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Service Quality Determinants of College Students Attending a Live Sporting Event

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DETERMINANTS OF SERVICE QUALITY

Abstract

Service quality can be defined as striving to make every interaction with a consumer a quality encounter, and has steadily become an important facet of the experience of attending a live sporting event. While many studies have been done to examine how consumers determine quality of service, little research has focused on college aged students. This study was done using Michael Brady’s hierarchical framework of service quality determinants applied to college students age 18-24. Results indicated that determinants of service quality change as college students grow older, it identified that interaction quality was the primary determinant for this age group, specifically attitudes and behaviors. How employees interact with this age group will be used as a primary determinant of service quality.
Service Quality Determinants of College Students Attending a Live Sporting Event

Many individuals do not associate a live sporting event with service quality. Service quality can be most associated with satisfaction or dissatisfaction before and after the sale of a particular item or experience (Parasuaman et al., 1985, 1988; Gronroos, 1984; Chelladurai & Kang 2000; Theodoakis, Kambitsis, Laios, & Koustelios, 2001). A live sporting event at first glance, does not seem to qualify under this description. Consider though, at a live sporting event the consumer or spectator has paid to consume a service, the experience of watching their favorite team. A spectator of a live sporting event will not simply sit in their seat for three to four hours until the game is over. They will interact with the service providers, the facility, and other consumers. Numerous secondary aspects of the consumption of a live sporting event must be examined in order to assess service quality. These secondary aspects include the facility that the event is taking place in, consistency of performance, willingness of employees to provide service to the customer, possessing the proper skills to provide the service, ability to communicate to the customer, understanding the customer’s needs, and security (Parasuraman, Zeithaml, & Berry 1985).

Interaction between service providers and consumers will continue to be a focus for any business that provides a service and seeks feedback on the service experience. While relating service quality to the sports industry has not been a top priority, it has received significant attention within the past two decades (Parasuaman et al., 1985, 1988; Theodoakis et. al. 2001; Brady & Cronin, 2001; Chelladurai & Kang, 2000; Yoshida & James, 2010; Kelly & Turley, 2010). Providing service quality in a sporting environment can be the deciding factor in the consumer’s decision to attend a sporting event or to become a repeat consumer. The consumer’s perception of service quality when interacting with service providers will ultimately decide on a
case by case basis whether the consumer’s expectations were met and service quality was achieved.

**Literature Review**

Service quality has received a great amount of attention from service marketing researchers, specifically in the past 15 to 20 years. The Gap Model has provided the motivation for a great deal of this research (Parasuraman et al., 1988). This model shows that consumers’ service quality perceptions are influenced by a series of gaps between consumers’ expectations of their experiences and their actual experiences (Parasuraman et al., 1988). The research for this model, which was based on interviews with executives and consumer focus groups, identified nine distinct determinants of service quality (Parasuraman et al., 1988). These determinants included: attitude, behavior, expertise, ambient conditions, design, social factors, waiting time, tangibles (the physical environment that the event is taking place in), and valence (Parasuraman et al., 1985). Subsequent research has narrowed this extensive list of determinants down to a much more comprehensive list of five dimensions: reliability, empathy, tangibles, assurance, and responsiveness (Parasuraman et al., 1991).

In simplifying and building on his research, Parasuraman (1991) condensed his established dimensions of service quality to develop the SERVQUAL instrument. This instrument was designed to measure service quality based on the five dimensions outlined in his study. SERVQUAL is based on the perception gap between the received service quality and the expected service quality (Parasuraman et al. 1985). Although recent research has narrowed the scope of measuring service quality determinants; it is unclear as to what or who should be reliable, responsive, empathetic, assured, and tangible in order to exceed consumer’s
DETERMINANTS OF SERVICE QUALITY

expectations. Clearly identifying and defining the “what and who” would strengthen this framework.

The level of perceived service quality received by a consumer is determined by the customer’s comparison of their normative expectations for what should happen in an interaction with a service provider and what actually occurs (Kelly & Turley, 2001). These normative expectations are made by consumers and are predictions on how all of the aspects of the service encounter will likely proceed (Parasuraman et al. 1988). Consumers also take into consideration what they feel a service provider should offer instead of what service providers would offer to the consumer (Parasuraman et al. 1988). These expectations and comparisons occur in each instance that a consumer encounters a touch point and offers service providers a chance to exceed expectations or to fail to meet the consumer’s perceived expectations altogether.

Historically there have been two schools of thought on how to measure service quality. The first, which has been discussed, is the more recent approach focusing on perceived quality compared to expected quality. This is considered the “American” perspective pioneered by Parasuraman, as opposed to Gronroos’ (1983) view that service quality be broken down between functional and technical quality otherwise known as the “Nordic” perspective (Brady et al. 2001).

Gronroos (1983) proposed that consumer’s perceptions of service quality can be split into two parts, technical quality and functional quality. Technical quality, which focuses on the evaluation of the core service provided, which in this case would be the on-the-field product (Gronroos, 1983). Functional quality or the evaluation of the service delivery such as the stadium, the employees, parking location and availability, cheerleaders, and all other secondary service aspects of the spectator experience also provide an important component of service quality (Gronroos, 1983). It should be noted that service providers have little to do with technical
DETERMINANTS OF SERVICE QUALITY

quality provided to consumers, but are in total control of functional quality aspects (Kelly & Turley, 2001). This gives a different insight into what can influence consumers’ perceptions of service quality. One problem with this approach is that it does not provide any insight for service providers to help shape functional quality aspects to influence perceived service quality. Although functional quality can be shaped to suit the consumer that the service provider is attempting to market itself to, a universal categorization of functional quality aspects such as: pre-game, in-game, and post-game.

This categorization can help refine exactly what aspects of functional quality contribute to service quality. Pre-game could include interaction with service providers outside of the facility such as security personnel and parking lot attendants. Pre-game functional quality could also include cleanliness of parking facilities, traffic patterns leading to the stadium, and ease of access to the facility. In-game could include interaction with service providers inside of the facility such as concession workers and ushers. This aspect of functional quality could also include speed of service at concession areas, availability of services (such as number of restrooms, concession stands, and service personnel), and attractiveness of the facility. Another categorization method that could be utilized is to break down the functional quality aspects that would include visual, physical, and auditory functional quality. Visual functional quality would include aspects such as attractiveness of the facility, advertisements, concession areas, seating areas, and parking areas. Physical functional quality aspects would include ease of access to services, availability of seating, and physical safety of consumers. Auditory functional quality aspects would include the public address announcements and in-game music played during lulls in the on-field action. A clearly defined scale with specific breakdowns of what is being measured would lead to a more developed system of measurement.
Brady (2001) proposes a merging of Gronroos’ “Nordic” perspective and Parasuraman’s “American” perspective of service quality, by stating that service quality perceptions are determined by three dimensions: outcome, interaction, and environmental quality. The first two dimensions are adapted from Gronroos’ (1983) idea of assessing service quality according to consumer evaluations of outcomes and interaction with employees. The third dimension shows the influence of the consumer’s surroundings and its effect on perceived service quality (Brady, 2001). Brady adds that these three dimensions are composed of subdimensions, and that consumers base their perceptions of the primary dimensions, on their assessment of these sub factors (2001). Taking all of these factors and dimensions into consideration is how the consumer’s overall perception of service quality is formed (Brady, 2001). This hierarchical approach is much different from other existing views, mainly due to the synthesizing of multiple views into one focused framework of measuring consumer’s perceptions of service quality. Although this framework has yet to be applied to the sport industry, it is the most developed framework for measuring consumer’s perception of service quality.

Kang (2006) builds on Brady’s theory of synthesizing the measurement of determinants of service quality by providing a hierarchical approach. Kang (2006) builds on previous research by incorporating the hierarchical approach with functional and technical quality. She has indicated that existing research using the SERVQUAL instrument is not sufficient in order to accurately measure service quality (Kang, 2006). The SERVQUAL instrument has only focused on how the service is delivered but has neglected to focus on the service encounter outcome or the technical dimension. The functional quality focuses on the “how” and considers issues such as the behavior of customer-staff contact and the speed of service (Kang 2006). In contrast, technical quality focuses on the “what” and considers the end result of service (Kang 2006).
blending of technical and functional quality gives a clearer picture of whether service quality is achieved and provides a hierarchical structure that must be satisfied in order to achieve service quality, functionally and technically (Kang, 2006).

Chelladurai (2000) proposes a framework for analysis of quality in sport services that is much different from previous approaches. Chelladurai (2000) looks at three perspectives: targets of quality (which are the features of a product subjected to quality evaluations), standards of quality (the specific criteria applied in quality judgments), and evaluations of quality (the arbiters of quality). This framework offers a new perspective on how to interpret and categorize past literature in the context of this framework. It also proposes that any quality evaluation of a service should begin by identifying the targets of quality evaluations (i.e., breaking down that service into smaller discrete and distinct elements), and assessing the targets in terms of consumer and human service components (Chelladurai & Kang 2000). This framework also highlights the relevance of different standards of quality to different targets of quality, and the relative significance of the clients, the service providers, and the managers as arbiters of quality (Chelladurai et al. 2000). These segmental perspectives on quality in a service operation offer a different perspective than the hierarchical design or the functional and technical quality pieces discussed earlier.

Another approach that has been explored in literature is measuring perceived service quality and spectator satisfaction strictly based on the facility that a sporting event takes place in. Wakefield & Blodgett (1994) began to examine this phenomenon by labeling the physical facility in which the event takes place a “servicescape”. Wakefield & Blodgett (1994) examined the effect a servicescape, or facility has on the perceived level service quality of consumers. The researchers believe that the servicescape will affect repeat patronage, perception of the service
experience, level of excitement associated with the consumption of the service, and customer satisfaction (Wakefield & Blodgett 1994). In this instance, when spectators perceived a higher quality of servicescape they were more satisfied with the actual servicescape and service quality (Wakefield et al. 1994). The opposite was also found, poor perception of the servicescape led to lower satisfaction and lower perceived service quality (Wakefield et al. 1994). Greenwell (2002) found that the physical facility that the sporting event takes place in moderately effects the customers’ satisfaction level and perceived service quality (Greenwell, Fink, & Pastore, 2002). The researchers found that consumers were influenced by their perceptions of the facility and that consumers’ judgments about satisfaction were based, in part, on their interactions with the facility (Greenwell et al. 2002). The study identified three components of the service experience that influenced customer satisfaction: core product, the physical facility, and the service personnel. Though, the largest influence on satisfaction of these three was the core product (Greenwell et al. 2002).

Yoshida & James (2011) found a similar relationship between aesthetic quality of surroundings and service quality. These researchers proposed that aesthetic quality is a dimension of service quality that has been overlooked in past studies. This study is attempting to add aesthetics to the functional and technical dimensions that past researchers have concluded as the focal dimensions that predict perceived service quality. Past research has included aesthetic quality into the functional dimension of service quality, but in this study the researchers have made it its own separate entity or dimension. The researchers conclude that bundling aesthetic elements together based on a consistent theme would be helpful for creating a memorable atmosphere and increasing the quality of aesthetic services (Yoshida & James, 2011). Also the researchers point out that it is important to note both aesthetic and functional quality are under
the control of sport managers and are specifically important when the technical quality of the core product is low (Yoshida et al. 2011).

**Defining Service Quality**

Service quality can be defined in various ways across many service industries. Parasuraman (1985) defines service quality as a measure of how well the service level delivered matches customer expectations. He continues to say that “delivering quality service means conforming to customer expectations on a consistent basis” (Parasuraman, Zeithaml, & Berry, 1985, pg. 42). Brady (2001) suggests that service quality results from a comparison of perceived performance with expected performance. Theodorakis (2001) defines service quality as “a comparison to excellence by the customer” (Theodorakis, Kambitsis, Laios, & Koustelios, 2001, p. 431). In the sports industry, specifically live sporting events, there are many opportunities to create and maintain service quality for consumers. Beginning with parking attendants and ticket takers and leading to ushers and concession workers, each touch point creates an opportunity to exceed expectations or to fail to meet the consumer’s expectations. By failing to meet consumers’ expectations of service quality, an organization is destined to lose that consumer to a service provider that will surpass expectations. One segment of the population that attends live sporting events that have been overlooked in past studies is individuals who are between the ages of 18-24 and attend college. For the purpose of this study service quality will be defined as achieving excellence while exceeding the consumer’s perceived expectations.

**Omission of College Age Demographic**

Throughout the literature dealing with service quality at sporting events this demographic does not receive the appropriate amount of attention or study. In Parasuraman’s study in 1985 that produced the Gap Model of service quality, the age demographic was not specified for his
DETERMINANTS OF SERVICE QUALITY

focus groups (1985). In concert with these findings, in his follow up to the Gap Model development, Parasuraman also did not specify age demographics in his study which formulated SERVQUAL in 1991 (Parasuraman et al. 1991). As discussed earlier, SERVQUAL is a questionnaire given to service providers and their consumers which matches perceived expectations and actual service outcomes. In Brady’s (2001) contribution to measuring service quality he provides a hierarchical approach to perceived service quality, but his demographic breakdown is far too large as its first age demographic is age 18-30. This demographic breakdown fails to provide any insight into the 18-24 year old demographic specifically. While Brady’s study provides significant insight to a new approach of measuring perceived service quality, its omission of such a large demographic segment cannot be ignored. In Kelly & Turley’s 2001 study, they also fail to address this demographic, as their demographic breakdown begins with age 25 and completely ignores the 18-24 year old demographic. This specific demographic is one that has yet to be fully examined and critically focused on by researchers in order to understand how a college-age demographic perceives service quality. Although marketers and service providers in the sport industry market their service to a broad population, significant research into how a younger demographic perceives service quality could allow service providers to become more attractive to an emerging segment of sport consumers.

Advantages of Studying Service Quality

The question of examining perceived determinants of service quality at live sporting events, and if tailoring your service to fit these perceptions would lead to repeat patronization and expanding the consumer base, has been asked by researchers in the past. How this question will relate to a younger consumer base, ages 18-24 specifically, has yet to be fully examined. College students with disposable income are a market segment that can easily be overlooked and
DETERMINANTS OF SERVICE QUALITY

taken for granted. This study will focus on this demographic exclusively to try to provide ways of capturing this segment of the population by categorizing perceived service quality traits that are specific to this demographic. This segment’s perception of service quality will also be examined through the formation of a survey instrument that will gauge how they perceive service quality at a live sporting event.

If it is possible for sports teams to grow their consumer base through providing service quality to a younger demographic, teams that have difficulty developing an all-encompassing consumer base could look to service quality as a strategy to focus their efforts when attempting to broaden their existing consumer base. Looking at the determinants of service quality will allow service providers to gain better understanding of the process an individual undertakes when deciding if the service encounter met their expectations. This can also provide a varied approach for sports teams that do not have control of personnel decisions for on-the-field talent. Teams that do not have control of their on-field personnel, such as minor league baseball teams and minor league hockey teams could use a service quality approach as a means of attacking the problem of sub-standard attendance (Hill 2009). The significance of this question is also linked to the demographic that will be focused on.

By examining the determinants of service quality for a younger demographic, college students age 18-24 specifically, this study will allow major league teams, minor league teams, and service providers to tap into a previously unexplored segment of the population. Providing the determinants of service quality will also enable sports teams to provide a higher value to consumers of the on-the-field product, and give better alternatives for consumers to spend their ever shrinking discretionary income. By taking a closer look at the determinants of service quality for this population, service providers will be able to ensure the most efficient way to
DETERMINANTS OF SERVICE QUALITY

provide service quality to a younger demographic. Taking all of these factors under consideration, it is easy to see why asking this research question is significant and vital to the sport industry. This leads to the research questions:

- What are the determinants of service quality for this segment of the sport consumer population?
- Can the “who and what” of providing service quality be identified?
- Do determinants of service quality change as college students grow older?
- Do past experiences at live sporting events affect this demographics’ service quality determinants?

Method

Participants

The population for this study included college students between the ages of 18-24 that have attended a live sporting event within the past six months. This research utilized the population of the student body as a whole as a sample for this research. Any responses from students who did not qualify based on the predetermined demographic or who failed to complete the survey instrument were discarded before the data was analyzed.

The survey was sent to all 2891 undergraduate students at a local college. 266 subjects chose to participate in this study by following the link emailed to them resulting in a response rate of 9.2%. Of the 266 participants who began the survey, fifty-one were disqualified from completing the survey based on not fitting into the specified age range, not attending a live sporting event within the past six months, or by attending a live sporting event but not at one of the specified levels of competition. This provided a completion rate for this survey of 81.4%. Of the individuals who chose to participate in this survey, 66% were in the 18-20 age range. This
was by far the largest age group represented, with 21-22 year olds representing 27% of all respondents, and the 23-24 year old age range was represented by only 4% of total respondents.

**Survey Instrument**

Brady’s (2001) conceptualization of a hierarchical framework of determinants of service quality was the basis of this survey instrument. The survey instrument measured what aspects of the service encounter college students age 18-24 determined most important. Specific age ranges were identified in order to recognize any changes in service quality determinants as the population progressed in age. The survey instrument began with questions to ensure that only the appropriate population will take part in this study. The survey instrument then sought to identify the specific sport that was engaged in for each participant’s response. Next, the subjects identified what level of competition for their attended event, high school, college, minor league, or professional. This is an important delineation because expectations of service quality would change based on the level of competition present. A consumer would not have the same expectations of service quality at a high-school event, as functional quality aspects provided would not have the same characteristics as those at a professional or minor league sporting event.

The main body of the survey instrument consisted of statements that the subjects will respond to, based on a five point Likert scale. These three sections of the survey instrument were separated to measure the basic determinants of service quality that Brady (2001) had identified as the foundation of his hierarchical framework: reliability, responsiveness, and empathy. Each section featured was specific to each basic determinant, but was also specific to the next level of Brady’s hierarchy; attitudes, behavior, expertise, design, social factors, waiting time, and valence (service outcome). The survey then asked subjects to rate on a scale of 1-10 how important service quality was in deciding to attend a live sporting event, with one being the least important
DETERMINANTS OF SERVICE QUALITY

and ten representing the most important factor. The survey then asked subjects to rank the top four aspects that affect perceptions of service quality at a live sporting event. There were six choices provided for subjects to choose from, as each of Brady’s basic service quality determinants were represented by two choices. Responsiveness options were waiting time and employee expertise, Empathy options were represented by employee attitudes and employee behaviors, and Reliability options were represented by outcome of service experience and attentiveness to customer needs. The survey instrument then asked a series of three yes or no questions, which sought to determine the vast majority of coding for the information gathered. These questions asked if a past experiences of receiving poor service quality affected current views on attending a live sporting event. The next asked if the employees at the sporting event provided good service, as this would be specific to the service interaction. The last question addressed if the service provider/organization provided service quality to the subject at their last attended live sporting event. It is important to differentiate these two questions because an individual could receive good service from the individual employee, yet still leave the interaction with the perception that they did not receive service quality. This information also provided insight into defining the “who and what” that had been overlooked in determining service quality (See Appendix A).

Data Collection Procedure

In order to collect the desired data for this study, a comprehensive list of contacts was compiled in order to assemble a distribution list for the survey instrument. The first distribution list was comprised of professors in the Sport Management program at an area college, in order to pilot the study. Based on the responses received, the survey instrument was adjusted accordingly to incorporate feedback received by the individuals piloting the survey. A cover letter was
written that included consent and confidentiality statements (see Appendix B). Once this phase was completed, the survey was distributed to the entire population that was specified and responses were monitored. A follow-up email was sent two weeks after the initial request, and the survey was closed after being open for 3 weeks.

**Data Analysis Procedure**

Once the survey was closed, the data collected was analyzed using multiple techniques. The first tactic employed was the identification of frequencies within each section of the survey instrument. Specific attention was given to frequencies within each age group, as it allowed insight into what each group conveyed as a possible determinant of service quality. This approach allowed for a clearer picture of the data, specifically when analyzing how participants ranked service quality determinants. Calculating frequencies was also utilized when examining how important respondents deemed service quality was when attending a live sporting event. This approach provided a distinct cross section of each age group and their feeling on service quality.

Within the Likert scale portion of the survey instrument, responses were compared between descriptor sections as well as within each descriptor section, in order to detect any possible relationships. Emphasis was placed on identifying relationships between and within the Likert scale portion of the survey instrument, how respondents ranked service quality determinants, how important respondents deemed service quality in a sport setting, and if respondents received service quality from either employees or the organization.
DETERMINANTS OF SERVICE QUALITY

Results

Frequencies and Demographics

The descriptive statistics of this research provided insight into each age group’s view on service quality. On a scale of one to ten, ten representing that service quality was the most important factor and one representing that service quality was a non-factor when making the decision to attend a live sporting event, the mean answer was rated as 6.3 with 122 respondents rating service quality as a five or higher in importance when deciding to attend a live sporting event. Fifty-five percent of 18-20 year-olds indicated that service quality rates as a seven or higher when deciding to attend a live sporting event, while sixty-six percent of 20-21 year-old indicated that service quality rated as a six or higher as a determining factor. Fifty percent of respondents age 23-24 indicated that service quality rated as a seven or higher as a determining factor.

When asked if receiving poor service quality would affect your decision to attend another event at that specific facility, sixty-two percent of respondents indicated that would affect their decision to revisit that facility for another sporting event. Sixty-five percent of 18-20 year olds indicated that receiving poor service quality would affect their decision to revisit that facility, fifty-eight percent of 21-22 year olds indicated that this would affect their decision to revisit the facility, and sixty-two percent of 23-24 year-olds indicated that it would affect their decision.

When asked to rank the top four service attributes that would affect their perceptions of whether they received service quality, fifty-six percent of 18-20 year olds indicated that waiting time was the most important factor. The option that the 21-22 year old demographic chose the most as affecting their perceptions of service quality was employee attitudes, with just over fifty percent of 21-22 year olds indicating that this was either first in importance. 23-24 year olds also
chose employee attitudes with the most frequency when asked to rank factors affecting their perceptions (See Table 1).

**Responsiveness and Reliability Aspects**

When examining the inferential statistics, results were analyzed in order to uncover any correlations between the responses given. All correlations were found using two-tailed probability (p=.05). Significant relationships were identified between Responsiveness and Reliability factors in nearly all of Brady’s (2001) subdimensions: employee attitudes, employee behavior, social factors, employee expertise, waiting time, and valence. The only aspect in which no relationship was identified was within Responsiveness aspects of facility design and any of Brady’s (2001) subdimensions. The strongest relationships were identified between Reliability and Responsiveness aspects of employee attitudes, Reliability aspects of employee attitudes and Responsiveness aspects of employee behaviors, Responsiveness aspects of waiting time and Reliability aspects of employee behaviors and attitudes (See Table 2)

**Reliability and Empathy Aspects**

When examining Reliability and Empathy aspects, significant relationships were identified. The strongest relationships occurred within Reliability aspects and Empathy aspects of employee attitudes, reliability aspects of employee attitudes and empathy aspects of employee behaviors, Reliability aspects of employee behaviors and Empathy aspects of employee attitudes. The only instance in which no relationship was identified was within Reliability aspects of waiting time and Empathy aspects of facility design (see Table 3)

**Responsiveness and Empathy Aspects**

When investigating Responsiveness and Empathy aspects substantial relationships were identified. Strong correlations existed within Responsiveness aspects and empathy aspects of
employee attitudes, Responsiveness aspects of employee attitudes and Empathy aspects of employee behaviors, and within Responsiveness and Empathy aspects of waiting time. This relationship was the strongest and the only occurrence waiting time having a strong relationship with any other aspects of the service interaction. There were two instances in which significant relationships were not identified, these being within Responsiveness aspects of facility design and Empathy aspects of employee expertise and Empathy aspects of waiting time. (See Table 4)

Using Like Descriptors within Service Quality Determinants

When examining service quality determinants using the same descriptors, significant relationships were identified in nearly every instance. The strongest and most consistent relationships were identified when examining Empathy aspects and when examining Reliability aspects within Brady’s (2001) service quality determinants. Within Responsiveness, relationships did not occur with the equivalent regularity as they did when Empathy and Reliability aspects were employed as descriptors. These relationships were the strongest when the determinants specific to Interaction Quality were correlated with each other. (See Tables 5-7)

Factors Determining Service Quality

When analyzing the data received concerning what factors determine if service quality was delivered, a significant relationship was identified between employee behaviors being considered the most influential factor that affects perceptions of service quality and employee attitudes being the most influential factor (r = .323, p< .001). Employee attitudes influencing service quality perceptions was shown to have a significant relationship with valence affecting perceptions of service quality (r = -.222, p <.05). Employee attitudes affecting perceptions of service quality was shown to have a significant relationship with waiting time being judged as the most influential aspect affecting service quality perceptions also (r = -.194, p <.05).
DETERMINANTS OF SERVICE QUALITY

Service Quality Determinants and Importance

Significant relationships were identified between how important service quality was when deciding to attend a live sporting event, and many aspects of this research. Aspects such as: Reliability of employee attitudes, Reliability of employee behaviors, past experiences affecting current views on service quality, level of competition, and Responsiveness aspects of valence. The importance of service quality exhibited strong relationships with all Empathy aspects of the service experience. (See Table 8)

Employees versus Organizations Providing Service Quality

Significant relationships were identified within employees providing quality service and the specific aspects of the delivery process. Reliability, Responsiveness, and Empathy when employed as descriptors of employee attitudes exhibited strong relationships with whether employees delivered quality service or not. Strong relationships were identified between Reliability aspects of employee behavior and whether employees provided quality service. Another strong relationship was identified between Responsiveness aspects of employee expertise (See Table 9). A strong relationship was also identified between employees providing quality service and the organization/service provider delivering quality service (r = .590, p < .001).

Past Experiences and Service Quality

When examining if past experiences at live sporting events influenced current views on service quality, there was a significant relationship identified. A negative correlation existed between past experiences affecting current views on service quality and how important service quality was rated (r = -.179, p < .05). No other relationships were identified when past experiences affecting current views on service quality was compared to any other variable.
DETERMINANTS OF SERVICE QUALITY

Discussion

When this research was initially undertaken, its goal was to identify service quality determinants for college students age 18-24 at a live sporting event. Previous research efforts had yet to focus in detail on this age demographic, and its omission from research into this topic leaves an incomplete picture of how service providers can deliver service quality to all of their consumers within the sport industry. This research also attempts to decipher if this age group’s determinants of service quality change as they progress in age, if past experiences at live sporting events influence current views on service quality, and if the “who and what” of providing service quality to this age group can be identified. The results that are presented are an effort to apply the existing research framework to a sport setting, specific to the 18-24 year-old age group. After analyzing the collected data, within Brady’s (2001) framework, Interaction Quality has been identified by this sample as having the strongest relationship in determining whether service quality is achieved; specifically attitudes and behaviors of an organization’s employees. While employee expertise also is included in Interaction Quality, it does not exhibit as strong a relationship in providing service quality as the other descriptors of Interaction Quality determinants. These two factors when utilizing Empathy as a descriptor, results in a particularly strong relationship. Analysis indicates that if individualized care and attention is given to 18-24 year olds through the use of attitudes and behaviors, service quality will have the best chance to be achieved. By concentrating organizational efforts to focus on interactions with these consumers an organization will have the best chance to deliver service quality to this age group. Employing Empathy as a descriptor of service quality, allows service providers to focus on the consumer in an individualized manner and to provide care to each customer during “touch points” created during their interactions with an organization and their employees.
Service Quality Determinants for College Students 18-24

Attitudes and behaviors of employees specifically delivered through individualized attention and care and the importance that this age demographic places on their delivery is quite telling. This younger demographic have indicated that they place higher importance on receiving individualized care and attention at a live sporting event, that is typically overflowing with people, in order to achieve service quality. This is not isolated to this age group as all individuals want to be made to feel as though the spotlight is shining solely on them, and that their every need should be catered to. This demographic of sporting event attendees is no different from any other attendee in that respect. The major difference that became clear through this research is that this specific age group equates this individualized approach through attitudes and behaviors with determining if quality service was delivered. This is not exclusive to empathy aspects, but as attitudes and behaviors are focused through individualized care and attention, organizations are more likely to deliver service quality. While Responsiveness and Reliability aspects of employee attitudes and behaviors exhibit strong relationships with delivering service quality to this age demographic, it is only when empathy aspects of both attitudes and behaviors are examined in concert with each other that the strongest relationships are revealed.

Examining the relationships present between Responsiveness and Reliability factors has shown that for this age range, these descriptors of Brady’s (2001) subdimensions, while an important aspect of delivering service quality, exhibit weaker relationships when determining if service quality was delivered. The Responsiveness and Reliability of each aspect included in Brady’s (2001) lowest level of his hierarchy displayed strong positive correlations in nearly every determining factor of service quality except facility design. The willingness to help customers and the ability to provide prompt service combined with the ability to consistently
DETERMINANTS OF SERVICE QUALITY

deliver the promised service is critically important to the determinants of waiting time, employee attitudes, and employee behaviors. If an organization can emphasize to their employees to demonstrate through their attitudes and behaviors a willingness to help this age group on a consistent basis, perceptions of Interaction Quality will be affected in a positive manner and service quality will be achieved with a greater frequency.

Similar to the relationship identified between Reliability and Responsiveness, Reliability and Empathy when examined together represent an important facet of delivering service quality. The strongest relationships occurred when Reliability and Empathy are employed as descriptors of employee attitudes and behaviors, specifically Empathy aspects of employee attitudes. The determinant of employee attitudes, when Empathy is added as a descriptor consistently results in a strong relationships regardless of what the other determinant may be. In each instance the correlation is a positive one that is significant \(p < .001\), except for situations involving Reliability of waiting time as a variable. When Reliability of wait time is examined, while there are instances in which the results are significant at the \(p < .001\) level, there are instances in which the results are only significant at the \(p < .05\) level. The same can be said for instances in which Empathy and Responsiveness descriptors are examined together. Similar strong relationships exist between these descriptors of employee attitudes and behaviors, and at very significant levels. But, as other determinants are examined using these descriptors, the results are not as consistently significant, facility design is an example of this.

In instances when Responsiveness and Empathy aspects are examined together there are similar results as when other descriptors are compared. Employee attitudes and behaviors exhibit strong relationships when examined in concert with each other. Although when these two descriptors are studied together, the strongest relationships that exist occur within
DETERMINANTS OF SERVICE QUALITY

Responsiveness and Empathy aspects of waiting time. The strong relationship identified is one that can be expected, as responsiveness as a descriptor implies prompt service. The added aspect of Empathy that focuses on the individualized attention given to customers is the intriguing characteristic. The strength of relationships between Empathy aspects of waiting time when coupled with any of the other eight determinants is significantly less than the relationship exhibited when responsiveness and empathy are paired as descriptors. This can be attributed to this age range placing such importance on waiting time, specifically the 18-20 year-old segment combined with the entire population’s desire for individualized care and attention. The 18-24 year-old population want individualized care and prompt service, which does not always go hand in hand. In this instance, this sample wants the best of both worlds.

When examining instances in which a single descriptor is utilized to compare Brady’s (2001) service quality determinants, similar results within employee attitudes and behaviors are evident. The strongest relationships exist within Interaction Quality determinants, employee expertise included. In instances that Brady’s (2001) descriptors are paired together, employee expertise has not exhibited as strong relationships with its Interaction Quality counterparts. It is only when the same descriptor is utilized on other Interaction Quality determinants that employee expertise displays its stronger relationships with employee attitudes and behaviors. This shows the importance of Interaction Quality to this age demographic, regardless of whether a service provider uses a multiple descriptor approach or chooses to focus on a single service quality descriptor; the strongest relationships exist within Interaction Quality.

Employing Empathy as the single descriptor of a service quality determinant has resulted in the strongest relationships contained in this research. When the determinants of employee attitudes and behaviors are examined using Empathy as a descriptor, the resulting relationship
DETERMINANTS OF SERVICE QUALITY

was the strongest contained in this research. Across all nine determinants, in each circumstance significant relationships are present and the strength of the relationships is substantial. The same can be said when Reliability is used as a single descriptor. This is not the case when Responsiveness is employed as a single descriptor. In multiple occurrences when Responsiveness is utilized as the single descriptor the resulting relationship is either weak, or contain insignificant relationships. It is also noted that within employee attitudes and behaviors, which have been indicated by this group as having the strongest relationship with achieving service quality, Responsiveness exhibits the weakest relationship when compared to Empathy and Reliability as descriptors. This age demographic has prioritized their descriptors of service quality determinants. While they have indicated that employee attitudes and behaviors determine if service quality is achieved, Empathy should be the focus of service providers as the primary descriptor of these determinants, then reliability, followed by responsiveness.

“Who and What” of Providing Service Quality

In attempting to identify the “who and what” of providing service quality, a significant conclusion can be made. This age group does not distinguish between the organization providing services to them, and the employees that they interact with. Employees of the organization are seen as a direct reflection of the organization and not a separate entity. This age demographic determines service quality based on their interactions with employees, and based on those judgments of interactions with employees, they determine if the organization delivered quality service. If organizations are to provide service quality to this age group, they must be prepared to be judged based on “touch points” where their employees directly interact with the 18-24 year-old demographic.
DETERMINANTS OF SERVICE QUALITY

The relationship between employee behaviors and attitudes is uniform throughout all portions of this research. The relationship that was identified between each of these determinants being rated as the most influential factor affecting perceptions of service quality is quite telling. As the importance of employee attitudes rise, so does employee behaviors. This indicates that service providers must focus their efforts on both of these aspects of Interaction Quality.

Although, the negative correlations that were identified between employee attitudes affecting perceptions and valence, as well as waiting time shows that if efforts are placed solely on employee attitudes, the importance placed on Quality of Outcomes can be severely downplayed in the eyes of this age demographic. In this instance, if this age group receives a poor outcome in the service encounter; they could still perceive that they received service quality if emphasis is placed on positive employee attitudes.

Service Quality Determinants Change as College Students Grow Older

When examining how each age range ranked aspects that influence their perception of service quality, the change in importance was distinct. The importance the majority of 18-20 year olds put on waiting time was quite different than the importance that the other demographics focused on. While waiting time was important to the 21-22 year old demographic, they placed more focus on the attitudes of the employees that they interacted with. This mirrored the 23-24 year old demographics’ focus as well. 23-24 year olds indicated that the attitudes of employees affected their perceptions of service quality, even more than waiting time. This change in importance and in influential factors is an important concept. 18-20 year old appear to be less patient and allow time spent waiting for concessions, ushers, and ticket takers instead of the quality of attitudes and interactions with individuals to affect their perceptions of service quality.

Conversely, as the respondents have grown older they are more willing to base their perceptions
DETERMINANTS OF SERVICE QUALITY

of receiving service quality on interacting with the facility’s employees instead of the amount of time spent waiting in line. Based on Brady’s (2001) hierarchy, this sample began to place the most emphasis on the Outcome Quality (waiting time and valence) beginning at the 18-20 age range instead of service quality as a whole. As the respondents entered into the next age range, they have included Interaction Quality into how they determine service quality. Outcome Quality has not been ignored by this age range, but has simply been surpassed by employee attitudes as a determining factor of service quality. This shows that as individuals grow older, simply providing a quality outcome is not enough when the goal is providing service quality, and more importantly, how this demographic determines service quality does change as they progress in age.

Examining the frequency of answers given, when broken down by age, the majority of each age range rated the importance of service quality when deciding to attend a live sporting event at a level of six or higher. This is important as it indicates that service quality is seen as an important aspect of the entire experience of attending a live sporting event. This is also significant due to this demographics’ omission from previous research, and shows that each age demographic places value on service quality in a sporting environment. The results, when analyzed, also show the impact that receiving poor service quality in this environment could have. Sixty-two percent of all respondents had indicated that receiving poor service quality would affect their decision to attend another sporting event at that facility. This shows that if service quality is not delivered on a consistent basis, the consequences could be that this demographic could choose to attend a different venue in the future and the possibility of losing this consumer for good is quite real.
DETERMINANTS OF SERVICE QUALITY

Past Experiences Affecting Current Views

Past experiences are usually used as a basis of making future expectations, and affecting future intentions. While the majority (62%) of 18-24 year-olds indicated that past experiences at live sporting events impacted their current view on service quality, the only significant relationship that was identified was with how important service quality was rated. The higher that this population rated the importance of service quality at a live sporting event, the more they are able to look past any past experiences that they might have had during previous sporting events. 18-24 year-olds are willing to take each interaction on a case by case basis and allow the service provider and their employees another chance to deliver service quality. Conversely, if an individual in this age range deems service quality as not important, they will keep their last interaction with this service provider in the forefront of their mind. For an individual who does not place much importance on service quality, their past experience affects their future intentions at a higher frequency.

Research Implications

There are several implications for future research. While this research focused on identifying service quality determinants of a specific age demographic at a live sporting event, the scope of this research was quite narrow. Uncovering the importance of service quality determinants of a broader age range of subjects would be an admirable pursuit, and would provide a basis of comparison to this age group. Allowing this age group to be identified by gender would also allow for greater comparison between subjects and within the entire population. Males could place more emphasis on a single determinant that is entirely ignored by females.
DETERMINANTS OF SERVICE QUALITY

Given that this research utilized Brady’s (2001) hierarchy of service quality determinants, future research could attempt to use focus groups of 18-24 year-old subjects in order to formulate service quality determinants that are focused on this age group specifically. Within this research, the determinants were presented to the subjects, and there is a possibility that how 18-24 year-olds actually perceive and determine service quality is still unknown. Providing these participants an opportunity to vocalize how exactly they determine service quality in a sport setting could provide more accurate results precisely tailored to this age demographic. This approach could also provide determinants that are omitted from previous research efforts.

As empathy was identified as the core descriptor of service quality determinants within this sample, future research could seek to examine what actions should be taken to provide individualized care and attention to this age demographic. These terms need to be assigned operational definitions in order for service providers to deliver them on a consistent basis, and for organizations to incorporate these terms into their delivery process. Also, future research should focus on how to incorporate specific actions that include individualized care and attention with their employees’ attitudes and behaviors.

With the focus of this research being how 18-24 year-old consumers determine if service quality was delivered, this same question could be posed to sport service providers. A disconnect could exist between how service providers believe this age group determines if service quality was delivered. Examining how these service providers’ employees feel that service quality is delivered could result in quite different results. Efforts should be made to uncover if how service quality is defined by both the service provider and the consumer are similar.
Limitations Within Research

In any research project, this study did encounter some limitations. The 18-20 year-old segment of subjects represented sixty-six percent of all respondents. The 23-24 year-old segment was only represented by eight percent of total responses, which makes generalizing the results and assumptions for this age range very risky. In addition, two of Brady’s (2001) determinants, ambient conditions and tangibles were omitted as options of service quality determinants for this sample. This was done due to the chance that the sample would not know what was meant by these determinants, and to avoid confusion. Also, definitions of service quality, empathy, responsiveness, and reliability were not provided to the population of this study as the aim was not to overwhelm the subjects with information. Furthermore, this research aimed to involve multiple institutions in order to include the broadest population possible, but was limited to one college as IRB approval would have been difficult to achieve. Also, in the ranking section of the survey instrument, the focus was placed on Brady’s descriptors and Physical Environment Quality determinants were not included.

Conclusion

This study set out to reveal how college students age 18-24 determine service quality at a live sporting event. Employee attitudes and behaviors were identified as the primary determinant of service quality at a live sporting event. Within this finding, it was also shown that through the use of individualized care and attention, service quality can be achieved when focused on this age demographic. Organizations will need to concentrate their efforts and tailor their employees’ interaction with these consumers to utilize this information. As this age demographic progresses in age they are becoming more mature, how they are treated and made to feel at “touch points” throughout the service delivery process is becoming more important to them. Providing the
promised service in a timely manner is simply not enough for these consumers. If employee attitudes and behaviors are not tailored to meet what these consumers are seeking, which is a quality interaction with the organization’s employees, service quality will not be achieved. These consumers could choose to spend their extra discretionary income at other venues that are willing to provide individualized care and attention to them. But, if organizations are willing to emphasize how important the quality of interactions are to the 18-24 year-old demographic, and accentuate how attitudes and behaviors can be a determining factor of service quality, organizations can create a very lucrative opportunity to capture a segment of the population that has been overlooked as consumers in a sport setting.
DETERMINANTS OF SERVICE QUALITY

References


DETERMINANTS OF SERVICE QUALITY


DETERMINANTS OF SERVICE QUALITY

Appendix A.
The Survey Instrument

Determinants of Service Quality

Q1
☐

Have you attended a live sporting event in the past 6 months?

Yes ☐

Click here to edit choices

If No is Selected, Then Skip To End of Survey

Skip Logic

Q2
☐

How old are you?

18-20 ☐

21-22 ☐

23-24 ☐

Q3

What type of sporting event did you attend?

Football ☐

Click here to edit choices

Q4

What level of sport?

• ☐

High School

• ☐

College

• ☐

Minor League

• ☐

Professional

Q5

This Section Addresses Reliability Aspects of Service Quality

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<tr>
<th>I can count on employees to be friendly</th>
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<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can count on employees to take actions to address my needs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I can count on employees to know their jobs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The layout of the service provider's facility impresses me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other customers consistently leave me with a good impression of this service provider</td>
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<td>☐</td>
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<td>☐</td>
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<td>Waiting time is predictable</td>
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<td>☐</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>After the sporting event I feel that I had a good experience</td>
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Q6
### Determinants of Service Quality

#### This Section Addresses Responsiveness Aspects of Service Quality

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<td>The attitudes of employees demonstrate their willingness to help me</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Employees respond quickly to my needs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Employees are able to answer my questions quickly</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>The layout of the facility does not affect my experience</td>
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<td>○</td>
</tr>
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<td>Other customers do not affect the service provider's ability to provide good service</td>
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<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>The service provider tries to keep my waiting time to a minimum</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I believe the service provider tries to give me a good experience</td>
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#### This Section Addresses Empathy Aspects of Service Quality

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<th>Neither Agree nor Disagree</th>
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</tr>
</thead>
<tbody>
<tr>
<td>The employees' attitudes show me they understand my needs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The behavior of employees shows me they understand my needs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The employees understand that I rely on their knowledge to meet my needs</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>The service provider understands that the design of its facility is important to me</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The service provider understands that other patrons affect my perception of its services</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The service provider understands that waiting time is important to me</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The service provider knows the type of experience its customers want</td>
<td>○</td>
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<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
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<td></td>
<td></td>
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</tbody>
</table>

How important is service quality when deciding to attend a sporting event?

10 being most important
DETERMINANTS OF SERVICE QUALITY

Q8

Many different factors can impact your opinion of service quality at a live sporting event. Rank the top four aspects that would affect your perceptions.

- Employee Expertise
- Outcome of Service Experience
- Waiting Time
- Employee Attitudes
- Employee Behavior
- Attentiveness to Customer Needs

Q10

If you had received poor service quality at a live sporting event would it impact your decision to attend another sporting event at that facility?

Yes

Q11

Do you feel that employees provided good service to you during your last attended sporting event?

Yes

Q12

Based on your last experience at a live sporting event, did the service provider/organization provide you with service quality?

Yes
Appendix B.

Cover Email

Dear Colleague,

I am conducting a survey that examines the service quality determinants of college students age 18-24. Service quality is an important aspect of the spectator experience, ensuring that a fan receive service quality when attending a live sporting event is imperative when attempting to retain customers and reach new demographics of fans. This specific demographic of fan and their determinants of service quality has yet to be fully explored and studied, and with this research I hope to allow organizations to tailor their service quality approaches to maximize the patronage and loyalty of this demographic.

Survey Link:  
https://sjfc.us2.qualtrics.com/ControlPanel/?ClientAction=EditSurvey&Section=SV_8JurR1P3brhEhwM&SubSection=&SubSubSection=&TransactionID=2&Repeatable=0&T=SbGpR

There are no known physical or psychological risks associated with completing the survey. You may refuse to answer any questions and may withdraw from completing this survey at any time. By completing this survey, you consent to participate. No personally identifiable information will be associated with your responses in any published and reported results of this study.

For questions about your rights as a participant in this study or to discuss other related concerns or complaints with someone who is not part of the research team, you can contact Dr. Emily Dane Professor in the Sport Management Department at St. John Fisher College at (585)-899-3803.

I would be greatly appreciated if you could complete the survey by February 16, 2012. Feel free to contact either of us if you have any questions. Thank you very much for your assistance.

Sincerely,

Stephen Gonzalez
sng04885@sjfc.edu
585-747-0468
Table #1
Ranking of Service Quality Attributes

<table>
<thead>
<tr>
<th>Ranking of Service Quality Attributes</th>
<th>Ages 18-20</th>
<th>Ages 21-22</th>
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<tbody>
<tr>
<td>Most Important</td>
<td>Waiting Time</td>
<td>Employee Attitudes</td>
<td>Employee Attitudes</td>
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<tr>
<td>Attentive to Customer Needs</td>
<td>Waiting Time</td>
<td>Attentive to Customer Needs</td>
<td></td>
</tr>
<tr>
<td>Employee Behavior</td>
<td>Employee Behavior</td>
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</tr>
<tr>
<td>Employee Attitudes</td>
<td>Employee Expertise</td>
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<td>Employee Expertise</td>
<td>Attentive to Customer Needs</td>
<td>Outcome of Service Experience</td>
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<tr>
<td>Least Important Service Experience</td>
<td>Outcome of Service Experience</td>
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Table #2
Relationships Between Reliability and Responsiveness Descriptors

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<td>Expertise</td>
<td>Design</td>
<td>Social</td>
<td>Wait Time</td>
<td>Valence</td>
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<td>.235**</td>
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Note: Numbers in Table Represent Correlation Coefficients
* Indicates p < .05
** Indicates p < .001
### Table #3
**Relationships Between Reliability and Empathy Descriptors**

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Note: Numbers in Table Represent Correlation Coefficients

* Indicates p < .05

** Indicates p < .001

---

### Table #4
**Relationships Between Responsiveness and Empathy Descriptors**

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<tr>
<td>Behaviors</td>
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<td>Empathy</td>
<td>Design</td>
<td>.348**</td>
<td>.428**</td>
</tr>
<tr>
<td>Social</td>
<td>.283**</td>
<td>.398**</td>
<td>.433**</td>
</tr>
<tr>
<td></td>
<td>Wait Time</td>
<td>.380**</td>
<td>.351**</td>
</tr>
<tr>
<td></td>
<td>Valence</td>
<td>.319**</td>
<td>.462**</td>
</tr>
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</table>

Note: Numbers in Table Represent Correlation Coefficients

* Indicates p < .05

** Indicates p < .001
## Table #5
### Determinants of Service Quality and Empathy as a Single Descriptor

<table>
<thead>
<tr>
<th>Empathy</th>
<th>Attitudes</th>
<th>Behaviors</th>
<th>Expertise</th>
<th>Design</th>
<th>Social</th>
<th>Wait Time</th>
<th>Valence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
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<td>.555**</td>
<td>.267**</td>
<td>.377**</td>
<td>.484**</td>
<td>.443**</td>
<td></td>
</tr>
<tr>
<td>Behaviors</td>
<td>.752**</td>
<td>.529**</td>
<td>.257**</td>
<td>.364**</td>
<td>.455**</td>
<td>.358**</td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>.555**</td>
<td>.529**</td>
<td>.426**</td>
<td>.436**</td>
<td>.418**</td>
<td>.333**</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>.267**</td>
<td>.257**</td>
<td>.426**</td>
<td>.493**</td>
<td>.422**</td>
<td>.402**</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>.377**</td>
<td>.364**</td>
<td>.436**</td>
<td>.493**</td>
<td>.505**</td>
<td>.603**</td>
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</tr>
<tr>
<td>Wait Time</td>
<td>.484**</td>
<td>.455**</td>
<td>.418**</td>
<td>.505**</td>
<td>.574**</td>
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</table>

Note: Numbers in Table Represent Correlation Coefficients

* Indicates p < .05
** Indicates p < .001

## Table #6
### Determinants of Service Quality and Responsiveness as a Single Descriptor

<table>
<thead>
<tr>
<th>Respons.</th>
<th>Attitudes</th>
<th>Behaviors</th>
<th>Expertise</th>
<th>Design</th>
<th>Social</th>
<th>Wait Time</th>
<th>Valence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
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<td>0.103</td>
<td>.174*</td>
<td>.441**</td>
<td>.383**</td>
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<tr>
<td>Behaviors</td>
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<td>.616**</td>
<td>.313**</td>
<td>.433**</td>
<td>.432**</td>
<td>.281**</td>
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</tr>
<tr>
<td>Expertise</td>
<td>.450**</td>
<td>.616**</td>
<td>0.188*</td>
<td>.272**</td>
<td>.410**</td>
<td>.333**</td>
<td></td>
</tr>
<tr>
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<td>.313**</td>
<td>.188*</td>
<td>.579**</td>
<td>.217**</td>
<td>-0.086</td>
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</tr>
<tr>
<td>Social</td>
<td>.174*</td>
<td>.433**</td>
<td>.272**</td>
<td>.579**</td>
<td>.382**</td>
<td>-0.047</td>
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<tr>
<td>Wait Time</td>
<td>.441**</td>
<td>.432**</td>
<td>.410**</td>
<td>.217**</td>
<td>.382**</td>
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</table>

Note: Numbers in Table Represent Correlation Coefficients

* Indicates p < .05
** Indicates p < .001
**Table #7**

**Determinants of Service Quality and Reliability as a Single Descriptor**

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Attitudes</th>
<th>Behaviors</th>
<th>Expertise</th>
<th>Design</th>
<th>Social</th>
<th>Wait Time</th>
<th>Valence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
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<td>.393**</td>
<td>.379**</td>
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<td>.272**</td>
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</tr>
<tr>
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<td>.385**</td>
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<td>.300**</td>
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<tr>
<td>Expertise</td>
<td>.437**</td>
<td>.456**</td>
<td>.400**</td>
<td>.357**</td>
<td>.246**</td>
<td>.222**</td>
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<tr>
<td>Design</td>
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<td>.385**</td>
<td>.400**</td>
<td>.353**</td>
<td>.199**</td>
<td>.328**</td>
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</tr>
<tr>
<td>Social</td>
<td>.379**</td>
<td>.385**</td>
<td>.357**</td>
<td>.353**</td>
<td>.489**</td>
<td>.355**</td>
<td></td>
</tr>
<tr>
<td>Wait Time</td>
<td>.250**</td>
<td>.210**</td>
<td>.246**</td>
<td>.199**</td>
<td>.489**</td>
<td>.359**</td>
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</tr>
</tbody>
</table>

Note: Numbers in Table Represent Correlation Coefficients
* Indicates p < .05
** Indicates p < .001

**Table #8**

**Service Quality Determinants and Importance**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ Importance</td>
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<td>.211**</td>
<td>.247**</td>
<td>.269**</td>
<td>.166*</td>
<td>.212*</td>
</tr>
<tr>
<td>SQ Importance</td>
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<td>.207*</td>
<td>.172*</td>
<td>.224*</td>
<td>.192*</td>
<td>.227*</td>
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</table>

Note: Numbers in Table Represent Correlation Coefficients
* Indicates p < .05
** Indicates p < .001

**Table #9**

**Relationships Between Employees Giving Good Service and Interaction Quality Components**

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Emp. Gave Good Service</td>
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<td>-.196*</td>
<td>-.184*</td>
<td>-.170*</td>
<td>-.178*</td>
</tr>
</tbody>
</table>

Note: Numbers in Table Represent Correlation Coefficients
* Indicates p < .05
** Indicates p < .001