

An Examination of Expectation as a Comparison Standard in Measuring Service Quality in the Hospitality Industry

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현대산업에서 서비스 품질 측정을 위한 표준치와 기대치의 비교

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요 약

본 연구는 서비스업에서 서비스 품질을 측정하는 것에 있어서 표준과 기대치에 관한 비교다.

외식산업에서의 기대의 개념은 서비스 품질을 측정한다는 것으로 이를 표준화하기 위해 광범위하게 사용되었다. 그러나, 서비스 품질 측정에 있어서 기대치가 당위성과 신뢰성에 의해 많은 연구자들에 의해 비평되었다.

이 연구의 목적은 기대치에 통한 서비스업에서의 서비스 품질을 측정한다는 것이다. 본 연구는 다음과 같은 한계점을 가진다.

첫째로, 연구의 표본수가 적기 때문에 분석에 있어서 신뢰성이 떨어졌다.

둘째, 한정된 한국의 호텔을 이용했던 여행자에 한하여 설문을 했기 때문에 객관성이 결여될 수가 있다.

셋째, 총체적인 서비스 품질과 고객 만족의 측정은 하나의 항목 저울과 이와 같이 그것을 사용하면서 수행되었기 때문에 이들의 신뢰성을 추정하는 것이 불가능했다.

연구결과 소비자가 서비스의 평가를 위한 비교 기준으로서 기대치에 대한 4개의 다른 수준을 가진 요인을 사용하였다.

본 연구에 있어서 기대의 개념이 고객 만족에 서비스 품질보다 관계가 높다는 것을 밝힌다.

I. INTRODUCTION

Service quality has emerged as an issue of paramount importance for the hospitality industry. It is ordinarily identified as being one of the most effective and difficult

means of building a competitive position in a service industry and improving organisational performance.¹⁾

Service quality offers a way of achieving success among competing services, where companies that provides nearly identical services are competing within a small area, such as hotels and restaurants might do, offering high service quality may be the only way of differentiating oneself from many competitors. Establishing high service quality enhances customer satisfaction. Thus it can generate increased market share and profitability of providers.²⁾

However, despite of the importance of service quality in the hospitality industry, it seems like many managers not know how to measure service quality. Moreover, the existing measurement of service quality is still controversial in terms of generating/providing reliable and valid information for managers.³⁾

The use of comparisons is central to measuring and understanding of service quality. The notion of comparison standards- what is being used as a reference comparison what evaluating service quality, has important implications for methodology. Although several comparison standards have been introduced into the literature from different perspectives, their utilisation often triggers methodological problems in the measurement of service quality such as vague conceptualisation and miss-interpretation.⁴⁾

Expectation is one of the most widely employed as a comparison standard in the measurement of service quality.^{5,6,7)}, Customers compare their expected level of

1) Lewis, B. R. (1993), Service quality: recent developments in financial service. *International Journal of Bank Marketing*, 11(6), 19-25.

1) Hoffman, K. D. and Bateson, J. E. G. (1997). *Essentials of Services Marketing*. Orlando: Dryden.

3) Hoffman, K. D. and Bateson, J. E. G., *op cit*.

4) Ekinci, Y., Riley, M., and Chen, J. S. (2000). A review of comparison standards used in service quality and customer satisfaction studies: some emerging issues for hospitality and tourism research. *Tourism Analysis*, 5(2/3), 197-202.

5) Parasuraman, A., Zeithaml, V. A., and Berry, L. L., (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420-450.

6) Parasuraman, A., Zeithaml, V. A., and Berry, L. L., (1994). Reassessment of expectations as comparison standard in measuring service quality: Implications for further research. *Journal of Marketing*, 58(Jan.), 111-124.

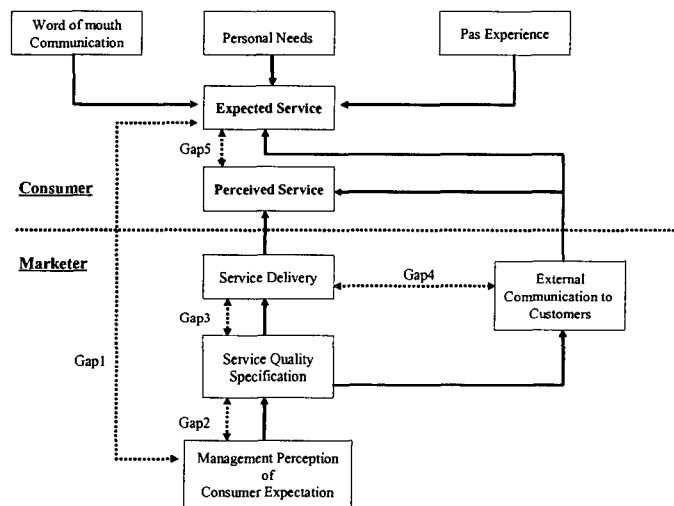
7) Teas, R. K. (1994). Expectations as a comparison standard in measuring service quality: An assessment of a reassessment. *Journal of Marketing*, 58(Jan.) 132-139.

performance with the perceived service performance in order to judge service in order to judge service quality. However, despite its importance as a comparison standard, its use is still vague and need to be refined.⁸⁾

The aim of this research is to provide some insights into the nature of expectation in assessing service quality in the hospitality industry. This study investigates whether or not different types of expectation constitute a scale and that can be used to improve service quality measurement. The relationships of customer satisfaction with service quality and the concept of expectation are also illuminated. To do this an alternative methodology named the Guttman scaling procedure is utilized.

II. MEASUREMENT OF SERVICE QUALITY

Parasuraman et al.⁹⁾ have developed one of the most popular models of service quality; gap model, which can evaluate perceived service quality as a function of the difference between expected and perceived service. <Fig. 1> shows the SERVQUAL model.



<Fig. 1> The SERVQUAL model

Source: Parasuraman et al. (1985), p.44.

8) Liljander, V. and Strandvik, T. (1993). Different comparison standard as determinants of service quality. *Journal of Consumer Satisfaction and Dissatisfaction*, 6, 118-132.

9) Parasuraman, A., Zeithaml, V. A., and Berry, L. L., (1994). *op. cit.*, 58(Jan.), 111-124.

According to <Fig. 1>, the upper part of the model related to the customers and the lower part related to the service provider. The process in between accounts for the different steps that have to be undertaken to meet the customers demands. The expected service is a function of the customers past experience, personal needs and word of mouth communication. In summary, the gap model postulates that the process of service quality can be evaluated in terms of gaps between expectations and perceptions on the part of marketers, employees, and customers.

Parasuraman et al.¹⁰⁾ argued that the most important gap is between customers expectations of service and their perception of the service actually delivered (gap 5). The other four gaps (1, 2, 3, and 4) are the major causes of gap 5. Thus firms should try to close or narrow the other four gaps first in order to manage gap 5.

The development of the gap model by Parasuraman et al.¹¹⁾ opened new horizons to the understanding of service quality. Moreover, the measurement of the gap between customers expectation of service and perception of service received (gap 5) led to frequently used and a highly debated service quality instrument called the SERVQUAL scale.

The original SERVQUAL scale was composed of two sections. The first section contains 22 items for customer expectations of excellent firms in the specific service industry (E). The second contains 22 items, which measure consumer perceptions of service performance of a company being evaluated (P). The Result from the two sections is then compared and used to determine the level of service quality($Q = PE$).

The developers of SERVQUAL modified its structures.¹²⁾ The modified model is designed to measure two kinds of service quality. One is the gap between perceived service and desired service labelled by developers as Measure of Service Superiority (MSS), the other is the discrepancy between perceived service and adequate service (minimum service) labelled as Measure of Service Adequacy (MSA). In response to the criticism of different score measure (i.e. indirect measure of perception and expectation gap), Parasuraman et al.¹³⁾ suggested three alternative service quality measurement formats to capture MSS and MSA. These are as follows.

10) *Ibid.*

11) *Ibid.*

12) Teas, R. K. (1994). Expectations as a comparison standard in measuring service quality: An assessment of a reassessment. *Journal of Marketing*, 58(Jan.) 132-139.

13) *Ibid.*

Three-Column Format This format measures separate ratings of desired, adequate, and perceived service with three identical, side-by-side scales.

Two-Column Format This format generates direct ratings of the service superiority and service adequate gaps with two identical scales.

One-Column Format This format generates direct ratings of only the service superiority with one scale.

The SERVQUAL instrument has been widely used to measure service quality in various service industries including the hospitality industry. Also a great deal of recent research on service quality has been carried out with the frame of the SERVQUAL model. However, despite of its popularity, it has received its share of criticism since its development. A considerable number of criticisms focused on the use of expectation as a comparison standard.^{14,15)}

III. THE ROLE OF EXPECTAION AS A COMPARIOSON STANDARD

The concept of expectation has been emphasized as a key variable in the evaluation of service quality. However, Teas¹⁶⁾ points out that some validity problems arise when customer expectation is used as a comparison standard. For example, expectation is dynamic in nature and may change according to customers experiences and consumption situations. Boulding, Kalra, Staelin, and Zeithaml¹⁷⁾ reject the use of expectation as a comparison standard for the measurement of service quality and recommend performance only measurement.

The theoretical examination of customer expectation as a comparison standard can be considered from two perspectives: narrow and broad. The narrow perspective views customer expectation as a belief in future performance of a product. The broad

14) Zeithaml, V. A., Berry, L. L. and Parasuraman, A. (1993). The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, 21 (1), 1-12.

15) Cronin, J. J. Jr. and Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58 (Jan.), 125-131.

15) Teas, D. K. *op cit.*

17) Boulding, W., Kalra, A., Stealin, R. and Zeithaml, V. A. (1993). A dynamic model process model of service quality: from expectations to behavioural intention, *Journal of Marketing Research*, 30(February), 7-27.

perspective proposes that the expectation is multidimensional and associated with different levels of *performance*. In this respect, Millers¹⁸⁾ definition is notable.

Miller classified expectations into ideal, expected, *minimum tolerable* and *deserved* categories. The ideal is the wished for level, and reflects what the respondent feels the performance of the product or service can be. The expected is based on the respondents objective calculation of what the performance will be. This is also known as predictive expectation. The minimum tolerable is the least acceptable performance level. This is better than nothing and reflects what the minimum level of perceived performance must be. The deserved level can be determined by a consumers evaluation of the rewards and costs involved in the relationship. Hence, this indicates what individuals, in the light of their investments, feel that the performance ought to be or should be (Miller, 1977, p. 76).¹⁹⁾ Also, the types of expectation are hierarchical, with desired expectation at the top and minimum tolerable at the bottom. The position of the expected service and deserved service may change according to situational and personal factors.

The SERVQUAL research team defines desired service as the level of service that customers hope to receive. This is a mixture of what customers believe the level of performance can be and should be.²⁰⁾ They also claim that this corresponds to customer evaluation of service quality. The adequate service expectation is defined as the lower level of performance that consumers will accept. Zeithaml et al. (1993, p. 6)²¹⁾ note that this level of expectation is comparable to Millers minimum tolerable expectation. This is known as *predictive expectation*, and is associated with customer satisfaction. The area between desired service and adequate service is called the zone of tolerance (ZOT) and represents the range of service performance customers would tolerate.

However, according to Zeithaml et al.s study, the concept of desired service includes both the *ideal* service and *deserved* service presented by Miller. They also

18) Miller, J. A., (1977). Studying satisfaction: modifying models, eliciting expectations, posing problems and making meaningful measurements. in H. Keith Hunt (ed.), *Conceptualizations and Measurement of Consumer Satisfaction and Dissatisfaction*, Bloomington: School of Business, Indiana University, 72-91.

19) *Ibid.*

20) Babakus, E. and Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research*, 24, 253-268.

21) *Ibid.*

argue that the definition of adequate service is comparable to Millers minimum tolerable level. But Miller highlights that such a service performance merely means better than nothing. He notes that, at that level of service performance:

the consumer experiences dissatisfaction. He may attempt to remedy the situation and probably wont purchase that brand (continue patronizing that store) but will switch to another. If no alternative is available, he will probably continue to use the product as long as it satisfies or fills a need. (Miller, 1977, p. 79)²²⁾

Based on the above statement, performing above the minimum tolerable level does not assure satisfaction as Zeithaml et al. proposed that it would. And, more importantly, consumers would not tolerate services that were equivalent to their minimum tolerable expectation. Taking into account Millers²³⁾ definition, consumers would tolerate service performance if it were equal to the deserved service level. Therefore a ZOT may only occur when the service performance is between the predicted (expected) and the deserved expectation. Furthermore, the bottom line for satisfaction is where the perceived service performance is equal to the *deserved expectation*.

The negative empirical findings concerning the measurement of expectations has led to some doubt about its value. Some scholars maintain that measurement of expectations does not provide unique information for estimating service quality; they would argue that performance only assessment has already taken into account much of this information.^{24),25)} In general, previous studies would recommend that performance only measurement is sufficient. However, it has been acknowledged that such an approach would limit the explanatory power of service quality measurement.²⁶⁾ because assessment of desired and deserved expectations may be valuable in determining and monitoring service performance and customer satisfaction. Also, this information might be used as an internal benchmark (or a standard) to enhance the existing level of service quality in the future. However, attempts to explain the

22) Miller, J. A., *op cit*.

23) *Ibid*.

24) Cronin, J. J. Jr. and Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus- expectations measurement of service quality. *Journal of Marketing*, 58 (Jan.), 125-131.

25) Babakus, E. and Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research*, 24, 253-268.

26) parasuraman, A., Zeitham, V. A., and Berry, L. L., *op cit*.

difference between service quality and customer satisfaction, as recommended by Zeithaml et al.'s model, appear to be unsuccessful due to the fact that the two concepts are always highly correlated.

To support the validity of expectations as a comparison standard in the evaluation of services the Guttman scaling procedure is used. The following section introduces the principles behind the methodology and the rationale for this approach.

IV. METHODOLOGY

For this study, the Guttman scaling procedure is employed as a methodology.²⁷⁾ The Guttman scaling, also known as scalogram analysis and cumulative scaling, was originally developed to set for unidimensionality in a scale. Unidimensionality is considered as an essential element of construct validity^{28,29)}. We follow the line of Gerbing and Anderson³⁰⁾ and accept that exploratory factor analysis is unsuitable for confirming unidimensionality. Essentially, this factor analysis is based on linear correlation and is therefore a form of probability modelling. The main assumption is that, if there is a linear relationship between the scale items, it is unidimensional. However, Hattie³¹⁾ argues that a linear relationship in some cases indicates homogeneity rather than unidimensionality. Guttman scaling is a deterministic form of modelling and it provides two unique parameters to establish unidimensionality, in contrast to probability modelling. The two main properties of Guttman scaling are that it is simultaneously ordinal (hierarchical) and cumulative. Therefore, in the Guttman scaling procedure, unidimensionality is established by displaying both *hierarchical* and *cumulative* properties of a scale.^{32,33,34)} For example: salt, rock and diamond can be

27) Guttman, L. (1950). *op. cit.* in McIver and Carmines (1981).

28) Hattie, J. (1985), Methodology review: Assessing unidimensionality of tests and terms. *Applied Psychological Measurement*, 9(2), 139-164.

29) Ekinci, Y., Riley, M., and Chen, J. S. (2000). A review of comparison standards used in service quality and customer satisfaction studies: some emerging issues for hospitality and tourism research. *Tourism Analysis*, 5(2/3), 197-202.

30) Gerbing, D. W. and Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 15, 186-192.

31) Hattie, J., *op. cit.*

32) Guttman, L. (1944). A technique for scale analysis. *Educational and Psychological Measurement*, 4, 170-190.

ordered according to hierarchical order based on the degree of hardness. Furthermore, the structure of cumulating can be checked according to a predetermined criterion, which in this example, is hardness. On a purely unidimensional scale if a person accepts that rock is hard they must accept that diamond is harder. Hence the rationale for using Guttman procedure is our assumption of discrete dimensions and the evidence for its unidimensionality.

Since perfect scales rarely occur in real-life situations, the cumulative property of the scales is checked by the error counting procedure. Guttman³⁵⁾ suggest using Coefficient of Reproducibility statistics (CR) to assess the number of errors and the degree of scalability. To do that the CR score has to be .90 or higher. This statistic indicates that the scale should only produce 10% error if the examined construct is scalable and unidimensional. The formula for measuring CR is as follows (Guttman, 1950):

$$CR = 1 - \frac{\text{total error}}{\text{total responses}}$$

$$CR = 1 - \frac{\text{total error}}{(\text{items} \times \text{respondents})}$$

Edwards³⁶⁾ argues that scales with extreme items tend to spuriously inflate CR scores and therefore minimum marginal reproducibility (MMR) statistics should also be taken into consideration. MMR can be computed as follows:

$$MMR = \frac{(\text{total responses} - \text{marginal errors})}{\text{total responses}}$$

$$CR - MMR = \frac{(\text{marginal errors} - \text{scale errors})}{\text{total responses}}$$

The difference between CR and MMR shows the potential for improvement in unidimensionality.³⁷⁾ Since there is no definitive interpretation of the difference between CR and MMR, various alternatives have been suggested.³⁸⁾ As a rule of

33) McIver, J. P. and Carmines, E. G. (1981). *Unidimensional scaling*. USA: Sage

34) 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*, 49(fall), 41-50.

35) Guttman, L., *op. cit.* (1950).

36) Edwards, A. L. (1957). *Techniques of Attitude Scale Construction*. New York: Appleton Century Crofts.

37) *Ibid.*

38) McIver, J. P. and Carmines, E. G., *op. cit.*

thumb, MMR should not be excessively high or close to CR. Menzel³⁹⁾ offers another statistic, the coefficient of scalability (CS), to check whether the scale consists of balanced positive and negative responses. This measure also indicates whether the scale has potential for further improvement of its unidimensionality. As a minimum threshold, Dunn-Rankin (p.106)⁴⁰⁾ suggests that CS should be greater than +.60, if a scale consists of balanced positive and negative items.

If a scale successfully qualifies through the above procedure, a further test is required to examine the consistency of the cumulative structure between scale items. According to the Guttman scaling procedure, the scale items should display a weak monotonic relationship. To test this, Yules Q correlation is recommended for a dichotomous rating scale.⁴¹⁾

According to Ekinci and Riley (1999), Guttman scaling can be formed according to two methods. In the first method, the contents of the items are used to establish a hierarchical and cumulative scale. In the second, a hierarchical and cumulative structure is searched for in the data. Then the principles of Guttman scaling procedure are employed to check the unidimensionality of a scale. Thus, the former method employs a ready-made ordinal and cumulative scale before the main data collection and check the cumulative structure in the data, while the latter is more practical and seeks an ordinal and cumulative structure in the survey data if the construct is already scaled.⁴²⁾ In both cases, the purpose of the study is the same that is, to assess whether or not the scale is unidimensional. In the present study, for the purpose of the research, the formal method (using a ready-made ordinal and cumulative scale) was employed. The four different types of expectation were generated for constructing an ordinal scale. They are *desired*, *anticipated*, *deserved* and *minimum tolerable*. The scale items were as follows: (1) the level of service I received at this hotel was lower than I desired; (2) the level of service at this hotel was lower than I anticipated; (3) the level of service at this hotel was lower than I deserved; (4) the level of service at this hotel was less than adequate. Definitions of desired (ideal), *anticipated* (predictive), *deserved* and *adequate* (minimum tolerable) expectation were adopted

39) Menzel, H. (1953). *op. cit.* in McIver and Carmines (1981).

40) Dunn-Rankin, P. (1983). *Scaling Methods*. New Jersey: Hillsdale

41) Koslowsky, M., Pratt, G. L., and Wintrob, R. M. (1976). *op. cit.* in Ekinci and Riley, (1999).

42) Edwards, A. L. *op. cit.*

from the previous studies.^{43,44)}

V. FINDINGS

The field survey was conducted at an international airport in Korea. The survey population is consisted of international travellers who stayed in Korean hotels. In order to provide face validity, all samples were English native speakers or Western people, who use English in their working environment. The analysis of findings was also conducted with the data collected form English native speakers only. However, no significant differences were found. In total, 110 questionnaires were distributed and 102 valid questionnaires were collected. The sample size was sufficient according to Guttman.⁴⁵⁾

At first stage, to validate unidimensionality of the expectation scale, CR, MMR, and CS value were assessed. As mentioned earlier Guttman⁴⁶⁾ set a standard of 10% error and coefficient of reproducibility (CR) of .90 in order to assess the scalability of a scale. The first stage of error assessment yielded a satisfactory CR value (.96) for the four-item expectation scale. Both MMR (.78) and CS (.74) scores were compared with the obtained CR value and were found to be adequate. These results suggest that the scale fulfils the criterion of unidimensionality and therefore, evaluation of services can be scaled by using different types of expectations.

The second stage of validating the expectation scale involved performing Yules Q correlation in order to test a weak monotonic relationship between the scale items. <Table 1> shows the Yules Q correlations among the expectation scale items.

[Please insert Table 1 here]

Items	(1)	(2)	(3)	(4)
Lower than desired(1)	1			
Lower than desired(2)	.98**	1		
Lower than desired(3)	.96**	.91**	1	
Less than adequate(4)	.94**	.95**	.74**	1

**Significant at less than .01 level; *significant at less than .1 level.

43) Miller, J. A. *op. cit.*

44) Parasuraman, A., Zeithaml, V. A., and Berry, L. L., *op. cit.*

45) Guttman, L., *op. cit.*

46) *Ibid.*

Lower than anticipated (2)

As can be seen from the <Table 1>, the relationships between the items were quite robust and there was no need to eliminate any item from the scale (Yules $Y > .70$).

To investigate the relationships between customer expectation, service quality and customer satisfaction, the Spearman correlation test was employed. <Table 2> shows the correlation matrix involving expectation, overall quality and customer satisfaction scales.

<Table 2> Relationships Between Expectations, Overall Service Quality and Customer Satisfaction

Scales	Exp	OSQ	CS/D
Expectations(Exp.)	1		
Overall service quality(OSQ)	.43**	1	
Customer Satisfaction(CS/D)	.51**	.79**	1

The results show that expectations are positively correlated with overall service quality and customer satisfaction. The correlation between expectations and customer satisfaction was higher than that between expectation and overall service quality. Separate analyses also revealed that the relationships between the expectation scale and the four SERVQUAL scales were weak (all r values $< .30$, $p < .05$). These findings show that the concept of service quality is a better indicator of customer satisfaction than service quality.

To investigate whether the concept of service quality can be distinguished from customer satisfaction using different types of expectation, an independent samples t -test was conducted. To do this, customers were classified into two groups with respect to their score on the expectation scale. Group 1 contained those customers who rated the level of service performance equal to or higher than desired expectations and group 2 contained those customers who rated the level of service performance lower than their desired expectations. The dependent variables were measures of customer satisfaction and overall service quality. <Table 3> shows the findings of the independent samples t -test.

The results in <Table 3> indicate that perceptions of service quality and customer satisfaction are statistically different for the two groups of customers who rated the level of services according to their desired expectation ($p < .00$). This finding indicates that desired expectation is a significant variable in relation to evaluation of service quality

<Table 3> Evaluation of Service Quality and Customer Satisfaction with Respect to Desired Expectation

Segments of Expectation	Independent Samples t-test Statistics				
	n	Means	St.D	t-value	sig.
Overall Service Quality					
Equal or higher than desired	61	4.25	.72		
lower than desired	26	3.50	.95	4.00	.000
Customer Satisfaction					
	n	Means	St.D	t-value	sig.
Equal or higher than desired	61	4.25	.70		
lower than desired	26	3.35	.94	4.95	.000

and customer satisfaction. The descriptive statistics for the measurement of customer satisfaction (mean = 3.98, St.D. = .89) and overall service quality (mean = 4.03, St.D. = .89) imply that customers would like to receive a level of service close to their desired expectation in order to be happy in terms of customer satisfaction or service quality.

However, as can be seen from the mean values of the two segments, evaluations of customer satisfaction and service quality are the same and therefore these two constructs cannot be separated according to desired expectation. In both cases, customers would like to receive service equal to or higher than the desired level in order to note satisfaction and quality. A ZOT may occur between the desired and predictive expectations (SQ mean = 4.00, CS/D mean = 3.67) or the desired and minimum tolerable expectations (SQ mean = 3.50, CS/D mean = 3.35), as proposed by Zeithaml et al.⁴⁷⁾ However, testing of this hypothesis was not possible due to the limited number of observations (for the former case the sample was limited to four; for the latter there was no observation in response to service performance lower than the minimum tolerable level). However, using the expectation scale, three levels of service performance were identified in order to provide further insight with respect to this proposition. These were: (1) levels of service equal to or higher than desired; (2) levels of service lower than anticipated but equal to or higher than desired; (3) levels of service lower than desired but equal to or higher than minimum tolerable. <Table 4> shows the means of customer satisfaction and service quality evaluation with respect to these segments.

The mean scores of the customer satisfaction and service quality scales indicate that

47) Zeithaml, V. A., Serry, L. L. and Parasuraman, A., *op. cit.*

Table 4. Three Levels of Service Performance According to Different Types of Expectation

Scales	Equal or higher than desired exp.		Lower than anticipated but equal or higher than deserved exp.		lower than deserved but equal or higher than minimum tolerable exp.	
	Mean	St.D	Mean	St.D	Mean	St.D
Overall service quality(OSQ)	4.25	.72	3.79	.80	2.71	.95
Customer Satisfaction(CS/D)	4.25	.70	3.57	.76	2.71	.95

customer evaluations of both constructs are either similar or identical for the three segments. Therefore it may be argued that these two concepts cannot be separated according to the different types of expectation. As can be seen from <Table 4>, the service performance level equal to or higher than the minimum tolerable expectation (mean=2.71) is rather low and does not assure satisfaction or superior service quality, as Zeithaml⁴⁸⁾ proposed it would. Also, the minimum thresholds for service quality and satisfaction seem to fall where the level of service performance is equal to the customers deserved expectation (OSQ_{mean} = 3.79, CS_{mean} = 3.57), which is similar to Millers proposition.

VI. DISCUSSION AND CONCLUSION

The objective of this study was to determine the role of customers expectations in the evaluation of service quality in the hospitality industry. The CR, MMR and CS scores of the expectation scale (.95, .78 and .74 respectively) provided strong evidence that *evaluation of services can be scaled according to different types of expectation*, namely desired, anticipated, deserved and adequate. In other words, consumers use four different types of expectation as a comparison standard for the evaluation of services. This finding supports Millers⁴⁹⁾ theory that expectations can be antecedents of customer satisfaction. Also, Zeithaml et al.s⁵⁰⁾ proposition with respect to the use of desired expectation as a comparison standard was partly supported by this result.

48) *Ibid.*

49) Miller, J. A. *op. cit.*

50) Zeithaml, V. A., Berry, L. L. and Parasuraman, A., *op. cit.*

However, this study indicates that different types of expectation cannot distinguish between the concepts of customer satisfaction and service quality.

In the present study, although the expectation scale is correlated highly with both service quality and customer satisfaction, the magnitude of correlation is higher for customer satisfaction ($r = .51$) than for service quality ($r = .43$). This may suggest that the concept of expectation is more appropriate for measuring customer satisfaction than service quality, as originally suggested by Miller.⁵¹⁾ It may also be argued that customer satisfaction is more related to the use of internally assessed criteria that involve the use of our expectations in the evaluation of services. This also provides further insights concerning the theory of the SERVQUAL model and its applications, in which service quality is conceptualized as a gap between customer expectation and perceived performance. According to this study, performance only measurement seems to be the main indicator for measuring service quality and similar results are also reported in the service quality literature.⁵²⁾

One of the apparent implications of this study is that managers should keep the service level above the customers deserved expectations in order to satisfy them. Also, the use of expectation scale together with the measure of overall satisfaction and service quality would provide more diagnostic capability about the level of service performance from the customers perspective. This would provide better information for developing quality improvement strategies.

This research has certain limitations and thus interpretation of its findings needs to be approached with caution. Firstly, the study sample is small and is limited to a relatively specific group of travelers who stayed in Korean hotels. Secondly, measurements of overall service quality and customer satisfaction were carried out using a single-item scale and thus it was not possible to estimate their reliability. Therefore, a study of further applications of the expectation scale in different samples would better establish its external validity.

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