measures, a true understanding of what a consumer truly thinks can not be formulated. By not providing quality service to its patrons, an individual business stands to suffer from negative word of mouth, loss of customers, increased employee turnover, loss of profits and market share, and ultimately, its ability to operate all together. This in turn has helped to lead to the development of several different models, some of which that will be reviewed in the following sections.

## **Five RATER criteria Model**

Further analysis by Berry, Zeithaml & Parasuraman revealed that their original 10 points could in effect be reduced to five determinates of satisfaction, thus leading to the development of their RATER Model (1985). Otherwise known as SERVQUAL, RATER stands for the five dimensions that Berry, Zeithaml and 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.

It is believed by the authors (Berry, Zeithaml & Parasuraman, 1985) that these five dimensions are a concise representation of the core criteria that customers employ in evaluating service quality.

## **Problems with SERVQUAL**

Predominant among the recent studies, and the bar for almost all disconfirmation studies, has been the work of Parasuraman, Zeithaml and Berry (1985) and the development of the SERVQUAL instrument. In developing SERVQUAL, the belief that service quality is measurable only in the eyes of the consumer was paramount. They also believe that if consumers are going to experience a high level of service that their expectations will be met or exceeded by the service product. Because service is much less tangible than other products (for example a chair), the ways in which customers form the expectations used to measure service are also different (Oliver, 1997; Parasuraman, Zeithaml & Berry, 1985). If the customer's expectations of any of the aforementioned dimensions are not met, then the customer will experience a gap between the two, and thus would not feel that they are experiencing a high level of service (O'Neill & Wright, 2002).

This model has generated more studies and criticism than any other model of its kind to date (Coulthard, 2004). These criticisms arise from several points, including: conceptual basis, process orientation, dimensionality, the use of gap scores, difference scores, problems in Likert scales (interpretation of the mid-point) and order effects (Coulthard, 2004). Of particular interest is the fact that all the research to this point has focused on the cognitive and not the affective.

Coulthard (2004) States:

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 (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 could be applied to any service. It needed to be customized to the specific service. Babakus and 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 & Taylor (1992).

Cronin & 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. 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). As can be seen from above, the debate about the expectations-performance model and SERVQUAL is well documented. Adding

to the debate is the realization that emotion also plays a role in the formation of satisfaction and quality evaluations.

### **Inferred and Direct Measures**

Both of these methods are based on the expectancy/disconfirmation of expectations and are used in conjunction with this model (Yuksel & Rimmington, 1998). Quite simply inferred measurement involves computing the discrepancy between expectations of performance and evaluation of outcomes. This technique requires researchers to compile separate data sets relating to customer-service expectations and perceived performance. The scores for performance are then subtracted from those of expectations to form the third variable, the confirmation/disconfirmation (or difference score), which is used in subsequent analysis (Yuksel & Rimmington, 1998).

On the other hand, the direct approach requires the use of summary-judgment scales to measure confirmation and disconfirmation. The researcher avoids 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 (Yuksel & Rimmington, 1998). Both these techniques, Inferred and direct methods of expectancy disconfirmation paradigm have been used by hospitality and tourism researchers in various hotel and tourism related studies (Yuksel & Rimmington, 1998).

### **Perceived Performance**

Limited empirical evidence indicates that the performance dimensions alone predict behavioral intention at least as well as the complete expectancy-

disconfirmation model (Yuksel & Rimmington, 1998). When a product or service performs well then, the consumer will be satisfied regardless of any confirmation/disconfirmation effect. From this theory it can be concluded that perceived performance of the product or service is the most important determinant of satisfaction.

### **Qualitative Research**

The different models and dimensions of service quality discussed above are often expressed in a quantitative manner. These models (SERVQUAL, SERVPERF, and SPC) are usually used to conduct survey research. After data collection has occurred the information is converted into numerical form, entered into some form of a data base and then subjected to statistical analysis. This however, is not the only way to gather information from consumers' or on the performance of an organization (Leedy & Ormrod, 2005). Other methods known as qualitative research do exist. Important to note that while it may be difficult to do, these methods can be, and often times are, converted into quantitative research. Often times these qualitative forms of research provide exceptional detail and allow for a wider range of information to be gathered than can be in the confines of a survey or guest comment card. This detail is important because it allows the researcher to gain a better understanding of what is really going on in the minds of consumers (Leedy & Ormrod, 2005).

The most obvious form of this research is the interview process. This can be conducted one-on-one or with a larger group. The advantage to this form of information gathering is that it allows the customer to put into words what he or

she is thinking/feeling in regards to product performance or service rendered. In addition, because the interview is done in person the differentiation between what is being said and how the respondent feels (and to what degree these feelings are experienced) can be attained through the observation of body language, tone of voice, hand movements and other physical attributes. This kind of observation is impossible in a survey-only research project (Leedy & Ormrod 2005).

Another way to observe service performance is in the use of secret shoppers. A secret shopper is nothing more than a guest that, unknown to the service provider, is conducting an in-depth review of the provider. This form of research has in recent history become very popular with hotels and restaurants. Companies such as AAA or Mobile use this method in an effort to determine worthiness for their Five Star or Five Diamond status, respectively (Leedy & Ormrod, 2005). Corporate hotel companies have also gotten in on the game, sending unknown shoppers to different hotels across the country in an effort to monitor each hotel and the service that it provides. After any such event takes place, an in-depth written report with the observations of the secret shopper is provided as a tool to improve performance (Leedy & Ormrod, 2005).

This brief discussion on qualitative research is not intended to belittle the importance of this form of research, or the results collected from it. It was intended to allow for the existence of other forms of research from the ones discussed in this chapter and that were used in the implementation of this project. This now leads to an introduction about the role that emotion plays in service quality.

## **Emotions and Service Quality**

While many studies have concluded that there is a significant relationship between quality, 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). Much of this research has been focused on the disconfirmation of some comparison standard or perceived service performance. Quality and satisfaction however, are also believed to contain an affective (emotional) component without which customer's 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).

## **Emotions and Satisfaction**

As was touched on at the end of section three, there has been a general lack of research concerning the role that emotions play in customer satisfaction/dissatisfaction, future behavioral intention and customer loyalty.

Liljander & Strandvik (1997) comment:

Satisfaction is believed to contain an affective dimension too, without which customer's responses cannot be fully accounted for. While the comparison processes in disconfirmation judgments require deliberate processing of information, the affective processes are thought to be partly outside the customer's conscious control. Cognitive and affective responses can thus be seen as distinct, and having a separate influence on satisfaction formation. Although affect has emerged as an important research theme in satisfaction research, where it has also been studied in service contexts, its importance has not been fully recognized in service quality models or in empirical research on service quality and satisfaction (p. 149).

This in turn has led to some research, but the need to expand on this work and to gain a better understanding of the role that emotions play was the catalyst for this study.

Another point of weakness in the previous research is that fact that the vast majority if it has been cross-sectional in nature. As described in earlier sections, this form of research provides a snap shot in time. While there are advantages to this method, one of the drawbacks is the fact that it does not allow for any changes that may occur over time, and what has caused those changes. By employing a longitudinal study, it is believed that a better understanding of emotions can be formed. As such the need to review the current literature, as well as provide relevant background information is the basis of this section. A general discussion on emotion, as well as the role that it plays in satisfaction/dissatisfaction, future behavioral intention and customer loyalty will

be addressed. Also included are some of the antecedents to emotion, a review of the research to date, different constructs used to measure emotion, and problems with these scales. This now leads to the issue of trying to define emotion(s).

### **Emotion Defined**

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

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).

A broader definition is given by Oliver (1997) who suggests that, “Emotion includes arousal, various forms of affect and cognitive interpretations of affect that may be given a single description.” (p.294). 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 & 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. This thought goes hand in hand with the

expectancy-disconfirmation model in that different ways of thinking about the same situation, or say, different expectations about the same situation, will, in the end, determine different emotional reactions. The same can be said in the formation of satisfaction. The point here is that trying to define emotions (affect) has up this point, been unsuccessful. Oliver (1997) 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. (p. 294)

Adding to the confusion is the idea that emotions are in fact not completely universal. Different cultures that speak different languages have differences in opinion about how emotions are expressed, interpreted, and defined (Oliver, 1997). While it has been hard for researchers to define emotions in general, a much narrower definition has been developed for consumption emotions.

### **Consumption Emotion**

Consumption emotion refers 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). This now leads to different types of emotions, and the different models explaining how emotions are formed.

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

Another 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 (Liljander & Bergenwall, 2004). 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. They of course can be positive, negative, neutral, or some combination of them all. Liljander & Bergenwall (2004) 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 (p.3).

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 (Liljander & Bergenwall, 2004). Of course this has not stopped researchers from developing different models in an effort to explain emotions and the role that they play. This now leads to a more in-depth explanation of different constructs used to measure and explain emotions, especially in the context of service consumption.

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

Liljander & Strandvik (1997) state:

Research on both satisfaction and service quality has been very cognitive in nature. Both concepts have been posited as post-consumption cognitive process, where the customer actively processes the perceived performance of the service and then compares in the performance with some comparison standard. Levels of satisfaction and service quality have been assumed to be directly and positively related to the level of disconfirmation. The symmetry of this relationship has, however, been challenged by the idea of a customer perceived zone of tolerance (p. 7)

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; Oliver & Westbrook, 1993). Researchers 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 (Oliver, 1997; Oliver & Westbrook, 1993; Liljander & Strandvik, 1997). In effect when a product fails to live up to a customer's needs or expectations, it is thought that they will respond with negative emotions (Oliver, 1997; Oliver & Westbrook, 1993; Liljander & Strandvik). 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 (Oliver, 1997; Oliver & Westbrook, 1993; Liljander & Strandvik). 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; Oliver, 1997; Oliver & Westbrook, 1993).

Unlike the previous two theories, which base 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 (Oliver, 1997; Liljander & Strandvik, 1997; Liljander & Bergenwall, 2004). 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 (Oliver, 1997). 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 (1997) 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 one's 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 result (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 (Oliver, 1997; Liljander & Strandvik, 1997). This now leads to some of the different structural models of emotions.

### **The James-Lange Theory**

This theory, which was actually proposed by two separate researchers independently of each other, claims that an emotion is a response to a change in the physical state of the human body (Bourne & Russo, 1998). For example, when walking in the woods, a hiker suddenly sees a bear. Two things are likely to happen, they run to escape and they feel fear. This theory believes that first you run, then you realize you are afraid. Seeing the bear triggered several physical changes, such as increased blood pressure, pounding heart, faster breathing, and tensing of the muscles. According to this theory, the interpretation of these physical changes is the emotion known as fear. Thus, we feel different emotions because the body produces different physical changes and responses for each emotion-provoking stimulus (Bourne & Russo, 1998).

### **The Cannon-Bard Theory**

This alternative to the James-Lang Theory insists that we experience the emotion of fear and the physical changes mentioned above at the same time, when

viewing the bear (Bourne & Russo, 1998). These researchers have taken this approach based on the physical makeup of the human brain and nervous system. An inherent flaw in this theory is that Cannon and Bard believed that all emotions produce a single pattern of physical arousal. Recent research has identified that different emotions (fear, sadness, joy, surprise) do, in fact produce different physical responses (Bourne & Russo, 1998).

### **The Two-Factor Theory of Emotion**

In this theory, emotional experience can be divided into two parts: general arousal and cognitive appraisal (Bourne & Russo, 1998). Arousal is the energizing aspect of emotion. Appraisal refers to recognizing, categorizing and evaluating a situation. In other words, two factors contribute to the formation of the emotion. One factor is the physical arousal and the second is the brain assessing the different physical elements of the arousal and then assigning an emotion to them. However, the order in which this occurs is not set in stone. For example, a person that wakes up in the middle of the night, for no reason, often times describes the feeling of fear or doubt. It is not until this feeling has been actively processed upon awakening that the heart rate goes up and pupils dilate. In fact, it has been debated that physical arousal is needed at all to inspire emotions (Bourne & Russo, 1998). Work with paraplegic's shows that, despite the inability to experience the physical arousal component of emotions, they do however experience them. Interestingly enough though emotional experiences are not as intense after becoming a paraplegic. In essence, arousal signals that something is

happening, and if aroused, we seek an explanation for it (Bourne & Russo, 1998).

### **Classifying Emotions**

Emotions have at least two principle dimensions, one qualitative and the other quantitative (Russell, 1980). In other words, they can be measured by either frequency, (how often they occurred) or degree, (the intensity that they were experienced). This is important to note because both the frequency and the degree will affect the motivating factor of the emotion. For example, an emotion that is experienced but with only a little intensity may be quickly forgotten. On the other hand, an emotion, such as anger, that is experienced to a large degree will often times be remembered for long periods of time. Also the item, person, or situation causing the emotional response will also be remembered and associated with that particular emotion (Oliver, 1997; Liljander & Bergenwall, 2004).

### **Emotions and Motivation**

The motivation to seek certain goals is affected by our emotions. Unpleasant emotional states and the situations that cause them act as negative incentives that we are motivated to avoid or escape. Favorable emotional states and the situations that cause them act as positive incentives that we are motivated to achieve or sustain (Liljander & Strandvik, 1997; Liljander & Bergenwall, 2004; Mattila, 1999). By creating situations that elicit pleasant or favorable emotions, the consumer is now motivated to repeat that experience. The same holds true for negative emotions. Now the consumer is motivated to avoid that situation, or in the case of a hotel, staying there again. Other aspects such as loyalty and

positive/negative word of mouth may also come into play (Liljander & Strandvik, 1997; Liljander & Bergenwall, 2004; Mattila, 1999).

### **Antecedents of Emotion**

Emotions, in relation to consumption, can be viewed in two ways. One is a more direct approach where positive (or good) product performance will lead to positive emotions and negative (or bad) product performance will lead to negative emotions (Westbrook, 1987). Thus, it stands to reason that actual product performance is an important factor when it comes to the formation of emotions. Another key factor is the importance of the product or service to the consumer (Oliver, 1997; Festinger, 1957). Quite simply, the more important the product or the service rendered is to the consumer, the stronger the emotional response is going to be. For example, a business traveler that checks into a hotel and finds out that despite his request for a king bed that only doubles are left, may become slightly annoyed. Compare that emotion to a couple on their wedding night in the same situation. The importance of the room type has changed, and so will the reactions and emotion(s) to the service encounter.

The second role that emotions can play in consumption is based not on the actual product performance, but on what emotions the product or service actually inspires (Liljander & Strandvik, 1997). This theory works in much the same way that the expectancy disconfirmation model works, except that the desired outcome is a certain emotion(s). Satisfaction is then judged on the basis of either achieving or not achieving this emotional state. Once again, the importance of the service or product is going to play a role in the degree of the emotional response.



Because the perceived product performance is going to have a direct effect on satisfaction, and in turn satisfaction levels (negative, positive or neutral) are going to moderate the emotional outcome, many of the same factors that lead to positive product performance evaluations are, in turn, factors that affect emotional outcomes (Oliver, 1997; Liljander & Bergenwall, 2004). While a more detailed discussion of these factors has been given in previous sections, briefly these items include, but are not limited too: the servicescape, core service employee service, product performance, magnitude (importance) and service quality. Of course service quality has its own host of determinants which have been reviewed in previous sections and as such will not be reviewed again. This now turns to a discussion on attitudes, their role in consumption, and how they are affected by consumption emotions.

### **Measuring Emotion**

Two main scales have been found in the recent literature as being particularly useful for the measurement of emotions in consumption or service settings (Liljander & Strandvik, 1997). As such, both these scales will now be reviewed. The first is Izard's 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.

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) in the scales and for not taking into the account the level of arousal (Liljander & Strandvik, 1997). Arousal is defined as the level, or degree to which the emotion(s) is experienced by the consumer. This now leads to a scale that does include the level of arousal and the actual scale used in this study.

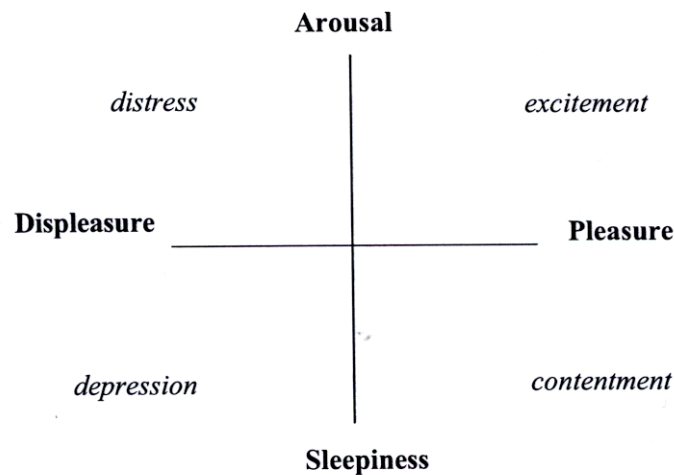
### **Russell's Circumflex Model of Emotions**

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 6. 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 (1980), 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 (1980), 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 frequency and degree to which each emotion was experienced using a five point Likert Scale. The five point scale was changed from the normal seven point scale after conducting a pilot study in which the respondents expressed confusion of the midpoint. While some other scales have been developed by researchers, these two scales are the ones most commonly used in the emotion/satisfaction research.

### **Summary**

In closing, the previous section has provided an overview of emotions, how they are defined, the role they play in consumption, different frameworks, examples of how they are measured, the role they play in attitudes and some of their determinants. Also of importance is the fact that the majority of studies addressing satisfaction measurement have not included the role that emotions play. This, in turn, has led many researchers to the belief that a truly accurate picture of satisfaction and how it is formed has not been achieved. In an effort to address this problem, some researchers have started to address this issue and develop new models and constructs that include emotions in the measurement of satisfaction and role that satisfaction plays in customer loyalty and future behavioral intentions. In an effort to add to this research, this project was developed. The results of which will support the idea that evaluating satisfaction with both emotional and cognitive measures is better than using just one, along

with other research objectives. This now leads to the theoretical framework that was developed to answer this and other pressing issues.

## **Chapter III**

### **METHODS**

#### **Research Considerations**

The basic goal of every business is to be profitable and it is within this basic tenant that research, both academic and applied, has been instigated. In the context of this project, the role that emotions have on customer satisfaction, future behavioral intentions and customer loyalty, has been investigated. The end result is a better understanding of the above, so that it can be applied to real world operations in an effort to increase profits. As highlighted in previous sections, the importance of customer satisfaction, service quality, customer loyalty, and future behavioral intentions can not be underestimated. Further, the important role that emotions have on all of these constructs has been evaluated, along with the basic lack of understanding and research in this particular area (Liljander and Strandvik, 1997; Yu and Dean, 2001). So the considerations of this project include a better understanding of emotions, the role they play in satisfaction, service quality, and future behavioral intentions.

#### **Research Hypotheses**

While the importance of measuring service quality has been highlighted in both the literature and this project, the exact method of doing so has been debated (Cronin & Taylor, 1994; O'Neill, 1992). In an effort to fill this void, the

expectancy-disconfirmation model was adopted by researchers as the basis for methodology when it came to measuring satisfaction (Wirtz & Bateson, 1999). Among the proposed constructs, the SERVQUAL scale, first developed by Parasuraman, Zeithaml and Berry (1985) is the most widely used. Based on the idea that service quality is measurable, but only in the eyes of the consumers, the researchers take the view that service is deemed to be of high quality when customer's expectations are confirmed by subsequent service delivery. This construct has faced a myriad of critiques. One of these being that the suggested five structural dimensions of SERVQUAL have failed to be replicated in studies conducted by researchers other than the original authors (Cronin & Taylor, 1992; Carman, 1990). Inherent to these failures is the idea that the SERVQUAL instrument is not appropriate for all kinds of service environments, as suggested by Parasuraman, Zeithaml and Berry (1985). In relation to this project, to the researcher's best knowledge no attempt to use a modified SERVQUAL scale has ever been made in the research setting selected for this project. Based on the previous review of the SERVQUAL scale, the question of the five dimensions and their ability to factor out comes to mind. This then leads to the first hypothesis.

- H1- The five factor structure proposed for the original SERVQUAL Scale will not be held up.

The next important measurement tool in association with this project is Russell's Circumflex Model of Emotions (1980). In essence this scale allows for

the measurement of emotions in both frequency and degree. Object to this model is the circular order of emotions that should factor out from any analysis conducted on this construct. The actual emotions included were: happiness, excitement, calmness, surprise, idleness, boredom, sadness and fear, representing both of Russell's bipolar dimensions of degree of arousal and pleasantness (1980). This circular order has been found to be accurate in other studies (Lilijander & Bergenwall, 1997). However, the unique research setting of this project calls for a confirmation of the circular order proposed by Russell. As such the following hypothesis is presented.

- H2- Russell's proposed circular order of affect will be supported.

Another important aspect in the measurement of emotion is two/three factor of emotions previously found in other studies. The two factor structure is best described as Positive/Negative, while the three factor structure is Positive/Neutral/Negative. Due to the high emotional states of the venue selected for this project, and its uniqueness, the following hypothesis is now presented.

- H2a-A two factor (Positive/Negative) factor structure will be held up for spectator emotion during the Auburn Game Day Experience.

Customer satisfaction remains a central topic for researchers in the hospitality industry (Oliver, 1996). Because customer satisfaction plays such a key role in the overall well being of any business that provides products or services, the determinants of customer satisfaction have also received a great deal of attention



by researchers. While debated by some, the majority of research today has indicated that service quality is a vital antecedent to overall customer satisfaction. Recent work however has revealed that there has been a lack of research examining the role that emotions play in the formation of a positive evaluation of service quality (Liljander & Strandvik, 1997). It is believed by this researcher that by including the affective component in addition to the traditional cognitive element, that a better predictor of service quality can be attained. With this in mind the following hypothesis is now presented.

- H3- An individual's perceptions of service quality will be positively related to their degree of emotional satisfaction.

While hospitality professionals have long believed that emotions play a key role in the determining of overall customer satisfaction, there has been a general lack of research concerning the role that emotions play (Barsky & Nash, 2002). While many studies have concluded that there is a significant relationship between satisfaction and future behavioral intentions, the validity of these studies is being questioned due to their lack of emotional measurement (Liljander & Strandvik, 1997; Yu & Dean, 2001). Much of this research has been founded around the disconfirmation of some comparison standard or perceived service performance. Satisfaction however, is also believed to contain an affective component without which customers responses cannot be fully accounted for (Oliver, 1997; Liljander & Strandvik, 1997; Yu & Dean, 2001). Therefore the following hypothesis is proposed:

- H4- An individual's degree of emotional satisfaction will be positively related to their overall satisfaction.

Modern research has made a connection between the emergence of positive and negative emotions in the consumer in relation to the service encounter also play an equally important role in determining future behavioral intention (Allen, Machleit & Kleine, 1992; Oliver, 1993; Richins, 1997; Cronin, Brady & Holt, 2000; Barsky & Nash, 2002). Further research has indicated that one's emotions have a strong influence on future behavioral intention, and that an individual will change his or hers behavior in order to maintain, or repeat positive emotions and avoid, or diminish, negative emotions. Because of this connection it can be expected that a high level of perceived service quality can be linked to positive future behavioral intention and that a low level of perceived service quality can be linked to negative future behavioral intention (Allen, Machleit & Kleine, 1992; Oliver, 1993; Richins, 1997; Cronin, Brady & Holt, 2000; Barsky & Nash, 2002). In light of this, the following hypothesis is proposed.

- H5- An individual's degree of emotional satisfaction will be positively related to their future behavioral intention.

The idea that a consumer's perception of service quality is an antecedent of customer satisfaction has been highlighted earlier in this project. Also introduced was the idea that a positive evaluation of service quality can be linked to future behavioral intention. But because overall satisfaction is determined by the

consumer based on more than the perceived service quality alone, it is possible that a consumer may have a favorable experience concerning service quality, but that the overall evaluation of satisfaction is negative because of other factors. This in turn leads to the idea that future behavioral intention, while connected to perceptions of service quality, is more strongly connected to overall satisfaction, when service quality is part of the equation making up the evaluation of overall customer satisfaction. Because of this, the following hypothesis is presented.

- H6-While an individual's perception of service quality will be related to their future behavioral intention, there will be a stronger correlation between their perceptions of service quality and overall satisfaction, which in turn will be positively correlated with future behavioral intention.

As stated in previous sections, overall satisfaction does relate to future behavioral intentions. As such the following hypothesis is proposed:

- H7-An individual's level of overall satisfaction will be positively related to future behavioral intention.

The majority of modern research on satisfaction has been operationalized by some derivation of the Expectancy-Disconfirmation Model (Oliver, 1997). While this model has provided good results in explaining customer satisfaction, customer loyalty and future behavioral intention, objections to the validity of these findings has been raised (Liljander & Strandvik, 1997; Barsky & Nash, 2002). The main objection is the concentration of these studies on the cognitive

formation of satisfaction and the lack of affective measures. It is believed that without such affective measures that the true picture of overall customer satisfaction and future behavioral intention is not being revealed. As such, the following hypothesis is proposed:

- H8-The inclusion of the more emotional component of the satisfaction construct (ES) will lead to better results in terms of explaining both overall customer satisfaction (OCS) and future behavioral intention (FBI), than when using the cognitive component alone (PSQ).

### **Theoretical Model**

Now that the research hypotheses have been revealed, the model being tested in this project can now be examined. The model proposed here consists of four main variables including: Perceptions of Service Quality (PSQ), Customer Satisfaction (OCS), Emotional Satisfaction (ES), and Future Behavioral Intention (FBI). Two of the variables, PSQ & ES are directly linked to FBI and CS. CS, however, is also directly linked to FBI Also important to note is the connection of PSQ and ES. The following model puts these ideas into perspective.

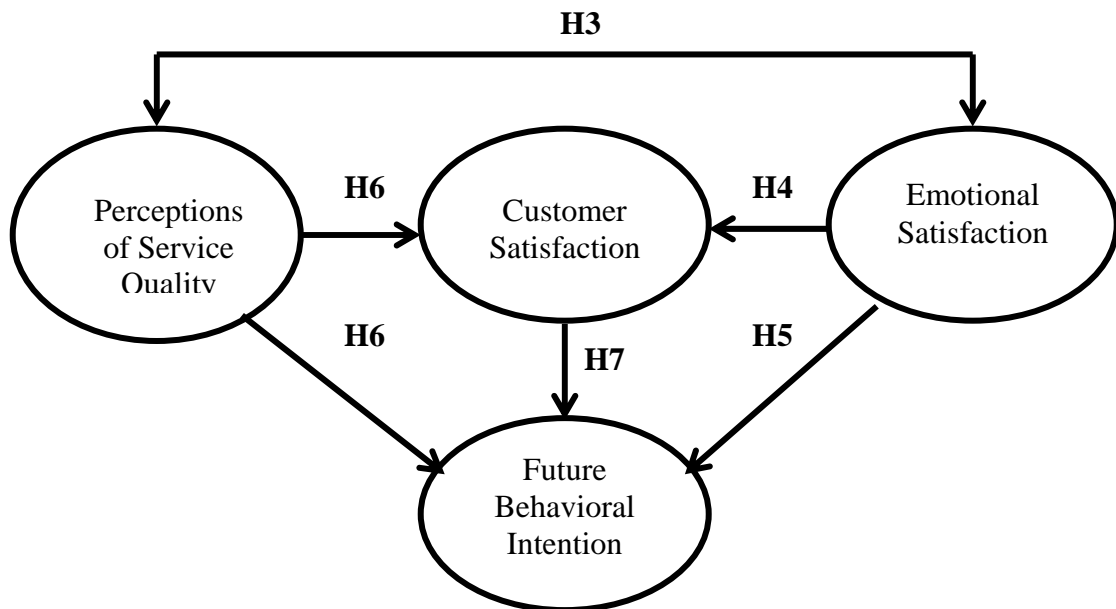


Figure 7. Theoretical Framework

### 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 conduct a longitudinal survey. This need then meant that a population that could be tracked over time in order to complete all three stages of the survey was needed. Another important part of the project was finding a venue that involved emotions and consumption and, at the same time, was an activity that the traceable population was likely to attend. Other important considerations were the different measures to be used, administration of the surveys, permission to conduct the research, and other

details associated with such a project. The need to explain how these problems and others were overcome is the emphasis of this chapter. In addition, the different types of research used in the design framework, the research sample, the research instrument and the research procedures will be expanded upon. As such, this now leads to a discussion on the two types of research used in this project.

### **Qualitative and Quantitative Research**

According to Leedy and Ormrod (2005) 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 (p.95).

Another important difference between the two is that quantitative research is most often 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. Both methods were used in this project, and their role will be explained later in this chapter.

### **Cross-sectional and Longitudinal Studies.**

When it comes to consumer research, two main types of research have been used: cross-sectional and longitudinal. In essence, a cross-sectional survey

is a snapshot in time. It is an evaluation given from any participant in the consumption process being evaluated and usually focuses on the most recent consumption episode (Leedy & Ormrod, 2005). In contrast, a longitudinal study focuses on a single group of people that is followed over a period of time and data is collected at intervals over this time period (Leedy & Ormrod, 2005). Cross-sectional studies have an advantage in that they are typically easier to administer than longitudinal studies. Because they do not have to be administered to the same group of people, over time there is no need to track the respondents, or set up future survey dates. However, one disadvantage with cross-sectional surveys is the fact that they are only looking at one moment in time. In effect, the researcher is only gaining insight into one specific moment. This does not allow for any changes that might occur in the evaluation due to time, experience, or other factors. Longitudinal studies, on the other hand, do allow for such changes. By measuring the results more than once, any patterns or changes and potential reasons for those changes, can be evaluated. Furthermore, if a theoretical model is being tested, when using a cross-sectional design, that model is only tested once. In a longitudinal survey, however, that model is tested every time the next stage in the survey is administered. This replication of the model gives it more credibility if and when it is supported in each stage of the research (Leedy & Ormrod, 2005). The repeated measure aspect of a longitudinal design is also an advantage for the same reasons listed above. In essence, the ability to track changes over time and replicate the data at different stages leads to a better understanding of what is going on, and why changes, if any, are occurring.

## **Research Setting**

As was noted earlier, the need to find a setting in which consumption is taking place, that has a high level of emotions, and can facilitate a longitudinal study was key to this project. As such, the 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 SEC Football and the large amount of concessions and other services provided during the game time experience, along with the fact that there are seven home games every year, Jordan Hare Stadium was an ideal choice of location for the study. Also important was the fact that numerous students attended every home football game, thereby allowing for the longitudinal aspect of the design. The actual surveys were given out in different classes a total of three times. This allowed the researcher to track the same students over time, and measure their experiences. The classes were selected based on their size and that permission was sought and granted from the professor of each class. The surveys were given out a week before the first home game, the week following the third home game, and the week following the last home game. While the initial plan included administering the surveys after a home victory and a home loss, the unexpected undefeated season by the football team made this impossible. This unforeseen issue did however provide an escalating amount of emotion surrounding the team and the football environment as the season continued.



## **Pilot Research**

The pilot study was conducted with a class of approximately 12 students. The basis for this study was a heavily modified SERVQUAL scale. This scale was chosen on its previous validation in evaluating customer satisfaction and its applicability to the service setting found within Jordan Hare Stadium. The survey was administered exactly the same way that it was administered for the entirety of the project. While actual results were not calculated, the researchers used this class as a way to ensure that each question made sense to the respondents and to measure the time it took for the respondents to fill out the survey. As a result of this pilot study, several changes were made to the actual survey, including changing the mid-point of the Likert Scales (the scales were reduced from seven points to five) editing of questions for wording, and the format in which the emotional measurement section was written. All of these changes were made in an effort to ensure as little confusion as possible on the part of the respondents in an effort to make the data set as clean as possible.

## **The Research Sample**

For this project, the research sample or the participants selected for survey administration, was a convenience sample of students enrolled in a mid-sized university located in Auburn, Alabama. Because of the longitudinal design of this study, there was an obvious need to be able to re-contact the participants twice more after the initial survey. This point, in combination with the fact that the majority of the student population frequents every home game made them very suitable to the project needs. By administering the surveys during class, the need

to re-survey the same individuals twice more was satisfied. Another obvious need was to identify students that had either gone to a game in the past season and that were planning on attending in the current season (experience level), or to find students with no previous experience, but that were planning on attending the home football games. This was accomplished with in the survey by a series of questions pertaining to the profile of each respondent. In this way, the researchers were able to weed out any respondents that took all three surveys, but did not attend any home football games.

Another reason for using the student population is the fact that many students themselves feel that their opinions are underrepresented when it comes to the game day experience. This came through in the pilot study, the focus group, and the comments section of the survey. It was hoped by the researcher that providing the students with an outlet to express their views, would facilitate a high response rate. Recent events concerning the renovations of Jordan Hare Stadium during the previous off-season may have contributed to these feelings. Initial renovation plans for the stadium originally included a major up grade for the restroom facilities available to the students. These were to include remodeling and increasing the actual number of restrooms. But due to budget mistakes and overruns, these renovations were cut out and slated to be completed at another time. Students also expressed displeasure at the pricing and quality of the food and beverage products offered to them. Another issue is that of overcrowding in the student section, meaning that during big games, seats in the student section were not available.

The implications for the university as a whole are important. First is the safety issue associated with an over-crowded student section. Too many people in too small a space could be a major problem if there was ever a need to evacuate the stadium quickly. Another issue at hand is the fact that students are paying customers and see the performance of stadium operations in the same light that any consumer paying for services would. This means that the operations are being evaluated by the students on aspects such as pricing, quality, service quality, accessibility, and cleanliness to name a few. It stands to reason that the performance of the stadium operations will, in fact, effect the overall evaluation of the game day experience, which in turn is part of the overall evaluation of the university experience as a whole. The game day experience is a huge economic boom for both the university and the surrounding city. While the revenue generated by the sale of student tickets is modest compared with that of non student/alumni tickets (students pay \$75 for all home games), selling all of these tickets is a revenue earner for the university. As such, the performance of the facilities and services of Jordan Hare Stadium are important to the paying customers. With that in mind, what the customers think about the facilities and services should also be important to the university.

### **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 and, as such, certain precautions need to be taken in

order to minimize their potential effect. The first is known as Type I Error, or alpha. It is defined as “the probability of the 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). In order to combat this problem, the researcher sets the alpha level, or in other words, the acceptable limits for error, usually .05. The second type of error, is called Type II error, or beta. This is defined as “the probability of failing to reject the null hypothesis when it is actually false” (Hair, Anderson, Tatham & Black, 1998). Mediated by both of these types of errors is the power, or the probability of correctly rejecting the null hypothesis when it is should be rejected. Because the Type I and Type II errors are inversely related, and 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 dependant 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 this study consisted of a longitudinal, repeated measure design, three stages of surveys were administered. Stage I yielded 553 usable surveys, stage II, 407, and Stage III, 251. With 800 surveys being administered at stage I, this represents an overall return rate of surveys traceable throughout the entire project at 31%. This is well within acceptable standards and should provide a proper balance between Type I and Type II errors and the power.

### **Non-Response/ Late response Bias Checks**

While the researchers acknowledge the possibility of a Non-Response or Late Response Bias error in the study, no measure was taken to guard against this possibility. An effort was made by the researcher to administer the survey well after the first three stages had been given and collected, but due to circumstances out of the researcher's control, available class time was not granted. While this can be seen as a definite limitation to the study, the researcher points to the high response rate and longitudinal aspect of the project as counteracting this potential problem.

### **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. Because there were three stages to the survey, the survey used was different for stage I (expectations survey) compared to stage II and stage III. Stage II and stage III were identical, the only difference being that they were administered at different times.

### **Stage One Research Instrument**

Stage I, or the expectations survey, had several goals and was administered the week leading up to the first home football game of the season. It differed from the two other stages in that it included the basic demographic information (gender, location, class ranking, experience, etc). It was also unique because it was asking for predicted, or the expected emotions, in both frequency and degree. It also measured the expected performance and importance of all

service attributes ranging from food quality, security, bathroom cleanliness, and service provided. The scale provided was made up of five points ranging from Strongly Disagree (SD) to Strongly Agree (SA). SD was anchored at 1, while SA was anchored at 5. The emotion section of the survey was based on Russell's Circumplex model of Emotions. This scale was also based on five points. For the frequency section, the scale ranged from not at all, (1), to very often, (5). For the degree portion of the survey, the scale was very low, (1), to very high, (5). While the expectations/performance items were based on the previously validated SERVQUAL Scale. Included on every survey was a heading where the respondent was asked to put their last name and first initial. This was done in order to track each respondent throughout the course of the project. Each survey was placed in alphabetical order by class and assigned a number. Each additional stage was collected in the same manner, and then assigned the same number as its corresponding survey from the first administration. This process was then repeated for the final stage, allowing the researchers to enter the data from the same respondent, across all three stages. Data was entered into the database at the end of each stage allowing the researcher to clean each data set individually and then one final time as a whole. Also included in all three stages of the survey was a measure of predicted overall satisfaction (Stage I) and in the following stages, overall satisfaction with the game day experience (Stages II & III).

### **Stage II and III Surveys**

The second and third stages of the project were very similar to the first, but differed in some important ways. First, the demographic information was not asked for again, for the reason of redundancy. The second stage also differed in the fact that they were post-consumption, and given the week following a home victory. In effect, instead of attempting to predict what the respondents were going to experience, they were giving testament to what they what they actually did experience. This was for both the emotional scale and the modified SERVQUAL Scale. The scales were operationalized in the same manner that they were in the stage I survey. This allowed the researchers to measure the difference between what the respondents expected (stage I) and what they felt actually occurred (stage II and III). Because the third stage was an exact replication of the third stage, no further evaluation is needed.

### **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. The scale used to measure the participant's emotions was based on Russell's Circumplex Model of Emotions (1980). Briefly, this model allows the researchers to measure both the frequency (how often the emotion occurred) and the degree (or how intensely the emotion was felt). This measure was conceptualized using a five point Likert type scale. The other variables were measured using a modified SERVQUAL scale. This instrument has been applied to a host of different service settings but to the



researcher's knowledge, has never been used in evaluating football stadium operations. However, based on previous research, it does provide a solid framework from which to work. The applicability of this instrument to a setting such as this is further explored in the analysis of results chapter.

### **Qualitative Research Procedures**

Based on the definition provided earlier in this chapter, the idea behind the focus group was to identify potential hypotheses to be studied and explored by the quantitative side of this project. The focus groups were conducted informally in small groups or even one on one. The researcher's objective was to talk to students that had experience with the football stadium operations, and from them get a better understanding of their concerns. Topics ranged from overcrowding to bathrooms to food quality to pricing to sign usage to security to service quality to the staff and the effects that each had on overall satisfaction evaluations. From these discussions, the focus of the project was narrowed and specific hypotheses were formed. The next step was to accurately quantify what the students had been expressing.

### **Quantitative Research Procedures**

As has already been touched on, the quantitative procedure included a repeated measure, longitudinal survey. The general format included an expectations measurement prior to the first home game and then two more survey administrations following home victories. This format allowed the researchers to track the same respondents over time, evaluate any changes that occurred, compare expectations with actual performance, and replicate the proposed model

twice. Data was collected for each stage, and then entered into a database. Data cleaning occurred at the end of each stage, and then as a whole, once the final stage had been entered. The data was analyzed using the Statistical Package for the Social Sciences version 12.0 (SPSS). Included in this analysis were: means testing, standard deviations, univariate regression, validity testing, reliability testing, factor analyses, and the sequential testing necessary to either reject or support the individual hypotheses.

### **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 has already been stated, the respondents were asked to provide their last name and first initial during the survey process in order to track their results. This information however was not entered into the SPSS Database in any form. Instead each survey was randomly numbered after the first administration. At the completion of this project all actual surveys will be disposed of using the standard disposal methods of sensitive documents approved by Auburn University. Another important consideration was the fact that the surveys were administered in class. In order to avoid any possibility that the students may have felt coerced into completing the survey, a

formal statement regarding the voluntary nature of the project along with the option to not participate was offered before every singly administration, across all three stages. It is felt by the researcher that the adherence to IRB guidelines and the voluntary nature of the administration has prevented any possible breeches of ethical conduct.

### **Summary**

In closing, this 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 step is 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 shall be reserved for the following chapter.

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

The sample was selected from Auburn University students enrolled in the Fall semester, 2005. A total of 800 stage one questionnaires were administered over a one week period in September 2005, approximately one week before the start of the 2005 SEC College Football season. By way of review, this questionnaire was designed to attest to respondent's pre-season expectations of the quality of the upcoming Game Day Experience as well as their emotional status. Additional demographic information was also sought as well as information pertaining to their level of support and experience with the Auburn

football team. Due to logistical considerations students were recruited ostensibly from within the College of Human Sciences. That said an effort was made to recruit students from the College of Business and the Department of Educational Foundations, leadership and Technology. These students will be used to compare for response bias.

Of the 800 questionnaires administered pre-season, a total of valid 615 responses were received representing a very healthy first stage response rate of approximately 77%. Upon closer examination, however, actual useable returns stood at 553 equating to a 70% response rate. For the purposes of analysis useable returns were defined as those which had at least completed the student identification and scaling sections of the survey over all stages. In short, 62 surveys were found to be unusable both in terms of completed content (i.e., a failure to complete the various scales and for tracking purposes at stage two, i.e., a failure by respondents to code the surveys accurately with either a traceable name or student number). A number of possible reasons may be postulated for this, including a general unease with a perceived lack of anonymity, the prospect of having to complete a further questionnaire at some stage in the future, the timing of the surveys administration (i.e., immediately prior to or following a scheduled break in class proceedings and a deliberate unwillingness by a number of students to participate in the research).

Of the 553 traceable questionnaires administered at stage two of the research, a total of 407 useable returns were received at stage two, representing a stage two return rate of approximately 74%. The response rate at stage three

proved much smaller, but nonetheless respectable with a total of 251 useable returns representing approximately 62% of the stage three sample. These are high response rates, but the research design framework of the study, which made use of students who could easily be recontacted, facilitated such a high response. These figures are clearly represented in Table 7 below.

Table 7 – Description of Questionnaire Return

	<b>Questionnaires Administered</b>	<b>Questionnaires Returned</b>	<b>% of Sample Population</b>	<b>% of Total Sample</b>
<b>Stage One</b>	800	615	76.8	-
<b>Stage Two</b>	553	407	73.5	51
<b>Stage Three</b>	407	251	61.6	31

Responses to the questionnaires were coded and the resulting data were analysed to address the study’s principal research hypotheses.

### **Sample Characteristics**

Of the 615 subjects included in stage one of the study, Table 8 shows that almost 83% of respondents were female with the remaining 17% being male. The only explanation that can be offered for this is that the College of Human Sciences traditionally attracts a greater percentage of female students, with an approximate 18/82% male/female breakdown. The 615 respondents included 509 (82.8%) females and 106 (17.2%) males. Figures demonstrate an almost identical distribution of male and female respondents at stage two. Of the 407 useable responses, 339 (83.2%) were female and 58 (14.2%) were male, with the

remaining 2.6 percent being accounted for by 10 missing entries. Again, stage three comprised 216 (86%) females and 34 males (13.5%) with one missing entry.

For the purposes of this study, respondents were categorised into one of five classifications including: freshmen, sophomores, juniors, seniors and graduate students. Table 8 demonstrates an almost even split in student classification across all three stages of the research, apart from in the case of graduate students who accounted for between 5.4% of the total sample at stage one, 2.1% at stage two and 3.5% at stage three. Once again this breakdown is representative of current enrolment figures within the College of Human Sciences.

Additional analysis shows that the vast majority of respondents (55.9%) originated from the state of Alabama. This was followed by Georgia which accounted for approximately 11% of the total sample, Florida which accounted for 5.5% of the total sample and Tennessee which accounted for approximately 3%. The remainder of respondents originated from within the South East, with 121 missing entries accounting for approximately 20% of the total sample. Of those who responded 87.2% (536) stated that they intended to attend at least one home football game in the 2004 season, with the remaining 12.8% (79) stating that they would not. Almost 55% of respondents stated that they had attended at least 10 or more home football games in their time at Auburn University. Approximately 70% (429) of respondents classified themselves as being either committed or very committed to Auburn University football team, while 14.1% (87) declared themselves to have either a low level (9.9%) of commitment or to

be non-committed (4.2%) to the team. Not surprisingly (given the gender imbalance) 97.2% (598) of respondents declared that they had never played football before, while a mere 2.4% (15) declared they had.

Table 8 – Demographic Profile of Students

	<b>Value Label</b>	<b>n</b>	<b>%</b>	<b>Value Label</b>	<b>n</b>	<b>%</b>
<b>Stage One</b>	<b>Student Classification</b>			<b>Gender Distribution</b>		
	Freshman	104	16.9	Male	106	17.2
	Sophomore	144	23.4	Female	509	82.8
	Junior	170	27.6	Missing		
	Senior	164	26.7	Total	615	100.0
	Graduate	33	5.4			
	Missing					
	Total	615	100.0			
<b>Stage Two</b>	<b>Student Classification</b>			<b>Gender Distribution</b>		
	Freshmen	74	18.2	Male	58	14.2
	Sophomore	86	21.1	Female	339	83.2
	Junior	113	27.7	Missing	10	2.6
	Senior	106	26.0	Total	407	100.0
	Graduate	20	4.9			
	Missing	8	2.1			
	Total	407	100.0			
<b>Stage Three</b>	<b>Student Classification</b>			<b>Gender Distribution</b>		
	Freshmen	51	20.3	Male	34	13.5
	Sophomore	59	23.5	Female	216	86.0
	Junior	64	25.4	Missing	1	0.5
	Senior	67	26.6	Total	251	100.0
	Graduate	9	3.5			
	Missing	1	0.7			
	Total	251	100.0			



## **Description of Individual Measurement Items**

Stage one of the analysis required respondents to rate both their pre-season emotional state on two 5 point Likert scales, one pertaining to the intensity of the emotions felt and one pertaining to the frequency that each emotion was felt. Additionally, respondents were also asked to rate their expectations of anticipated product and service delivery pertaining to the upcoming game day experience. The results from each of these scales including the mean and standard deviation for each scale item will now be presented.

### **Stage One Emotional Data**

Table 10 summarizes the mean and standard deviations for each of the emotional scale items. Frequency of emotion was measured on a 5-point Likert scale anchored at (1) not at all, through to (5) very often. Intensity of emotion was evaluated on a similar 5-point Likert scale anchored at (1) very low, through to (5) very high. Each scale comprised eight items, representing both extremes (positive and negative) of four emotional separate emotional variables encompassing happiness (sadness), excitement (boredom), calmness (fear) and surprise (idleness). All variables were based upon Russell's (1980) circumflex model of affect.

Table 10 – Descriptive statistics for stage one emotional data

<b>Variable</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Skewness</b>
<b><u>Frequency</u></b>			
Happiness	3.91	.976	-.682
Excitement	4.12	.957	-.925
Calmness	2.95	1.11	-.047
Surprise	2.55	1.11	.153
Idleness	2.07	1.00	.713
Boredom	1.70	.924	1.28
Sadness	1.58	.845	1.38
Fear	1.70	.921	1.08
<b><u>Intensity</u></b>			
Happiness	3.92	.952	-.701
Excitement	4.10	.954	-.896
Calmness	2.87	1.08	.077
Surprise	2.51	1.16	.218
Idleness	2.01	1.01	.720
Boredom	1.72	.974	1.26
Sadness	1.60	.917	1.53
Fear	1.70	.959	1.25

Please note that while negative items were reverse coded in all instances, their mean values are represented in original form for ease of interpretation during this more description section of the results. For example a reverse rating of 5 for fear on either scale would indicate that a respondent was consistently experiencing a high degree of fear. When reported in original unreversed format however, this score is actually reflective on a 1 which corresponds to the fact that the respondent was rarely experiencing any degree of fear.

Looking firstly at the more positive side of emotion, mean values range from m=2.55 for surprise to m=4.12 for excitement on the frequency scale, while they range from m=2.51 for surprise to m=4.10 for excitement on the intensity scale. On the more negative side of the scale however, mean values range from a

worst case scenario of  $m=2.07$  for idleness through to a best case scenario of  $m=1.70$  for sadness on the frequency scale; and from  $m=2.01$  idleness to  $m=1.60$  for sadness on the intensity scale. This is not really surprising given that the season was yet to start and there was nothing to be sad about. Similarly, the high degree of recorded idleness may be indicative of the anticipation felt in the build up to the season kick off. While the results indicate a degree of positive skewing for most variables this is only slight, with a normal distribution being recorded.

### Stage Two Emotional Data

Table 11 summarizes the mean and standard deviations for each of the stage two emotional scale items. Once again all scores for negative scale items are reported in original unreversed scoring form for ease of interpretation

Table 11 – Descriptive statistics for stage two emotional data

<b>Variable</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Skewness</b>
<b><u>Frequency</u></b>			
Happiness	4.14	.863	-.859
Excitement	4.25	.855	-1.04
Calmness	2.94	1.01	.201
Surprise	3.39	1.05	-.199
Idleness	2.20	.952	.292
Boredom	1.80	.875	.892
Sadness	1.69	.862	1.08
Fear	2.15	1.16	.600
<b><u>Intensity</u></b>			
Happiness	4.22	.923	-1.08
Excitement	4.34	.883	-1.45
Calmness	2.90	1.01	.078
Surprise	3.39	1.13	-.283
Idleness	2.22	1.00	.398
Boredom	1.82	.971	1.03
Sadness	1.73	.953	1.26
Fear	2.12	1.21	.736

Looking at the more positive scale items mean values range from  $m=2.94$  for calmness to  $m=4.25$  for excitement on the frequency scale and range from  $m=2.90$  for calmness to  $m=4.34$  for excitement on the intensity scale. These higher values are no doubt reflective of the excitement and enthusiasm that greeted the Auburn football teams first home season winning game. On the more negative side of the scale mean values range from a worst case scenario of  $m=2.20$  for idleness to a best case scenario of  $m=1.69$  for sadness on the frequency scale; and from  $m=2.22$  for idleness to  $m=1.73$  for sadness on the intensity scale. These values are above those recorded during the pre-season expectation survey and no doubt reflect the higher degree of involvement during the game day experience.

### Stage Three Emotional Data

Table 12 summarizes the mean and standard deviations for each of the stage three emotional scale items.

Table 12 – Descriptive statistics for stage three emotional data

Variable	Mean	Std. Deviation	Skewness
<b><u>Frequency</u></b>			
Happiness	4.58	.709	-1.80
Excitement	4.63	.666	-2.05
Calmness	2.94	1.09	.075
Surprise	3.37	1.04	-.212
Idleness	2.04	.997	.846
Boredom	1.60	.847	1.41
Sadness	1.43	.755	2.18
Fear	2.12	1.08	.542
<b><u>Intensity</u></b>			
Happiness	4.55	.719	-1.78
Excitement	4.61	.697	-2.15
Calmness	2.77	1.12	.028
Surprise	3.36	1.06	-.236
Idleness	2.01	1.03	.901
Boredom	1.68	.988	1.53
Sadness	1.56	1.00	2.05
Fear	2.09	1.15	.772

Positive scale items are once again well above average ranging from m=2.94 for calmness to m=4.63 for excitement on the frequency scale, while they range from m=2.77 for calmness through to m=4.61 for excitement on the intensity scale. Negative scale item values range from a worst case scenario of m=2.12 for fear to a best case scenario of m=1.43 for sadness on the frequency scale; and from m=2.09 for fear to m=1.56 for sadness on the intensity scale.

Given that these values correspond with the last home game in the season, when so much was at stake in terms of championship standing it is not surprising that there should have been a high frequency and intensity of excitement and at the

same time a high frequency and intensity of fear. In football terms, there was a lot at stake. One of the more interesting findings on the more positive side of the scale relates to the fact that calmness seems to have rated least positively of all in terms of both frequency and intensity. This is all the more curious given the high degree of excitement experienced and may point to a potential problem respondents may have had interpreting this item.

### **Stage One Expectation / Importance Scales**

Table 13 summarizes the mean and standard deviations for each item, measured on a 5-point Likert scale at stage one. Both respondent expectations and importance were measured across 18 service attributes based largely upon the original SERVQUAL instrument, but amended as a result of the qualitative research stage to better suit the game day context. An additional, two items (20 and 21) were included to attest to respondents overall satisfaction with the quality of service offered by Jordan Hare Stadium (JHS) and the overall quality of the facilities offered by JHS. These were included to account for both product and more relational aspects of the game day experience. A final scale item (item 21) was included as an overall satisfaction measure with the game day experience.

Turning to the actual measurement scales while expectation scores, with one exception (item 15) were well above average, they could hardly be classed as excellent. Mean values range from  $m=2.37$  for item 15 to  $m=4.21$  for item 21. Clearly respondents don't have high expectations of the service provider, which begs the obvious question why? While it is beyond the remit of this section of the results to address this question, a simple bivariate correlation (Pearson Product

Moment) does suggest a statistically significant relationship between respondents overall expectations (calculated as the mean of all expectation scale items) and the number of actual football games attended by respondents. A correlation of -0.098 was found which, while low, was nonetheless significant at the 1% level. This fact is supported from information gleaned during the more qualitative stage of the research where participants indicated a low level of optimism with respect to the treatment and/or service they expected to receive from Jordan Hare Stadium. Participants based this expectation upon their previous experiences during previous football seasons.

More worrying though is the fact that in almost all cases, with the exception of item 18, respondents indicated a higher degree of importance for each item than the expectation recorded. This information is shown in Table 12, where for each respondent, an importance – expectation score was calculated. Normally performed in the context of an importance – performance analysis (IPA), the computation of such difference scores serves to highlight the extent of anticipated underperformance as it relates to service delivery in the context of the game day experience for this group. In addition, a series of paired-samples t-tests were run to evaluate where mean expectation scores differed significantly from mean importance scores. The results point to the fact that there are statistically significant differences between the level of ascribed importance pertaining to quality variables and the corresponding expectation of performance in relation to these same variables ( $p < 0.001$ ). Left unchecked this could be highly detrimental to the service provider. Mean difference values range from  $m = +.274$  for signs and

displays will be easy to read and accurate to  $m=-1.84$  for JHS will have adequate seating for students. Significant negative differentials were also recorded for items 4 ( $m=-1.37$ ), 5 ( $m=-1.17$ ), 6 ( $m=-1.51$ ), 12 ( $m=-1.53$ ) and 15 ( $m=-1.60$ ). Table 12 relates to the provision of the elements of the service delivery process.



Table 13 – Stage one analysis of importance / expectation measurement items

Variable	Expectations		Importance		Expectation minus Importance	t Value	Sig. (2 tailed)
	Mean	SD	Mean	SD			
1. Jordan Hare Stadium (JHS) will offer fair prices for its food & beverage products	2.62	1.13	3.61	1.25	-.990	15.89	.001
2. JHS will offer high quality food & beverage products	3.15	.950	3.46	1.19	-.298	5.94	.001
3. JHS will offer a wide variety of food and beverage products	3.20	.944	3.33	1.17	-.120	2.31	.021
4. JHS will have clean restrooms	3.01	1.24	4.40	.945	-1.37	23.26	.001
5. JHS will have an adequate number of restrooms	3.02	1.23	4.37	.930	-1.17	19.29	.001
6. The lines for restrooms will move quickly	2.85	1.27	4.38	.889	-1.51	23.99	.001
7. The vendors in JHS will provide excellent service	3.38	.933	3.71	1.08	-.319	6.47	.001
8. JHS will have excellent facilities	3.54	.926	4.06	.927	-.510	11.93	.001
9. Staff at JHS will be consistently courteous	3.46	1.01	4.06	.999	-.589	11.69	.001
10. Attendees at JHS will feel safe and secure during game day	4.18	.875	4.46	.853	-.280	6.87	.001
11. JHS will have adequate seating for students	2.82	1.45	4.65	.828	-1.84	27.32	.001
12. Entering and exiting JHS will be quick & efficient	2.88	1.35	4.41	.911	-1.53	23.72	.001
13. The lines at vendor stations will move quickly & efficiently at JHS	3.03	1.04	3.93	1.10	-.900	16.08	.001
14. JHS staff will show a genuine interest in solving consumer problems	3.13	1.04	3.83	1.09	-.688	13.31	.001
15. JHS will have excellent parking availability for patrons	2.37	1.32	3.98	1.25	-1.60	22.07	.001
16. Other spectators at JHS will be well behaved during game day	2.92	1.09	3.69	1.09	-.769	13.68	.001
17. The behaviour of other spectators may influence my enjoyment of the game	3.46	1.15	3.73	1.17	-.275	6.54	.001
18. Signs and displays at JHS will be easy to read & accurate	3.89	.881	3.62	1.16	.274	-5.59	.001
19. Overall the quality of service offered by JHS will be excellent	3.67	.892	4.10	.972	-.430	10.10	.001
20. Overall the facilities offered at JHS will be great	3.65	.921	4.15	.973	-.501	11.41	.001
21. Overall, I expect to be extremely well satisfied with my game day experience	4.21	.865	4.53	.843	-.325	8.68	.001

## **Stage Two Performance Data**

The stage two questionnaires sought to measure respondent perceptions of the quality of the game day experience following Auburn's first home game in the 2004 SEC football season. Table 14 summarizes the mean and standard deviations for each item, measured on a 5-point Likert scale anchored at (1) strongly disagree through to (5) strongly agree at stage two.

This measure is best described as a direct disconfirmation or absolute performance measure of respondent perceptions of the quality of experience actually received, as opposed to their previous pre-season measure of expectation (Table 13) which sought to ascertain what respondents anticipated they would experience as a result of engaging in the game day experience. It is a measure of how the service has performed on the basis of the customer's absolute level of satisfaction or dissatisfaction with the service encounter. Actual performance means ranged from  $m=2.34$  for item 15 pertaining to parking availability to  $m=4.11$  for item 10 pertaining to safety and security on the day. In all cases, except with respect to item 15, mean values were well above average. Attention then turned to how each item performed in the context of its corresponding importance weighting. For each respondent, an importance – performance difference score was calculated and a series of paired-samples t-tests were run to evaluate where mean performance scores differed significantly from the mean importance scores recorded for each variable during stage one of the research. While the results paint an above average picture of game day service provision,

operators should not be complacent as the results further reveal that they are underperforming with respect to 20 out of 21 items assessed.

Table 14 – Stage two analyses of respondent performance scores

Variable	Performance		Importance		Performance minus Importance	t Value	Sig. (2 tailed)
	Mean	SD	Mean	SD			
1. Jordan Hare Stadium (JHS) offers fair prices for its food & beverage products	2.52	.968	3.61	1.25	-1.09	13.69	.001
2. JHS offers high quality food & beverage products	3.15	.953	3.46	1.19	-.310	5.47	.001
3. JHS offers a wide variety of food and beverage products	3.21	.913	3.33	1.17	-.120	2.65	.001
4. JHS has clean restrooms	2.71	.969	4.40	.945	-1.69	27.25	.001
5. JHS has an adequate number of restrooms	2.96	1.04	4.37	.930	-1.41	20.30	.001
6. The lines for restrooms moved quickly	2.99	.960	4.38	.889	-1.39	20.98	.001
7. The vendors in JHS provide excellent service	3.43	.825	3.71	1.08	-.280	5.28	.001
8. JHS has excellent facilities	3.44	.898	4.06	.927	-.620	11.37	.001
9. Staff at JHS are consistently courteous	3.48	.915	4.06	.999	-.582	10.55	.001
10. Attendees at JHS feel safe and secure during game day	4.11	.883	4.46	.853	-.350	6.94	.001
11. JHS has adequate seating for students	3.14	1.15	4.65	.828	-1.51	23.08	.001
12. Entering and exiting JHS is quick & efficient	3.44	1.11	4.41	.911	-0.97	14.32	.001
13. The lines at vendor stations move quickly & efficiently	3.33	.866	3.93	1.10	-.600	9.75	.001
14. JHS staff show a genuine interest in solving consumer problems	3.14	.944	3.83	1.09	-.695	11.03	.001
15. JHS has excellent parking availability for patrons	2.34	1.04	3.98	1.25	-1.64	20.82	.001
16. Other spectators at JHS were well behaved during game day	3.26	.982	3.69	1.09	-.435	6.44	.001
17. The behaviour of other spectators influenced my enjoyment of the game	3.53	1.11	3.73	1.17	-.221	3.11	.002
18. Signs and displays at JHS were easy to read & accurate	3.94	.816	3.62	1.16	.325	-3.64	.001
19. Overall the quality of service offered by JHS was excellent	3.75	.858	4.10	.972	-.350	7.62	.001
20. Overall the facilities offered at JHS will be great	3.66	.881	4.15	.973	-.493	10.23	.001
21. Overall, I expect to be extremely well satisfied with my game day experience	3.95	.873	4.53	.843	-.586	13.08	.001

Negative scores indicate that service delivery did not match the level of importance that respondents attributed to each item. As Table 14 illustrates, the negative scores recorded for each of these variables were found to be significant at the level of 1% ( $p < 0.005$ ). Scale items worthy of particular note include item 1 (price fairness for food and beverage concessions) which recorded a negative differential of  $m = -1.09$ ; items 4, 5 & 6 pertaining to the restrooms which recorded negative differentials of between  $m = 1.41$  to  $m = 1.69$ ; and item 15 pertaining to parking availability which recorded a negative differential of  $m = -1.64$ . As with the preceding importance – expectation analysis item 18 was the only variable to record a statistically significant positive differential ( $p < 0.001$ ).

It also proved useful to explore the stage two perception data in the context of the stage one expectation data in order to highlight any shortcomings with the game day delivery process. Unlike the previous analysis, which is best described as an absolute or direct disconfirmation analysis, the current approach is best described as an inferred disconfirmation approach, where pre-consumption expectation scores are compared with post-consumption perception scores to highlight the existence and extent of any quality gap and/or gaps in delivery. Expectations and perceptions are measured separately producing a relative measure of how well the service has performed relative to what the consumer expected. Table 15 summarizes the mean and standard deviations for each item, measured on a 5-point Likert scale anchored at (1) strongly disagree through to (5) strongly agree at stage two. Additionally, it also reports the stage two performance – expectation differential scores and the results of a series of paired

samples t-tests undertaken to assess the statistical significance of all such differentials.

Table 15 – Stage two analyses of performance – expectation scores

Variable	Performance		Expectation		Performance minus Expectation	t Value	Sig. (2 tailed)
	Mean	SD	Mean	SD			
1. Jordan Hare Stadium (JHS) offers fair prices for its food & beverage products	2.52	.968	2.62	1.130	-0.10	1.13	.255
2. JHS offers high quality food & beverage products	3.15	.953	3.15	.950	-.004	.889	.375
3. JHS offers a wide variety of food and beverage products	3.21	.913	3.20	.944	0.01	.547	.584
<b>4. JHS has clean restrooms</b>	2.71	.969	<b>3.01</b>	<b>1.24</b>	<b>-.303</b>	<b>4.62</b>	<b>.001</b>
<b>5. JHS has an adequate number of restrooms</b>	2.96	1.040	<b>3.02</b>	<b>1.23</b>	<b>-.060</b>	<b>3.48</b>	<b>.001</b>
<b>6. The lines for restrooms moved quickly</b>	2.99	.960	<b>2.85</b>	<b>1.27</b>	<b>0.14</b>	<b>-2.58</b>	<b>.010</b>
7. The vendors in JHS provide excellent service	3.43	.825	3.38	.933	.058	-1.12	.259
<b>8. JHS has excellent facilities</b>	3.44	.898	<b>3.54</b>	<b>.926</b>	<b>-.166</b>	<b>3.45</b>	<b>.001</b>
9. Staff at JHS are consistently courteous	3.48	.915	3.46	1.01	.020	.189	.850
10. Attendees at JHS feel safe and secure during game day	4.11	.883	4.18	.875	-.078	1.73	.084
<b>11. JHS has adequate seating for students</b>	3.14	1.15	<b>2.82</b>	<b>1.45</b>	<b>.269</b>	<b>-3.90</b>	<b>.001</b>
<b>12. Entering and exiting JHS is quick &amp; efficient</b>	3.44	1.11	<b>2.88</b>	<b>1.35</b>	<b>.569</b>	<b>-7.59</b>	<b>.001</b>
<b>13. The lines at vendor stations move quickly &amp; efficiently</b>	3.33	.866	<b>3.03</b>	<b>1.04</b>	<b>.300</b>	<b>-4.90</b>	<b>.001</b>
14. JHS staff show a genuine interest in solving consumer problems	3.14	.944	3.13	1.04	.017	-.121	.904
15. JHS has excellent parking availability for patrons	2.34	1.04	2.37	1.32	-.030	.380	.704
<b>16. Other spectators were well behaved during game day</b>	3.26	.982	<b>2.92</b>	<b>1.09</b>	<b>.340</b>	<b>-5.24</b>	<b>.001</b>
17. The behaviour of other spectators influenced my enjoyment of the game	3.53	1.11	3.46	1.15	.075	-1.10	.270
18. Signs and displays at JHS were easy to read & accurate	3.94	.816	3.89	.881	.050	-.151	.880
19. Overall the quality of service offered by JHS was excellent	3.75	.858	3.67	.892	.080	-1.21	.223
20. Overall the facilities offered at JHS will be great	3.66	.881	3.65	.921	-.010	1.10	.271
<b>21. Overall, I expect to be extremely well satisfied with my game day experience</b>	3.95	.873	<b>4.21</b>	<b>.865</b>	<b>-.262</b>	<b>7.87</b>	<b>.001</b>

As Table 15 demonstrates there was an almost even split between negative and positive differentials with a total of 12 negatives being recorded and 11 positives. In all cases statistically significant differentials have been highlighted in bold typeface. Negatives differentials ranged from  $m=-.030$  for parking availability to  $m=-.303$  for overall satisfaction ( $p<0.001$ ). Once again, the operator seems to have performed most badly with respect to items 4 through 6 pertaining to restrooms. On a more positive note, the operator has performed particularly well with respect to items 11 ( $m=+.269$ ), 12 ( $m=+.569$ ) and 13 ( $m=+.300$ ) which pertain to student seating, entering and exiting the stadium and lines at vendor stations ( $p<0.001$ ).

### **Stage Three Performance Data**

As with stage two, the stage three questionnaires sought to measure respondents' perceptions of the quality of the game day experience, although on this occasion respondent perceptions relate Auburn's final home game in the 2004 SEC football season.

Table 16 – Stage three analyses of respondent performance scores

Variable	Stage Two Performance		Stage Three Performance		Performance minus Performance	t Value	Sig. (2 tailed)
	Mean	SD	Mean	SD			
1. JHS offers fair prices for its food & beverage products	<b>2.52</b>	<b>.968</b>	<b>2.76</b>	<b>1.04</b>	<b>0.24</b>	<b>-2.84</b>	<b>.005</b>
2. JHS offers high quality food & beverage products	3.15	.953	3.29	.965	0.14	-1.15	.251
3. JHS offers a wide variety of food and beverage products	3.21	.913	3.36	.935	0.15	-1.60	.109
4. JHS has clean restrooms	2.71	.969	2.75	1.04	0.04	.058	.954
5. Adequate number of restrooms	<b>2.96</b>	<b>1.04</b>	<b>2.63</b>	<b>1.17</b>	<b>-0.33</b>	<b>4.25</b>	<b>.001</b>
6. Lines for restrooms moved quickly	<b>2.99</b>	<b>.960</b>	<b>2.69</b>	<b>1.20</b>	<b>-0.30</b>	<b>3.88</b>	<b>.001</b>
7. The vendors in JHS provide excellent service	3.43	.825	3.48	.828	0.05	-.737	.462
8. JHS has excellent facilities	3.44	.898	3.38	.894	-0.06	1.49	.137
9. Staff are consistently courteous	3.48	.915	3.60	.875	0.12	-1.60	.110
10. Attendees at JHS feel safe and secure during game day	4.11	.883	4.19	.777	0.08	-.733	.465
11. JHS has adequate seating for students	<b>3.14</b>	<b>1.15</b>	<b>2.98</b>	<b>1.21</b>	<b>-0.16</b>	<b>2.99</b>	<b>.003</b>
12. Entering and exiting JHS is quick & efficient	3.44	1.11	3.41	1.11	-0.03	1.42	.155
13. The lines at vendor stations move quickly & efficiently	3.33	.866	3.36	.935	0.03	.310	.757
14. JHS staff show a genuine interest in solving consumer problems	3.14	.944	3.13	.987	-0.01	.871	.385
15. JHS has excellent parking availability for patrons	2.34	1.04	2.42	1.18	0.08	-.845	.399
16. Other spectators at JHS were well behaved during game day	<b>3.26</b>	<b>.982</b>	<b>3.46</b>	<b>.946</b>	<b>0.20</b>	<b>-2.28</b>	<b>.023</b>
17. The behaviour of other spectators influenced my enjoyment	3.53	1.11	3.58	1.10	0.05	-.705	.482
18. Signs and displays at JHS were easy to read & accurate	3.94	.816	3.99	.840	0.05	.285	.776
19. Overall the quality of service offered by JHS was excellent	3.75	.858	3.83	.854	0.08	-.278	.781
20. Overall the facilities offered at JHS will be great	3.66	.881	3.65	.926	-0.01	.780	.436
21. Overall, I was extremely well satisfied with my game day experience	3.95	.873	4.04	.830	0.09	.437	.663

Table 16 shows that mean values range from a below average  $m=2.42$  for item 15 pertaining to parking availability to  $m=4.19$  for item 10 pertaining to attendee safety and security. Stage three performance values were also compared to those recorded during stage two of the research to ascertain if respondent

perceptions had changed in any way over the course of time. Table 15 highlights statistically significant change (at the 1% level) for five of the scale items evaluated (in all cases these items have been type bolded). Perceptions increased significantly for item 1 pertaining to fair pricing ( $m=+0.24$ ;  $p<0.005$ ) and item 16 pertaining to the influence of –other patrons ( $m=+0.20$ ;  $p<0.05$ ). Items 5 and 6 however, pertaining to restroom availability and item 11 pertaining to student seating experienced statistically significant decreases in perception over the same time period ( $p<0.005$ ). While inappropriate to discuss in detail during this subsection of the thesis, these difference scores do lend weight to the central research hypotheses detailed within the preceding theoretical framework. That is that respondents’ perceptions of service quality and overall satisfaction are unstable over time and that this may be influenced by the degree of emotion experienced on the day. It should be borne in mind that this change in perception does not in any way relate to a change in perception regarding the stage two game day experience. Rather it serves to highlight the fact that respondents’ perceptions can change and must be considered as such.

### **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 judgement 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 getting at 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 in this project 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. Even though the development of the SERVQUAL scale had undergone accepted processes for the scale development, the instruments application in the context of a game day football experience required additional review by event organisers, university teaching and research staff and students who had attended similar events in years gone by 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 judgement 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 discuss and refine the instrument to be used. Participants were drawn from the Hotel and Restaurant Management program's Continuous Quality Improvement course, which met at 1.00pm each Monday. Class participants had been notified one week before that the focus group would be taking place during the first half hour of class and advised that if they did not want to participate they would be formally excused from this section of class. All discussions were recorded and subsequently analysed and cross-checked against independently transcribed notes for accuracy. While all members of the focus group had previously been informed of the purpose of the meeting, it nonetheless proved necessary to repeat the rationale that was to guide the proceedings. Students were first of all 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, that all respondents felt strongly that Jordan Hare Stadium event staff were largely uncaring about the quality of the Auburn student's game day experience. This, they felt, was reflected in their rather poor treatment in terms of both seating allocation and rest room availability during game time.
- 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, great emphasis was placed on the rather price/quality food and beverage offering. Put simply, respondents felt that the service operator was not delivering value for money when it came to concessions.
- Fourthly, restrooms were identified as an area worthy of extra special attention, both in terms of cleanliness and line length. This was coupled with the admission that students were often prevented from exiting the student section to avail of restroom services during actual game play and when a refusal by stadium staff to permit students the right to re-enter the seating section upon their return.

Upon conclusion of this session, all participants were provided with an initial draft of the survey instrument which was to be administered to students one week before the start of the 2004 SEC College Football season and after the first and last home games of the 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 student'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 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. There was wide agreement that the

broad SERVQUAL dimensions were representative of many of the issues affecting their perceptions of service quality as it related to the game day experience.

- 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 were also concerned at the very repetitious nature of certain of the scale items; in particular items 7 and 19 and 8 and 20. Participants were advised that items 19 and 20 were taken as overall measures of service and facility adequacy, while items 7 and 8 related to more specific aspects of the delivery process. Upon receiving this explanation participants were satisfied that questions were not in fact repeating each other.
- Participants expressed a degree of concern about the presentation of the emotion scales and had difficulty differentiating between the issues of intensity and frequency. This led to a further refinement pertaining to the values and legends used to describe each of the two scales. Additionally, each scale was represented on either side of the variables to allow for ease of interpretation.
- Participants had difficulty interpreting the calmness emotional variable which is opposite the fear variable on Russell's (1980) Circumplex model. While a large amount of time was spent explaining what this variable was attempting to explain, respondents persisted in voicing their disquiet over

same. In short, they saw no context for such a variable in a highly charged and goal driven event such as SEC football.

- Participants were also concerned about the number of measurement variables and the fact that this might encourage a high non-response rate amongst the student body. Once again, there was a suggestion that item statements should be kept as brief as possible without losing the central them of investigation.
- Participants also raised concerns about the administration of the survey and related attrition. In short, this highlighted the very real issue of potential survey fatigue. It was suggested however, that while the pre-season and stage one administrations would follow quite closely, the stage two administration would not take place until nearer the seasons end and this would compensate somewhat from perceived fatigue.

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. The event was concluded approximately thirty hours later and informants thanked for their participation.

### **Construct Validity**

According to Cohen, Swerdlik and Smith (1992), construct validity refers to a judgement 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 behaviour. Principally, the researcher investigating a test's construct validity must formulate hypotheses about the expected behaviour 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. 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.

### **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). This form of examination explores the question: Do like measures perform similarly and as expected?

As stated previously, the service quality construct has been operationalized in a number of ways within the literature. Principally, though, it has been operationalized as the difference between customer perceptions and expectations (inferred disconfirmation) and as absolute performance based measures of consumer perceptions (direct disconfirmation). To date the most popular approaches have been the inferred SERVQUAL approach of Zeithaml, Parasuraman and Berry (1990) and the direct SERVPERF approach of Cronin and Taylor (1992). Both employ the same 22 SERVQUAL performance items of Parasuraman, Zeithaml and Berry (1985, 1988) to define the domain of the

service quality construct and both were used to attest to the degree of convergent validity pertaining to the measurement instrument. To this end a simple correlation (Pearson product moment) was conducted between both the inferred and direct disconfirmation scores computed following the stage two survey administration and an overall single item measure of quality/satisfaction (item 21) taken across all stages of the project. This item addressed the issue: Overall, I am extremely well satisfied with quality of service received during my game day experience. This question was included as a check for comparison purposes. Like the above listed disconfirmation measure respondents were once again asked to rate their perceptions of quality on a five point Likert scale anchored at strongly disagree (1) to very strongly agree (5). In short, this was designed to attest as a global measure of the quality/satisfaction constructs which could then be used specifically to test for degrees of convergence. The inferred disconfirmation scores were calculated for each of the 20 items and as an overall mean value using the following formula, Service Quality (SQ) = Perceptions (P) – Expectations (E), where SQ refers to the difference score, P refers to the respondent's perceptions at stage two and E refers to the respondent's expectations at stage one. The direct disconfirmation score on the other hand is a simple average of respondent's perception scores at stage two.

Results of this test (Table 17) indicate a significant correlation between both the inferred and direct measures of service quality and the overall single item measure, attesting to the convergent validity of the instrument. Correlations of

.250 (inferred SQ) and .663 (direct SQ) were found to be significant at the 1% level ( $p < 0.05$ ).

Table 17 – Correlation index of mean inferred and direct disconfirmation scores and single item measure of service quality.

		<b>Mean Overall SQ Score</b>	<b>Mean Inferred (P-E) SQ Score</b>	<b>Mean Direct SQ Score</b>
<b>Mean Overall Quality Scores</b>	Pearson Correlation Sig. (2-tailed) N	1.000 . 383	.250** .001 383	.663** .001 384
<b>Mean P-E Difference Scores</b>	Pearson Correlation Sig. (2-tailed) N	.250** .001 383	1.000 . 396	.365** .001 396
<b>Mean Direct SQ Scores</b>	Pearson Correlation Sig. (2-tailed) N	.663** .001 384	.365** .001 396	1.000 . 384

\*\*Correlation is significant at the 0.001 level (2-tailed).

### **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 (Pearson product moment) between respondents average pre-season expectation scores and a single item measure of game fairness taken as part of the stage two survey. Both variables worked well for this analysis as neither could be said to be related in any significant way given that respondent expectations of game performance were recorded pre-game and respondent's perceptions of the fairness of game were recorded following the actual game.



Table 18 – Correlation index of mean expectation scores and perceived fairness of game scores.

		<b>Mean Expectation Score</b>	<b>Mean Game Fairness Score</b>
<b>Mean Expectation Scores</b>	Pearson Correlation	1.000	.084
	Sig. (2-tailed)	.	.094
	N	613	399
<b>Mean Game Fairness Scores</b>	Pearson Correlation	.084	1.000
	Sig. (2-tailed)	.094	.
	N	399	399

Table 18 demonstrates that there was a statistically insignificant correlation between respondents pre-season game day expectations and their perception of fairness of the game following the first home game of the season ( $p > .05$ ). This result attests to the discriminant validity of the research measure. According to Cohen et al., (1992), “a validity coefficient showing a statistically insignificant relationship between test scores and/or other variables, with which scores on the test being construct validated, should not theoretically be correlated provides discriminant evidence of construct validity” (p.181).

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

While the overriding goal of the present study is to ascertain the nature of any relationship that might exist between respondent perceptions of service quality and their emotional state, it is also useful to test the use of the measurement instrument for evaluating service quality and consumer emotion within the particular service setting, i.e., the Auburn game day experience.

### **Dimensionality of Cognitive Satisfaction**

There is general agreement within the literature that identification of service quality dimensions aids an understanding of customer needs and wants. Yet,

while the search for a reliable method of measuring service quality has produced an extensive literature, there has been little consensus on a methodology, which is of general applicability in all situations. In the absence of any other objective measure, disconfirmation models came to dominate the literature on service quality from the early 1980s. These models have sought to define quality in terms of the difference between an individual's expectations of a service and their perceptions of actual service delivery. Pre-eminent among these studies has been the work of Parasuraman, Zeithaml and Berry (1985) and the development of their SERVQUAL instrument. Their research has concentrated on the belief that service quality is measurable but only in the eyes of the consumer. They take the view that service is deemed to be of high quality when customer's expectations are confirmed by subsequent service delivery. Their model has been challenged on a number of grounds, however. One stream of objections suggest that absolute measures of attitudes provide a more appropriate measure of quality than explanations based disconfirmation models (Cronin & Taylor, 1994). Indeed, the failure to define the perceptions element of SERVQUAL in terms of attitudes has been heavily criticized (Iacobucci, Grayson & Omstrom, 1994). There have also been numerous criticisms of SERVQUAL for the inductive nature of the original research in that it failed to draw on the theory base in the disciplines of psychology, social sciences and economics (Anderson, 1992). Many studies have also failed to replicate the five dimensions of quality found in the original research, suggesting little generalizability of these emerged dimensions. Subsequent studies, for example, have demonstrated that this is not always the

case (Babakus & Boller, 1992; Carman, 1990). The number of dimensions can range from one, for example Cronin and Taylor (1992) to eight, for example, Carman (1990). Even Parasuraman et al. (1994) recognises the overlap of responsiveness, assurance and empathy, and the possible blending of these three dimensions into one. All of which provides further evidence of the complexity of the service quality construct and the fact that it cannot be defined in any one way for all service encounters.

Given that the measure required significant modification pre-administration, it is not surprising that the actual measure should not factor out to represent the five dimensions originally proposed for SERVQUAL. Given the almost total neglect of the subject matter within the domain of South-eastern Conference College Football, the author has no real basis for suggesting an appropriate factor structure for this more cognitive aspect of the evaluation instrument. Discussions during the qualitative stage of the research do suggest however that a number of factors more than any other do stand out in the minds of spectators when engaged in game day experience. Such factors as food and beverage supply, restroom availability, queuing and the influence of other spectators, service and security personnel, do suggest a rather complicated factor structure. For this reason it is difficult to propose an exact factor structure for the service quality construct. That said, the researcher feels confident in hypothesising that:

- H1 – the five factor structure proposed for the SERVQUAL instrument will not be held up.

In order to test this hypothesis a number of measures were used, principally inferred (P-E difference scores) and direct disconfirmation (perception data only) measures as taken across all three stages of the project. The data were factor analysed making use of the VARIMAX factor rotation procedure in SPSS-X version 12. 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 correlations between a set of variables to identify those groups of variables that are relatively homogenous. Diekhoff (1992) also claims that the statistical independence of factor variates makes “factor analysis useful as a precursor to other kinds of statistical analysis” (P.334) such as univariate significant difference tests. In all cases the highest loading per item and factor is taken. In all, three separate factor analyses were conducted:

- Firstly, an analysis of the performance/expectation difference scores (inferred disconfirmation technique) as proposed under the original SERVQUAL study. Service quality scores were computed by averaging respondents’ expectation scores at stage one and subtracting these from an average of their corresponding perception scores at stage two.
- Secondly, an analysis of the stage two perception data only (direct disconfirmation technique) as proposed by various studies following

SERVQUAL (Cronin & Taylor, 1992; 1994). Service quality scores were computed by averaging respondent's perceptions at stage two.

- Thirdly, an analysis of the stage three perception data to verify if the stage two factor structure held up over time

### **Inferred Disconfirmation Factor Rotation**

Prior to undertaking any such factor analysis it was deemed necessary to address the question of whether the data actually lent itself to the technique, in other words was the data factorable? A component matrix was generated to ensure that the analysed variables had reasonable correlations (greater than or equal to 0.3) with other variables. Unrotated and rotated component matrices were inspected and variables that did not correlate or correlated weakly with others were excluded (De Vaus, 1996). All but one variable (item 17) correlated well. The result of the corresponding KMO of sampling adequacy was 0.893 and Bartlett's test for sphericity was 2287.172, which is considered a high Chi-Square, significant at the level of 1 percent (sig.=0.001). The results of these tests rendered the P-E difference score data very factorable and consequently the factor analysis was generated.

Table 19 – Factor analysis pertaining to inferred (P-E) disconfirmation scores

Variable	P-E Inferred Disconfirmation			
	Comp 1 CONVEN.	Comp 2 FACIL.	Comp 3 F&B	Comp 4 ASSURANCE
V1			.629	
V2			.765	
V3			.712	
V4	.685			
V5	.683			
V6	.793			
V7		.425		
V8		.479		
V9				.472
V10				.638
V11	.476			
V12	.520			
V13	.565			
V14	.461			
V15	.702			
V16	.464			
V17				.574
V18		.604		
V19		.798		
V20		.737		
<b>Eigenvalue</b>	<b>6.403</b>	<b>1.508</b>	<b>1.325</b>	<b>1.045</b>
<b>% of variation</b>	<b>32.013</b>	<b>7.540</b>	<b>6.625</b>	<b>5.223</b>
<b>alpha</b>	<b>0.78</b>	<b>0.70</b>	<b>0.66</b>	<b>0.52</b>

Note – all absolute values less than 0.4 have been suppressed for the purpose of analysis

The results of the inferred measure factor analysis are presented in Table 19. This table shows not only the item number loading on each factor, but also the extent to which it correlates or loads under each factor. While there is no golden rule as to the actual size of a correlation co-efficient should be before it is said to load on a factor, the cut off point in this instance was set at 0.4.

The results illustrate quite clearly that the five-component structure proposed by Parasuraman, Zeithaml and Berry (1988) for their SERVQUAL scale was not confirmed and that service quality, at least as measured using the inferred

disconfirmation approach was four dimensional in structure, with all 20 of variables loading heavily on four separate factors. Table 19 illustrates strong factor loadings (item to total correlations) along four dimensions, accounting for approximately 52% of the explained variance. This is clearly at variance with the original SERVQUAL factor structure and lends strong support to the H1 hypothesis. From the analysis, extracted component one is reflective of what might best be described as the more convenience/process oriented elements of service delivery (CONVENIENCE); component two is reflective of the more tangible (FACILITY) oriented aspects of the delivery process; component three relates solely to the issue of food and beverage supply, which is clearly of great importance to respondents (F&B) and component four (ASSURANCE) seems to relate to the influence of others in assuring enjoyment and safety during the game day experience. It should be stressed that while items 1, 11, 12 and 14 cross-loaded on two different factors, the degree of difference between the correlation coefficients registered for each item was so significant that in all cases each item was factored into the corresponding reliability analysis for that factor registering the higher coefficient.

### **Direct Disconfirmation Factor Rotation – Stage Two**

Prior to undertaking any such factor analysis it was again deemed necessary to address the question of whether the data actually lent itself to the technique, in other words was the data factorable?

Table 20 – Stage two factor analysis - direct disconfirmation scores

Variable	Direct Disconfirmation Measure			
	Comp One TECHNICAL	Comp Two CONVENIENCE	Comp Three F&B	Comp Four RESTROOMS
V1			.682	
V2			.683	
V3			.739	
V4				.661
V5				.825
V6				.823
V7	.616			
V8	.511			
V9	.522			
V10	.658			
V11		.677		
V12		.620		
V13		.477		
V14		.642		
V15		.745		
V16		.474		
V17				
V18	.744			
V19	.696			
V20	.660			
<b>Eigenvalue</b>	<b>7.245</b>	<b>1.626</b>	<b>1.393</b>	<b>1.298</b>
<b>% of variation</b>	<b>36.22%</b>	<b>8.12%</b>	<b>6.96%</b>	<b>6.48%</b>
<b>alpha</b>	<b>0.86</b>	<b>0.76</b>	<b>0.74</b>	<b>0.78</b>

Note – all absolute values less than 0.4 have been suppressed for the purpose of analysis

A further component matrix was generated to ensure that the analysed variables again had reasonable correlations (greater than or equal to 0.3) with other variables. Unrotated and rotated component matrices were inspected and variables that did not correlate or correlated weakly with others were excluded (De Vaus, 1996). All but one variable (item 17) correlated well. The result of the corresponding KMO of sampling adequacy was 0.894 and Bartlett's test for sphericity was 3211.248, which is considered a high Chi-Square, significant at the



level of 1 percent (sig.=0.001). The results of these tests rendered the stage two perception score data very factorable and consequently the factor analysis was generated.

The results of the stage two direct disconfirmation factor analysis are presented in Table 20. The results again lend support to the H1 hypothesis in that they confirm that the five-component structure proposed by Parasuraman, Zeithaml and Berry (1988) for their SERVQUAL scale was not confirmed and that service quality, at least as measured using this more direct technique comprised four dimensions. Table 20 illustrates strong factor loadings (item to total correlations) along four dimensions, which again is at variance with the original SERVQUAL factor structure. Combined, these four factors accounted for approximately 58% of the explained variance. From the analysis, extracted component one is reflective of what might best be described as the more technical/process elements of service delivery (TECHNICAL); component two is reflective of the more comfort and convenience (CONVENIENCE) oriented aspects of the delivery process, component three relates solely to the issue of food and beverage supply and choice (F&B) and component four pertains to the restroom supply and availability (RESTROOM). Unlike the preceding factor analysis of the inferred (P-E) disconfirmation scores, respondents seem to view the issue of restrooms in a much more serious light when experience alone is concerned.

### **Direct Disconfirmation Factor Rotation – Stage Three**

This procedure was repeated making use of the stage three performance data. The result of the corresponding KMO of sampling adequacy was 0.886 and

Bartlett's test for sphericity was 2113.498, again considered a high Chi-Square, significant at the level of 1 percent (sig.=0.001). These results rendered the stage three perception score data very factorable, the results of which are presented in Table 21.

The results again lend support to the H1 in that they confirm that the five-component structure proposed for the original SERVQUAL was not held up and that service quality, at least as measured during stage three of the research again comprised four dimensions. These four dimensions accounted for approximately 59% of the explained variance. That said the results are not a mirror image of the stage two factor analysis with slight variations in factor structure being very apparent. Component one (VENDOR) seems to relate to vendor and/or concession services. The staffing issue as it relates to food and beverage supply seems to be important to respondents. Component two (CONVENIENCE) again relates to the issue of convenience and timeliness of supply and component three (RESTROOM) again stands alone and pertains to restroom available and use. Component four (SAFETY), on the other hand, seems to relate to the issue of trust and security as it relates to overall service and facility supply.

It should be added that in all instances data was further exposed to a corresponding scree test, which displayed a clear break between the steep slope of the initial factors and a gentler slope for the remainder, implying that the latter were less important. In all instances, the greatest degree of variance was explained by those factors registering an Eigenvalue at least equal to one.

Table 21 – Stage three factor analysis - direct disconfirmation scores

Variable	Direct Disconfirmation Measure			
	Comp One VENDOR	Comp Two CONVENIENCE	Comp Three RESTROOM	Comp Four SAFETY
V1	.730			
V2	.806			
V3	.769			
V4			.866	
V5			.814	
V6			.736	
V7	.487			
V8	.486			
V9	.460			
V10				.735
V11		.564		
V12		.807		
V13		.638		
V14		.516		
V15		.503		
V16		.554		
V17		.488		
V18				.665
V19				.681
V20				.554
<b>Eigenvalue</b>	<b>7.337</b>	<b>1.916</b>	<b>1.358</b>	<b>1.215</b>
<b>% of variation</b>	<b>36.687%</b>	<b>9.57%</b>	<b>6.79%</b>	<b>6.07%</b>
<b>alpha</b>	<b>0.82</b>	<b>0.77</b>	<b>0.82</b>	<b>0.77</b>

Note – all absolute values less than 0.4 have been suppressed for the purpose of analysis

### **Dimensionality of the More Affective Element of the Research Instrument**

Similarly the measurement instrument also sought to measure consumer emotion across two scales; one measuring frequency of felt emotion, the other measuring intensity of felt emotion. Both scales were based upon Russell's circular model of affect, with consumers being asked to rate the frequency with which they experienced certain emotions on a 5 point Likert scale ranging from not at all (1) to very often (5). Similarly, respondents were also asked to rate the

degree to which they had experienced each emotion on another 5 point Likert scale ranging from very low (1) to very high (5). Actual emotions included: happiness, excitement, calmness, surprise, idleness, boredom, sadness and fear; representing both of Russell's bipolar dimensions of degree of arousal and pleasantness. By means of multi-dimensional scaling, a number of studies have since found this circular order to be accurate (Mano, 1990; Liliander & Bergenwall, 1997). For this reason, the second research H2, states that:

- H2 – Russell's proposed circular order of affect (emotion) will be supported.

The structure of emotion can also be explored via orthogonal factor rotation and many studies have concluded a two and/or three factor solution. While certain studies have proposed a three factor solution encompassing positive, negative and neutral states (Liliander & Bergenwall, 1997; Yu & Dean, 2001) others have uncovered a more easily explained two factor solution encompassing both positive and negative aspects of emotion (Evrard and Aurier, 1994; Hausknecht, 1988; Westbrook & Oliver, 1991). Given the very highly charged nature of the event under investigation, the researcher believes that the possibility of experiencing a neutral state of emotion is highly unlikely. H2a therefore states:

- H2a – a two factor (positive/negative) factor structure will be held up for spectator emotion during the Auburn Game Day Experience.

## The Structure of Emotion – Stage One

The stage one emotion data was first examined by multidimensional scaling (Euclidean distance), which according to Norusis (1993) is the equivalent of a principal components analysis. Figure 22 shows the resulting 2-dimensional plot for each of the eight emotions as evaluated via both frequency (f) and intensity (d) scales at stage one. Looking firstly at the frequency (f) data, Kruskal's stress was 0.04 and the squared correlation coefficient ( $R^2$ ) was 0.99, both indicating a very good fit. Similarly, the intensity data (d) also performed well. Kruskal's stress was 0.03 and the squared correlation coefficient ( $R^2$ ) was 0.99, again indicating a very good fit.

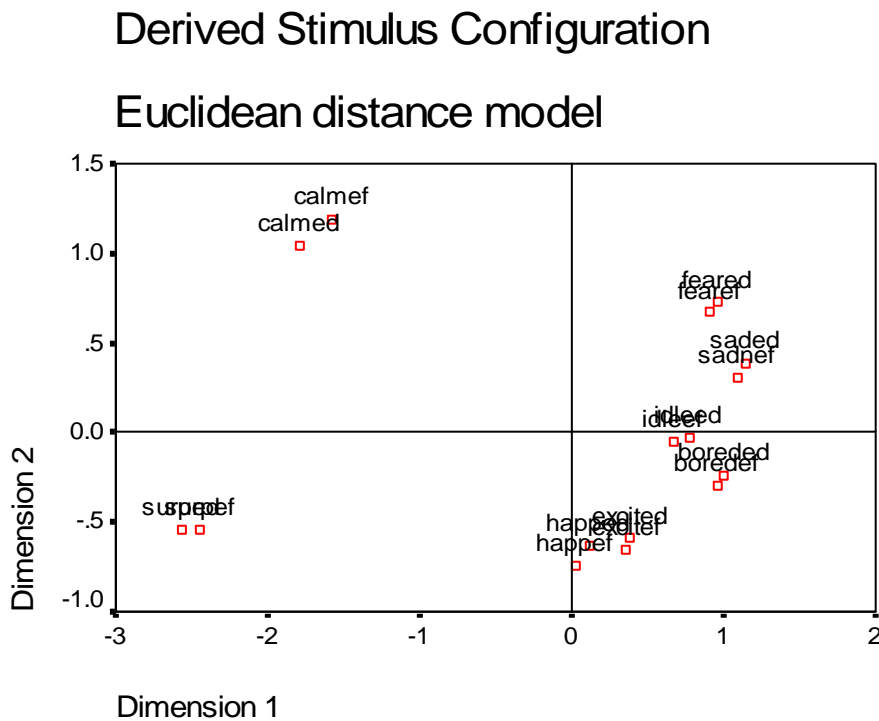


Figure 22 Multidimensional scaling of emotions – stage one

While the results are limited by the small number of emotions included in the study Figure 22 nonetheless makes it clear that Russell's (1980) circular order of affect has been supported. This, of course, lends positive support to the H2, which suggested a similar circular order. 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. It should be remembered that this analysis is based upon the reverse coded scores, which if unreversed would lead to surprise facing north, excitement north-east, calmness south-east, and idleness, boredom and fear, south to west.

The emotional scales were then factor analysed to see if they could be reduced to a smaller set of emotions, and if these would again correspond with Russell's dimensions of pleasure-displeasure and degree of arousal (Liljander & Strandvik, 1997). As with the preceding factor analyses for service quality, this analysis again made use of the VARIMAX factor rotation procedure in SPSS-X version 12. Due to concerns expressed during the qualitative stage of the research pertaining to the inclusion of the calmness scale item however, the researcher determined that this item would be removed from the ensuring factor analysis. This issue will be addressed again in the context of the reliability tests conducted for all extracted components.

Prior to undertaking any such factor analysis it was again deemed necessary to address the question of whether the data actually lent itself to the

technique, in other words was the data factorable? A component matrix was generated to ensure that the analysed variables had reasonable correlations (greater than or equal to 0.3) with other variables. As Table 23 makes clear this was done separately for both the frequency and intensity scales. The result of the corresponding KMO of sampling adequacy for the frequency scale was 0.616 and Bartlett's test for sphericity was 1146.530, which is considered a low Chi-Square, significant at the level of 1 percent (sig.=0.001). The result of the corresponding KMO of sampling adequacy for the intensity scale was 0.652 and Bartlett's test for sphericity was 1368.777, again significant at the level of 1 percent (sig.=0.001). The results of these tests rendered the stage one emotional data very factorable and consequently the factor analysis was generated.

Table 23 – Stage one factor analysis – structure of emotion

Emotional Variables	Frequency Data		Intensity Data	
	DIM 1 POS	DIM 2 NEG	DIM1 NEG	DIM2 POS
1. Happiness	.899			.921
2. Excitement	.905			.914
3. Surprise		.606	.671	
4. Idleness		.629	.662	
5. Boredom				
6. Sadness		.728	.771	
7. Fear		.575	.670	
<b>Eigenvalue</b>	<b>2.22</b>	<b>1.90</b>	<b>2.314</b>	<b>2.138</b>
<b>% of variation</b>	<b>31.73</b>	<b>27.18</b>	<b>33.054</b>	<b>30.542</b>
<b>alpha</b>	<b>0.90</b>	<b>0.56</b>	<b>0.66</b>	<b>0.90</b>

The results of this analysis are presented in Table 23 and are supportive of the H2a. This table shows not only the item number loading on each factor, but also the extent to which it correlates or loads under each factor. While there is no strong rule as to the actual size a correlation co-efficient should be before it is said

to load on a factor, the cut off point was set at 0.4. It should be noted that were items loaded on more than one factor they were removed from the analysis. For example, with respect to item 5 boredom, which like calmness, may have occurred due to a certain amount of respondent confusion over the interpretation of the variable in a highly charged atmosphere. Table 22 illustrates strong factor loadings (item to total correlations) along two dimensions (positive and negative), which combined, explain approximately 59% of the variance on the frequency scale. The intensity scale presents an almost identical picture, again with two factors being extracted explaining over 64% of the variance. Item 5, boredom, was again removed due to cross loading. These findings are again in keeping with other studies where a similar two factor (positive/negative) factor structure was uncovered (Liljander & Strandvik, 1997; Yu & Dean, 2001).

### **The Structure of Emotion – Stage Two**

The stage two emotion data was also examined by both multidimensional scaling (Euclidean distance) and orthogonal factor analysis. Figure 24 shows the resulting 2-dimensional plot for each of the eight emotions as evaluated via both frequency (f) and intensity (d) scales at stage one. Looking firstly at the frequency (f) data, Kruskal's stress was 0.64 and the squared correlation coefficient ( $R^2$ ) was 0.98, both indicating a very good fit. Similarly, the intensity data (d) also performed well. Kruskal's stress was 0.05 and the squared correlation coefficient ( $R^2$ ) was 0.98, again indicating a very good fit.



Note - g1f1/d1 = happiness, g1f2/d2 = sadness, g1f3/d3 = surprise, g1f4/d4 = idleness, g1f5/d5 = excitement, g1f6/d6 = boredom, g1f7/d7 = calmness, g1f8/d8 = fear.

Figure 24. Multidimensional scaling of emotions – stage two

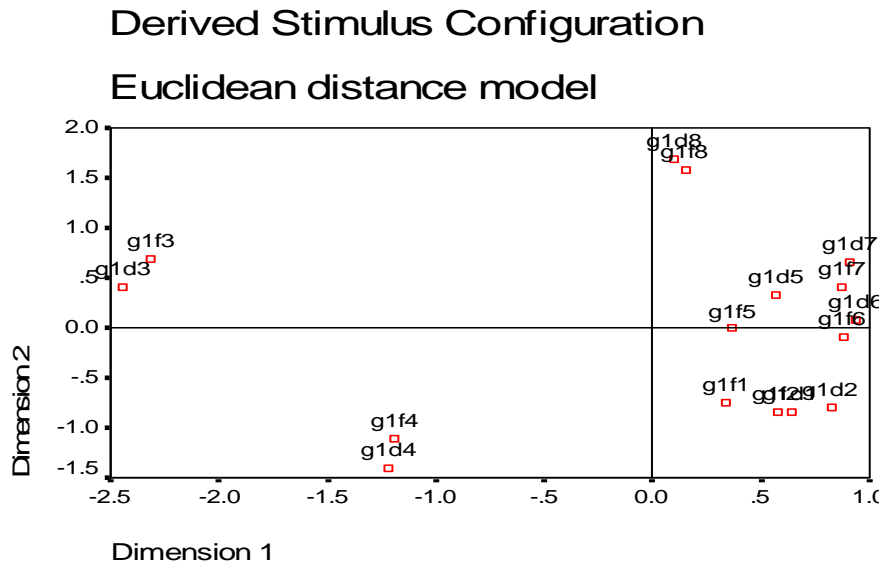


Figure 24 makes it clear that Russell’s (1980) circular order of affect has again been supported, which lends further positive support to the H2, which suggested a similar circular order. Once again though the order differs slightly from that proposed under Russell’s original model of affect.

The stage two emotional data was then factor analysed to see if they could be reduced to a smaller set of emotions and if these would again correspond with Russell’s dimensions of pleasure-displeasure and degree of arousal (Liljander & Strandvik, 1997). As with the preceding factor analyses for service quality, this analysis again made use of the VARIMAX factor rotation procedure in SPSS-X version 12. The result of the corresponding KMO of sampling adequacy for the

frequency scale was 0.644 and Bartlett’s test for sphericity was 961.380, which is considered a low Chi-Square, yet nonetheless significant at the level of 1 percent (sig.=0.001). The result of the corresponding KMO of sampling adequacy for the intensity scale was 0.654 and Bartlett’s test for sphericity was 908.292, again significant at the level of 1 percent (sig.=0.001).The results of these tests rendered the stage two emotional data very factorable and consequently the factor analysis was generated.

Table 25– Stage two factor analysis – structure of emotion

<b>Emotional Variables</b>	<b>Frequency Data</b>		<b>Intensity Data</b>	
	<b>DIM 1 POS</b>	<b>DIM 2 NEG</b>	<b>DIM 1 POS</b>	<b>DIM 2 NEG</b>
<b>1. Happiness</b>	.864		.883	
<b>2. Excitement</b>	.879		.888	
<b>3. Surprise</b>	.714		.609	
<b>4. Idleness</b>		.695		.714
<b>5. Boredom</b>		.788		.769
<b>6. Sadness</b>		.734		.785
<b>7. Fear</b>				
<b>Eigenvalue</b>	<b>2.426</b>	<b>2.022</b>	<b>2.220</b>	<b>2.273</b>
<b>% of variation</b>	<b>34.650</b>	<b>28.889</b>	<b>31.713</b>	<b>32.471</b>
<b>alpha</b>	<b>0.78</b>	<b>0.65</b>	<b>0.73</b>	<b>0.71</b>

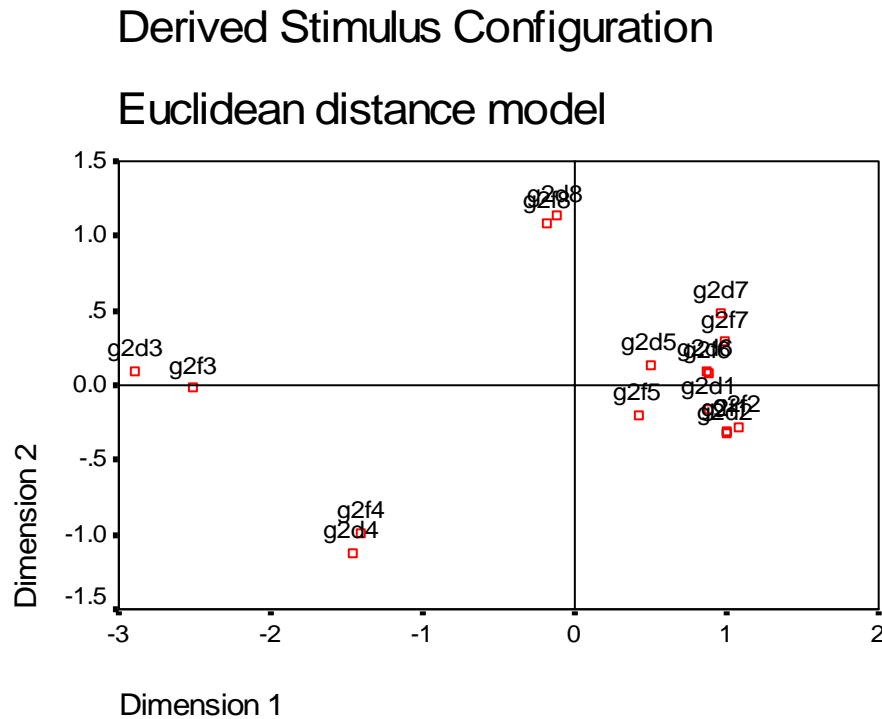
The results of this analysis are presented in Table 25 and are again supportive of H2a. This table shows not only the item number loading on each factor, but also the extent to which it correlates or loads under each factor. Item coefficients have again been cut off at 0.4. Table 25 illustrates strong factor loadings (item to total correlations) along two dimensions (positive and negative), which combined explain approximately 63% of the variance on the frequency and scale. Item 7 (fear) was removed from the analysis because of cross-loading. A further two factor solution (positive/negative) was uncovered for the intensity

scale with item 7 (fear) again being removed because of cross-loading. Combined, these dimensions explained some 64% of the variance. These findings are again in keeping with other studies where a similar two factor (positive/negative) factor structure was uncovered.

### **The Structure of Emotion – Stage Three**

The stage two emotion data was also examined by both multidimensional scaling (Euclidean distance) and orthogonal factor analysis. Figure 26 shows the resulting 2-dimensional plot for each of the eight emotions as evaluated via both frequency (f) and intensity (d) scales at stage one. Looking firstly at the frequency (f) data, Kruskal's stress was 0.01 and the squared correlation coefficient ( $R^2$ ) was 0.99, both indicating a very good fit. Similarly, the intensity data (d) also performed well. Kruskal's stress was 0.02 and the squared correlation coefficient ( $R^2$ ) was 0.99, again indicating a very good fit.

Figure 26 Multidimensional scaling of emotions – stage three



Note – g2f1/d1 = happiness, g2f2/d2 = sadness, g2f3/d3 = surprise, g2f4/d4 = idleness, g2f5/d5 = excitement, g2f6/d6 = boredom, g2f7/d7 = calmness, g2f8/d8 = fear

Figure 26 makes it clear that Russell’s (1980) circular order of affect has again been supported, which lends further positive support to the H2, which suggested a similar circular order. Once again though the order differs slightly from that proposed under Russell’s original model of affect.

The stage three emotional data was then factor analysed. As with the preceding factor analyses for service quality, this analysis again made use of the VARIMAX factor rotation procedure in SPSS-X version 12. The result of the corresponding KMO of sampling adequacy for the frequency scale was 0.644 and

Bartlett’s test for sphericity was 551.312, which is considered a low Chi-Square, yet nonetheless significant at the level of 1 percent (sig.=0.001). The result of the corresponding KMO of sampling adequacy for the intensity scale was 0.657 and Bartlett’s test for sphericity was 565.584, again significant at the level of 1 percent (sig.=0.001).The results of these tests rendered the stage three emotional data very factorable and consequently the factor analysis was generated.

Table 27– Stage three factor analysis – structure of emotion

<b>Emotional Variables</b>	<b>Frequency Data</b>		<b>Intensity Data</b>	
	<b>DIM 1 POS</b>	<b>DIM 2 NEG</b>	<b>DIM1 POS</b>	<b>DIM2 NEG</b>
<b>1. Happiness</b>	.902		.907	
<b>2. Excitement</b>	.918		.907	
<b>3. Surprise</b>		.531		
<b>4. Idleness</b>				.768
<b>5. Boredom</b>				.787
<b>6. Sadness</b>		.678		.809
<b>7. Fear</b>		.647		.613
<b>Eigenvalue</b>	<b>2.555</b>	<b>1.564</b>	<b>1.795</b>	<b>2.583</b>
<b>% of variation</b>	<b>36.500</b>	<b>22.336</b>	<b>25.646</b>	<b>36.897</b>
<b>alpha</b>	<b>0.92</b>	<b>0.40</b>	<b>0.89</b>	<b>0.76</b>

The results of this analysis are presented in Table 27 and are again supportive of the H2a. Item coefficients have again been cut off at 0.4. Table 26 illustrates strong factor loadings (item to total correlations) across two dimensions (positive/negative), which combined explain approximately 59% of the variance on the frequency scale and strong factor loadings on two dimensions for the intensity data, explaining approximately 63% of the variation. Items 5 (idleness) and 6 (boredom) were removed from the frequency analysis due to cross-loading. While it is beyond the remit of the findings section to discuss the possible causes

for this change in factor structure at stage three, it could be hypothesized that this in some way related to the nature and importance of the game being watched, (i.e., the last home game of a very competitive record breaking season for the Auburn Tigers). It is further hypothesized that this may have heightened respondents' emotional state to a point where idleness/boredom was not a factor.

### **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. Of the three traditional methods used to estimate reliability (for example test-retest, alternative form and internal consistency), only the internal consistency method shall be reported on within this analysis. Put simply, the internal consistency test was deemed appropriate for testing stability within the measurement procedure. As Bryman and Cramer (1997) put it, it is particularly important in connection with multiple items scales and raises the question of whether each scale is measuring a single idea and hence whether the items that make up the scale are internally consistent. This approach relies upon Cronbach's alpha, which essentially calculates the average of all possible split-half reliability coefficients. While split half reliability tests may also serve to demonstrate the internal consistency of an instrument, Cronbach's alpha is viewed as a more

expedient indicator. According to Nunnally (1978) the rule of thumb is that the result should be 0.7 or above.

### **Stage One Reliability Data**

Stage one data collection comprised a pre-season expectation measure, an importance measure, as well as a pre-season emotional measure comprising both frequency and intensity scales. The results show that the instrument performed well in terms of reliability. Overall reliabilities were  $\alpha = 0.92$  and  $0.94$  respectively for both the expectation and importance scales. Overall reliability for the stage one emotional scale was recorded at  $\alpha=0.76$ . Upon closer examination however, it becomes clear that overall reliability will increase significantly if scale item number 3 (calmness) is removed from both scales. The resulting  $\alpha=0.78$  is more than acceptable. Please note that the reliability scores tables for each of the stage one measurement scales has been included in the appendices section of the thesis.

Reliability tests were also ran for each of the factor analyzed stage one emotion scales. Table 27 demonstrates that the corresponding reliability coefficients range from a rather marginal  $\alpha=0.56$  through to  $\alpha=0.90$  on the frequency scale and from  $\alpha=0.66$  through to  $\alpha=0.90$  on the intensity scale.

### **Stage Two Reliability Data**

Stage two data collection comprised an absolute performance measure and a further emotional measure comprising both frequency and intensity scales. The collection of the stage two performance data permitted the computation of the inferred disconfirmation scores (P-E difference scores), which were factor

analyzed in terms of exploring the stage two instruments dimensional structure. Results show that the stage two instrument performed well with coefficient  $\alpha=0.77$  for emotion (rising to  $\alpha=0.79$  when calmness was removed),  $\alpha=0.89$  for the stage two performance data and  $\alpha=0.88$  for the inferred disconfirmation scores. An additional behavioral intention measure was taken during stage two, comprising three variables relating to intention to recommend, revisit and continuing support for the Auburn football team. When factor analyzed, all three items loaded heavily on one factor explaining approximately 75% of the variance, with a corresponding  $\alpha=0.84$ . Reliability tests were also ran for the extracted components of the stage two inferred and direct disconfirmation measures. Looking firstly at the inferred (P-E) measures, Table 28 highlights four factors with coefficient  $\alpha$  ranging from a low  $\alpha=0.52$  for assurance through to  $\alpha=0.78$  for convenience. Table 27 highlights a four factor structure for the more direct disconfirmation measure, with coefficient  $\alpha$  ranging from  $\alpha=0.74$  to  $\alpha=0.86$ . These are very acceptable results in all cases. Reliability tests for the extracted components pertaining to the stage two emotion scales (Table 27) range from coefficient  $\alpha=0.65$  through to  $\alpha=0.78$  on the frequency scale and coefficient  $\alpha$  ranging from  $\alpha=0.71$  through to  $\alpha=0.73$  on the intensity scale.

### **Stage Three Reliability Data**

Stage three data was identical in all respects to stage two. This included an absolute performance measure and a further emotional measure comprising both frequency and intensity scales. Results show that the stage two instrument



performed well with coefficient alpha ranging from  $\alpha=0.70$  for emotion (rising to  $\alpha = 0.71$  when calmness was removed) and  $\alpha=0.90$  for the stage two performance data. An additional behavioral intention measure was taken during stage two, comprising three variables relating to intention to recommend, revisit and continuing support for the Auburn football team. When factor analyzed, all three items loaded heavily on one factor explaining approximately 65% of the variance, with a corresponding  $\alpha=0.71$ . Reliability tests were also ran for the extracted components of the stage three direct disconfirmation measure. Table 20 highlights a four factor structure with coefficient alpha ranging from  $\alpha=0.77$  to  $\alpha=0.82$ . These are very acceptable results in all cases. Reliability tests for the extracted components pertaining to the stage three emotion scales (Table 26) are less than satisfactory for the frequency scale with coefficient alpha ranging from  $\alpha=0.40$  to  $\alpha=0.92$ . Results are more acceptable on the intensity scale however with coefficient alpha ranging from  $\alpha=0.76$  to  $\alpha=0.89$ .

### **Testing of Central Research Hypotheses**

Attention shall now turn to section five of the analysis and the testing of the key research hypotheses as set within the original research framework. In short, the data gathered during the quantitative stage of the research process will be scrutinized in order to test for consistency with each of the research hypotheses. Figure 27 presents a pictorial path representation of the key research hypotheses and the order in which they will be addressed.

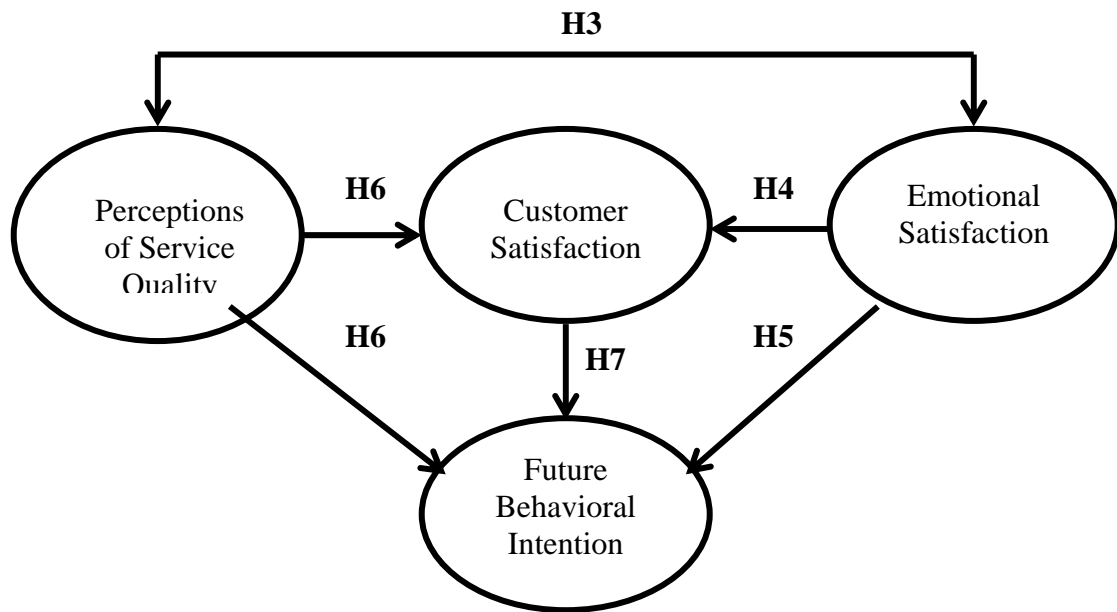


Figure 27. Theoretical model of central research hypotheses

**H3**

Customer satisfaction remains a central tenet of hospitality research and its achievement remains fundamental to effective delivery of services and the development of ongoing relationship efforts with customers. Traditionally viewed as a vital antecedent of the customers perception of service quality, researchers now view service quality as a vital antecedent to the customers overall satisfaction (Oliver, 1993; 1997). This view is also supported by Gotlieb, Grewal and Brown (1994) whose work suggests that service quality is a vital antecedent of customer satisfaction. This view is further supported by Heskett, Sasser and Schlesinger (1997) whose work on the service profit chain illustrates the nature of this relationship quite clearly. This view proposes then that customer satisfaction acts

as a form of mediating variable between the customer's perception of quality and their future behavioural actions. This view is clearly represented in Figure 27.

While this view is now well accepted within research circles, there has been increasing debate as of late concerning the validity and reliability of the findings supporting this proposition. This has arisen due to the ignorance by service researchers of what is best described as the more affective component of the satisfaction construct – consumer emotion. “By and large the emotions that customers feel when consuming a service have not been explored in either perceived service quality or customer satisfaction models” (Gronroos, 2001, p.72). It is quite obvious however, that experienced emotions have the potential to affect not only the consumers cognitive view of the service consumed, but also their overall satisfaction and longer term behavioural intentions. It is therefore hypothesized:

- H3: An individual's perception of service quality will be positively related to their degree of emotional satisfaction.

This hypothesis was investigated by calculating the mean perception scores for each of the 20 scale items and correlating (Pearson's product moment correlation) these with the mean emotion scores for all eight items across stages two and three of the research. This correlation was used to give an indication of the direction and strength of the linear association between both variables. The

closer the correlation efficient (r) is to 1 or -1, the stronger the association (+/-) between the variables.

Table 29 – Correlation index of mean service quality and emotion scores – stage two

Stage	Mean Emotion	Mean Perception	N	Sig. (2-tailed)	Pearson Correlation
Two	3.86	3.26	399/397	0.001	0.225**
Three	4.01	3.28	249/250	0.008	0.168**

\*\* Correlation is significant at the 0.01 level (2-tailed).

Results of this test (Table 29) show that a strong positive correlation of 0.225 was for stage two data and 0.168 for the stage three data, both of which are significant at the 1% level. The results of this test are consistent with the view expressed in H3 that there is a positive relationship between consumer perceptions of service quality and the level of felt emotion.

#### H4

While it is widely accepted by hospitality professionals that emotion plays a crucial role in determining customer satisfaction levels, there has been an almost complete dearth of studies concerning the role of emotion in hospitality satisfaction research (Barsky & Nash, 2002). Further, while many studies have concluded that there is a significant relationship between satisfaction and future behavioural intention, the validity of their findings is now being questioned in that they relate solely to measures of the more cognitive component of the satisfaction construct (Liljander & Strandvik, 1997; Yu & Dean, 2001). Much of this research has been focused around the disconfirmation of some comparison standard or perceived service performance. Satisfaction however, is also believed to contain an affective (emotional) component without which customers responses cannot be

fully accounted for (Oliver, 1997; Liljander & Strandvik, 1997). It is therefore hypothesized that:

- H4: An individual's degree of emotional satisfaction will be positively related to their overall satisfaction.

Table 30 – Correlation index of mean emotion scores and overall satisfaction

<b>Stage</b>	<b>Mean Emotion</b>	<b>Overall Satisfaction</b>	<b>N</b>	<b>Sig. (2-tailed)</b>	<b>Pearson Correlation</b>
<b>Two</b>	3.86	3.95	399/384	0.001	0.337**
<b>Three</b>	4.01	4.04	249/247	0.001	0.284**

\*\*Correlation is significant at the 0.001 level (2-tailed).

This hypothesis was investigated by calculating the mean emotion scores for each of the 8 scale items and correlating (Pearson's product moment correlation) these with a single item (item 21) measure of overall satisfaction taken across all stages of the research. Results of this test (Table 30) show significant positive correlations with overall satisfaction (0.337; Sig. < 0.001) at stage two and stage three (0.284; Sig. < .001) of the study, thereby lending support to the H4.

## **H5**

A growing body of literature now points to the fact that the positive and negative emotions that consumers associate with the service encounter play an equally important role in determining future behavioral intention (Allen, Machleit & Kleine, 1992; Oliver, 1993; Richins, 1997; Barsky & Nash, 2002). It is now widely accepted that customer satisfaction levels and longer term behavioural 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). Staus and Neuhaus (1997) suggest that one's emotions have a strong influence on future behavior, and that one responds to an event in certain ways to maintain positive emotions, such as happiness and to avoid negative emotions, such as depression. Not surprisingly, positive emotion triggered by the provision of a high level of perceived service quality can therefore be linked to positive future behavioural intention, and vice versa (Wong, 2004, p.367). It is therefore hypothesized:

- H5: An individual's degree of emotional satisfaction will be positively related to their future behavioural intention.

Table 31 – Correlation index of mean emotion scores and future behavioural intention

<b>Stage</b>	<b>Mean Emotion</b>	<b>Mean FBI</b>	<b>N</b>	<b>Sig. (2-tailed)</b>	<b>Pearson Correlation</b>
<b>Two</b>	3.86	4.50	399/403	0.001	0.472**
<b>Three</b>	4.01	4.59	249/251	0.001	0.335**

\*\*Correlation is significant at the 0.001 level (2-tailed).

This hypothesis was investigated by calculating the mean emotion scores for each of the 8 emotional scale items and correlating (Pearson's product moment correlation) these with both a mean future behavioural intention (FBI) score taken over stages two and three of the research. Results of this test (Table 31) show a significant positive correlation across both stages (0.472; 0.335; Sig. < 0.001) lending strong support to the H5.

## **H6**

Previous reference has been made to the concepts of customer satisfaction and customer perceived service quality. Indeed a review of the literature reveals that the terms are quite often used interchangeably, which has led to confusion regarding both terms. While the two concepts are related and appear to be merged, there are still gaps in the understanding of the two constructs, their relationship to each other and their antecedents and consequences (Gwynne, Devlin & Ennew, 1998). Oliver (1980) takes the view that satisfaction is “the emotional reaction following a disconfirmation experience” (p.461). Getty and Thompson (1994) define it as a “summary psychological state experienced by the consumer when confirmed or disconfirmed expectations exist with respect to a specific service transaction or experience” (p.4). In fact, the most commonly used representation of customer satisfaction is the disconfirmation approach (Ramaswamy, 1996), where satisfaction is related to the variation between a customer’s pre-purchase expectations and his or her post-purchase perceptions of the actual service performance. Perceived quality, on the other hand, may be viewed as a global attitudinal judgment associated with the superiority of the service experience over time (Getty & Thompson, 1994). It is perceived as being much more dynamic in nature and less transaction specific (Parasuraman, Zeithaml & Berry, 1988). In other words, it has attitudinal properties and acts as a global, value judgment. According to Lovelock, Patterson & Walker (1998), the important distinction is that “... satisfaction is experience-dependent - you must experience the service to feel a degree of satisfaction/dissatisfaction. Perceived

service quality on the other hand is not experience-dependent ... perceived service quality is formed over multiple service encounters” (p.126). Not surprisingly, there has been considerable debate concerning the nature of the relationship between both constructs. While many researchers present strong evidence to suggest that satisfaction may be a vital antecedent of service quality (Oliver, 1980; Bitner, 1990), more recent research suggests that service quality is a vital antecedent to customer satisfaction (Oliver, 1993; Taylor & Baker, 1994; Spreng & Mackoy, 1996; Yu & Dean, 2001). This view is supported by Gotlieb et al. (1994) who suggest that perceived service quality affects satisfaction and behavioural intentions are affected by satisfaction. This view suggests that while service quality influences the consumer future behavioural intention, it does so through the mediating role of satisfaction (Wong, 2004). As such it is hypothesized:

- H6: That while an individual’s perception of service quality will be positively related to their future behavioural intention, there will be a stronger correlation between their perceptions of service quality and overall satisfaction, which in turn will be positively correlated with future behavioural intention.

This hypothesis was investigated by calculating the mean perception scores for each of the 20 scale items and correlating (Pearson’s product moment correlation) these with both a single item (item 21) measure of overall satisfaction taken across all stages of the research and a mean future behavioural intention



(FBI) score taken over stages two and three of the research. Results of this test (Table 32) show a significant positive correlation with future behavioural intention (0.296; Sig. < 0.01) but a much stronger positive correlation with overall satisfaction (0.663; Sig. <0.01) at stage two and a similar result for the stage three data (0.226; 0.679; Sig. <0.01). Results over both stages confirm the mediating role of satisfaction as expressed within the H6.

Table 32 – Correlation index of mean perception scores / overall satisfaction and future behavioural intention

<b>Stage two</b>		<b>Mean Perception Score</b>	<b>Overall Satisfaction Score</b>
<b>Overall Satisfaction Score</b>	Pearson Correlation Sig. (2-tailed) N	.618** .000 384	
<b>Mean FBI Score</b>	<b>Pearson Correlation Sig. (2-tailed) N</b>	.278** .000 394	.380** .000 381
<b>Stage three</b>			
<b>Overall Satisfaction Score</b>	Pearson Correlation Sig. (2-tailed) N	.679** .000 247	
<b>Mean FBI Score</b>	<b>Pearson Correlation Sig. (2-tailed) N</b>	.226** .000 250	.382** .000 247

\*\*Correlation is significant at the 0.01 level (2-tailed).

## H7

It is apparent at this stage that certain of the results pertaining to the preceding research hypotheses support the H7.

- H7: An individual's level of overall satisfaction will be positively related to future behavioural intention.

Table 32 shows a strong positive relationship between both constructs across both stages of the analysis (0.380; 0.382; Sig. < 0.01).

## **H8**

In the absence of any other objective measures disconfirmation theory came to dominate the literature on both service quality and satisfaction from the early 1980s. Not surprisingly, the confirmation-disconfirmation paradigm has been extensively incorporated into both satisfaction and service quality studies. These models contend that both 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 (Mowen, 1995). 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). While there have been many detractors, this model has been applied extensively throughout the service sector and been proven to be both psychometrically and practically sound (Danaher & Haddrell, 1996). Researchers have debated the dimensionality of both constructs as explored via such models and raised doubt as to whether the results of these studies can be interpreted as explaining either satisfaction or service quality (Yu & Dean, 2001).

While much research has been conducted concerning the conceptualization, measurement and antecedent properties of both constructs, there is a growing body of literature that suggests that the reliability of these studies may be somewhat questionable in that they have tended to concentrate on the more cognitive element of the satisfaction construct only (Liljander & Strandvik, 1997; Wirtz & Bateson, 1999; Yu & Dean, 2001). Yu and Dean (2001)

for example, suggest that focusing on the more cognitive component of the satisfaction construct only, neglects an important element, namely emotions, and may be insufficient to obtain a comprehensive picture of consumer responses. This view is also taken by Barsky and Nash (2002) who state: “Despite the obvious importance of eliciting positive emotional responses from guests, we can find no record that hotels have ever measured or used consumer emotions as a management tool”(p.39). More recent research, however, suggests that the satisfaction construct cannot be fully understood or explained without accounting for affect in the form of consumer emotion (Liljander & Strandvik, 1997; Cronin, Brady & Holt, 2000). It is hypothesized therefore:

- H8: That the inclusion of the more emotional component of the satisfaction construct (ES) will lead to better results in terms of explaining both overall customer satisfaction (OCS) and future behavioral intention (FBI), than when using the cognitive component alone (PSQ).

Regression analysis was employed to assess which of the two components served as the better predictor of OCS and FBI. Two separate regressions were performed with OCS and FBI serving as the dependent variables, while PSQ and ES served as the independent variables. Looking firstly at OCS, the adjusted  $R^2 = .475$ , and  $F(2, 373) = 170.421$ , sig. = .001. With 47% of the total variance explained, the standardized beta coefficients (PSQ = .620, sig. .001 and ES = .195, sig. .001) indicate that both components are important in explaining overall

customer satisfaction. Moving on to FBI, the adjusted  $R^2 = .229$ , and  $F(2, 386) = 58.521$ ,  $sig. = .001$ . With almost 23% of the total variance explained, the standardized beta coefficients ( $PSQ = .201$ ,  $sig. .001$  and  $ES = .395$ ,  $sig. .001$ ) again indicate that both components are important in explaining future behavioral intention. A further regression was performed to confirm the nature of the relationship between OCS and FBI where FBI served as the dependent variable. In this instance the adjusted  $R^2$  was  $.14$ , and  $F(1, 379) = 63.967$ ,  $sig. = 0.001$  and the corresponding beta coefficient =  $.380$ .

These tests were repeated for the stage three variables.

Looking firstly at OCS, the adjusted  $R^2 = .482$ , and  $F(2, 242) = 112.786$ ,  $sig. = .001$ . With 48% of the total variance explained, the standardized beta coefficients ( $PSQ = .648$ ,  $sig. .001$  and  $ES = .151$ ,  $sig. .001$ ) indicate that both components are important in explaining overall customer satisfaction. Moving on to FBI, the adjusted  $R^2 = .139$ , and  $F(2, 242) = 19.814$ ,  $sig. = .001$ . With almost 14% of the total variance explained, the standardized beta coefficients ( $PSQ = .161$ ,  $sig. .001$  and  $ES = .310$ ,  $sig. .001$ ) again indicate that both components are important in explaining future behavioral intention. A further regression was again performed to attest to the nature of the relationship between OCS and FBI at stage three, where FBI served as the dependent variable. In this instance the adjusted  $R^2$  was again  $.14$ , and  $F(1, 245) = 41.956$ ,  $sig. = 0.001$  and the corresponding beta coefficient =  $.382$ .

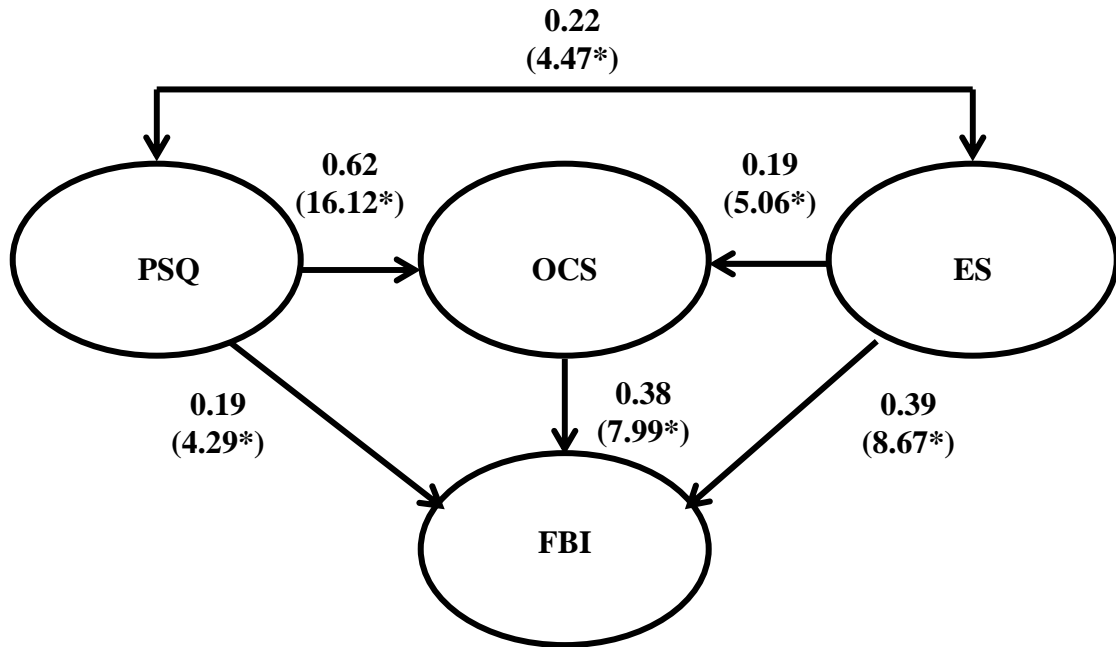
Turning to the issue of explanation, a further regression was performed to address the issue of explanation of OCS and FBI; in other words whether the

inclusion of the ES measure leads to better results in explaining OCS and FBI when compared to using the PSQ measure alone. In this instance PSQ was the sole independent variable used. Looking firstly at the stage two results for OCS, the adjusted  $R^2$  was .440, and  $F(1, 382) = 299.687$ , sig. = 0.001. Moving on to FBI, the adjusted  $R^2$  was .087, and  $F(1, 392) = 37.545$ , sig. = 0.001. The stage three results present a similar picture for both constructs. The adjusted  $R^2$  was .440, and  $F(1, 245) = 209.234$ , sig. = 0.001. Moving on to FBI, the adjusted  $R^2$  was .051, and  $F(1, 248) = 13.294$ , sig. = 0.001. Both results confirm the viewpoint expressed within H8 that customer satisfaction (OCS) and future behavioral intention (FBI) are better explained when affect (ES) is included.

### **Stage Two Path Model**

The results of each of these tests along with the result from the H3 (Pearson Correlation Co-efficient) are presented in Figures 33. Numbers in parentheses represent  $t$ -values associated with each beta coefficient and their respective significance is denoted as \* $p < 0.001$ .

Figure 33. Theoretical model of central research hypotheses



### Stage Three Path Model

The results of each of the stage three tests together with Pearson correlation pertaining to H3 are presented in Figures 34. Once again cases numbered in parentheses represent *t*-values associated with each beta coefficient and their respective significance is denoted as \**p*<0.001.

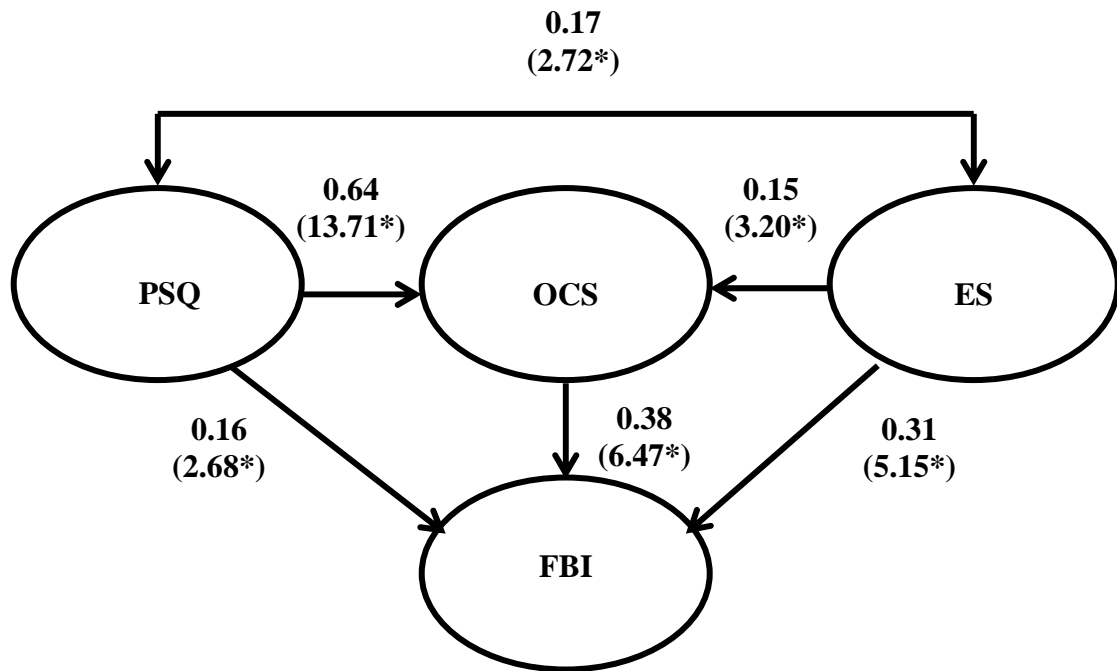


Figure 34. Theoretical model of central research hypotheses

## **Chapter V**

### **Discussion and Conclusions**

#### **Research Overview**

As highlighted earlier in the methodology section, the research associated with the project involved both quantitative and qualitative research. The qualitative research consisted of a focus group conducted with a small class of students. The results of which were used to establish a basic understanding of what was important to consumers during the game day experience at Jordan Hare Stadium, and to streamline the actual survey in an effort to measure those important factors. The quantitative research consisted of a time elapsed, longitudinal study. The sample group was made up of students attending a mid sized university in Alabama. Two main constructs were used in the evaluation of the service experience. A disconfirmation measure of service quality scale was used to evaluate the more cognitive nature of the service encounter. Additionally the measure of the emotional aspect was measured using Russell's Circular Model of Affect (1980).

In order to support the longitudinal aspect of the survey design, the surveys were administered a total of three times to the sample group. The first stage was given the week leading up to the first home football game. The main purpose of this



stage was to measure the expectations of the respondents when it came to their predicted game day experience. The next two administrations were given out the week after home victories. The original plan called for the surveys to be administered the week after a home victory and the week after a home loss. However due to the unexpected, undefeated season by the football team, this was not possible. Despite this, the benefits of the multiple stage design include tracking the changes in respondents over time, replication of the data and a large database with more than adequate sample size, power, validity and reliability. Data were entered into a database and analysis was conducted using the Statistical Package for the Social Sciences, or SPSS, version 12.0, the results of which are highlighted in the analysis section of this project.

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 limitations of the study and recommendations for future research

## **H1**

As has already been highlighted in both the theoretical framework and analysis sections of this project the SERVQUAL scale, developed by Parasuraman, Zeithaml and Berry (1985) is one of the most widely used, and heavily critiqued instruments used by researchers today. Because of its wide spread acceptance by researchers, it was used as a basic frame from which to start

the survey used in this project. One of the main critiques of this tool has been the inability to replicate its proposed 5 factor structure, in multiple service settings. Because of this and the unique service setting that was used for this project the first hypothesis was:

- H1-The five factor structure proposed for the SERVQUAL instrument will not be held up.

To test this hypothesis three separate factor analyses were conducted, the results of which were highlighted in the analysis section. Briefly they were:

- Firstly, an analysis of the performance/expectation difference scores (inferred disconfirmation technique) as proposed under the original SERVQUAL study. Service quality scores were computed by averaging respondents' expectation scores at stage one and subtracting these from an average of their corresponding perception scores at stage two.
- Secondly, an analysis of the stage two perception data only (direct disconfirmation technique) as proposed by various studies following SERVQUAL (Cronin & Taylor, 1992; 1994). Service quality scores were computed by averaging respondent's perceptions at stage two.
- Thirdly, an analysis of the stage three perception data to verify if the stage two factor structure held up over time.

Based on the results from the data analysis, the five factor structure for the SERVQUAL scale was not held up. For the first stage, only 4 factors emerged

from the analysis, Convenience, Facilities, Food and Beverage and Assurance. In total each factor explained 51.3 % of the variance.

Factor analysis of the two performance scores revealed much of the same, a four factor reduction including Technical, Convenience, Food and Beverage and Restrooms. Once again the amount of total variance explained was 57.76%.

Stage III also supported the H1 with Vendors, Convenience, Restrooms and Safety representing the four factors. Once again the total variance explained was 58.2%.

One important implication of these results is that as the season moved on, the structure of the SERVQUAL scale changed. The same four factors were not found in each stage, pointing to the fact that the sample group was evaluating their experience in a different way, compared to their expectations, and the last administration of the survey. Several factors may have contributed to these changes. First is the experience factor. The experience level for the sample group ranged greatly, depending on the number of years, and games that the individual students had attended in the past.

Because of the continued success of the football team and their undefeated season, there was an escalating amount of excitement and emotion as the season progressed. This culminated with the last home football game, which was played against a highly ranked rival. This researcher feels that this heightened emotional state contributed to many of the changes experienced in the stage III results.

One factor that was found across all four stages was the convenience factor. Also of note is that it scored either the highest, or second highest in terms

of the amount of variance explained, in all three stages. This highlights one of the main issues that students have with Jordan Hare stadium and when it comes to the game day experience. Large crowds, heavy traffic, long waits for vendors, bathrooms and other facilities are just some of the by-products associated with the game day experience, which may have contributed to the overall importance of this factor.

Another factor that was found to be very important in the final two stages was the bathrooms. While it did not show up as a separate factor in the first, expectation stage, it did however become a factor after the respondents experienced their performance first hand. One logical conclusion is that due to the higher number of female respondents in this survey and the fact that lines for female restrooms tend to move slower than their male counter parts, that this factor became very important to the large majority of female respondents. This is supported by many of the comments written on the bottom of the surveys complaining about the long lines, general uncleanliness and the need for more restrooms.

In summary, H1 was supported in all three stages, that is the five factor structure of SERVQUAL was not held up. Also important to note are the changes that occurred over the course of the project. This fact leads to the idea that experience does matter, and that the previous service encounter can change the manner in which the consumer evaluates the next service encounter.

## H2

Similar to the SERVQUAL scale, the need to evaluate the structure of Russell's emotional scale (1980) is also paramount. Briefly, this scale allows for the measurement of emotion. This was utilized in two ways, frequency and degree. Frequency being how often a particular emotion may occur and degree being the intensity, or how strongly that emotion, was felt by the respondent. As proposed by Russell, the emotions involved should factor out into a circular order containing positive, neutral and negative aspects. This circular order has been found in previous studies to be accurate, but because of the unique service setting used in this project, it is necessary to confirm this structure.

- H2-Russell's proposed circular order of affect (emotion) will be supported.

Initial tests revealed that the circular model was in fact supported in this instance. As highlighted in the analysis section, the fit indices and the 2-dimensional plot for the emotions were favorable. However it became apparent to the researcher that while the circular model worked well, that by elimination one of the emotions, calmness, the scale produced stronger reliability numbers. Because of this a second, sub hypothesis was proposed simple stating that:

- H2A- a two factor (positive/negative) structure will be held up for spectator emotion during the Auburn Game Day Experience.

This second hypothesis was tested across all three stages of the survey, for both frequency and degree. It is felt by the researcher that the calmness emotion was not a good fit in this setting because the football season generates so much excitement and anticipation within the students. This also became apparent in the focus group, when several of the respondents commented on the fact that remaining calm during a home football game was not considered normal. As such, associating the emotion calmness with any aspect of the game day experience was very hard for the respondents to understand.

Important to note when interpreting these results is the difference between goal directed and reactive emotions. Briefly a goal directed encounter is one in which specific emotional response is being sought by the consumer, and the achievement of that emotion will be a determining factor in a positive evaluation of the experience. For example somebody who goes to a scary movie, expects and even wants to be scared. Failure to do so, would be a negative experience. In the same light a reactive setting is one where a specific emotional outcome is not necessarily the largest factor in determining satisfaction. For example, when a guest checks into a hotel, the emotions generated from that specific service encounter, are not the motivation to engage in that encounter in the first place.

In relation to the results of this project, the emotion surprise is a good example. In the stage one factor analysis, surprise was actually part of the negative side of the scale. Because this was the expectation portion of the study, the respondents were evaluating a surprise, perhaps a loss, as a negative emotion. However, for stage II surprise loaded on the positive side of the scale. One

possible explanation is that the home team was expected to lose the game prior to second stage of administration. But because the home team won, the respondents were surprised, but in a good way, by the outcome. However, in stage III surprise once again loaded on the negative side of scale. This is perhaps explained by the fact that this was the last home game, and also the last chance to continue the perfect season that the team was experiencing. The home team was expected at this point by the respondents to win, and thus a surprise, or a loss, would have been a negative.

Overall both the H2 and the H2a were supported across all three stages and the circular nature of the emotional scale was confirmed. Important to note is the fact that emotions can be evaluated in different ways (positive or negative) depending on what that particular emotion means, in conjunction with the preferred result in the eyes of the consumer.

### **Hypothesis 3**

As highlighted in previous sections, the importance of customer satisfaction is often times revealed by the amount of research that it has generated over the past 40 years (Oliver, 1997). As the research has developed however, the need to incorporate the emotional side, or the affective, into the formation and evaluation of satisfaction has become more obvious (Liljander & Strandvik, 1997). This relationship and the need to explore it further then lead to the development of the third hypothesis.

- H3- An individual's perception of service quality will be positively related to their degree of emotional satisfaction.

This hypothesis was tested by generating mean perception scores for each of the 20 scale items and correlating these with the mean emotion scores for all eight items across stages two and three of the research. The results of which showed a strong, positive correlation across both stages, for stage II a correlation of .225 and for stage III, .168. Both these correlations are significant at the .001 level. The implication here is that the H3 is supported by the data. In other words there is a statistically significant positive correlation between the emotional satisfaction and the perception of service quality. The belief that service quality is a vital antecedent to overall customer satisfaction was confirmed. With this in mind, the fact that emotional satisfaction then plays a part in the formation of a positive evaluation of service quality means that it is, in turn, going to affect, the consumers view of overall satisfaction., this data also supports the arguments made by previous researchers that without measuring the emotional aspect of service quality and customer satisfaction, that a truly accurate picture of what is going on cannot be achieved (Liljander & Strandvik, 1997; Yu & Dean, 2001).

#### **Hypothesis 4**

In line with the idea behind the H3, the role that emotion plays in the formation of overall satisfaction is also very important. Because of the competitive nature of the service industry today, coupled with the cost of recruiting new customers, the importance of customer satisfaction is not to be



overlooked. Because of this importance, the need to get as accurate a picture of customer satisfaction as possible is needed. In this light much of the criticism directed at previous research has been in accordance with a general lack of affective measurement in the customer satisfaction construct (Liljander & Strandvik, 1997; Yu & Dean, 2001; Liljander & Bergenwall, 2004). This then lead to the formation of the H4:

- H4-An individual's degree of emotional satisfaction will be positively related to their overall satisfaction.

This hypothesis was investigated by generating the mean emotions scores for each of the eight scale items across frequency and degree and correlating these with a single item measure of overall satisfaction, taken during stages II and III of the study. The results showed a strong positive correlation at the .001 level. Respectively for stage II a correlation of .337 was found, and for stage III, .284. Further analysis was conducted to determine if Perceptions of Service Quality (PSQ) or Emotional Satisfaction (ES) was a better predictor of Overall Customer Satisfaction (OCS) and Future Behavioural Intentions (FBI).

The analysis revealed that both PSQ and ES are important factors in the determination of OCS and FBI, across both stage II and III. This overlapping can be attributed to the fact that ES is also positively related to PSQ. And since PSQ is positively related to OCS, it also makes sense that ES is positively related to OCS as well.

In regards to FBI, the same sort of logic applies. Based on these results it can be inferred that the formation of FBI is related to a positive evaluation of both PSQ and ES. Once again this overlapping is best explained when it is realized that ES is also an important component of PSQ.

### **Hypothesis 5**

FBI and its formation has, much like customer satisfaction, received a growing amount of attention from researchers in the last 20 years (Yu & Dean, 2002). However the lack of research on FBI that contains both the cognitive and affective aspects of its formation means that it needs to be explored further. In an effort to add to the current body of work on FBI, the following hypothesis was developed:

- H5-An individual's degree of emotional satisfaction will be positively related to their future behavioural intention.

This hypothesis was tested by calculating the mean emotion sores for each of the 8 emotional scale items across both frequency and degree, and correlation them with a mean FBI score, taken from stages II and III. In short, H5 was supported at the .001 level for both stages with a correlation score of .472 and .335 respectively. In other words it was found that FBI did in fact have an emotional element to it, and that a positive evaluation of the emotional state generated by the service encounter, did in fact, contribute to the formation of future behavioural intention. The implication here is that in order to have a better chance of convincing a customer to come back, service providers need to focus

not only the cognitive side of persuasion, but also on generating positive emotional states in their customers.

### **Hypothesis 6**

As previously reviewed in this project, the connection between customer satisfaction and perceived service quality has been debated, but both sides agree that both these elements are closely related. While some would argue that they are interchangeable, recent research has revealed that they are indeed separate variables and thus will exhibit separate amounts of correlation to other factors, such as future behavioural intention. As such the 6<sup>th</sup> hypothesis was formed to test just that:

- H6-That will an individual's perception of service quality will be positively related to their future behavioural intention, there will be a stronger correlation between their perceptions of service quality and overall satisfaction, which in turn will be positively correlated with future behavioural intention.

This hypothesis was tested by generating mean perceptions scores for each of the 20 scale items and correlating these with both a single item measure of overall satisfaction taken across all stages of the research and a mean future behavioural intention score taken over stages two and three of the research. Results support H6 in that the correlation between PSQ and FBI was .296 while a stronger correlation between OCS and PSQ at .663 was found. Both correlations were significant at the .001 level. For stage III similar results were found.

In essence the hypothesis H6 was supported. The positive correlations between FBI, PSQ and OCS further highlight the importance that these factors play in the retention of guests.

### **Hypothesis 7**

In line with the previous three hypotheses, H7 explores the relationship between overall satisfaction and future behavioural intention. Because emotional satisfaction and perceptions of service quality can be seen as antecedents to OCS, it is important to explore the nature of the relationship between OCS and FBI in their own right. As such the following hypothesis is presented:

- H7- An individual's level of overall satisfaction will be positively related to future behavioural intention.

To explore this hypothesis, Overall satisfaction scores were generated for stage II and III and then correlated with FBI for Stage II and III of the research. Analysis revealed a positive correlation of .380 and .382 for both stages respectively with a significance level of .001. This analysis reveals that this hypothesis is supported, meaning that the positive formation of overall customer satisfaction is an important factor when it comes to the formation of future behavioural intention.

### **Hypothesis 8**

The vast majority of previous research in both satisfaction and future behavioural intention has been grounded in the previously reviewed expectancy-disconfirmation model. While this model has been very useful in explaining both these phenomena and their formation, the validity of their findings has been called

into question. Once again the lack of emotional measurement has been highlighted as a weakness of previous models (Liljander & Strandvik, 1997; Liljander & Bergenwall, 2004; Yu & Dean, 2002). The general idea here is that with the inclusion of emotional satisfaction into the equation a better understanding of both overall customer satisfaction and future behavioural intention can be achieved. In an effort to explore this concept further, the following hypothesis is presented:

- H8-That the inclusion of the more emotional component of the satisfaction construct ES will lead to better results in terms of explaining both overall customer satisfaction (OCS) and future behavioural intention (FBI), than when using the cognitive component alone (PSQ).

This hypothesis was supported in both stage II and stage III. In essence while the connection between PSQ and OCS and FBI is apparent, a stronger connection is found when PSQ and ES are used in relation to OCS and FBI. This builds upon the evidence found in support of many of previous hypotheses in which ES was positively correlated with both PSQ and OCS.

### **Summary**

In summary, all eight of the central research hypotheses presented in this projected were supported by the resulting analysis. Inherent to these hypotheses is the idea that emotions, or the affective element of the satisfaction construct, does in fact lead to a better understanding of perceptions of service quality, overall customer satisfaction and future behavioural intention. This overlapping

effect can be best explained by the fact that each one of these elements, is in their own right, a separate construct. Within each of these independent constructs the addition of the emotional element increases our ability to explain their formation. Thus as the relationships between these separate constructs was explored, the affective element and its importance was only further highlighted. This now leads to a discussion about the implications that these results have both from an academic and practical standpoint

### **Measurement Instruments Performance**

As was described in detail in the analysis section, the construct validity and reliability of the instruments used in this study were found to be well within the acceptable ranges as prescribed by modern statistical methods. However it is interesting to note that each scale had some unique factors associated with it. It is the discussion of these factors that makes up this section. The first is the modified SERVQUAL scale.

Based on work with the focus group, the SERVQUAL scale needed significant modification in order to be adapted to the service setting selected for this project. As detailed in earlier sections, the five factor structure proposed by the researchers responsible for developing the SERVQUAL scales, was not realized. This has been one of the main critics of this scale since its inception. Other researchers have also failed to replicate the original five factors (Cronin & Taylor, 1992). In this case there are several potential reasons as to why the scale did not factor out.

One of those may be the unique setting within which this study was conducted. Very little, to no previous research was found to exist in the context of a repeated sporting event, with in a football stadium. This may simply mean that the modified SERVQUAL scale is not applicable to such a setting.

Another potential reason that the five factor structure did not appear is the high emotional aspect of college football. While the SERVQUAL scale was intended to be used in any service setting, it is unclear if a setting in which emotional content is so high was considered during its development. Hence while the SERVQUAL scale may work in a more average service setting, for example a restaurant, its ability to adapt to such an emotionally charged setting is in question.

The other scale used in this project was Russell's circumflex model of emotions (1980). This scale is intended to factor out in a circular pattern, with three distinct phases including: positive, negative and neutral emotions. In this study, as with previous research, this circular order and two factor structure (positive/negative) was held up. But after initial testing, it became apparent to the researcher that this circular aspect could be modified somewhat in order to produce even stronger results. In essence one of the emotions was removed from the scale, calmness, and the circular structure was confirmed, but across two planes, positive and negative. It is believed by the researcher that the reason for such changes has to deal once again with the highly emotional event that was being observed. It would seem that in regards to college football emotions are

either strongly positive or negative. There does not appear to be any middle of the road when it comes to the emotions experienced by the respondents.

Another interesting part of this scale was that fact that one emotion, surprise, changed its orientation in regards to being viewed as a positive or negative emotion by the respondents. This change occurred between stage II and stage III. It is the researchers view that this change is once again associated with the unique setting that the study was conducted in, and its highly emotional aspects.

### **Academic Implications**

One of the goals of every research project is that it will lead to a better understanding of some phenomena. In academic terms this may mean that a previous construct or hypothesis is re-tested and supported. Or that a new, better way of answering a specific question is found. All in all the importance of the project, outside the needs of the researcher conducting the project, must be highlighted. This section is going to do just that. It will provide a series of points that based on the data collection and analysis will hopefully add to the current body of knowledge.

As has been mentioned through out this project, when it comes to the measurement of satisfaction and future behavioural intention, the vast majority of research has in fact been based on the expectancy-disconfirmation model. While this approach has yielded good results, the need to gain a better understanding of what is really going on has become paramount. In an effort to realize this goal, some researchers have pointed out that inherent with every service encounter and



product consumption episode, is the fact that emotions are generated as well. Logic seems to point to the fact that if such items are generating some form of emotional satisfaction/dissatisfaction that the measurement and evaluation of said emotions will then in turn lead to a better understanding of customer satisfaction, future behavioural intention and even perceptions of service quality.

While the analysis of this study supports this concept, the importance to the academic arena is based on several factors.

To the researcher's best knowledge, several studies have attempted to study the emotional outcomes of service encounters, but none have attempted to do so using a measure that includes both the frequency and the degree of the emotions. In fact initial analysis conducted on each construct revealed that when both the frequency and degree were used together, that they produced much better results than when used separately. The implication here is that while measuring emotions does lead to a better understanding of PSQ, OCS and FBI, that the emotional scale is best served when both the frequency and degree are measured. The implication here is that in order to achieve the best results, future research needs to incorporate this method of measuring both frequency and degree.

One important factor is the unique setting that was chosen for this project. To the researchers best knowledge, very little, if any research has been conducted in the confines of a large football stadium. While at first glance the importance of such an arena may be questioned, when one considers that scale of the services provided, the relevancy becomes much clearer. Jordan Hare Stadium consistently attracts over 86,000 patrons for every home football game, seven times a year.

During each event a myriad of service and product encounters occur, from interaction with the vendors, food and beverage, to security and bathroom operations. Also consider the fact that Jordan Hare is just one of hundreds of football stadiums of around the same size and scope, across the country, providing many of the same services to its patrons. So this project has provided what will hopefully be the groundwork for more research in repeating sporting event venues. The economic impact that these stadiums have on the services industry as a whole should not be discounted and because of the general lack of research in this area, it is ripe for exploration.

Another important contribution of this study is the importance of longitudinal assessment. While this researcher fully acknowledges the difficulty in conducting such a study, the results can not be argued with. Specifically the changes over time in both the structure of the modified SERVQUAL scale, and the emotional scale, show just how much change can occur. While cross-sectional studies have many advantages, this project sheds light on one of the major weaknesses of such a study, in that it is a snapshot in time and does not allow for changes overtime or experience.

Another point of interest is the mediating factor that overall customer satisfaction seems to play in determining future behavioural intention. The results of this study indicate that while emotional satisfaction and perceptions of service quality are positively correlated with FBI, that the best indicator is OCS. This is supported by the fact that both ES and PSQ have stronger relationships to OCS, than they do to FBI, either as individual constructs, or when viewed together.

Another interesting result that came out was how one emotion, can depending on the context, be viewed in either a positive or negative light. For this project it was surprise, but no doubt depending on the setting and context, all the emotions tested could in some fashion change sides. This is important for researchers because how the emotional outcomes are viewed by the consumer may change over time. Once again the idea of experience and the need to study what effects the experience level has (longitudinal vs. cross-sectional survey design) comes to mind.

Another element of interest was the failing of the modified SERVQUAL scale to structure out into its normal five factor components. The heavy modification that the scale had to undergo to be applicable to this specific venue may have something to do with this failure, but this does go in line with many of the other researchers and the critiques aimed at the SERVQUAL scale. One of them being that it is not adaptable across a wide range of service venues. Also the supporting evidence for Russell's circumflex model of emotions also points to the fact that this construct is very flexible and applicable to a wide range of service venues. This now leads to a more specific discussion on some of the implications revealed for the operators of Jordan Hare Stadium.

### **Practitioner Implications**

In a general sense the implications for this project point the practitioner towards the realization that the emotional component of customer satisfaction, perceived service quality and future behavioral intentions cannot be ignored. In fact all three of these important factors were found to have strong correlations

with the associated emotional satisfaction. Because repeated sporting events tend to be highly emotionally charged events anyway, the importance of the emotional factor only grows, and as will be detailed later, changes in perception may be caused by the emotions generated by the event as a whole. This information is important for several reasons.

First and foremost is the fact that the majority of research to date has not measured the emotional component. The realization that the emotional construct plays such an important role brings into doubt the validity of the previous research. For the practitioner this means that they may have only been evaluating part of the picture when it comes to perceptions of service quality, customer satisfaction and future behavioral intention. By taking into account the emotional aspects of the aforementioned variables, practitioners can more accurately control the effects that their service efforts have on the consumer. With this in mind a more detailed look at some of the more important aspects of the data results will now be examined

The sample group for this project consisted of college students, enrolled in a mid-sized university located in Alabama. One of the reasons for selecting this group besides the ability to track them over time and that access to the students was relatively easy to achieve, was the idea that the students themselves felt like they were an ignored part of the population. This came though in the focus group. The implication for the operators of Jordan Hare Stadium are large. These current students are the future alumni of this particular university. The experience that they have now, may play a part in their willingness to support the university

financially later in time. As such the University should be concerned with how well their stadium and its operations, performed in the eyes of the students. As such some specific points of needed improvement based on the results of this project will now be highlighted

Based on the expectations gathered in stage I, compared to the importance and performance scores generated in stages II and III, there are several aspects of the service scope at Jordan Hare stadium that need to be examined by the operator.

One of the worst performers in the eyes of the students is the price of the food and beverage products at Jordan Hare Stadium. It makes sense that a student population that is typically cash strapped would be concerned with the prices of drinks and foods at their sporting events. Considering the often time hot temperatures that the first 3 to 4 games are played in, the cost of beverages is of particular importance. This is important to note for the operators of Jordan Hare Stadium. Not only are the students displeased with the prices, there is a very good chance that this displeasure is preventing them from purchasing beverages. A review of the pricing structure for the food and beverage at Jordan Hare Stadium might be in order. While the price and the profit margin may be reduced, the difference may in fact be overcome, or even exceeded by an increased number of sales. While there was a change for the positive in stage III of the survey, this change might be accounted for by several reasons. First may be that the patrons were much more experienced with the high prices, and thus their expectations about those prices had decreased. Because stage III was given after the last and 7<sup>th</sup> home game, the respondents had the entire season to become used to the

prices. Another important factor may be the heightened emotional importance of this game to the students. As has already been stated, due to the undefeated nature of the season, this last home game was of particular importance.

Another item that the students had low expectations about, but performed even worse than those expectations, were the bathrooms. The restrooms were judged by three questions, regarding the cleanliness, the number and how quickly the lines moved. Once again it needs to be pointed out that the majority of the respondents were female, and traditionally the lines for female restrooms do move slower. However this does not make up for the cleanliness factor. While the performance minus expectation scores for the restrooms did improve from the stage II to stage III, this change can be explained by the fact that the respondents realized that the bathrooms were going to have long line and not be overly clean. The anticipation of these factors, and their subsequent confirmation, means that there was less dissatisfaction.

Another factor that scored poorly in the eyes of the students was the number of seats available in the student section. At Jordan-Hare Stadium, the students are regulated to a specific section of the stadium. No changes are made in this section based on larger crowds, etc. This result also showed a dramatic improvement from stage II to stage III. The same explanation used for the scores on the bathrooms is also offered for changes in scores for the seating as well. Another reason that the scores may have changed so much is that because the stage III surveys were given after the last home game of the year, in which a record crowd was expected because of the undefeated season, this also changed

the student's expectations about overcrowding in the student section. In other words everybody going to the game that Saturday realized that the stadium was going to be filled past capacity and the result would be overcrowding.

Another example of how the emotional component can have a direct effect on the evaluation of overall customer satisfaction is best typified by the overall satisfaction scores in stages II and III. In stage II this question generated a -.586 difference, meaning that the performance did not live up to the importance that the consumers were giving it. However this did change to a positive result of .09 in stage III. This change can be accounted for the completion of the undefeated season and a victory in the last home game of the season. The implication here for practitioners is that the emotional satisfaction can and does change the overall satisfaction levels of the consumer.

The overriding implications for the hospitality world as a whole, is that emotional satisfaction, does in-fact have an impact on perceptions of service quality, overall customer satisfaction and future behavioral intention. This is important because of the highly competitive nature of the services industry as a whole. As has been highlighted earlier, the importance of customer loyalty, in terms of profits and costs is another reason why this research is of such importance. Hospitality firms are always looking for a competitive advantage, something that allows them to gain market share and increase profits, ahead of the competition. By realizing the importance that emotional satisfaction plays a company now has a better understanding on how and why a consumer becomes satisfied.

## **Summary of the Contributions**

In summary this project has made several important contributions in both the academic and practical arenas. This section will be briefly re-highlight these important aspects of the study.

The inclusion of the emotional, or affective, element when measuring perceived service quality, overall customer satisfaction and future behavioral intention yields better results than when only the cognitive elements are used. The failure of a modified SERVQUAL scale to factor out in its proposed five factor structure. The implication here is that this scale is not applicable to a repeated sporting event venue.

The need for more longitudinal studies when measuring customer satisfaction, perceptions of service quality and future behavioral intentions is also highlighted. Despite the difficulties of conducting such a study, the changes observed over the different stages of this product illustrate how valuable such a study can be.

The confirmation of Russell's circumflex model of emotions in a repeated sporting events venue. By supporting the circular order proposed by Russell (1885) the applicability of this scale to highly emotional service encounters has been confirmed.

The emotional content of a service encounter, can over time, change the evaluation of overall customer satisfaction. This is important, especially when considering the impact that repeat customers can have on a specific service company or firm.



The mediating role that overall customer satisfaction plays between perceived service quality/emotional satisfaction and future behavioral intention. While PSQ and ES do correlate positively with FBI, they relate much better when OCS is used as the mediator.

The high level of correlation between emotional satisfaction and perceived service quality. This is important because perceived service quality plays a key role in the determination of overall customer satisfaction. Thus emotional satisfaction becomes very important in view of its strong correlation with PSQ.

### **Future Research**

As stated earlier, one of the major limitations of this study is the fact that the football team did not experience a home loss. Because of this there was no negative measurement of emotion. This fact leads the researcher to the conclusion that further research is needed to truly understand the role that emotions play in perceptions of service quality, customer satisfaction and future behavioral intention. In essence by conducting this same study over another football season the ability to measure a home loss would, most likely, be achieved. In addition several changes to the actual survey would be recommended. These would include further modification of the SERVQUAL scale in an effort to prevent cross-loading. Modification of the emotional scale is also needed to help eliminate feelings that did not factor out in the analysis, for example calmness. Another suggestion would be a sample group that is more balanced, in terms of gender, in order to increase the applicability of the results to the entire student body.

## **Conclusion**

This chapter has provided a discussion based on the results of this study. Each hypothesis was highlighted, and the associated results were revealed. Also included were some of the implications that this research has on both the academic and practical arenas. From there a discussion on the performance of the measurement instruments, a summary of the major contributions of this study and the associated limitations were also included. The chapter ended with a recommendation to conduct the same basic study over another football season, with some suggested changes needed to improve the study.

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