

LODGSERV: A SERVICE QUALITY INDEX FOR THE LODGING INDUSTRY

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ABSTRACT

LODGSERV is a 26-item index (alpha = .92) designed to measure consumers' expectations for service quality in the hotel experience. The index confirms the five generic dimensions of service quality hypothesized by Parsuraman, Zeithaml and Berry (1986): Tangibility, Reliability, Responsiveness, Assurance, and Empathy. This paper describes the development of the index and discusses its use as a management tool. Key Words: Service quality, consumer expectations, index, hotel, hospitality.

BACKGROUND

The intense competition of the 1980s has led many hospitality businesses to look for ways by which they can profitably differentiate themselves from their competition. One such strategy is the delivery of high service quality (Haywood, 1987; LeBoeuf, 1987; Smith, 1988, Zemke and Albrecht, 1985).

Because service is an intangible, it is difficult for a hospitality business to objectively measure its service quality. However, many studies clearly support the theory that service quality, as perceived by consumers, is derived from a comparison of their expectations of the service they will receive with their perceptions of the service they did receive (Cadotte and Turgeon, 1988; Martin, 1986; McCleary and Weaver, 1982; Parasuraman et al., 1986). Service quality, then, is the direction and degree of difference between expectations and perceptions; that is, the better perceptions are than expectations, the higher the level of perceived service quality; the worse perceptions are than expectations, the lower the level of perceived service quality.

The hospitality industry needs a valid tool to measure these two sides of the

service quality construct. Having and using valid measures of quality service will allow management to identify and reward employees, properties, districts or regions who meet or exceed customers' expectation standards. Conversely, units which are weak in this area can be identified and helped. This paper focuses on LODGSERV.EXP—the benchmark or expectations side of such a measurement tool for the lodging segment.

METHODOLOGY

In 1986, Parsuraman et al. unfolded SERVQUAL, a 31-item scale which generically measures the service quality construct (interaction between perceptions and expectations) in service industries. They further identified five dimensions of service quality:

- **Tangibles:** physical facilities, equipment, appearance of personnel.
- **Reliability:** ability to perform the promised service dependability and accurately.
- **Responsiveness:** willingness to help customers and provide prompt service.
- **Assurance:** knowledge and courtesy of employees and their ability to convey trust and confidence.
- **Empathy:** caring, individualized attention the firm provides its customers.

Guided by this work, LODGSERV was specifically tailored to the lodging industry and initially contained 36 items designed to tap various aspects of the five service quality dimensions. For the benchmark survey, the items were worded so as to capture consumers' expectations for service quality in a hotel experience and to parallel the intent of the SERVQUAL questions. For each statement, respondents were asked how strongly they agreed or disagreed with should statements. For example, one statement was worded as follows: "The hotel should provide modern and sufficient exercise or fitness facilities." A seven-point scale, ranging from 7 = Strongly Agree to 1 = Strongly Disagree, was used.

During the spring of 1989, telephone interviews were completed with 201 adults (over 21 years of age) who had stayed in a hotel/motel on at least three nights during the previous year. A sample size of 200 was selected because "other scale developers in the marketing area had used similar sample sizes to purify initial instruments..." (Parasuraman et al., 1986, p.9). The sample was randomly selected from telephone directories of a mid-size city/SMA (1985 estimated population: 427,800).

Data were coded and computer entered; a 20% verification check was made from computer entry to raw data. Confirmatory Factor Analysis (Hunter and Gerbing, 1982) was used to purify the scale and confirm the five dimensions of service quality proposed by the Parasuraman, et al. study.

FINDINGS AND DISCUSSION

Three aspects of instrument testing and refinement guided this study: validity, reliability and utility. Since validity had been established for the original generic instrument, and since the intent of each question was maintained, the content validity for LODGSERV is assumed. Additionally, in a pre-test (N = 20), no problems with

wording or understanding were found.

Using the approach of Hunter and Gerbing (1982), reliability was established using tests for (1) internal consistency (2) parallelism, and (3) calculations of coefficient alpha. Because LODGSERV is conceptualized as being composed of five separate aspects of service quality, each dimension was tested separately.

After several testing stages, 10 of the original 36 questions were shown to not contribute meaning to the index. Their deletion yielded a 26-question version of LODGSERV. The following discussion, then, refers to the this 26-item refined index.

Reliability of LODGSERV and Its Five Dimensions

Alpha levels for the five dimensions are consistently high, ranging from 0.63 to 0.80, with the total index having an alpha level equal to 0.92 (see Table 1).

Table 1
Reliability and Correlation Coefficients For LODGSERV
And Its Five Dimensions (N = 201)

Dimension	Reliability (Alpha)	Correlations		
		Item-Dimension (Range)	Dimension-Dimension (Average)	Dimension-Total
Reliability	.63	.47-.61	.36	.75
Assurance	.73	.52-.69	.43	.86
Responsiveness	.70	.62-.71	.49	.91
Tangibles	.71	.39-.66	.36	.80
Empathy	.80	.48-.72	.42	.86
LODGSERV	.92	--	--	--

Because the distribution of total index scores suggests consumers have only small differences in their service quality expectations, an index measure of high reliability is important (Borg and Gall, 1979).

Item-to-total correlations, both items-to-dimension and dimension-to-index, are likewise robust, indicating they have meaning in measuring and understanding the various aspects of the construct (Babbie, 1979; Borg and Gall, 1979). In giving support to having five distinct dimensions in their measure, Parsuraman et al. (1982) cite the relatively low inter-correlations among the five factors themselves. Similarly, LODGSERV exhibits low inter-dimension correlations.

Distribution of LODGSERV Scores

A respondent's score on this service-quality expectation index could range from 1 (reflecting low expectations) to 7 (reflecting high expectations). For this research sample, the scores on the 26-item, refined index ranged from a low of 4.12 to a high of 7.00, with the median score of 6.15.

Scores from the refined index approximate the shape of a normal distribution.

Skewness measures a curve's deviation from symmetry and will take on a value of zero when the distribution is completely symmetrical and bell-shaped. The skewness value of -0.60 indicates a curve reasonably symmetric in shape with scores clustered to the right of the mean and "compares favorably with skewness values reported for other multiple-item scales" (Parasuraman, et al., p. 26).

Kurtosis measures the relative peakedness or flatness of the curve and will have a value of zero when the scores are normally distributed. A kurtosis value of 0.17 indicates that, for this research sample, the distribution is slightly more peaked (narrow) than would be true for a perfectly normal distributions—i.e., there's a concentration of values around the mean of 6.12. Indeed, with a standard deviation of .53, 95% of all respondents had scores between 5.59 and 6.65. The standard error of measurement for this sample is 0.04.

The distribution of LODGSERV scores confirms the fact that people have high expectations for service quality when it comes to staying in a hotel. In fact, two out of three (65.2%) consumers have index scores at or above the 6.0 mark.

While high expectation levels are widespread, examination of individual dimension scores shows that consumers do have a hierarchy of service-quality expectations when staying in a hotel (see Table 2).

Leading the way with a mean score of 6.63, the most critical dimension of service-quality in a hotel experience is reliability. More than 9 out of 10 of those polled expressed very strong feelings about expecting hotels to keep their promises. As would be expected, travelers want dependability; they want utilities and equipment to work consistently, and if a problem does arise, they want it quickly corrected. They also want services, such as a wake-up call or room service, delivered on time.

This finding emphasizes how important it is for a hotel to promise only that which it can provide. Whether the promise is implied, such as in the picture of a spacious, well-appointed guest room in a print advertisement, or explicit, such as housekeeping saying the roll-away bed would be brought up within a half hour, management must realize that a promise made must be a promise kept. In other words, a promise sets an expectation level, which, if unmet, can result in a dissatisfied guest. Given the importance of the reliability dimension, then, hoteliers should beware of making promises they cannot keep. It is better for a hotel to not make a promise, implied or explicit, than to make it and not be able to keep it.

Assurance, having a mean of 6.39, was found to be the next most important service quality dimension. Overall, 8 out of 10 strongly agreed with statements that reflect how important it is for a hotel's employees to convey trust and confidence. Guests are really buying peace of mind. They want to feel confident that employees are well-trained and experienced to handle both the routine and unexpected.

Zemke and Albrecht's (1985) concept of a Service Triangle is built on the premise that high service quality can only be delivered when three service elements are in place: (1) distinctive service strategies, (2) service systems which make it easier for employees to serve, and (3) management committed to "serving the employee who serves the customer." Given this, it is particularly interesting that, within the assurance dimension, more than 80% of these travelers think the hotel

Table 2
Summary of LODGESRV and Its Five Dimensions (N = 201)

Dimensions and Items	Mean	Standard Deviation	Strongly Agree*
<i>Reliability</i>	<i>6.63</i>	<i>.48</i>	<i>91.5%</i>
Equipment Works	6.76	.44	98.0
Dependable/Consistent	6.68	.65	95.0
Quickly Correct Problems	6.59	.75	92.0
Services On-Time	6.48	.90	88.6
<i>Assurance</i>	<i>6.39</i>	<i>.54</i>	<i>80.6%</i>
Trained/Experienced Employees	6.58	.63	94.5
You Feel Comfortable	6.53	.68	90.5
Company Supports Employees	6.28	.82	83.1
Knowledgeable Staff	6.21	.90	82.1
Reservationists Are Knowledgeable	6.33	.85	81.6
<i>Responsiveness</i>	<i>6.08</i>	<i>.74</i>	<i>64.2%</i>
Prompt Service	6.48	.70	89.7
Staff Shift Where Needed	5.85	1.08	66.2
Do Special Requests	5.90	1.00	62.7
<i>Tangibles</i>	<i>5.96</i>	<i>.75</i>	<i>61.7%</i>
Neat Personnel	6.61	.82	93.0
Quality Food/Beverage	6.14	1.31	80.6
Attractive Room	5.95	1.71	68.7
Decor Reflects Concept	5.88	1.02	66.7
Attractive Public Areas	5.77	1.25	53.7
Up-To-Date Equipment	5.41	1.43	53.2
<i>Empathy</i>	<i>5.84</i>	<i>.74</i>	<i>48.8%</i>
You Feel Special/Valued	6.18	.97	80.6
No Red Tape	6.18	.95	77.6
Sympathetic Employees	6.01	1.11	75.6
Sensitive Employees	6.07	.95	73.1
Convenient Hours	5.95	1.25	67.7
Anticipates Your Needs	5.66	1.07	56.7
Complimentary Services	5.41	1.35	49.3
Has Healthful Menus	5.32	1.45	44.3
LODGESRV	6.12	.53	65.2%

*Strongly Agree represents the response values of 6 and 7.

should "...give employees support so that they can do their jobs well."

Somewhat akin to the first two dimensions is responsiveness, ranked number three with a mean of 6.08. Nearly two thirds expect hotel personnel to be available, accessible and willing to help guests solve a problem.

The overriding aspect of this dimension is promptness. With today's fast-paced lifestyles, when customers want service, they want it now. Whether checking in or out of the hotel, or waiting to be seated in the restaurant, hotel guests expect to be promptly served. This means front-desk personnel shift to help when lines occur, the restaurant host immediately acknowledges the entering guest, and the wake-up call

rings when requested.

The importance of promptness cannot be overemphasized, especially as it relates to service. Time spent waiting always seems much longer than it really is. In fact, some suggest that the mind warps real time by a 4:1 ratio (Knutson, 1988). To a waiting guest, then, 30 real seconds is the equivalent of two perceived minutes.

A mean of 5.96 places the tangibles dimension fourth. While appearances can sometimes be deceiving, guests draw conclusions based on what they see, hear, feel, and smell. Walt Disney understood this; so did Ray Kroc. They also recognized that sometimes it's the small details which can make vivid lasting impressions. In fact, 85% of what people remember comes through their eyes while another 11% comes through their ears; the rest comes through other senses (LeBoeuf, 1987). (It should be mentioned that, while the question about being given a thoroughly clean room was statistically eliminated from the refined index, respondents strongly voiced their need for cleanliness.)

Between half and two thirds of the sample feel it is important for a hotel to have an attractive decor reflective of its image and price range, as well as up-to-date equipment such as key cards, computerized accounting and fast, efficient elevators. It is, however, the appearance of the hotel's staff which carries the most impact on guests. Almost unanimously, these respondents expect employees to be clean, neat and appropriately dressed. Being immaculately dressed is a subtle way for employees to tell guests that they have pride in all aspects of their work.

Ranked fifth, the empathy dimension of service quality is still very important to about half of the hotel guests. Empathy is the warm and fuzzy, the TLC of the hotel experience. It is characterized by caring employees who are sensitive to a guest's individual needs and by management who empower its employees to solve guest problems, even if it means going outside standard operating procedures. It is also demonstrated by hotels that operate their facilities and services during hours which are convenient for guests, not just management. And, according to these respondents, a hotel shows it has empathy when the entire staff (contact as well as non-contact) makes them feel like special and valued guests.

Reviewing the five distributions presented in Table 2 points out that consumers have consistently high expectations for reliability and assurance. Not only are the means high, but the standard deviations are small, indicating there may be little discriminatory power within these two dimensions. These items, then, are most likely dissatisfiers, rather than satisfiers. In other words, people will not be satisfied because they are present, but they will be dissatisfied if they are absent.

On the other hand, items within the other three dimensions (except prompt service in responsiveness) are more likely to help management segment—i.e., discriminate—along such characteristics as price segment, gender, and travel patterns. While additional statistical analysis is necessary to confirm this speculation, preliminary investigation does indicate the potential for such segmentation.

CONCLUSIONS AND IMPLICATIONS

Overall, several conclusions may be drawn from this study. First, LOGSERV

is a reliable and valid index to measure consumer expectations for service quality in hotels. Thus, it can become an effective management tool for the lodging industry. What remains to be measured is the perception side of the equation.

By comparing its customers' perceptions of service quality with consumers' expectations, a hotel company will be able to determine whether it is exceeding, meeting or falling below expectations. LODGSERV will enable managers to make these comparisons on each of the five service dimensions as well as from an overall perspective.

Other valuable applications include:

- Segmenting consumers into groups (e.g. high, medium and low) based on their expectation scores. By analyzing each segment's characteristics, the hotel will gain insights for more effective target marketing.
- Grouping units/regions/districts based on customers' perceptions. Scores can be compared over time and by carefully examining the characteristics of "winners" and "losers," management can discover key factors that facilitate, or hinder delivery of high-quality service. Good performers can be rewarded and their procedures replicated in other properties; weak properties can be targeted for improvement strategies.
- Showing a hotel/hotel company how it compares with its competition on service quality. The dual-set format (expectations and perceptions) makes it easy to include perception questions for competitive hotels. Management can learn how they are positioned and how they are competing. This competitive information will be a boon to advertising and sales efforts.

Next, the index scores confirm the fact that people do have very high expectations for service-quality when they stay in hotels. With such high expectations, it may be difficult for hotels to meet, let alone exceed expectations. In fact, Parasuraman and his colleagues found that, regardless of business service sector, perceptions consistently lagged expectations by about one full index point. They concluded, therefore, that given the current level of service-quality, if a business can just meet expectations, that may be sufficient to project an image of excellence. However, as competition intensifies and more businesses are able to meet these expectations, the norm for excellent service quality will become more stringent. Their conclusion is applicable to the lodging industry.

Finally, the process of converting an index, designed to generically measure consumers' expectations for service-quality, into a more useful industry specific tool without conceding validity or reliability has been demonstrated. This research strongly suggests that the process can and should be replicated for other segments of the hospitality industry. Efforts are currently underway to develop and test the following:

- DINESERV - For "fine-dining" restaurants
- TABLESERV - For "family/casual/theme" restaurants
- QUICKSERV - For "quick-service" restaurants
- CLUBSERV - For private clubs
- DRIVESERV - For delivery operations
- WORKSERV - For "business dining"

HOSPSERV - For hospital foodservice
DORMSERV - For college/university foodservice
WINGSERV - For airlines

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