
Customer satisfaction and its measurement in hospitality enterprises

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Abstract

Reviews and discusses the topic of customer satisfaction and its application to the hospitality and tourism industries. Defines the concept and analyzes its importance to services in general and to hospitality/tourism services in particular. Following a discussion on the dimensions and attributes of satisfaction, lists the main methods of measuring satisfaction and concludes with a review of global and cross-cultural issues that affect satisfaction.

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Measuring service quality via customer satisfaction

Customer satisfaction is the leading criterion for determining the quality that is actually delivered to customers through the product/service and by the accompanying servicing (Vavra, 1997). Simply stated, customer satisfaction is essential for corporate survival. Several studies have found that it costs about five times as much in time, money and resources to attract a new customer as it does to retain an existing customer (Naumann, 1995). This creates the challenge of maintaining high levels of service, awareness of customer expectations and improvement in services and product.

Knowledge of customer expectations and requirements, Hayes states, is essential for two reasons – it provides understanding of how the customer defines quality of service and products, and facilitates the development of a customer satisfaction questionnaires (Hayes, 1997, p. 7). Furthermore, customer satisfaction is recognized as of great importance to all commercial firms because of its influence on repeat purchases and word-of-mouth recommendations (Berkman and Gilson, 1986).

Satisfaction, reinforces positive attitudes toward the brand, leading to a greater likelihood that the same brand will be purchased again ... dissatisfaction leads to negative brand attitudes and lessens the likelihood of buying the same brand again (Assael, 1987, p. 47).

Or as others put it:

...if consumers are satisfied with a product or brand, they will be more likely to continue to

purchase and use it and to tell others of their favorable experience with it ... if they are dissatisfied, they will be more likely to switch brands and complain to manufacturers, retailers, and other consumers about the product (Peter and Olson, 1987, p. 512).

Satisfaction of customers also happens to be the cheapest means of promotion. Various researchers have found this ratio to range from about 10 to 1 (Knutson, 1988, p. 17) to 5 to 1 (Naumann, 1995, p. 22).

There are several ways to assess the quality of services and customer satisfaction through subjective, or soft, measures of quality, which focus on perceptions and attitudes of the customer rather than more concrete objective criteria. These soft measures include customer satisfaction surveys and questionnaires to determine customer attitudes and perceptions of the quality of the service they are receiving (Hayes, 1997, p. 2). Because the extent to which goods or services meet the customer's needs and requirements is the index by which quality is determined, customers' perceptions of service is vital in identifying customer needs and satisfaction.

To be successful, a customer satisfaction measurement (CSM) programme must come from and be incorporated into the firm's corporate culture (Naumann, 1995, p. 12). In today's competitive environment one of the most important goals of corporate cultures is retaining and satisfying current and past customers. Experience shows that only "consumer oriented" corporations can achieve this goal. These companies focus on the needs and wants of specific target groups and then work hard to maximize satisfaction with the product or service being offered (Vavra, 1997, p. 12). Instead of waiting for customer complaints to let them know when something isn't satisfactory or wrong, a



“consumer oriented” corporate culture, seeks continuous feedback from its customers through repeated customer satisfaction measurements (Vavra, 1997, p. 13).

In reality, application of CSM often does not accomplish the objectives of the researcher or company. The reasons for this shortfall are numerous. First, organizations often set customer satisfaction goals without any clear understanding of their current customers’ satisfaction levels (Dutka, 1994). Second, The companies that do measure customer satisfaction, don’t always act on the results obtained (Dutka, 1994). Finally, as organizations become more experienced with CSM, problems become increasingly apparent. For example, Jones and Sasser (1995) indicate that satisfaction data does not always correlate highly with organizational performance. This was supported by customers who responded that they were satisfied with the organization, yet purchased goods and services elsewhere. Finding a strong relationship between satisfaction scores and performance does not ensure economic success. In the long run the level of satisfaction may decline, customers’ attitudes and desires change, and new competition may emerge.

Quality may no longer provide a clear competitive advantage. Butz and Goodstein (1996), found that increasing numbers of managers reported that product innovation and quality no longer provided the basis for a competitive advantage. Because of this situation, the search for a competitive advantage has shifted from internal processes and structure to markets and customers. As a result there has been an increasing number of organizations that are reorienting strategy toward superior value delivery (Band, 1991; Day, 1990; Gale, 1994; Naumann, 1995). These authors usually cite one or more of the following four kinds of evidence to support their position:

- (1) Widely publicized success stories (e.g. AT&T, Federal Express, Xerox, Eastman Chemical Company);
- (2) analysis of profit impact of marketing strategy (PIMS) data that shows a strong relationship between quality, market share, and profitability (Gale, 1994);
- (3) studies finding a positive relationship between market orientation and organizational performance (Jaworski and Kohli, 1993; Narver and Slater, 1990); and
- (4) analyses of costs demonstrating that customer retention is substantially less expensive than customer acquisition (Birch, 1990). Because of all the overwhelming number of authors encouraging organizations to provide customer value,

the question becomes how to do it? This paper will provide valid methods that an organization can use to measure the value it provides to its customers.

What is customer satisfaction?

Social psychologists, marketing researchers, and students of consumer behaviour, have extensively studied the concepts of customer satisfaction and dissatisfaction. The increasing importance of quality in both service and manufacturing industries has also created a proliferation of research, with more than 15,000 academic and trade articles having been published on the topic of customer satisfaction in the past two decades (Peterson and Wilson, 1992). Several conferences have been devoted to the subject and extensive literature reviews have been published (Day, 1977; Hunt, 1977; LaTour and Peat, 1979; Smart, 1982; Ross, *et al.*, 1987; Barsky, 1992; Oh and Parks, 1997) The result of all this research has been the development of nine distinct theories of customer satisfaction. The majority of these theories are based on cognitive psychology, some have received moderate attention, while other theories have been introduced without any empirical research. The nine theories include:

- 1 expectancy disconfirmation;
- 2 assimilation or cognitive dissonance;
- 3 contrast;
- 4 assimilation-contrast;
- 5 equity;
- 6 attribution;
- 7 comparison-level;
- 8 generalized negativity; and
- 9 value-precept (Oh and Parks, 1997).

Recently, numerous researchers have attempted to apply CS theories developed by consumer behaviourists in the areas of lodging (Barsky, 1992; Barsky and Labagh, 1992; Saleh and Ryan, 1991; Ekinci and Riley, 1998), restaurant (Dube *et al.*, 1994; Bojanic and Rosen, 1994; Lee and Hing, 1995; Oh and Jeong, 1996), foodservice (Almanza *et al.*, 1994), and tourism (Pizam and Milman, 1993; Danaher and Arweiler, 1996; Ryan and Cliff, 1997; Hudson and Shepard, 1998) in order to investigate CS applicability to the hospitality and tourism industries.

Customer satisfaction is a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service (WTO, 1985). While there are a variety of approaches to the explanation of customer satisfaction/dissatisfaction, the most widely used is the one proposed by Richard Oliver who has

developed the expectancy disconfirmation theory (Oliver, 1980). According to this theory, which has been tested and confirmed in several studies (Oliver and DeSarbo, 1988; Tse and Wilton, 1988), customers purchase goods and services with pre-purchase expectations about anticipated performance. Once the product or service has been purchased and used, outcomes are compared against expectations. When outcome matches expectations, confirmation occurs. Disconfirmation occurs when there are differences between expectations and outcomes. Negative disconfirmation occurs when product/service performance is less than expected. Positive disconfirmation occurs when product/service performance is better than expected. Satisfaction is caused by confirmation or positive disconfirmation of consumer expectations, and dissatisfaction is caused by negative disconfirmation of consumer expectations.

Customer satisfaction can also be defined as satisfaction based on an outcome or a process. Vavra's (1997, p. 4) outcome definition of customer satisfaction characterizes satisfaction as the end-state resulting from the experience of consumption. This end state may be a cognitive state of reward, an emotional response to an experience or a comparison of rewards and costs to the anticipated consequences. Vavra also puts forth a definition of customer satisfaction based as a process, emphasizing the perceptual, evaluative and psychological processes contributing to customer satisfaction (1997, p. 4). In this definition, assessment of satisfaction is made during the service delivery process.

A minority of researchers perceive the satisfaction process to be subjective in expectations but objective in the perceptions of the product attributes, or outcome. Thus, Klaus (1985, p. 21) defines satisfaction as "the customer's subjective evaluation of a consumption experience, based on some relationship between the customer's perceptions and objective attributes of the product". Others point out that both what is perceived (outcome) and what is expected are subjective and therefore psychological phenomena - not reality (Maister, 1985). The importance of the subjective nature of the process cannot be overstated. Since both expectations and perceptions are psychological phenomena, they are both susceptible to external influences and manipulation. As an illustration of how expectations can be explicitly manipulated Sasser *et al.* (1979, p. 89) note that: "Some restaurants follow the practice of promising guests a waiting time in excess of the "expected time". If people are willing to

agree to wait this length of time, they are quite pleased to be seated earlier, thus starting the meal with a more positive feeling" (Maister, 1985, p.114). An example of creating low customer expectations is a restaurant in Orlando, Florida, which calls itself Warm Beer & Lousy Food. Once a customer has experienced a reasonable meal at the above restaurant he/she is pleasantly surprised and comes out very satisfied. Manipulating perceptions of outcome is also a common practice in some hotels where front office clerks mention nonchalantly that a particular suite in the hotel is a favorite of a famous personality. The intention here is to influence the perception of the customer and suggest that the hotel must be good since an "expert" regularly frequents it.

Satisfaction is not a universal phenomenon and not everyone gets the same satisfaction out of the same hospitality experience. The reason is that customers have different needs, objectives and past experiences that influence their expectations. To a student on a limited budget, a lunch composed of fast food items at the crowded and noisy school cafeteria may be a highly satisfying experience, while the same experience may be perceived as totally dissatisfying to an affluent executive discussing a business transaction. The same customer may also have different needs and expectations on different meal occasions, or at different times of the day (Davis and Stone, 1985, p. 31). The student in our previous example will not be highly satisfied when his college friends take him out for a "birthday" meal celebration at the school cafeteria. Therefore it is important to gain a clear idea of the customer needs and objectives that correspond to different kinds of satisfactions. This necessitates the segmentation of the market, because no service or product can offer everyone the same degree of satisfaction (WTO, 1985).

To recapitulate what we have established by now is that an individual's satisfaction with outcomes received from a hospitality experience results from a comparison of these outcomes with expectations. Expectations can be described as a mutable internal standard which is based on a multitude of factors including needs, objectives, past personal or vicarious experiences with the same establishment restaurant, with similar establishments, and the availability of alternatives (i.e. are there any other establishments in town?). This view is supported by Mazursky who suggests that:

Experiences beyond those with the focal brands may lead to different normative standards employed by consumers in evaluating performance. Possible norms, according

to this view, include perceived best brand, the most recently used brand, a brand used by a reference person, products competing for the same needs, and the like (p. 338).

Changes in satisfaction with the meal experience may result from changes in the perception of the actual quality of outcomes received, or from changes in the expectations against which these outcomes are compared. Alterations in the expectations can result from change in needs (i.e. hungry versus full; tired versus rested) change of objectives (i.e. business trip vs leisure trip), new personal or vicarious experiences (i.e. recently had a superb hospitality experience at another hotel) and any other influences that make salient a particular quality of outcomes (i.e. it's a very hot day and the restaurant is not air conditioned) (McCallum and Harrison, 1985).

Past research in customer satisfaction and service quality has resulted in increasing research efforts to look at new ways to evaluate these concepts. Historically, the assumption has been that a linear relationship exists between satisfaction/dissatisfaction and disconfirmation or performance evaluations. Researchers such as Oliva *et al.* (1992) proposed a catastrophe model theorizing the nature of the relationship of satisfaction with transaction costs and brand loyalty. This theory hypothesizes that satisfaction and dissatisfaction occur at different points, specifically these behaviours are associated with transaction costs and brand loyalty and are not monotonic. Research by various authors (Cronin and Taylor, 1992; Oliver and Swan, 1989; Cadotte *et al.*, 1987) using structural modelling, found underlying causal dynamics among Customer Service model constructs. The result of this discovery is that CS researchers must, determine a generalizable causal relationship among model constructs and identify a representative parsimonious CS structural model.

The components of satisfaction

Unlike material products or pure services, most hospitality experiences are an amalgam of products and services. Therefore it is possible to say that satisfaction with a hospitality experience such as a hotel stay or a restaurant meal is a sum total of satisfactions with the individual elements or attributes of all the products and services that make up the experience.

There is no uniformity of opinion among marketing experts as to the classification of the elements in service encounters. Reuland *et al.* (1985, p. 142) suggest that hospitality

services consist of a harmonious mixture of three elements: the material product in a narrow sense which in the case of a restaurant is the food and beverages; the behaviour and attitude of the employees who are responsible for hosting the guest, serving the meal and beverages and who come in direct contact with the guests, and the environment, such as the building, the layout, the furnishing, the lighting in the restaurant, etc.

Czepiel *et al.* (1985) on the other hand, suggest that satisfaction with a service is a function of satisfaction with two independent elements. The functional element, i.e. the food and beverage in a restaurant, and the performance-delivery element, i.e. the service. To prove the independence of the two elements from each other, the authors claim that restaurant clients are quite capable of having responses to each element that differ one from the other: "The service was great, the food poor" or conversely... (p. 13).

Davis and Stone (1985, p.29) divide the service encounter into two elements: direct and indirect services. For example, direct services may be the actual check-in/check-out process in hotels, while the indirect services include the provision of parking facilities, concierge, public telephones for guests' use, etc.

Lovelock (1985) divides the service attributes into two groups: core and secondary.

Airline service provides a good example, with customers first making inquiries and reservations, then checking in their baggage, getting seat assignments, being checked at the gate, receiving on-board service in flight, and retrieving their baggage at the destination airport. Each of these activities is an operations task that is secondary to the core product of physically transporting passengers and their bags between two airports. But these secondary tasks have a greater potential to generate customer dissatisfaction if performed poorly (p. 272).

In a restaurant situation Lovelock's core will be composed of the food and beverage, while his secondary will be composed of everything else, including service, environment, etc.

Lewis (1987), too, classifies the service encounter attributes in two groups: essential and subsidiary. The essential attributes are identical to Czepiel's functional, Davis and Stone's direct, Reuland and colleagues' product, and Lovelock's core, i.e. the food and beverage in the meal experience. On the other hand Lewis's subsidiary attributes are more comprehensive than either Davis and Stone's indirect, Czepiel's performance-delivery, or Lovelock's secondary, and include such factors as: accessibility, convenience of location, availability and timing and flexibility, as well as interactions

with those providing the service and with other customers. It is equivalent to a combination of the behaviour and environment elements in the Reuland *et al.* model.

Yet other researchers support the idea that the service encounter attributes are situation-specific and as such cannot be classified into universal elements. For example, Fiebelkorn (1985) doing a study at Citibank found that overall satisfaction with Citibank as one of the customer's banks (or his bank only) is based on satisfaction with the last encounter with the bank in five main areas: teller encounter, platform encounter, ATM (automatic teller machines) encounter, phone encounter, problem encounter. He then concludes that "the common thread running through all five service-encounter types is that customers want: prompt service by people who know what to do and how to do it, and who care about them as valued customers" (Fiebelkorn, 1985, p. 185).

Dimensions of satisfaction

In service organizations, the assessment of the quality of a service is made during the actual delivery of the service – usually an encounter between the customer and a service contact person. Parasuraman *et al.* (1985, 1988, 1991) identified the following five generic dimensions of service quality (SERVQUAL) that must be present in the service delivery in order for it to result in customer satisfaction:

- *Reliability* – the ability to perform the promised services dependably and accurately.
- *Responsiveness* – the willingness to help customers and provide prompt service.
- *Assurance* – the knowledge and courtesy of employees as well as their ability to convey trust and confidence.
- *Empathy* – the provision of caring, individualized attention to customers, and
- *Tangibles*, the appearance of physical facilities, equipment, personnel and communication materials.

The model conceptualizes service quality as a gap between customer's expectations (E) and the perception of the service providers' performance (P). According to Parasuraman *et al.* (1985), service quality should be measured by subtracting customer's perception scores from customer expectation scores ($Q = P - E$). The greater the positive score represents the greater the positive amount of service quality or visa versa.

The gap that may exist between the customers' expected and perceived service is not only a measure of the quality of the service,

but is also a determinant of customer satisfaction/dissatisfaction. Measuring the gap between expected and perceived service is a routine method of utilizing customer feedback. Zeithaml *et al.*, (1988) suggested a model that details the gaps between customer expectations and the actual service delivered. (see Figure 1). Vavra (1997, p. 91) identified a sixth gap namely the difference between the customers' desired service and their expected service.

Since its introduction in 1988, SERVQUAL has been used in hundreds of studies including numerous studies in the hospitality and tourism industries (Fick and Ritchie, 1991; Saleh and Ryan, 1991; Luk *et al.*, 1993; Bojanic and Rosen, 1994; Lee and Hing, 1995; Ryan and Cliff, 1997). SERVQUAL was also used by Knutson *et al.* (1991) to create a lodging-specific instrument called LODGSERV which is a 26 item index designed to measure consumer expectations for service quality in the hotel experience. LODGSERV, however, is not as popular among hospitality and tourism researchers as SERVQUAL and was used only in a limited number of studies (i.e. Patton *et al.*, 1994; Ekinici *et al.*, 1998).

But SERVQUAL has also been seriously criticized (Carman, 1990; Finn and Lamb, 1991; Babakus and Boller, 1992; Brown *et al.*, 1993; Smith, 1995). The main criticisms of the model relate to the application of expectations and the gap scoring. First, the conceptualization of expectation as a comparison standard in the model is a difficult concept to quantify. Second, if the variables are difficult to quantify then, by implication, the gap score becomes that much less secure as a measurement. Third, some methodological issues arise. Finally, doubt has been expressed as to the universal quality of the dimensions. (Eckinici and Riley, 1998, p. 355)

Overall satisfaction vs satisfaction with individual attributes

In the previous section we indicated that it is possible to say that satisfaction with a hospitality experience is a sum total of satisfactions with the individual elements or attributes of all the products and services that make up the experience. Though superficially the above statement makes sense, in reality the matter is more compounded. The question that we have to ask ourselves is whether when customers experience the attributes of the hospitality experience they form a set of independent impressions on each and compare those with the expectations of the same attributes. And, is the resultant overall level of satisfaction

determined by the arithmetic sum total of these impressions? The answer to the above question is dependent on one's belief about the process of consumer choice. More specifically, it is related to whether one believes that consumer choice behaviour could be explained by compensatory or non-compensatory models.

Non-weighted compensatory models presume that customers make trade-offs of one attribute for another in order to make a decision, i.e. a weakness in one attribute is compensated by strength in another. In a hotel stay example, if the guestroom was small and uncomfortable, but the service was good, the resultant overall satisfaction with the hotel experience might still be high; small and uncomfortable room was traded-off with good service, because both of them were of equal importance to the customer. Weighted compensatory models (sometimes referred to as expectancy-value models) also assume that people have a measurement of belief about the existence of an attribute, but that each attribute has an importance weight relative to other attributes. Using this model in our previous example, we might conclude that because guestroom quality was rated higher in its relative importance than service was, the resultant overall satisfaction with the hotel experience will be dissatisfaction.

Non-compensatory models (no trade-offs of attributes) can take one of two forms: conjunctive or disjunctive. In conjunctive

models consumers establish a minimum acceptable level for each important product attribute and make a choice (or become satisfied) only if each attribute equals or exceeds the minimum level. In a restaurant example each of the three attributes of quality of food and beverage, quality of the service, and the ambiance of the restaurant will have to pass a threshold before overall satisfaction will occur. If ambiance did not pass this threshold, no matter how good the food and the service was, the result is overall dissatisfaction.

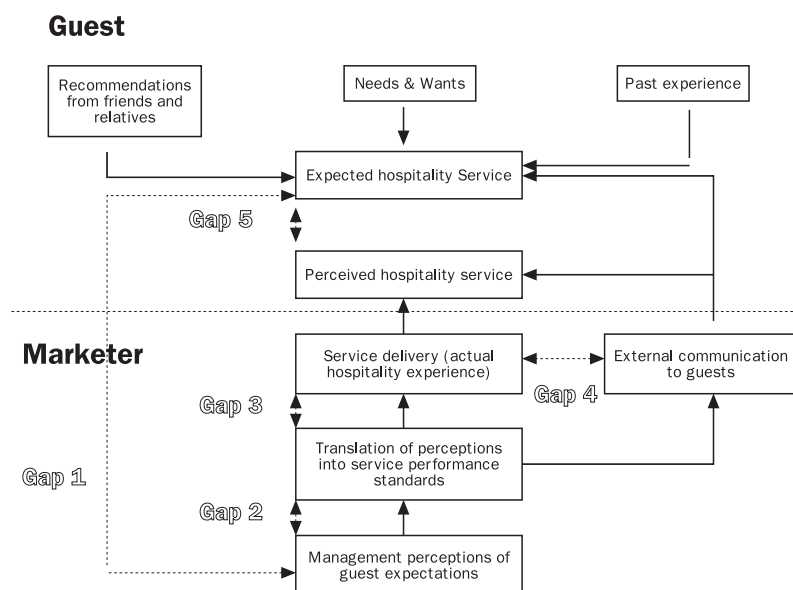
Disjunctive models are similar to conjunctive models, with one exception. Rather than establishing a minimum level on all important attributes, in conjunctive models consumers establish such levels only on one or a few attributes, e.g. the food in our restaurant example (Lewis and Chambers, 1989, p. 157).

Research evidence conducted in tourism and hospitality enterprises (Mazursky, 1989; Cadotte and Turgeon, 1988) support the disjunctive models. In a study conducted in 1978 among 432 foodservice firms representing 22,000 foodservice units, Cadotte and Turgeon asked company executives to list the type and frequency of their guests' complaints and compliments. As indicated in Table I, the data from the surveys suggest that:

...some restaurant attributes are more likely to earn guest complaints than compliments. Availability of parking, hours of operation, traffic congestion, noise level, and spaciousness of the establishment all appear in the top-ten complaint list... In contrast, guests express appreciation for high performance in some areas, but rarely complain when performance is so-so. The survey results suggest that guest react favorably to a clean neat restaurant, neat employees, ample portions, and responsiveness to complaints. The quality and quantity of service, food quality, helpfulness of the employees, and the prices of drinks, meals and other services appear in both the list of most frequent complaints and the list of the most frequent compliments (Cadotte and Turgeon, 1988, p. 47).

Following these findings, Cadotte and Turgeon divided the attributes into the following four categories: satisfiers, dissatisfiers, critical and neutral. Satisfiers, were those attributes where unusual performance apparently elicited compliments and satisfaction, but average performance or even the absence of the feature did not cause dissatisfaction or complaints. Large-size food portions, smartly dressed employees, clean and neat restaurants are all examples of a restaurant satisfier. Normal food portions, regularly dressed employees and not so neat restaurants do not

Figure 1
Hospitality service quality gap



Source: Based on Zeithaml et al. (1988, p. 36)

cause dissatisfaction. In contrast, large food portions and well-groomed and smartly dressed employees please the restaurant guest. "Satisfiers, represent an opportunity to shine, to move ahead of the pack, and to stand out from the crowd" (Cadotte and Turgeon, 1988, p. 51).

Dissatisfiers were more likely to earn a complaint for low performance or absence of a desired feature than anything else. But an operation that exceeds the threshold performance standard apparently will not receive compliments on the attribute. Parking and excessive noise are good examples of dissatisfiers; they have to be provided and maintained at a minimum or sufficient level. But efforts to achieve a higher performance level will not be appreciated by customers nor will it cause them satisfaction. "Dissatisfiers particularly require management control to prevent poor performance. Minimum standards should be established, and the focus should be on maintaining these standards.... Be as good as your competition, but do not waste resources trying to be better. . ." (Cadotte and Turgeon, p. 51).

Table I

Comparative rankings of food service attribute compliments and complaints

Attribute	Complaint rank	Compliment rank	Category
Availability of parking	1	19	Dissatisfier
Traffic congestion in establishment	2	26	
Noise level	5	24	
Spaciousness of establishment	8	18	
Hours of operation	9	20	
Cleanliness of establishment	14	4	Satisfier
Neatness of establishment	11	5	
Size of portions	12	5	
Employee appearance	17	7	
Responsiveness to complaints	20	9	
Quality of service	3	1	Critical
Food quality	7	2	
Helpful attitude of employees	6	3	
Quantity of service	10	8	
Prices of drinks, meals and service	4	10	
Management knowledge of service	23	11	Neutral
Availability of food on menu	16	12	
Beverage quality	24	13	
Variety of service	21	14	
Uniformity of establishment appearance	26	15	
Quality of advertising	25	16	
Convenience of location	15	17	
Quietness of surroundings	18	21	
Accuracy of bill	19	22	
Litter outside restaurant	22	23	
Reservations system	13	25	

Source: Cadotte and Turgeon, 1998, p. 46

Critical attributes were capable of eliciting both complaints (dissatisfactions) and compliments (satisfactions), depending on the situation. Quality of service, food quality and helpful attitude of employees ranked high in eliciting both complaints and compliments. Critical factors deserve special attention, because of their potential for both hurting and helping a business. "Like dissatisfiers, minimum standards must be set to avoid negative responses to your service. For the critical attributes, the objective is to raise performance beyond the norm" (Cadotte and Turgeon, p. 51).

Neutral attributes neither received a great number of compliments nor many complaints, therefore probably indicating that they were either not salient to guests or easily brought up to guests' standards.

Cadotte and Turgeon draw our attention to the fact that the classification of these factors is not permanent but constantly changes. Some dissatisfier type attributes were probably critical at one time. Higher industry standards, though, may have improved performance to the extent that most restaurants are able to meet guest requirements on these factors. For example, in warm climates, the availability of reliable air conditioning in hotels or restaurants was a critical factor; today, with the advent of modern refrigeration technology, all hotels and restaurants in such climates will have it. Having more of it will not satisfy anyone, but when air-conditioning breaks down, suddenly everyone becomes dissatisfied.

If Cadotte and Turgeon's findings are confirmed by other studies, we might indeed revise the prevailing theory about the nature of customer satisfaction/dissatisfaction and reject the notion that satisfaction and dissatisfaction are two extremes on one continuum. Instead, we might accept a modification of a theory that was advanced some years ago on the subject of job satisfaction. In this theory, Herzberg *et al.* (1959) proposed that job satisfaction and dissatisfaction are two extremes on two continua. On one continuum – the motivation continuum – we have satisfaction versus no-satisfaction, while on the other – the hygiene continuum – we have dissatisfaction versus no-dissatisfaction. In Herzberg's opinion, the variables the presence or absence of which cause satisfaction or no-satisfaction, are not the same that cause dissatisfaction or no-dissatisfaction. While Herzberg confirmed his theory by using a particular research method – the critical incident – few other researchers managed to duplicate his results by using alternative methods. In the majority of cases, it was found that though some variables operate solely on

one continuum (i.e. working conditions were found to be a hygiene factor, or dissatisfier), others (i.e. salary) appeared in both the hygiene (dissatisfier) continuum as well as the motivator (satisfier) continuum. Applying the same rationale to Cadotte and Turgeon's findings, one might conclude that if supported by other studies, customer satisfaction/dissatisfaction could also be explained as a process operating in three continua: the first for satisfaction, the second for dissatisfaction and the third (critical) for common factors that can cause both satisfaction as well as dissatisfaction.

But until such time we must still operate under the assumption that satisfaction and dissatisfaction are two extremes that operate on one continuum. Therefore we propose that customers' overall satisfaction with a hospitality service encounter is a sum total of the difference between their perceived outcome and expectations relating to a group of weighted attributes, some of which carry minimum thresholds, plus an additional mysterious factor which Gronroos (1984) calls image and Lewis calls overall feeling (Lewis, 1987, pp. 84-85). The following equation (modified from Lewis and Chambers, 1989, p. 157) gives a mathematical depiction of overall customer satisfaction:

$$A_{jk} = \sum^n W_{ik} B_{ijk}$$

with

$$B_{ijk} > I$$

where

A_{jk} = consumer k 's overall satisfaction score for hospitality enterprise j ,

W_{ik} = the importance weight assigned by consumer k to attribute i ,

B_{ijk} = consumer k 's rating of the amount of attribute i offered by enterprise j ,

n = the number of product/service attributes, and

I = a minimum level (threshold).

As to the question of identifying the individual attributes in the hospitality experience, and determining their relative importance weights as well as their minimum threshold levels, the answer to that has to be determined by each enterprise for each customer segment. However, based on previous research findings it is possible to identify these attributes and determine their relative importance among consumers of certain products/services. By using a particular technique called the Importance/Performance Analysis (IPA) hospitality and tourism researchers such as Evans and Chon (1989), Green (1993), Chacko and Dimanche (1994), Martin (1995), Duke and Persia (1996),

Vaske *et al.* (1996), Opperman (1996), Mount (1997), Go and Zhang (1997), Oh and Parks (1998), Hudson and Shepard (1998) managed to identify not only the gaps between the customer and service provider perception of quality, but also determine the gap between importance and performance.

Following Reuland *et al.* (1985) we suggest that a hospitality experience consists of the following elements which can be classified into three groups: the material product, the environment, and the behaviour and attitude of the employees. For example in a restaurant case the material product would be the food and beverage, the environment would be the physical attributes of the restaurant, and the behaviour and attitude would be the restaurant's staff conduct before and during the meal (see Table II).

Measuring customer satisfaction

1. Key measurement issues

Customer satisfaction measurement (CSM) serves two roles, providing information and enabling communication with customers. Perhaps the primary reason for taking the time to measure customer satisfaction is to collect information, either regarding what customers say that needs to be done differently or to assess how well an organization is currently meeting its customer needs (Vavra, 1997, p. 28). A secondary, but no less important function of CSM in hospitality enterprises, is that by surveying customers, an organization is demonstrating its interest in communicating with its customers – finding out their needs, pleasures, displeasures and overall well-being. Though it is impossible to measure the satisfaction of every single customer, those whose opinions are solicited and others who observe this process, are given a sense of importance and recognition.

The reasons for measuring customer satisfaction may vary from organization to organization. Naumann (1995) however, suggested the following five objectives that in his opinion are the most common.

- 1 To get close to the customer – understand what attributes are the most important to customers, find which attributes affect the customer's decision making, the relative importance of the attributes and get a performance evaluation of how well the firm is delivering each attribute.
- 2 Measure continuous improvement – the attributes significant to the customer are linked directly to value-added processes in the firm and are put into a form consistent with the internal measurements used to evaluate the process.

- 3 To achieve customer driven improvement – not all customers are an equally valuable source of innovation. This requires creation of a comprehensive database that not only tracks sales, but sources of innovations.
- 4 To measure competitive strengths and weaknesses – determine customer perceptions of competitive choices. This is achieved by surveying possible and future customers as well as current and past customers.
- 5 To link CSM data to internal systems (Naumann, 1995, pp. 22-7).

2. Attributes to be measured

As was previously mentioned, to measure customer satisfaction one needs to anticipate which dimensions or attributes of the product/service customers are using in their overall quality assessment. In previous sections we discussed some generic service dimensions such as the ones proposed by Fitzsimmons and Fitzsimmons (1998), Czepiel *et al.* (1985), Lovelock (1985) and Fiebelkorn (1985) or hospitality specific dimensions such as the ones proposed by Reuland *et al.* (1985) Davis and Stone (1985), Lewis (1987) and Cadotte and Turgeon (1988).

At this stage, it is important to note that the attributes that management may wish to measure may be unimportant or irrelevant to the customers' needs. Therefore, by taking a survey of the importance of each attribute from the customers one can obtain valuable and incontestable information about which attribute to include in the measurement. The major objective here is to balance the key information needs of management with the needs and issues of the customers (Vavra, 1997, p. 112).

Once it was determined which dimensions/attributes should be measured, there is a high

likelihood that the total number of items in the questionnaire may be too high. Therefore the list of items would need to be reduced (Vavra, 1997, p. 114). The most satisfactory and least biased way to reduce the number of items in the questionnaire is through the use of factor analysis. Factor analysis is a statistical technique identifying correlations among a list of issues or items. This can be used to identify common issues or problems among different groups of customers, grouping them to be dealt with together.

In addition to measuring satisfaction with various product service attributes the customer satisfaction questionnaire should include items related to the customer profile. These can consist of basic demographics (i.e. sex, education, income, profession, geographical origin, etc.), psychographics (life-style), and other miscellaneous variables related to the number of individuals in the party, frequency of visiting a hospitality enterprise, frequency of visiting the current establishment, etc.

3. Frequency and method of measurement

It is recommended that questionnaires containing some of the above measurements are distributed either on a continuous or periodic basis to all customers at the end of their experience. Under no circumstances should the questionnaires be left on the table before the meal was completed, or in the hotel guestroom before check-out. Leaving the questionnaire in advance will result in it being completed by only those who have either had an exceptional experience or a very poor one. The staff should distribute the questionnaire at the end of the experience with a request to complete it. To increase the rate of completion it is recommended to give customers some form of incentive such as a discount on the next restaurant meal, or hotel stay.

If the establishment cannot afford to distribute questionnaires to every customer, then a method should be devised so that random sampling be achieved. For example, every third customer at dinner and every fifth customer at lunch should be approached and asked to complete a questionnaire. In a restaurant case the customers to be approached should be seated throughout the restaurant so that all waiters will be represented in the sample. Questionnaires should be distributed throughout the seven days of the week so that both weekdays and weekends are included. All questionnaires should be coded in advance for date, and in the case of restaurants for meal (lunch or dinner), and table number, to enable analysis by day, menu items, and waiting personnel.

Table II

Product/service attributes in a restaurant meal experience

Material product	Environment	Behaviour and attitude
Quality of F&B	Cleanliness of restaurant	Friendliness
Portion size	Location and accessibility	Competence
Variety of menu choices	Size and shape of room	Courtesy
Food and beverage consistency	Furniture and fittings	Efficiency and speed
Range of tastes, textures, aromas, colors	Color scheme	Helpfulness
Correct F&B temperatures	Lighting	Professionalism
Appearance of F&B	Temperature and ventilation	Responsiveness to special requests
Price of meal/drinks/service	Acoustics (noise level)	Responsiveness to complaints
Availability of menu items	Spaciousness of restaurant	
	Neatness of restaurant	
	Employees' appearance	
	Availability of parking	
	Hours of operation	

4. Data analysis

The analysis of the data should be conducted on a weekly basis and the results compared with previous weeks. The mean and standard deviation should be computed for the global/overall satisfaction variables as well as for each of the product/service attributes. To understand better the satisfaction/dissatisfactions of each market segment, it is recommended that separate analyses be conducted for each identifiable market segment (i.e. leisure travellers, business travellers, conventioners, etc.).

To determine the relative importance (weights) of each product/service attribute, an establishment can either conduct a periodic study to determine how customers themselves rate these, or alternatively determine the weights by running a multiple regression with the global satisfaction variable as the dependent variable and each of the product/service attributes as the independent variables. The beta weights for each independent variable in the regression will be equivalent to the importance rates of the attributes. Since the relative importance of product/service attributes changes from time to time, it is recommended that these weights be computed at least once a year and if possible more than that.

Global issues and cultural differences in customer satisfaction

When designing global customer satisfaction measurements, regional and cultural aspects must be taken into account. And indeed, studies conducted by Chadee and Mattsson (1995) and Scott and Shieff (1993) found significant cross-cultural differences when measuring customer satisfaction. Services and products important to Asians may be completely different from those sought by Europeans. Culture has an impact on perception, problem solving and cognition and often leads to differences in satisfaction levels for a single product between different global customers. Global customers may have different expectations, different ways of evaluating performance, differing uses of response scale formats and may be influenced differently by the number of response positions in any question scale (Vavra, 1997, p. 430).

The majority of customer satisfaction research is done in industrialized economies, leaving very little research conducted in Africa, the Middle East, South America, Latin America and large portions of Asia. The question therefore is what can be done to avoid the confounds and problems of global

cross-cultural customer satisfaction research? To start with, it is critical that the satisfaction survey design, process and data be as comparable across countries as possible. If results of a country are used only within that country, equivalence is not an issue; if the results are to be used to gain a global picture, compatibility is essential. Differing languages, levels of literacy, interpretations of constructs and cultural behaviour must all be taken into account when creating a foreign customer satisfaction survey. Similar survey designs may or may not be usable in different socio-cultural environments or even within a single work environment as language and culture may not be homogeneous with a customers' corporation or work place.

To deal with the differences of socio-cultural behaviours, Vavra suggests looking into the "emic-etic dilemma". An "Emic" approach is based on recognition of the differences between cultures and acknowledging the importance of each culture's idiosyncrasies. This would constitute creating a different survey, with different questions, a different method of measurement and administration for each different culture. An "Etic" approach is based on the belief that certain industry standards, requirements, values and behaviours are continuous and transcend. This would allow for a "universal" type of evaluation to be developed and used cross-culturally. There are benefits to using either mode of evaluation, but there are also problems inherent in each method. In the "Emic" approach it is much more difficult to compare results from different cultures and each cultural evaluation is highly subjective to misinterpretation by evaluators from differing cultures. Should the "Etic" approach be used, caution must be used not to apply it in an unchecked manner or abuse the measures – imposing them on cultures without the adaptation or sensitivity to use the evaluative materials correctly (Vavra, 1997, p. 431-2).

Whether the "Etic" or "Emic" approach is used to evaluate global customers' satisfaction some sort of equivalence must be established within and between surveys. Vavra has identified the following two major categories of equivalence that should be considered when creating or administering international customer satisfaction surveys:

Establishing Equivalence

- *Construct equivalence*: This is the most basic form of equivalence. Basically this is asking whether or not a construct or phenomenon actually exists in another culture. It should never be assumed that a construct exists in another culture with-

out extensive qualitative research demonstrating its cultural existence.

- *Conceptual equivalence*: Concepts may be culturally hidebound. For example, the concept of “indifference” may not exist within another culture’s parameters.
- *Functional equivalence*: This addresses the question of whether or not products and services are expected to deliver identical functions across the various cultures. Consumer goods may vary in sameness or function.
- *Category equivalence*: The way objects, stimuli and behaviour are grouped, varies cross-culturally and may influence customer response. An example of this is making scales with fewer responses more applicable in some cultures.

Measurement equivalence

- *Scalar equivalence*: Do corporate chosen scales function similarly in different cultures? It is a good idea to test a scale’s acceptance in a culture before applying it.
- *Item/linguistic equivalence*: The items in the questionnaire must be able to be translated in an accurate manner so that the linguistic meaning remains similar across cultures.
- *Sample equivalence*: There is a likelihood that there might be a more homogenous sample across cultures because all survey participants will have chosen, purchased and used the same product or service in order to participate in the customer satisfaction survey. This homogeneity may not exist in other circumstances (Vavra, 1997, p. 434).

When designing global or cross-cultural satisfaction surveys, purchase behaviour should also be taken into account. Product/service categories and appropriateness/relevance of different products will vary cross-culturally (Vavra, 1997, p. 439). Also, the way in which purchases are made is also highly relevant. For example in the case of customer satisfaction surveys for food shoppers the difference between Americans’ weekly supermarket trips and Asians’ daily trips to the market play a part in how these surveys are constructed, utilized and to whom they are administered.

Finally, the attitudes and psychographics of customers must be taken into account when writing surveys. Questions relating to life-styles and individual values are subject to a wide range of cultural interpretations. It is important to take cultural values into account when writing customer satisfaction surveys, recognizing values that may be held in common and making a special point to create allowances for country or culture specific

concepts or measures. Knowledge of cultural attitudes and taboos helps the surveyor to create a courteous, understandable and concise questionnaire (Vavra, 1997, p. 440).

A final consideration when administering a questionnaire across multiple cultures is the language to be used. Global customers should be surveyed in their native language, which necessitates the translation of the instrument into the various languages needed. The four main methods of translating survey instruments are:

- 1 *Direct translation* – the use of bilingual translators to translate the original into the required languages.
- 2 *Back translation* – translation of the questionnaire by a native speaking bilingual into the desired language followed by a translation back to the original language by a another bilingual native speaker.
- 3 *De-centered translation* – the successive translations and re-translations, so that the final questionnaires employ terms and phrasing equally meaningful in both languages.
- 4 *Parallel translation* – the translation is continually performed by a committee of translators, all equally conversant in both languages, until the committee agrees that the questionnaires have near equal meanings in both languages.

In conclusion, if properly designed, administered and analyzed, the process of monitoring customer satisfaction can be beneficial to any hospitality enterprise and make the difference between offering a mediocre product and an excellent, quality product.

References

- Almanza, B.A., Jaffe, W. and Lin, L. (1994), “Use of the service attribute matrix to measure consumer satisfaction”, *Hospitality Research Journal*, Vol. 17 No. 2, pp. 63-75.
- Assael, H. (1987), *Consumer Behavior and Marketing Action*, 3rd ed., PWS-Kent, Boston.
- Babakus, F. and Boller, G.W. (1992), “An empirical assessment of the SERVQUAL scale”, *Journal of Business Research*, Vol. 24, pp. 253-68.
- Band, W.A. (1991), *Creating Value for Customers*, John Wiley, New York, NY.
- Barsky, J.D. (1992), “Customer satisfaction in the hotel industry: meaning and measurement”, *Hospitality Research Journal*, Vol. 16 No. 1, pp. 51-73.
- Barsky, J.D. and Labagh, R. (1992), “Quality management: a strategy for customer satisfaction”, *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 33 No. 5, pp. 32-7.

- Berkman, H.W. and Gilson, C. (1986), *Consumer Behavior: Concepts and Strategies*, 3rd ed., Kent, Boston.
- Birch, E.N. (1990), "Focus on value", in *Creating Customer Satisfaction*, Research report No. 944, The Conference Board, New York, NY, pp. 3-4.
- Bojanic, D.C. and Rosen, L.D. (1994), "Measuring service quality in restaurants: an application of the SERVQUAL instrument", *Hospitality Research Journal*, Vol.18 No. 1, pp. 3-14.
- Brown, T.S., Churchill, G.A. and Peter, J.P. (1993), "Research note: improving the measurement of service quality", *Journal of Retailing*, Vol. 69, pp. 127-39.
- Butz, H. E. and Goodstein, L.D. (1996), "Measuring customer value: gaining the strategic advantage", *Organizational Dynamics*, Vol. 24, Winter, pp. 63-77.
- Cadotte, E.R. and Turgeon, N. (1988), "Key factors in guest satisfaction", *Cornell Hotel and Restaurant Quarterly*, Vol. 28 No. 4, pp. 45-51.
- Cadotte, E.R., Woodruff, R.B. and Jenkins R.L. (1987), "Expectations and norms in models of consumer satisfaction", *Journal of Marketing Research*, Vol. 24, pp. 305-14.
- Carman, J.M. (1990), "Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions", *Journal of Retailing*, Vol. 66, pp. 33-55.
- Chacko, H.E. and Dimanche, F. (1994), *Improving Services Using Importance-Performance Analysis: The Case of Convention and Visitor Bureau*, Presented at the Council of Hotel, Restaurant and Institutional Education conference, Palm Spring, June.
- Chadee, D. and Mattsson, J. (1995), "Customer satisfaction in tourist service encounters", *Journal of Travel and Tourism Marketing*, Vol. 4, Fall.
- Cronin, J.J. and Taylor, S.A. (1992), "Measuring service quality: a reexamination and extension", *Journal of Marketing*, Vol. 56, pp. 55-68.
- Czepiel, J.A., Solomon, M.R. Suprenant, C.F. and Gutman, E.G. (Eds) (1985), "Service encounters: an overview", in *The Service Encounter: Managing Employee Customer Interaction in Service Business*, Lexington Books, Lexington, MA, pp. 3-15.
- Danaher, P.J. and Arweiler, N. (1996), "Customer satisfaction in the tourist industry: a case study of visitors to New Zealand", *Journal of Travel Research*, Vol. 35 No. 1, pp. 89-93.
- Davis, B. and Stone, S. (1985), *Food and Beverage Management*, 2nd ed., Butterworth-Heinemann, Oxford.
- Day, R. (1977), "Consumer satisfaction, dissatisfaction, and complaining behavior", in R. Day (Ed.), *Symposium Proceedings*, 20-22 April, School of Business, University of Indiana, Bloomington, Indiana.
- Day, G.S. (1990), *Market Driven Strategy: Processes for Creating Value*, Free Press, New York, NY.
- Dube, L., Renaghan, L.M. and Miller, J.M. (1994), "Restaurant management: measuring satisfaction for strategic management", *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 35 No. 1, pp. 39-47.
- Duke, C.R. and Persia, M.A. (1996), "Performance-importance analysis of escorted tour evaluations", *Journal of Travel & Tourism Marketing*, Vol. 5 No. 3, pp. 207-23.
- Dutka, A. (1994), *AMA Handbook for Customer Satisfaction*, NTC Business Books, Lincolnwood, IL.
- Ekinici, Y. and Riley, M. (1998), "A critique of the issues and theoretical assumptions in service quality measurement in the lodging industry: time to move the goal-posts?", *International Journal of Hospitality Management*, Vol. 17 No. 4, pp. 349-62.
- Ekinici, Y., Riley, M. and Fife-Schaw, C. (1998), "Which school of thought? The dimensions of resort hotel quality", *International Journal of Contemporary Hospitality Management*, Vol. 10 No. 2-3, pp. 63-7.
- Evans, M. and Chon, K.C. (1989), "Formulating and evaluating tourism policy using importance-performance analysis", *Hospitality Research Journal*, Vol. 13 No. 3, pp. 203-13.
- Fick, G.R. and Ritchie, J.R.B. (1991), "Measuring service quality in the travel and tourism industry", *Journal of Travel Research*, Vol. 30 No. 2, pp. 2-9.
- Fiebelkorn, S.L. (1985), "Retail service encounter satisfaction: model and measurement", in Czepiel, J.A., Solomon, M.R., Suprenant, C.F. and Gutman, E.G. (Eds), *The Service Encounter: Managing Employee Customer Interaction in Service Business*, Lexington Books, pp. 18-194.
- Finn, D.W. and Lamb, C.W. (1991), "An evaluation of the SERVQUAL scale in a retail setting", in Holman, R.H. and Solomon, M.R. (Eds), *Advances in Consumer Research*, Vol. 18, Association for Consumer Research, Provo, UT.
- Fitzsimmons, J.A. and Fitzsimmons, M.J. (1998), *Service Management: Operations, Strategy, and Information Technology*, Irwin/McGraw-Hill, Boston.
- Gale, B.T. (1994), *Managing Customer Value*, Free Press, New York, NY.
- Go, F. and Zhang, W. (1997), "Applying importance-performance analysis to Beijing as an international meeting destination", *Journal of Travel Research*, Vol. 35 No. 4, pp. 42-9.
- Green, C.G. (1993), "Using customer survey data to develop marketing strategies in college university foodservices", *Journal of College and University Foodservice*, Vol. 1 No. 1, pp. 39-51.
- Gronroos, C. (1984), "A service quality model and its marketing implications", *European Journal of Marketing*, Vol. 18 No. 4, pp. 36-44.
- Hayes, B.E. (1997), *Measuring Customer Satisfaction: Survey Design, Use, and Statistical Analysis Methods*, 2nd ed., ASQ Quality Press, Milwaukee, WI.
- Herzberg, E., Mausner, B. and Snyderman, B. (1959), *The Motivation to Work*, Wiley, New York, NY.

- Hudson, S. and Shepard, G.W.H. (1998), "Measuring service quality at tourist destinations: an application of importance-performance analysis to an alpine ski resort", *Journal of Travel and Tourism Marketing*, Vol. 7 No. 3, pp. 61-77.
- Hunt, K.H. (Ed.) (1977), *Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction*, Marketing Science Institute, Cambridge, MA.
- Jaworski, B. and Kohli, A. (1993), "Market orientation: antecedents and consequences", *Journal of Marketing*, Vol. 57, July, pp. 53-70.
- Jones, T.O. and Sasser, W.E. (1995), "Why satisfied customers defect", *Harvard Business Review*, Vol. 73, November-December, pp. 88-99.
- Klaus, P. (1985), "Quality epiphenomenon: the conceptual understanding of quality in face-to-face service encounters", in Czepiel, J.A., Solomon, M.R., Suprenant, C.F. and Gutman, E.G. (Eds), *The Service Encounter: Managing Employee Customer Interaction in Service Business*, Lexington Books, Lexington, MA, pp. 17-33.
- Knutson, B., Stevens, P., Wullaert, C., Patton, M. and Yokoyama, R. (1991), "LODGSERV: a service quality index for the lodging industry", *Hospitality Research Journal*, Vol. 15, pp. 277-84.
- Knutson, B.J. (1988), "Ten laws of customer satisfaction", *Cornell Hotel and Restaurant Quarterly*, Vol. 29 No. 3, pp. 14-17.
- LaTour, S.A. and Peat, N.C. (1979), "Conceptual and methodological issues in consumer satisfaction research", in Wilke, W.L. (Ed.), *Advances in Consumer Research*, Ann Arbor, Association for Consumer Research, MI, pp. 431-7.
- Lee, Y.L. and Hing, N. (1995), "Measuring quality in restaurant operations: an application of the SERVQUAL instrument", *International Journal of Hospitality Management*, Vol. 14 Nos 3-4, pp. 293-310.
- Lewis, R.C. (1987), "The measurement of gaps in the quality of hotel services", *International Journal of Hospitality Management*, Vol. 6 No. 2, pp. 83-8.
- Lewis, R.C. and Chambers, R.E. (1989), *Marketing Leadership in Hospitality*, Van Nostrand Reinhold, New York, NY.
- Lovelock, C.H. (1985), "Developing and managing the customer-service function in the service sector", in Czepiel, J.A., Solomon, M.R., Suprenant, C.F. and Gutman, E.G. (Eds), *The Service Encounter: Managing Employee Customer Interaction in Service Business*, Lexington Books, Lexington, MA, pp. 265-80.
- Luk, S.T.K., de Leon, C.T., Leong, F. and Li, E. (1993), "Value segmentation of tourists' expectations of service quality", *Journal of Travel and Tourism Marketing*, Vol. 2 No. 4, pp. 23-38.
- Maddox, R.N. (1985), "Measuring satisfaction with tourism", *Journal of Travel Research*, Vol. 23 No. 3, pp. 2-5.
- Maister, D. H. (1985), "The psychology of waiting lines", In Czepiel, J.A., Solomon, M.R., Suprenant, C.F. and Gutman, E.G. (Eds), *The Service Encounter: Managing Employee Customer Interaction in Service Business*, Lexington Books, Lexington, MA, pp. 113-123.
- Martin, D.W. (1995), "An importance/performance analysis of service providers' perception of quality service in the hotel industry", *Journal of Hospitality & Leisure Marketing*, Vol. 3 No. 1, pp. 5-16.
- Mazursky, D. (1989), "Past experience and future tourism decisions", *Annals of Tourism Research*, Vol. 16 No. 3, pp. 333-44.
- McCallum, J.R. and Harrison, W. (1985), "Interdependence in the service encounter", in Czepiel, J.A., Solomon, M.R., Suprenant, C.F. and Gutman, E.G. (Eds), *The Service Encounter: Managing Employee Customer Interaction in Service Business*, Lexington Books, Lexington, MA, pp. 35-48.
- Mount, D.J. (1997), "Introducing the relativity to traditional importance-performance analysis", *Journal of Hospitality and Tourism Research*, Vol. 21 No. 2, pp. 111-9.
- Narver, J.C. and Slater, S.F. (1990), "The effect of a market orientation on business profitability", *Journal of Marketing*, Vol. 54, October, pp. 20-35.
- Naumann, E. (1995), *Customer Satisfaction Measurement and Management: Using the Voice of the Customer*, Thomson Executive Press, Cincinnati, OH.
- Oh, H. and Jeong, M. (1996), "Improving marketers' predictive power of customer satisfaction on expectation-based target market levels", *Hospitality Research Journal*, Vol. 19 No. 4, pp. 65-85.
- Oh, H. and Parks, S.C. (1997), "Customer satisfaction and service quality: a critical review of the literature and research implications for the hospitality industry", *Hospitality research Journal*, Vol. 20 No. 3, pp. 36-64.
- Oh, H. and Parks, S.C. (1998), "The role of attribute importance as a multiplicative weighting variable in the study of hospitality consumer decision-making", *Journal of Hospitality and Tourism Research*, Vol. 21 No. 3, pp. 61-80.
- Oliva, T.A., Oliver, R.A. and MacMillan, I.C. (1992), "A catastrophe model for developing service satisfaction strategies", *Journal of Marketing*, Vol. 56, pp. 83-95.
- Oliver, R.L. (1980), "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, Vol. 17, pp. 460-9.
- Oliver, R.L. and DeSarbo, W.S. (1988), "Response determinants in satisfaction judgments", *Journal of Consumers Research*, Vol. 14, pp. 495-507.
- Oliver, R.L. and Swan, J. E. (1989), "Customer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach", *Journal of Marketing*, Vol. 53, pp. 21-35.

- Opperman, M. (1996), "Convention destination images: an analysis of association meeting planners' perceptions", *Tourism Management*, Vol. 17 No. 3, pp. 175-182.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, Fall, pp. 41-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol. 64, Spring, pp. 12-37.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1991), "Refinement and Reassessment of the SERVQUAL scale", *Journal of Retailing*, Vol. 67, Winter, pp. 420-50.
- Patton, M., Stevens, P. and Knutson, B.J. (1994), "Internationalizing LODGSERV as a pilot study", *Journal of Hospitality and Leisure Marketing*, Vol. 2 No. 2, pp. 39-55.
- Peter, P.J. and Olson, J.C. (1987), *Consumer Behavior: Marketing Strategy Perspectives*, Irwin, Homewood, IL.
- Peterson, R.A. and Wilson, W.R. (1992), "Measuring customer satisfaction: fact and artifact", *Journal of the Academy of Marketing Science*, Vol. 20 No. 1, pp. 61-71.
- Pizam, A. and Milman, A. (1993), "Predicting satisfaction among first time visitors to a destination by using the expectancy disconfirmation theory", *International Journal of Hospitality Management*, Vol. 12 No. 2, pp. 197-209.
- Reuland, R., Coudrey, J. and Fagel, A. (1985), "Research in the field of hospitality", *International Journal of Hospitality Management*, Vol. 4 No. 4, pp. 141-6.
- Ross, C.K., Frommelt, G., Hazelwood, L. and Chang, R.W. (1987), "The role of expectations in patient satisfaction with medical care", *Journal of Health Care Marketing*, Vol. 7 No. 4, pp. 16-26.
- Ryan, C. and Cliff, A. (1997), "Do travel agencies measure up to customer expectations? An empirical investigation of travel agencies' service quality as measured by SERVQUAL", *Journal of Travel and Tourism Marketing*, Vol. 6 No. 2, pp. 1-31.
- Saleh, F. and Ryan, C. (1991), "Analyzing service quality in the hospitality industry using the SERVQUAL model", *Service Industries Journal*, Vol. 11 No. 3, pp. 352-73.
- Sasser, W.E., Olsen, J. and Wyckoff, D.D. (1979), *Management of Service Operations*, Allyn and Bacon, New York, NY.
- Scott, D. and Shieff, D. (1993), "Service quality components and group criteria in local government", *International Journal of Service Industry Management*, Vol. 4 No. 2, pp. 18-25.
- Smart, D.T. (1982), "Consumer satisfaction research: a review", in McNeal, J.U. and McDaniel, S.W. (Eds), *Consumer Behavior: Classical and Contemporary Dimensions*, Little Brown, Boston, pp. 286-306.
- Smith, A.M. (1995), "Measuring service quality: is SERVQUAL now redundant?", *Journal of Marketing Management*, Vol. 11, pp. 257-76.
- Tse, D.K. and Wilton, P.C. (1988), "Model of Consumer Satisfaction Formation: An Extension", *Journal of Marketing Research*, Vol. 25, pp. 204-12.
- Vaske, J.J., Beaman, J., Stanley, R. and Grenier, H. (1996), "Importance-performance and segmentation: where do we go from here?", *Journal of Travel and Tourism Marketing*, Vol. 5 No. 3, pp. 225-40.
- Vavra, T.G. (1997), *Improving Your Measurement of Customer Satisfaction: A Guide to Creating, Conducting, Analyzing, and Reporting Customer Satisfaction Measurement Programs*, ASQ Quality Press.
- WTO (1985), *Identification and Evaluation of those Components of Tourism Services which have a Bearing on Tourist Satisfaction and which can be Regulated, and State Measures to Ensure Adequate Quality of Tourism Services*, World Tourism Organization, Madrid.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1988), "Communication and control processes in the delivery of service quality", *Journal of Marketing*, Vol. 52, April, p. 36.