

SERVPERF VERSUS SERVQUAL: A MARKETING MANAGEMENT DILEMMA WHEN ASSESSING SERVICE QUALITY

KEVIN M. ELLIOTT, *Mankato State University*

Major concerns are being voiced in the marketing literature regarding conceptual, methodological, and practical issues of measuring service quality. This paper addresses the practical usefulness to marketing managers of measuring performance perceptions only (SERVPERF) versus customer expectations and performance perceptions (SERVQUAL) when assessing service quality. The results of this study suggest that SERVQUAL may have more diagnostic value to marketers for strategic decision-making. Implications of the results for marketing managers are discussed.

INTRODUCTION

There is a current debate in the marketing literature as to the best approach for assessing service quality. Parasuraman, Zeithaml, and Berry (1994) responded to concerns raised by Cronin and Taylor (1992) and Teas (1993) regarding the validity of the SERVQUAL (performance perceptions - expectations) instrument. Cronin and Taylor (1994) and Teas (1994) then offer their reactions to Parasuraman et al. (1994) by expanding on alternative service quality assessment techniques, such as SERVPERF (performance perceptions only), EP (evaluated performance), and NQ (normed quality).

The debate among these authors have resulted in the identification of a number of legitimate and important questions concerning alternative conceptual and operational definitions of perceived service quality. Given the importance of service quality assessment in marketing theory and practice, it seems imperative that these questions be addressed, both from theoretical and practical application perspectives.

The purpose of this paper is to assess the practical value to marketing managers of the SERVPERF and SERVQUAL approaches to measuring perceived service quality. Specifically, this article addresses the practical usefulness to marketing managers of measuring expectations and performance perceptions versus

measuring performance perceptions only when assessing service quality.

SERVICE QUALITY

Service quality has generally been described as a global judgment, or attitude, relating to the superiority of a service. For example, Zeithaml (1988) defined perceived service quality as the customer's assessment of the overall excellence or superiority of the service. A number of companies have created programs that elicit customers' assessments of service quality.

Service quality appears to be one of the most important challenges facing organizations today because recent studies have shown that high levels of service quality has a positive influence on customer satisfaction (Cronin et al. 1992; Parasuraman, Zeithaml, and Berry 1988). This is especially true for firms that attempt to deliver high levels of service quality in order to provide themselves with a competitive edge (Brown and Swartz 1989).

Sherden (1988) argues that companies who achieve a high level of service quality will gain an edge over their competition in three key ways: 1) *value-added differentiation* - because service quality is valuable to customers, it can be a basis for differentiating a product or service; 2) *enhanced productivity* - high quality goes hand in hand with high productivity and thus lower costs; and 3) *improved human resource environment* - excellent service enables a company to attract and retain talented staff.

The quality of service is highly dependent on the performance of employees, which is an organizational

resource that cannot be calibrated and controlled to the same degree as tangible products. Uniform quality standards rarely can be established and enforced by service firms to the same degree as a manufacturer of a tangible product. Therefore, the quality of service may vary among employees, among customers, and from day to day (Zeithaml, Berry, and Parasuraman 1988).

Recent studies have identified consumer expectations as an intricate part of measuring the service quality construct (Davis and Allen 1989; Brown et al. 1989; John 1989; Bitner, Booms, and Tetreault 1990). The rationale for the importance of consumer expectations is that customers appear to have well-defined perceptions concerning criteria which are important to them regarding quality service (Sinkula and Lawtor 1988).

Current research has left confusion as to the relationship between service quality and customer satisfaction. Specifically, the question is: "Is customer satisfaction an antecedent of service quality, or is service quality an antecedent of customer satisfaction"? Parasuraman et al. (1988) suggest that incidents of satisfaction over time result in perceptions of service quality. Bitner (1990) and Bolton and Drew (1991a,b), on the other hand, argue that prior customer satisfaction levels mediate current perceptions of service quality. However, current findings (Cronin et al. 1992) tend to support Parasuraman et al. (1988) that service quality is an antecedent of customer satisfaction.

Measuring Service Quality

A survey of the marketing literature identifies two primary approaches to measuring service quality. SERVQUAL (gap analysis) argues that perceived service quality should be defined in terms of the difference between consumer expectations and performance perceptions. SERVPERF (performance-based measures) conceptualizes service quality using only performance perceptions. The two approaches are briefly described below.

1) *SERVQUAL* - Some studies have identified consumer expectations as an intricate part of measuring the service quality construct (Bitner et al. 1990; Davis et al. 1989; John 1989; Parasuraman et al. 1994). These studies define service quality in terms of how well the service level delivered matches customer expectations. The rationale for the importance of consumer expectations is that customers may have well-defined perceptions concerning criteria which are important to them regarding quality service (Sinkula and Lawtor 1988).

Parasuraman et al. (1988) examined the service construct by devising a 44-item (SERVQUAL) instrument. This instrument uses gap analysis to assess service quality. The difference between consumers' expectations about the performance of a service firm and their assessment of the actual performance for that firm results in a certain level of perceived service quality. Five service quality dimensions (tangibles, reliability, responsiveness, assurance, and empathy) were identified in the SERVQUAL instrument.

2) *SERVPERF* - Carman (1990), however, argues that the expectations-performance approach offers little theoretical support as a basis for measuring service quality. A number of recent studies (Bolton et al. 1991a,b; Cronin et al. 1994) suggest service quality should be measured as an attitude using performance-based measures. Woodruff, Cadotte, and Jenkins (1983) also lend support for performance-based measures by suggesting that consumer expectations introduce redundancy in measuring service quality.

Cronin et al. (1992) developed a 22-item (SERVPERF) instrument which they purport to be a more efficient and valid method of measuring service quality. The SERVPERF scale utilizes the 22 perceived performance items used in the SERVQUAL instrument. An added value of SERVPERF is that practitioners commonly measure the determinants of customer satisfaction and service quality by having their customers assess the company's performance.

SERVPERF vs. SERVQUAL

A logical question for marketing managers to ask when assessing the practical value of the SERVPERF and SERVQUAL approaches to measuring service quality is: "Which instrument will provide the most useful information and diagnostic value?" The SERVPERF instrument has been identified as being superior in explaining variance in an overall measure of perceived service quality (Cronin et al. 1994). SERVQUAL, on the other hand, has been shown to more accurately identify service shortfalls and deficiencies within a company (Parasuraman et al. 1994).

Which of those two issues (explained variance or deficiencies) should be of more concern and value to a manager of a service organization? This is seemingly a critical question, since using one approach over the other may lead to different actions by a firm trying to enhance the level of service being delivered. The point is that it may be time for marketing managers to investigate the practical issues (as opposed to strictly

theoretical issues) related to the measurement of service quality.

METHODOLOGY

One service industry that has received increasingly negative publicity in the last few years is the airline industry. *Consumer Reports* (1991) concluded that airlines today satisfy their customers less than any service firm they have rated in recent years. This same report noted that consumers are generally disappointed in the quality of their flying experience.

Airline carriers today, however, appear to be emphasizing the delivery of better service (e.g., on-time arrival, easy of reservations, tour packages, etc.) in an effort to win new customers and to increase loyalty with existing customers. Given this apparent effort by airline carriers to improve on the level of service quality being delivered, the airline industry was deemed an appropriate service industry to investigate the value of the SERVPERF and SERVQUAL measurement instruments.

Sample

Data were gathered from mail questionnaires concerning service quality of airline carriers. A list of 3,400 names of frequent flyers was obtained from a national mailing list company. A random sample of 2,450 names was then selected from the list and mailed the service quality questionnaire. The overall response to the mail survey was 18.8 percent, with 461 usable questionnaires being returned. No follow-ups or incentives for completion of the questionnaire were offered.

Questionnaire

In order to assess service quality, a 39-item instrument was used. The items were Likert-type statements on a seven-point scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (7). The measurement instrument captured most of the service quality items proposed by SERVPERF (Cronin et al. 1992) and SERVQUAL (Parasuraman et al. 1988), as well as major complaints of the flying public as identified by Bolton and Chapman (1989) and *Consumer Reports*, July 1991. The first 19 items measured consumer expectations of airlines. The next 19 items measured consumer perceptions of airline performance. The last item measured overall satisfaction using the response cue "How would you rate your level of satisfaction overall with your primary airline carrier? Responses to this question were formulated using a 7-point scale from "Very Unsatisfied" (1) to "Very Satisfied" (7).

Data Analysis Techniques

A two step testing procedure was used to analyze the data for this study. First, mean dimension scores were computed to assess perceived level of service quality across dimensions of airline carrier service. Performance perception scores (SERVPERF) and difference scores (SERVQUAL) were computed for each dimension. A difference score is defined as the degree and direction of discrepancy between consumers' perceptions of performance and expectations for a particular attribute. A positive score means that perceptions of performance exceed expectations. A negative value means that expectations were greater than performance perceptions.

Next, two stepwise regression models were employed to assess the predictive ability of both the SERVPERF and SERVQUAL instruments. The 19 independent variables for the SERVPERF model were performance scores, while the 19 independent variables for the SERVQUAL model included gap scores. The dependent variable for both regression models was overall satisfaction.

RESULTS

Table 1 summarizes SERVPERF and SERVQUAL scores for each of the five service quality dimensions identified by Parasuraman et al. (1988). As shown in Table 1, the SERVQUAL scores exhibit greater variation across the service dimensions than do the SERVPERF scores. This finding is consistent with Parasuraman et al. (1994), which argues that the greater variation is superior in terms of pinpointing areas of service quality deficiency.

TABLE 1
MEAN SERVPERF AND SERVQUAL
DIMENSION SCORES

Service Dimension	Mean SERVPERF Scores	Mean SERVQUAL Scores
Tangibles	5.10	-.773
Reliability	4.97	-1.437
Responsiveness	4.81	-1.560
Assurance	5.41	-.955
Empathy	4.88	-1.065

The results in Table 1 also suggest that examining only performance scores may lead to different perceptions and decisions with regard to areas of quality enhancement that need immediate attention. For example, when examining the SERVPERF dimension scores of "Reliability" (4.97) and "Empathy" (4.88), one would seemingly conclude that the latter needs more attention than the former. However, this may not be true, as the SERVQUAL scores show a larger gap and more serious deficiency in "Reliability" (-1.437) than "Empathy" (-1.065).

Predictive Ability

Table 2 shows the summarized stepwise regression analysis results used to assess the predictive ability of the SERVPERF and SERVQUAL instruments with regard to customer satisfaction. Both Model 1 and 2 assume the relationship as proposed by Cronin et al. (1992) and Parasuraman et al. (1988) that service quality is an antecedent of customer satisfaction. Model 1 uses performance-based measures (SERVPERF) to assess service quality, while Model 2 uses gap analysis (SERVQUAL). Satisfaction in this study is measured and viewed as global satisfaction across several prior experiences.

As shown in Table 2, a significant relationship was found between both regression models and customer satisfaction ($p < .001$ for both models). Model 1 (SERVPERF), however, explains more of the variation in customer satisfaction than does Model 2 (SERVQUAL). Model 1 has an adjusted R^2 of .65598, while Model 2 has an adjusted R^2 of .42761.

TABLE 2
VARIATION EXPLAINED IN
CUSTOMER SATISFACTION
USING SERVPERF VS. SERVQUAL

	Model 1 (SERVPERF)	Model 2 (SERVQUAL)
Adjusted R square	.65598	.42761
Significance	$p < .001$	$p < .001$

The results in Table 2 are similar to Cronin et al. (1994) who found SERVPERF to be superior to SERVQUAL in explaining variance in overall service quality. In this

study, SERVPERF was found to be superior in explaining overall customer satisfaction. SERVPERF appears to have the edge with regard to predictive ability of customer satisfaction and overall service quality.

DISCUSSION

A logical question for marketing managers to ask when assessing the practical value of the SERVPERF and SERVQUAL approaches to measuring service quality is: "Which instrument will provide the most useful information and diagnostic value?" The unresolved debate over conceptual and theoretical issues of SERVPERF and SERVQUAL is a valid concern; however, this debate seemingly does not impact marketing managers to the same degree as the issue of practical value of the two approaches.

It appears that both approaches have strengths and weaknesses with regard to practical value to managers in service industries. SERVPERF performs better in explaining variance in customer satisfaction and overall service quality, while SERVQUAL appears to be better at pinpointing areas of service deficiency (performance - consumer expectations). However, service managers would probably be more interested in identifying areas of deficiencies than explaining variance.

The key to any successful organization is to satisfy customer needs. In today's highly competitive environment, it is important to identify what is important to customers, inform customers that you intend to deliver what is important, then deliver what you promise (Kurtz and Clow 1992). Following this paradigm of customer satisfaction, it appears to be of paramount importance to identify customer expectations of various service quality attributes.

SERVQUAL would provide customer expectations needed in strategic decision making for marketing managers. SERVPERF would not be able to provide customer expectations, therefore, diagnostic value is seemingly lost. Moreover, areas of service deficiency could not be identified through SERVPERF. Service deficiency is another issue that should impact strategic decisions.

This is not to say that SERVPERF cannot impart valuable information for managers, since performance perceptions guide future decision making as well. However, SERVQUAL does provide customer expectations, as well as performance perceptions. SERVQUAL gives marketing managers information that SERVPERF provides, plus more!

Teas (1993) raises the issue that SERVQUAL may be problematic when a service attribute is a classic ideal point attribute - that is, when the customer's ideal point is at a finite level. Performance beyond this point may displease the customer (e.g., a salesperson is too friendly). However, this potential problem relates more to the conceptual/theoretical issue, rather than the practical value of the instrument. Identifying that the ideal service level for a particular attribute has been exceeded should be valuable information for a marketing manager. Appropriate changes could be made to address this problem.

The results of this exploratory study appear to suggest that SERVQUAL is preferable to SERVPERF with

regard to providing diagnostic value and managerial insights to service marketers for strategic decisions. However, given the increasing importance of the marketing of professional services, additional research is needed to assess the practical issues related to the measurement of service quality. The debate will obviously continue regarding conceptual, measurement, and practical value issues related to measuring service quality by both the SERVPERF and SERVQUAL scales. It is hoped that this article will be helpful in addressing the practical value issues as they relate specifically to marketing managers.

REFERENCES

- Bitner, Mary Jo, Bernard H. Booms, and Mary Stanfield Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," *Journal of Marketing*, 54 (January), 71-84.
- Bolton, Ruth N. and Randall G. Chapman (1989), "The Structure of Customer Complaint Behavior in the Airline Industry," *Developments in Marketing Science*, 12, 546-551.
- _____ (1990), "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses," *Journal of Marketing*, 54 (April), 69-82.
- _____ and James H. Drew (1991a), "A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes," *Journal of Marketing*, 55 (January), 1-9.
- _____ and _____ (1991b), "A Multistage Model of Customers' Assessments of Service Quality and Value," *Journal of Consumer Research*, 17 (March), 375-384.
- Brown, Stephen W. and Teresa A. Swartz (1989), "A Gap Analysis of Professional Service Quality," *Journal of Marketing*, 53 (April), 92-98.
- Carman, James M. (1990), "Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions," *Journal of Retailing*, 66 (1), 33-55.
- Cronin, J. Joseph and Steven A. Taylor (1992), "Measuring Service Quality: A Reexamination and Extension," *Journal of Marketing*, 56 (July), 55-68.
- _____ and _____ (1994), "SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality," *Journal of Marketing*, 58 (January), 125-131.
- Davis, Duane and Jeff Allen (1989), "Toward The Development of Recipient Based Measures of Service Quality In Business Education," *Developments In Marketing Science*, Vol. 12 Eds. Jon M. Hawes and John Thanopoulos, Orlando, FL: Academy of Marketing Science, 266-270.
- Gourdin, Kent N. (1988), "Bringing Quality Back to Commercial Air Travel," *Transportation Journal*, (Spring), 23-29.
- John, Joby (1989), "Perceived Quality In Health Care Service Consumption: What Are The Structural Dimensions?" *Developments In Marketing Science*, Vol. 12, Eds. Jon M. Hawes and John Thanopoulos, Orlando, FL: Academy of Marketing Science, 518-521.
- Kurtz, David L. and Kenneth E. Clow (1993), "Managing Consumer Expectations of Services," *The Journal of Marketing Management*, 2 (2), 19-25.
- Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64 (Spring), 12-37.
- Sherden, William A. (1988), "Gaining the Service Quality Advantage," *The Journal of Business Strategy*, (March/April), 45-48.
- _____, _____, and _____ (1994), "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research," *Journal of Marketing*, 58 (January), 111-124.
- Sinkula, James M. and Leanna Lawtor (1988), "Bank Characteristics and Consumer Bank Choice: How Important Are Importance Measures?" *Journal of Professional Services Marketing*, 3 (March/April), 131-141.
- Swartz, Teresa A. and Stephen W. Brown (1989), "Consumer and Provider Expectations and Experiences in Evaluating Professional Service Quality," *Journal of the Academy of Marketing Science*, 17 (Spring), 189-195.
- Teas, R. Kenneth (1993), "Consumer Expectations and the Measurement of Perceived Service Quality," *Journal of Professional Services Marketing*, 8 (2), 33-53.
- _____ (1993), "Expectations, Performance Evaluation, and Consumers' Perceptions of Quality," *Journal of Marketing*, 57 (October), 18-34.
- _____ (1994), "Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment," *Journal of Marketing*, 58 (January), 132-139.

- "The Best and Worst Airlines," *Consumer Reports*, July 1991, 462-469.
- Woodruff, Robert B., Ernest R. Cadotte and Roger L. Jenkins (1983), "Modeling Consumer Satisfaction Processes Using Experience-Based Norms," *Journal of Marketing Research*, 20 (August), 296-304.
- Zeithaml, Valarie A. (1988), "Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, 52 (3), 2-22.
- _____, Leonard L. Berry and A. Parasuraman (1988), "Communication and Control Processes in the Delivery of Service Quality," *Journal of Marketing*, Vol. 52 (April), 35-48.
- _____, _____ and _____ (1993), "The Nature and Determinants of Customer Expectations of Service," *Journal of the Academy of Marketing Science*, 21 (1), 1-12.

ABOUT THE AUTHOR

Kevin M. Elliott (Ph.D., University of Arkansas) is Associate Professor of Marketing at Mankato State University.