

# Total Experience as a Dimension of Quality in Services - A Study in the Health Care Industry

Gamini Gunawardane\*

*California State University at Fullerton, Fullerton, CA, U.S.A.*

---

Research on service quality in general as well as in health care settings has well established that the customer perception of the quality of a service encounter depends on the customer's pre-service expectations and post-service perceptions. These expectations and perceptions are assumed to be based on a set of factors of concern (called "dimensions") to the customer. For example, the most frequently used model of the customer's cognitive process of evaluating service quality, the SERVQUAL method, uses five such dimensions: Reliability, Responsiveness, Assurance, Empathy and Tangibles. In recent times, a customer's "total experience" with a service has been discussed and researched as the key dimension that really matters. Except for a few broad frameworks, research on specific factors that contribute towards this "total experience" is virtually non-existent. The study reported here investigates what factors contributes to customer "total experience" in health care settings and the correlation of "total experience" with the above five dimensions as well as with certain other dimensions of health care quality reported in the literature. Understanding factors that contribute to a customer's "total experience" is useful to service managers in designing service systems and policies that would enhance customer retention.

---

\*Corresponding Author. E-mail address: ggunawardane@exchange.fullerton.edu

## I. INTRODUCTION

Service quality has been an important topic of discussion and research over the past three decades. The literature is abundant with work focusing on the measurement of service quality (Parasuraman et al. 1985, 1988, and 1991; Zeithaml et al. 1993; Cronin and Taylor, 1992). The two key issues addressed by researchers are (1) what are the factors (called in the literature as "dimensions of service quality") customers consider in evaluating the quality of a service? and (2) how can the quality of a service, from the customer's point of view, be measured? We omit a detailed discussion of this highly researched field and refer the readers to Seth et al. (2005) who has identified as many as nineteen models on dimensions of service quality and the cognitive process used by service customers to evaluate the quality of a service. This paper

focuses on the first of these questions, namely the dimensions of service quality.

The predominantly used dimensions of service quality were conceptualized by Parasuraman et al. (1988). Based on a survey of a large number of customers, they claimed that the five dimensions of service quality customers focus on are Reliability (the ability to perform the promised service dependably and accurately), Responsiveness (willingness to help customers and provide prompt services), Assurance (knowledge and courtesy of employees and their ability to convey trust and confidence), Empathy (caring and individualized attention provided to the customer) and Tangibles (appearance of physical facilities, equipment, personnel and communication materials). However, in recent times, researchers have argued that the modern day customer lives in an "experience economy" (Pine and Gilmore, 1998) and what matters to the customer is his or her long term total experience

with a service (Fitzimmons and Fitzimmons, 2008). Although researchers have conceptualized in broad terms how customers perceive “total experience” with a service, research on exact factors that would be useful to service managers in understanding and operationalizing the concept of experience is almost non-existent.

The study reported here was aimed at investigating this concept of “total experience” of customers in one industry - the health care industry. More specifically, we wanted to investigate

- (i) whether the “total experience”, as perceived by the customer, is significantly different from the already well known five factor framework of customer perception;
- (ii) what sub-factors, among various factors/dimensions known in the literature, significantly influence the “total experience”;
- (iii) whether the perceived “total experience” in health care services varies with demographic variations of the customer base such as gender and age, and the type of medical service (such as physicians, dentists and hospitals); and
- (iv) what influences customer retention more – total experience or any of its components.

In Section II, we present a comprehensive survey of research on dimensions of service quality ranging from the earliest and best known five dimensions of Parasuraman et al. (1988) to the more recent concept of customer’s “experience”.

Section III reports a questionnaire survey conducted among health care industry customers (patients arriving at medical and dental clinics and hospitals) to measure their experience as well as the significance of certain specific factors associated with a health care service they have used at least three times during the last four years.

Section IV will analyze and discuss results and Section V will present management implications and limitations of the study.

## II. LITERATURE REVIEW

The initial investigations into dimensions of service quality conducted by Norwegian marketing researchers argued that service quality is based on either two dimensions, namely physical quality and interactive quality or three dimensions: technical dimension, functional dimensions and firm’s image (Mels et al. 1997), and physical quality, interactive quality and corporate quality (Lehtinen and Lehtinen, 1991). This area of research was revolutionized in the late 1980s by the landmark research of Parasuraman et al. (1988). Based on a survey of a large number of customers from five nationally known appliance repair, retail banking, long-distance telephone service, securities brokerage and credit card companies, they claimed that the five dimensions of service quality customers focus on are Reliability, Responsiveness, Assurance, Empathy and Tangibles, each of which was defined earlier. They would then operationalize it with the well known SERVQUAL method of measuring service quality. In this method, two questionnaires, each with 22 statements, based on these five dimensions are used. The first questionnaire is given to customers before the service to record “expectations” and the second is given after the service to record “perceptions”. Central to the SERVQUAL method is the view that service quality, from the customer’s perspective, is the difference between their post-service perceptions and pre-service expectations. If the numerical score, on a Likert scale, for perceptions exceeded the score for expectations, the customer satisfaction was deemed to be positive. Although there have been criticisms of this perceptions v. expectations model (Cronin and Taylor, 1992; Robeldo, 2001; Brown et al., 1993), SERVQUAL based on these five dimensions has remained the dominant model used to explain the

customer's cognitive process of evaluating service quality and has been used to measure service quality in a variety of service contexts (citations omitted) such as professional services, public recreation programs, retail settings, public services, food services, hair salons, information systems, higher education, university computer labs, hotels, transport services, tourist industry and banking. It has also been used extensively in health care settings such as hospital services (Marigold, 1992, Babakus and Mangold, 1992, Lee, 2005, and Chowdhury, 2008), long term care (Clark and Clark, 2007), physician perceptions (Lee et al. 2000, Walbridge and Delene, 1993) and outpatient clinics (Quader, 2009, Vartiainen and Hart, 1996, Wisniewski and Wisniewski, 2005).

However, some researchers have questioned the validity of the five dimensions and highlighted their overlapping nature. Other researchers have found new dimensions applicable to specific industries. For example, Mittal and Lassar (1996) replaced "Assurance" and "Empathy" with a dimension they called "Personalization", and showed the latter's importance in interactive encounters. A six factor model where "Empathy" is replaced by "Knowing/understanding the customer", and a new dimension "Access" is added, was proposed by Drew and Karwan (1994). Harrison-Walker (2000) subjected the responses in a SERVQUAL survey of customers in the hair salon industry to factor analysis with oblique rotation using SPSS. The result was a two-factor model that explained 68% of the variance. Assurance, Responsiveness, Reliability and Empathy all formed one factor and Tangibles formed the other factor. Llosa and Chandon (1998), analyzing data from a SERVQUAL survey of bank customers, found that while Tangibles and Empathy are clearly perceived by customers, the other three dimensions, Reliability, Assurance and Responsiveness are "confused in the client's mind". In the hotel industry, Carman (1990) found two key dimensions: Conviviality and Tangibles. In the retail clothing sector, Gagliano

and Hathcote (1994) found four factors: Reliability, Tangibles, Personal attention and Convenience. In car servicing, Bouman and van der Wiele (1992) found three factors: Tangibles, Customer kindness and Faith. The apparent overlap between Responsiveness, Empathy and Assurance has also been highlighted by Asubonteng, et al. (1996) and more recently by Zhou (2004) and Kueh and Voon (2007). Sureshchandar et al. (2002) identified five factors: Core service, Human element of service delivery, Service system, Tangibles, and Social responsibility. In summary, the dimensions on which customers base their expectations appear to be the physical elements (tangibles), outcome elements (reliability) and the process related elements (access, empathy, assurance etc.).

The more modern belief is that the one important dimension of service quality is the customer's "total experience" with the service. As far back as 1992, Bitner claimed that how customers experience activities is crucial to their perception of the value of a service. Berry et al. (2002) suggest that firms must provide customers with satisfactory experiences in order to create user value. Prahalad and Ramaswamy (2004) claimed that, "Value is now centered in the experience of consumers rather than embedded in the service". Previously, value was regarded as a ratio between service quality and cost. In the new perspective, value is realized when a service is used and not gained until customers have taken part in the service activities (Vargo and Lusch, 2004; Sandstrom et al. 2008). The service itself acts only as a stage for the customer experience (Arnould and Price, 1993; Pine and Gilmore, 1998).

What constitutes "total experience" of a service has not been researched sufficiently to provide sub factors contributing to "total experience" that would be practically useful to service managers although some general concepts have been established in recent times. Sandstorm et al. (2008) conceptualized that experience is formed by two components: functional outcome and emotional outcome.

Gronroos (2003) and Wong (2004) argued that services have paid attention primarily to functional quality and insufficient attention to total service experience including the emotional dimensions. Vargo and Lusch (2004) stated, “Value in use is the total service experience, i.e., the individual judgment of the sum total of all the functional and emotional outcomes.” Walter et al. (2010) theorized that service experience is dependent on the quality perceptions of core services, physical environment and social interaction.

As our project was aimed at investigating the components of “total experience” in health care settings, we researched the health care service quality literature for dimensions of service quality and attributes/factors contributing to it. Dimensions of service quality in health care settings that we found are summarized in Table 1 below. In Table 1, we have also included (last row) the dimensions used in the Consumer Assessment of Healthcare Providers and Systems (CAHPS, 2009) survey, the most well known and highly used consumer satisfaction survey in the U.S. health care industry.

**TABLE 1. DIMENSIONS OF HEALTH CARE SERVICE QUALITY**

AUTHORS	DIMENSION
Cho et al. (2004)	Convenience, Physician concern, Non physician (staff) concern, Tangibles
Alden, et al. (2004)	Tangibles, Access to services, Staff expertise, Personal care
McCarthy, et al. (2005)	Clear diagnosis, Effective treatment, Information, Communication, Assurance, Access, Post care advice
Kilbourne, et al. (2004)	Tangibles, Reliability, Response, Empathy
Gabbot and Hogg (1995)	Empathy, Credibility of physician, Range of services, Physical access, Situational factors, Responsiveness
Brown and Swartz (1989)	Professionalism, Skill of health professionals
Lee et al. (2000)	Assurance, Empathy, Reliability, Responsiveness, Tangibles, Core medical service, Professionalism/skill
Jun, et al. (1998)	Tangibles, Courtesy, Reliability, Communication, Competence, Understanding, Access, Responsiveness, Caring, Clinical outcomes, Collaboration
Chowdhury (2008); Quader (2009); Wisniewski and Wisniewski (2005); Lytle and Mokwa (1992); Headley and Miller (1993); Carmen (1990); Licata et al. (1995);	Reliability, Responsiveness, Assurance, Empathy, Tangibles (SERVQUAL dimensions)
Taylor (1994); Babakus and Mangold (1992)	Post service perception (single dimension)
Dean (1999)	Assurance, Tangibles, Empathy, Reliability/Responsiveness
Walbridge and Delene (1993)	Reliability, Professionalism/Skill, Empathy, Assurance, Core medical services, Responsiveness, Tangibles
U.S. Department of Health & Human Services (2009)	Access, Waiting times, Communication, Information, Courtesy and respect,

An examination of the dimensions of service quality in Table 1 indicates the presence of almost all the classifications of dimensions of service quality discussed above. For example, the

five SERVQUAL dimensions (Reliability, Responsiveness, Assurance, Empathy and Tangibles) seem to be present most often. Also noticeable are the “experience” elements of Walter et al. (2010): core services, physical environment and social interaction, and the more general factors of Vargo and Lusch (2004): functional outcomes and emotional outcomes. These dimensions fall into a few categories, namely physical elements (tangibles), outcome related elements (core medical services, competence and reliability), access related elements (waiting times) and process related elements (information, communications and courtesy). In fact, the five SERVQUAL dimensions themselves can be divided into functional outcomes (Reliability, Responsiveness) and emotional elements (Assurance and Empathy) while Tangibles would contribute to both. As described in the next section, our study included service quality dimensions derived from the above that address core quality, functional outcomes, emotional outcomes, physical environment and social interaction.

### **III. METHODOLOGY**

A SERVQUAL type survey instrument, in English and Spanish, was prepared and tested for readability and clarity with volunteering patients in two clinics in the Los Angeles and Riverside counties of Southern California in April 2010. Based on feedback from respondents and clinic staff who administered the questionnaires, the final version shown in Appendix I was formulated. The actual survey was then administered during August and September of 2010 to 240 patients (40 in each facility) in two physician clinics, two dentist offices and two hospitals that agreed to participate in the study. Patients were randomly selected upon arrival from among non-urgent cases. When each facility reached its quota of 40 (considered as the suitable number not to

overburden the facility operations), the survey was concluded.

The questionnaire would ask the voluntary respondents to participate only if they had visited a health care facility at least three times during the last four years. The survey was offered at random in the patients preferred language. The survey first asked patients how they rate their “experience” with the service. The responses were later coded from 5 = Excellent Experience to 1 = Bad Experience. Next, the patients ranked 15 statements shown in Appendix I on a scale of Strongly Agree = 5 to Strongly Disagree = 1. The 15 statements included two on each of the five SERVQUAL dimensions (in order, Tangibles, Responsiveness, Reliability, Assurance and Empathy) and also one each on the core service quality, fairness and equal treatment, and environment made up of other patients they come across. The receptionist and staff members, all bi-lingual, administered the questionnaire. They were also available to answer any questions on the statements in the questionnaire but were trained not to provide suggestive answers. To comply with confidentiality and privacy of health information laws, no individually identifiable information of the patient was requested, recorded or maintained in the response or analysis documents. From the 240 surveys 217 were found to be usable and were used in the results and analysis below.

### **IV. RESULTS AND DISCUSSION**

The responses were analyzed using SPSS 17. The two questions on each of the five SERVQUAL dimensions were averaged to get a mean score for each dimension. Next, the five scores were averaged to get a single SERVQUAL five dimension score. Thus, there were 9 dimensions in the study, namely Expectations, Tangibles, Responsiveness, Reliability, Assurance, Empathy, Fairness, Social environment (in the presence of other patients), and Core service quality. In the analysis stage, Tangibles, Responsiveness, Reliability and Core

service quality were averaged to form a composite Functional Outcomes dimension, and Assurance, Empathy, Fairness, and Social Interactions environment were averaged to form a composite Emotional Outcomes variable.

(a) Internal Consistency/Reliability

Responses on the 15 original statements were tested for internal consistency/reliability. Cronbach alpha was 0.904 (should be greater than 0.70) indicating good reliability of responses. Dimensionality of the scale used was tested using factor analysis. The response categories formed one component on extraction and this component explained 67% of the variation indicating that the scale items were unidimensional.

(b) Demographics of Respondents

Of the 217 respondents, 85 were male and 132 were female. 134 were below 30 years of age, 22 were between 30 and 50 and 61 were above 50 years. The type of health care services focused on were 102 doctor offices, 75 dentist offices, 20 hospitals and 20 other providers (such as chiropractors). In order to keep this paper to a reasonable length, we present in the sections below only overall results and variations by gender and omit variations by age.

(c) What factors (sub dimensions) contribute to “Experience”?

Multiple linear regression/ANOVA was performed with Experience score as the dependent variable and scores of the other 8 dimensions as independent variables. The results are shown in Table 2.

**TABLE 2. MULTIPLE REGRESSION/ANOVA: EXPERIENCE V. OTHER DIMENSIONS  
P VALUES (\* MEANS SIGNIFICANT AT 0.01 LEVEL)**

Dimension	Total n=217	Male n= 85	Female n=132
Tangibles	0.411	0.005*	0.124
Responsiveness	0.006*	0.191	0.002*
Reliability	0.001*	0.105	0.001*
Assurance	0.001*	0.001*	0.001*
Empathy	0.043	0.010	0.791
Fairness	0.018	0.109	0.001*
Interaction with other patients	0.120	0.383	0.879
Core service quality	0.001*	0.001*	0.027
R	0.840	0.907	0.847
Adjusted R Square	0.694	0.804	0.699

Multiple correlations (R) overall and by gender were high indicating that these sub dimensions are strongly positively related to Experience. Overall adjusted R square was 0.694 indicating that these sub dimensions explained 70% of the variance in Experience. In the case of males these sub dimensions explained 80% of the variance. Overall, correlations significant at 0.01 level were found between Experience and Responsiveness, Reliability, Core service quality (all of which are functional outcomes

dimensions) and Assurance (an emotional outcomes dimension). Males deviated from this by replacing Responsiveness and Reliability with a different functional outcome dimension – Tangibles. Apparently, males seem to be more concerned about the functionality and appearance of physical attributes in forming their Experience rating. Females, on the other hand, cared for Fairness rather than Tangibles in forming their Experience rating. From these results, we see that “total experience” of customers in health

care settings is based on both functional outcome and emotional outcome dimensions with a greater weight on functional outcomes such as core medical quality, reliability (accuracy of records and dependability), and responsiveness (waiting time and employee availability for questions and inquiries). We also get a better understanding of slight differences in sub-dimensions that affect the total experience of males and females.

(d) What contributes more to “Experience”: Functional or Emotional Outcomes?

Table 3 shows results of multiple regression/ANOVA performed with Experience as the dependent variable and Functional Outcomes and Emotional Outcomes (bundled) as independent variables.

**TABLE 3. MULTIPLE REGRESSION/ANOVA: EXPERIENCE V. FUNCTIONAL AND EMOTIONAL OUTCOMES (BUNDLED)  
P VALUES (\* MEANS SIGNIFICANT AT 0.01 LEVEL)**

Dimension	Total n=217	Male n= 85	Female n=132
Functional Outcomes	0.001*	0.001*	0.001*
Emotional Outcomes	0.030	0.001*	0.760
R	0.546	0.642	0.517
Adjusted R Square	0.742	0.807	0.724

Overall,  $R = 0.742$  indicated a strong relationship of the two independent variables with Experience. However, only the Functional Outcomes was significant at 0.01 level. While the standardized coefficient (not shown in the table) for Functional Outcomes was 0.628, the same for Emotional Outcomes was only 0.147. This finding is consistent with our earlier finding in subsection (b) that three Functional Outcomes were significantly correlated to Experience while only one Emotional Outcome was significantly correlated to Experience. This finding is also consistent with other studies on customer perceptions on health care quality (E.g., Carmen, 2000: “technical aspects” such as core medical care and medical outcome were more important to hospital patients than “accommodation aspects” like hospital room, food, privacy and parking). It was interesting to note that Emotional Outcomes (as a bundle) also contributed significantly to Experience of males while this was not evident for females. In subsection (b), we saw that, for females, correlations were significant between Experience and two Functional Outcomes (Responsiveness and

Reliability) and two Emotional Outcomes (Assurance and Fairness). However, when bundled with other dimensions of each outcome category, the importance of Functional Outcomes seems to down play or negate the importance of Emotional Outcomes for females. A possible reason for this is that females in the sample were mostly pregnant women and those accompanying their small children who possibly were more concerned about actual medical care dimensions like core medical outcomes, waiting times and accuracy of results than dimensions such as fairness, courtesy, personal attention and interaction with other patients

(e) What affects customer’s retention decision?

The score on statement 14 (“I will continue going to this place when I have a medical need”) was used to indicate a customer’s retention intentions (Retention). Retention is a primary objective of service managers. Correlation between Retention and Experience scores was 0.734 (high) and was significant at 0.01 level indicating the importance of the Experience dimension in positive retention decisions of the

customer. Table 4 shows the results of multiple regression/ANOVA with Retention as the dependent variable and the scores of the 8 dimensions investigated previously as independent variables.

**Table 4. Multiple Regression/ANOVA: Retention v. All Dimensions  
P values (\* means significant at 0.01 level)**

Dimension	Total n=217	Male n= 85	Female n=132
Tangibles	0.022	0.983	0.117
Responsiveness	0.206	0.175	0.035
Reliability	0.394	0.828	0.388
Assurance	0.001*	0.008*	0.004*
Empathy	0.209	0.001*	0.028
Fairness	0.001*	0.001*	0.217
Interaction with other patients	0.168	0.001*	0.009*
Core service quality	0.001*	0.001*	0.001*
R	0.868	0.987	0.877
Adjusted R Square	0.744	0.971	0.752

R was 0.868 and Adjusted R square was 0.744 indicating strong association of the group of dimensions with retention. Core service quality (a Functional Outcomes dimension) and Assurance and Interaction with other patients (two Emotional Outcomes dimensions) turned out to be significant for the retention decision in both males and females. This indicates that, as with total experience, both functional outcome and emotional outcome dimensions are significant in the retention decision. However, as a bundle, and somewhat surprising to common beliefs, males seem to include more Emotional Outcome dimensions (4) in their retention

decision than females (2). Another notable finding was that Fairness, which we earlier saw as a significant dimension in overall Experience for females, turned out to be less significant for them in their retention decision. The appropriate conclusion seems to be that all patients focus on core medical quality, courtesy and sincerity of service employees, and the pleasantness of the environment in deciding to return. Situations perceived as unfair or uncaring seem to influence males, to a greater extent, to perhaps not return.

Table 5 below shows results of the multiple regression/ANOVA run of Retention v. Functional and Emotional Outcomes (bundled).

**TABLE 5. MULTIPLE REGRESSION/ANOVA: RETENTION V. FUNCTIONAL AND EMOTIONAL OUTCOMES (BUNDLED)  
P VALUES (\* MEANS SIGNIFICANT AT 0.01 LEVEL)**

Dimension	Total n=217	Male n= 85	Female n=132
Functional Outcomes	0.001*	0.001*	0.001*
Emotional Outcomes	0.285	0.001*	0.607
R	0.678	0.807	0.689
Adjusted R Square	0.455	0.642	0.467



$R = 0.678$  indicated a high correlation between both dimensions taken together in retention decisions. Again, overall, it is the Functional Outcomes that turned out to be significant in the retention decision, most notably Core medical quality. The significance of the Emotional Outcomes as a bundle in the retention decision of males is consistent with our observation in the section above that males seem to include Empathy, Fairness and Interaction with other patients also in their retention decision. Bundled Functional Outcome dimensions and Emotional Outcome dimensions are seen to play identical roles in both total experience rating and retention decisions overall and for males and females. Contrary to the common belief, females seem to care less about emotional outcome dimensions than the core medical care and other functional outcome dimensions in forming their retention decisions.

(f) Is Experience as a perception different from the SERVQUAL five dimension perception?

The results indicated that the answer was, no. We averaged the five SERVQUAL item responses in to a single mean composite SERVQUAL score (mean = 3.876; SD = 0.651;  $n = 217$ ) and compared it with the mean Experience score (mean = 3.94; SD = 1.039;  $n = 217$ ). The paired sample t-test yielded a p value of 0.218 indicating that there was no significant difference in the mean scores of the two forms of perceptions. Correlation between the two dimensions was 0.740 ( $p = .001$ ) which was significant at .01 level. Independent samples t-test for Experience and composite SERVQUAL dimension across males and females yielded that neither dimension's mean scores were significantly different between males and females ( $p = 0.838$  and  $0.246$  respectively). Every SERVQUAL dimension (Reliability, Responsiveness, Assurance, Empathy and Tangibles) was highly correlated with Experience.

## V. MANAGEMENT IMPLICATIONS; LIMITATIONS OF THE STUDY

This exploratory study has shown that, in health care settings, total experience of customers (patients) affects retention. As such health care managers should focus not only on functional dimensions but also on emotional dimensions. However, a single dimension Experience is no more practically useful to health care managers than a five dimension SERVQUAL measure or individual key dimensions such as Core service quality and other dimensions that make up functional and emotional outcomes of the service. In fact, knowledge of individual sub dimensions gained here will be more useful to them in designing better systems and policies. Therefore, the first implication for health care managers is that they should not rely on short patient satisfaction surveys (three of the sites in the study had no patient satisfaction surveys and the other three had short surveys inquiring about overall satisfaction) that merely ask for overall satisfaction with the service. They should collect feedback, using surveys such as this, covering specific functional and emotional outcome dimensions

More specifically, dimensions which health care managers must focus seem to be Responsiveness (waiting times, response time to questions), Reliability (accuracy of results and records), Assurance (caring by non medical staff), Fairness and most importantly the Core service quality (physician and nursing services). These five dimensions taken together seem to contribute towards both total experience rating and retention decisions. Health care managers must note the presence of both functional outcome dimensions as well as emotional outcome dimensions in this bundle with a heavier weight towards functional outcome dimensions. Health care managers do focus regularly on improving core medical service quality but focus less on emotional dimensions of care. This study shows that they should realize the importance of dimensions such as Assurance (courtesy, respectfulness, genuine concern for patients'

interests). It was rewarding to see the two physician clinics and one hospital involved in the study moving towards more extensive and frequent customer service training as a result of their understanding the findings of this study. Fairness also turned out to be an important sub-dimension. It seems to be important for females in forming their total experience rating and for males in forming their retention decisions. Therefore, installing noticeable fair and equitable appointment scheduling, waiting time and other access policies appears to be very important in all clinics. For clinics that have a large female population, the greater focus of females on functional outcomes in both their total experience rating and retentions decisions must be addressed by improving core medical service quality, access and accuracy.

This study was limited to one industry in a limited geographical area and therefore its findings cannot be generalized to other types of services. In other services, the relative importance of functional and emotional dimensions may very well be different. Even in the health care industry, this study was limited to a few clinics and hospitals in a limited geographic region and therefore generalizing the findings to the industry as a whole will not be valid without further larger studies. The selection of dimensions to form the composite functional and emotional dimensions may also be questioned. For example, Responsiveness, which measured waiting times, may contribute both to the functional outcome perception of customers as well as to the emotional outcomes perceptions (due to the strain of excessive waiting). However, the importance of both dimensions, i.e., functional outcomes and emotional outcomes, is still a useful finding.

We also did not include in this paper an analysis and discussion of how concepts discussed in this paper may vary according to other demographic variations such as age of the customer and type of service. Therefore, conclusions made here for male and female populations may be subjected to further

modifications when analyzed across differences in age and type of service.

### **Acknowledgements**

The author is grateful to the Mihaylo College of Business and Economics at California State University at Fullerton for release time support for this research and to two anonymous reviewers for their constructive criticisms and valuable suggestions.

### **VI. REFERENCES**

- Alden, D.L., Hoa, D.M. and Bhawuk, D., "Client Satisfaction with Reproductive Health Care Quality." *Social Science & Medicine*, 59, 2004, 219-32.
- Arnould, E.J. and Price, L.L., "River Magic: Extraordinary Experience and the Extended Service Encounter", *Journal of Consumer Research*, 20(1), 1993, 24-45.
- Asubonteng, P., McCleary, K.J. and Swan, J.E., "SERVQUAL Revisited: A Critical Review of Service Quality." *The Journal of Services Marketing*, 10(6), 1996, 62-81.
- Babakus, E. and Mangold, W.G., "Adapting the SERVQUAL Scale to Hospital Services: An Empirical Investigation." *Health Services Research*, 26, 1992, 767-786.
- Berry, L., Carbone, L and Haeckel, S., "Managing the Total Customer Experience", *Sloan Management Review*, 43(3), 2002, 59-77.
- Bitner, M.J., "Servicescapes: The Impact of Physical Surroundings on Customers and Employees," *Journal of Marketing*, 56(2), 1992, 57-71.
- Bouman, M. and van der Wiele, T., "Measuring Service Quality in the Care Service Industry: Building and Testing an Instrument." *International Journal of Service Industry Management*, 3(4), 1992, 4-16.
- Brown, T.J., Churchill, G.A. and Peter, J.P., "Improving the Measurement of Service

- Quality.” *Journal of Retailing*, 69 (spring), 1993, 127-139.
- Brown, S.W. and Swartz, T.A., “A Gap Analysis of Professional Service Quality.” *Journal of Marketing*, 53 (April), 1989, 92-98.
- CAHPS: “Consumer Assessment of Healthcare Providers and Systems – Adult Primary Care Visit Questionnaire.” U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality, 2009, Available via [cahps@ahrq.gov](mailto:cahps@ahrq.gov)
- Carmen, J.M., “Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL dimensions.” *Journal of Retailing*, 66(1), 1990, 33-35.
- Carmen, J.M., “Patient Perceptions of Service Quality”, *Journal of Services Marketing*”, 14(4), 2000, 337-52.
- Cho, W.H., Lee H., Kim, C. and Lee, S., “The Impact of Visit Frequency on the Relationship between Service Quality and Outpatient Satisfaction: A South Korean Study.” *Health Services Research*, 39(1), 2004, 13-33.
- Chowdhury, M.M.U., “Customer Expectations and Management Perceptions in Healthcare Services of Bangladesh.” *Journal of Services Research*, 8(2), 2008, 121-40.
- Clark, W.R. and Clark, L.A., “Measuring Functional Service Quality using SERVQUAL in a High Dependence Health Service Relationship.” *The Health Care Manager*, 26(4), 2007, 306-17.
- Cronin, J.J. and Taylor, S.A., “Measuring Service Quality: A Reexamination and Extension.” *Journal of Marketing*, 56(3), 1992, 55-68.
- Dean, A.M., “The Applicability of SERVQUAL in Different Health Care Environments.” *Health Care Marketing Quarterly*, 16(3), 1999, 1-21.
- Drew, R.L. and Karwan, K.R., “Prioritizing the Dimensions of Service Quality: An Empirical Investigation and Strategic Assessment.” *International Journal of service Industry Management*, 5(4), 1994, 39-52.
- Fitzimmons, J.A. and Fitzimmons, M.J., *Service Management*, 6th edition, 2008, New York: McGraw Hill,
- Gabbot, M. and Hogg, G., “Grounds for Discrimination: Establishing Criteria for Evaluating Health Services.” *The Service Industries Journal*, 15(1), 1995, 90-101.
- Gagliano, K.B. and Hathcote, J., “Customer Expectations and Perceptions of Service Quality in Apparel Retailing.” *Journal of Service Marketing*, 8(1), 1994, 60-69.
- Gronroos, C., “The Perceived Service Quality Concept: A Mistake”, *Managing Service Quality*, 11(6), 2001, 150-52.
- Harrison-Walker, L.J., “Service Quality in the Hair Salon Industry.” *Journal of Business Disciplines*, 1, 2000, 37-52.
- Headley, D.E. and Miller, S., “Measuring Service Quality and Its Relationship to Future Consumer Behavior.” *Journal of Health Care Marketing*, 13(4), 1993, 32-41.
- Jun, M., Peterson, R.T. and Zsidisin, G.A., “The Identification and Measurement of Quality Dimensions in Health Care: Focus Group Interview Results.” *Health Care Management Review*, 23(4), 1998, 81-96.
- Kilbourne, W.E., Duffy, J.A., Duffy, M. and Giarchi, G., “The Applicability of SERVQUAL in Cross-national Measurements of Health-care Quality.” *Journal of Services Marketing*, 18(7), 2004, 524-33.
- Kueh, K. and Voon, B.H., “Culture and Service Quality Expectations; Evidence from Generation Y Consumers in Malaysia.” *Managing Service Quality*, 17(6), 2007, 656-80.
- Lee, J., “Measuring Service Quality in a Medical Setting in a Developing Country: The Applicability of SERVQUAL.” *Service Marketing Quarterly*, 27(2), 2005, 12-24.
- Lee, H., Delene, L.M., Bunda, M.A. and Kim, C., “Methods of Measuring Health Care Service Quality.” *Journal of Business Research*, 48, 2000, 233-46.

- Lehtinen, U. and Lehtinen, J.R., "Two Approaches to Service Quality Dimensions", *The Service Industries Journal*, 11(3), 1991, 287-285.
- Licata, J.W., Mowen, J.C. and Chakraborty, G., "Diagnosing Perceived Quality in the Medical Service Channel." *Journal of Health Care Marketing*, 15(4), 1995, 42-49.
- Llosa, S. and Chandon, J., "An Empirical Study of SERVQUAL's Dimensionality." *The Service Industries Journal*, 18(2), 1998, 16-42.
- Lytle, R.S. and Mokwa, M.P., "Evaluating Health Care Quality: Moderating Role of Outcomes." *Journal of Health Care Marketing*, 12(1), 1992, 4-14.
- Marigold, B.E., "Adapting SERVQUAL Scale to Hospital Services: An Empirical Investigation." *Health Services Research*, 26(6), 1992, 768-86.
- McCarthy, C.J., Oldham, J.A. and Sephton, R., "Expectations and Satisfaction of Patients with Low Back Pain Attending a Multidisciplinary Rehabilitation Service." *Physiotherapy Research International*, 10(1), 2005, 23-31.
- Mels, G, Boshoff, C. and Nel, D., "The Dimensions of Service Quality: The Original European Perspective Revisited", *The Service Industries Journal*, 17(1), 1997, 173-86.
- Mittal, B. and Lassar, W.M., "The Role of Personalization in Service Encounters." *Journal of Retailing*, 72(1), 1996, 95-109.
- Parasuraman A., Zeithaml, V.A., and Berry, L.L., "SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality." *Journal of Retailing*, 64(1), 1988, 12-39.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A., "Understanding Customer Expectations of Service." *Sloan Management Review*, 32(3), 1991, 29-38.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., "A Conceptual Model of Service Quality and Its Implications for Future Research." *Journal of Marketing*, 49(4), 1985, 41-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., "Refinement and Reassessment of the SERVQUAL Scale." *Journal of Retailing*, 67(4), 1991, 39-48
- Pine, J. and Gilmore, J. "Welcome to the Experience Economy", *Harvard Business Review*, July-August 1998, 97-105.
- Prahalad, C.K. and Ramaswamy, V., "Co-opting Customer Competence", *Harvard Business Review*, 78(1), 2000, 79-87.
- Quader, M.S., "Manager and Patient Perceptions of a Quality Outpatient Service." *Journal of Services Research*, 9(1), 2009, 109-37.
- Robeldo, M.A., "Measuring and Managing Service Quality: Integrating Customer Expectations." *Managing Service Quality*, 11(1), 2001, 22-31.
- Sandstrom, S, Edvardsson, B., Kristensson, P. and Magnusson, P., "Value in Use Through Service Experience", *Managing Service Quality*, 18(2), 2008, 112-126.
- Seth, N, Deshmukh, S.G. and Vrat, P., "Service Quality Models: A Review." *International Journal of Quality and Reliability Management*, 22(9), 2005, 913-49.
- Sureshchandar, G.S., Rajendran, C. and Anantharaman, R.N., "The relationship between service quality and customer satisfaction – a factor specific approach", *Journal of Services Marketing*, 16(4), 2002, 363-379.
- Taylor, S.A., "Distinguishing Service Quality from Patient Satisfaction in Developing Health Care Marketing Strategies." *Hospital and Health Services Administration*, 39(2), 1994, 221-36.
- Vargo, S.L. and Lusch, R.F., "Evolving to a New Dominant Logic of Marketing", *Journal of Marketing*, 68(1), 2004, 324-35.
- Vartiainen, P. and Hart, M., "Outpatient Satisfaction in the UK and Finland – A Comparative Study Using the SERVQUAL Methodology." Paper presented at the International Nursing and Midwifery

Conference, Edinburgh, UK, April 10-12, 1996.

Walbridge, S.W. and Delene, L.M., "Measuring Physician Attitudes of Service Quality." *Journal of Health Care Marketing* Winter, 1993, 6-15.

Walter, U., Edvardsson, B. and Ostrom, A., "Drivers of Customer's Service Experiences: A Study in the Restaurant Industry", *managing Service Quality*, 20(3), 2010, 236-58.

Wisniewski, M. and Wisniewski, H., "Measuring Service Quality in a Hospital Colposcopy Clinic." *International Journal of Health Care Quality Assurance*, 18(3), 2005, 217-228.

Wong, A., "The Role of Emotional Satisfaction in Service Encounters", *Managing Service Quality*, 14(5), 2004, 365-76.

Zeithaml, V.A., Parasuraman A. and Berry, L.L., "The Nature and Determinants of Customer Expectations of Service." *Journal of the Academy of Marketing Science*, 21(1), 1993, 1-12.

Zhou, L., "A Dimension-specific Analysis of Performance-only Measurement of Service Quality and Satisfaction in China's Retail Banking." *Journal of Services Marketing*, 18(7), 2004, 534-46.