

BASIC SERVICE QUALITY DIMENSIONS IN TOURIST DESTINATION PLANNING

Chris VASSILIADIS^{*}, Raghu BISTA^{**}, Anestis FOTIADIS^{*},

Abstract. *The study is related to the basic service quality dimensions in a tourist destination. It attempts to propose a set of dimensions of destination service quality and a quality measurement scale which can be used to measure the service quality in a tourist destination. This research study has found four dimensions of destination service quality and successfully developed a measurement scale that can be used to measure the basic service quality in a destination. Initially 31 variables were developed using a qualitative survey. An initial five dimensions with 15 items were developed from sample using EFA. The findings of the study have implications for the destination managers of a country in how they understand how tourists access the service quality in the destination.*

Key words: *tourist destination, service quality, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA)*

Introduction

Service Quality has become very important in this age of increasing competition in destination management. Tourists' expectations are constantly rising, therefore service quality is a necessary growth strategy for the tourism industry for the new millennium (Augustyn and Ho, 1998). Postma and Jenkins (1997) also state that quality improvement should be considered a useful instrument in achieving competitive advantage, as a strategy to reduce uncertainty, and as a way to improve the profits of tourist organisations. Destinations are amalgams of tourism products, offering an integrated experience to consumers (Buhalis, 2000). Tourists generally travel far for their holidays, to see new places, to relax, and have new experiences. A destination offers various types of services at the same time, like accommodation services of various quality and price, food and restaurant services, entertainment services, transportation facilities. Many organisations are involved in delivering services to tourists during their stay, which raises the potential for a lack of coherent service standards (Laws, 1995).

Mackey (1989); Woods and Deegan (2003) state that providing a quality tourism experience is a major hurdle. Both the concepts 'service quality' and

^{*} University of Macedonia, 156 Egnatia Street, Thessaloniki, Greece

^{**} University of Pécs, H-7633 Pécs, Szántó Kovács János u. 1/b., Hungary

the 'tourism industry' are complex because travel and tourism industries are comprised of a diversity of hospitality services provided by the public and private sectors. Similarly the tourism experience encompasses various degrees of interactions with the host community, business, and government. Another factor is the highly labour- intensive industry which has enormous potential for variation in quality. So, a quality service is difficult to insure in tourist destinations. Each service organisation, large or small which provides services to visitors, can contribute to the destination's quality. As a whole, total quality service is dependent on each individual organisation's service quality. Likewise, the behaviors of consumers have changed due to factors such as new means of communication, increase in the number of destinations and tourist products, reservation facilities, and the average level of education (Lanquar, 1989).

In the tourist industry, customers are not in a dependent position. The degree of dominance is high if the customers can dictate his or her demand on the service organizations and low if the service organization can dictate its demand. In tourism, customers' dominance tends to be very high. Due to this, there is a growing interest in the quality of the tourism industry from the customers' perspective (Fache, 2000).

Out of the five factors that lead customers to revisit a destination, two are related to the service quality in the destination (Gitelson and Crompton, 1984). One factor which makes customers revisit a destination is the reduced risk that an unsatisfactory experience would occur. The other factor is to expose others to the experiences which had been satisfying to the vacationers. By providing high quality services, tourist destinations are more likely to entice both first-time and repeat visitors. Tourists who have a quality experience are likely to communicate favorable reports to friends and relatives. This creates both repeat business and potential for new business. Unfortunately the reverse is also possible. If a quality tourist service is not experienced, then tourist business is lost. Not only do the unsatisfied tourists not return to the destination, but they will tell others about their disappointment (Mackey, 1989; Crotts, 1999). So destination quality is the key factor necessary for the sustenance and promotion of a destination.

Providing quality services to visitors depends on the destination's ability to exceed the expectations of the visitors. Quality improvement in a destination can be initiated by measuring service quality as perceived by tourists, correcting quality problems and developing the areas which are failing. However it has been found that managers' perception of service quality differs from the customer's perception of quality (Parasuraman et al. 1985). So study is

required to understand how customers perceive the level of service quality. In the case of a tourism destination planning, it is very important to know the quality of service the destination is offering to tourists from the customers' point of view. To measure the quality of a destination, operational instruments are needed.

Quality has been defined by putting the customer rather than the seller at the centre of managements' focus. For Juran (1989) 'quality is fitness for use'. He claims that the concept of fitness for use is universal and applies to all goods and services without exception. Later, Juran and Gryna (1993) use the definition; 'quality is customer satisfaction' and alternatively, another definition of quality is 'fitness for use'. For Deming (1986) quality should be aimed at the needs of the consumer, both present and future. Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (International Organization for Standardization, 1994).

Different researchers have conducted research to measure tourism service quality (Fick and Ritchie, 1991; Lockwood, 1994; Hudson and Shephard, 1998; Weiermair and Fuchs, 1999, 2004). The main methods used by researchers are: Important – Performance Analysis, Critical Incidents Techniques, SERVPERF, and SERVQUAL. Versions of SERVQUAL have been customised by researchers for use in different sectors of the tourism industry. Khan (2003) developed ECOSERV to measure the perception of eco-tourists. Knutson *et al.* (1991) developed LODGSERV to measure service quality in the lodging industry. Similarly Knutson *et al.* (1991) developed DINESERV to measure the service quality in dining restaurants. Tribe and Snaith (1998) developed HOLSAT by modifying SERVQUAL to measure the satisfaction of a holiday experience. However, on reviewing literature there seems to be no instrument, which can be used to specifically measure the service quality in a tourist destination. On this basis, the purpose of the current study is to propose a set of basic dimensions of destination service quality using a measurement scale, which measures the service quality in a tourist destination. As the process begins with the measurement of the service, the study will propose a scale to measure destination service quality, which will help destination organizations to improve the service quality in a destination.

Research Methodology

The generation of a pool of items was done as suggested by Churchill (1979). An extensive review of the literature was conducted to identify the domains of service quality and destination quality. Then explorative research was

conducted to develop destination quality items. A questionnaire was developed to ask destination management organizations of various countries about the basic quality variables of the tourism destinations by country/region. The questionnaire was sent by email to the destination management organizations. The email address was received from Tourism Offices Worldwide Directory (2006). However, only six completed answers were received. Then we selected the main travel and tourist organisations of Thessaloniki, Greece, and asked them about variables which are important to making a quality destination. Based on replies from destination management organisations and travel and tourist organisations, a list of 31 quality variables was developed. Then discussions were had with the the tourism sector businessmen, managers, and known experts of Nepal if they want to add any other variables to measure destination service quality. They agreed that the 31 variables were sufficient.

Then we developed the questionnaire to measure the perception of international tourists to Nepal using SERVPERF. The demographic section includes the nationality of the visitors, gender, age, marital status etc. The instructions for the respondents to fill in the questionnaire were as proposed by Parasuraman, Zeithaml and Berry, (1991). The items were measured using a Linkert type 7- point scale varying from 1 “Strongly Agree” to 7 “Strongly Disagree”. No verbal labels for scale points 2 through 6 were designed. As suggested by (Carman, 1990; Cronin and Taylor, 1992, 1994), only the perception section was designed to measure the visitors’ perception of service quality in Nepal. The questionnaire was in the English language. As suggested by Parasuraman et al. (1991) negatively worded items were not included in the perception sections. A seven-point scale ranging from ‘Strongly Agree’ (7) to ‘Strongly Disagree’ (1), with no verbal labels for scale points 2 through 6 was designed.

Carman (1990) found problem with negatively worded items in the long questionnaire. Before final print of the test items in the final form, it is a good idea to try out the items on a small sample (Crocker and Algina, 1986). So the questionnaire was tested on two small groups of international tourists to Nepal in the departure hall of Tribhuvan International Airport, Nepal. Some changes in wording of the items were made to remove the ambiguity.

Data Collection

The sample for the purpose of the data collection was the international tourists to Nepal. Since Nepal has only one international airport (Tribhuvan International Airport), all passengers who use air travel depart from this airport. Though the international flights out of the country are scheduled from between 6 am

to 1 am in the night, tourists who depart from 10 am to 4 pm were selected as respondents. This time was found suitable as tourists tended to be more relaxed.

Survey data was collected in July and August of 2006 in the Tribhuvan International Airport of Nepal. Permission was taken from the Airport Authority of Nepal to enter the departure hall. Data collection took place in the departure hall. Tourists who were waiting in the departure hall were asked to fill in the questionnaire. A cover letter explaining the purpose of the study was attached to the questionnaires. As tourists had just completed their holiday, they had fresh experience of the destination service quality in Nepal. Only tourists who knew English could participate in the survey. Tourists were provided with a small postcard as a small gift also. Interestingly some of the tourists did not take it as they did not want to increase the costs of the researcher. 260 questionnaires were distributed in 2006 and 244 were found completely filled out.

Data Analysis

Data was analyzed using SPSS 15 and Amos 7. First, data was factor analyzed with SPSS 15 to develop an explorative factor structure. Reliability analysis for each factor was produced with SPSS 15. For each subscale, the internal consistency (*Cronbach's Alpha*) was calculated. Later, the explorative factor structures of both samples were analyzed with CFA using Amos 7 to get a better fit (Albacete-Saiz, 2007).

Result of Exploratory and Confirmatory Factor Analysis of Foreign Tourists Sample

Sample Profiles. Table 1 provides the demographic profile of the sample. For the survey 244 survey questionnaires in total were used in the analysis. Tourists from 29 countries took part in the survey. Tourists from 4 countries represent nearly 49% of the total sample. These countries were USA (18%), Australia (14.3%), India (12.3%), and the UK (12.3%). In total there 44.3% were female and 55.7% were male. 51.2% of the sample respondents were married and the remaining were single.

The largest categories of the sample were aged fifty and above (27%) while the smallest categories were aged under 20 (2%). The next largest category comprised of tourists was aged between 30 and 39 (25.8%). The main reasons for visiting Nepal were leisure (39.8%) and trekking and mountaineering (36.9%). Most of the tourists were employed (52%). The largest number of

Tab. 1. Profile of respondents

Demographic characteristics	Survey (2006, n = 244)	Demographic characteristics	Survey (2006, n = 244)
Gender		Profession of	
Female	44.3%	Visitor	8.2%
Male	55.7%	Student	52%
Marital status		Job Holder	7.8%
Married	51.2%	Retired	20.1%
Single	48.8%	Business	11.9%
Age		Personal - Others	
Under 20	2%	Nights Spent in	2%
From 20-29	25%	Nepal	5.3%
From 30-39	25.8%	1 nights	14.3%
From 40-49	20.1%	2 Nights	25.8%
From 50 and above	27%	3 Nights	28.8%
Purpose of Travel		4-7 nights	26.6%
Leisure and		8-15 nights	
Entertainment	39.8%	16 nights or	
	36.9%	more	
Mountaineering/Trek	11.1%		
king	12.3%		
Business			
Others			

tourists (28.8%) stayed 8-15 nights while the lowest number of (2%) tourists stayed 1 night only.

Result of Exploratory Factor Analysis of Foreign Tourists

Exploratory factor analysis was employed to identify the dimensionality of the perceived service quality in the destination. A principle component factor analysis with Varimax rotation was performed and the factors with eigenvalues over one were retained. The Varimax criterion centers on simplifying the columns of the factor matrix. The Varimax rotation approach maximizes the sum of variances of required loadings of the factor matrix. Low factor loading, high factor loadings on more than one factor and communality below .5 criteria were used to exclude an item from further analysis (Hair *et al.*, 2006).

As a result of factor analysis, five dimensions of destination service quality were identified from the survey sample. Similarly 15 items were retained. The five factors were named as Hospitality, Tangible, Entertainment, Attractions, and Hassle Free. Total variance explained by five factors is 65.68%. The

Tab. 2. Exploratory Factor Analysis (EFA) results, Mean and Standard Deviation (SD) statistics.

Dimensions/Items	Factor Loadings	Variance Explained (%)	Cronbah's Alpha	Mean and SD (n = 244)
Hospitality Friendly People Warm Welcome and Hospitality Politeness of Employees Sincere Interest . Security	.828 .820 .805 .696 .566	21.215	.837	6.21 (1.007) 5.73 (1.223) 5.79 (1.180) 5.27 (1.292) 5.13 (1.390)
Tangible Neat and Clean Signposts Tourist Information	.758 .708 .703	11.936	.619	2.92 (1.425) 3.36 (1.420) 3.82 (1.421)
Entertainment Night Life and Entertainment Food Variety/Quality Souvenirs Shopping	.732 .678 .600	11.745	.254	4.43 (1.512) 5.07 (1.415) 5.65 (1.330)
Attractions Cultural Historical	.845 .756	10.825	.677	5.61 (1.305) 5.69 (1.296)
Hassle Free Fraud less No Language Problems	.800 .717	9.960	.525	4.20 (1.507) 4.58 (1.507)

Note: Mean represents the rating of destination service attributes by international tourists on a 7 point scale. Where the 7 value represents a "strongly agree" and the 1 value a "strongly disagree" tourist perception about the statement.

Cronbach's Alpha for each of these 5 dimensions seems poor from .254 to .837 (Table 2). The combined reliability of 15 items is 0.814.

Result of Confirmatory Factor Analysis

After Exploratory Factor Analysis (to be shortly at next as EFA), a Confirmatory Factor Analysis (to be shortly at next as CFA) was conducted. The EFA operates as a single generator of hypotheses of factorial structures

(Albacete-Saez *et al.*, 2007). It allows us to examine the relations between a large numbers of variables and determine whether the information can be summarized in a lower numbers of factors or components. The latter allows contrast between the hypotheses of these structures.

With the scope to form the result of an Explorative Factor structure, a CFA analysis was conducted with AMOS 7. Value of factor loadings and R^2 are provided in Table 3. The result shows the Chi Square value = 200; with *d.f.* = 80. From the fit statistics, the Confirmatory Factor Model of the first survey which was produced following EFA has fitted poor as fit index shows the result of GFI .906, AGFI .858, and RMSEA .079 (Schumacker and Lomax, 2004).

Tab. 3. Result of Confirmatory Factor Analysis (CFA)

Dimensions/Items	Factor Loadings	R^2
Hospitality		
Friendly People	.803	.645
Warm Welcome and Hospitality	.785	.617
Politeness of Employees	.820	.673
Sincere Interest	.733	.537
Security	.511	.261
Tangible		
Neat and Clean	.489	.239
Signposts	.721	.520
Tourist Information	.575	.330
Entertainment		
Night Life and Entertainment	.377	.142
Food Variety/Quality	.658	.433
Souvenirs Shopping	.659	.433
Attractions		
Cultural	.598	.358
Historical	.856	.732
Hassle Free		
Fraud less	.517	.268
No Language Problems	.689	.475

Note: Description of the CFA model; $df = 80$, $\chi^2 = 200$, GFI = .906, AGFI = .858, RMSEA = .079, CFI = .852, TLI = .887

Findings

Comparing the GFI, AGFI, and RMSEA, CFI, TLI of the model of the international tourist sample in 2006 we received the following results

(see Table 4). This result shows that the scale produced by sample can be used to measure the service quality in a tourist destination. This scale produced by the sample has four dimensions (factors) which support the idea that destination service quality is a multidimensional scale, as generally reported in the literature. The first factor is named as Tangible (same as PZB, 1988) that has four variable- signposts, tourist information centre, transportation, night life. The second factor (Security) includes four variables- fraud less transactions, environment friendly products, and specific needs, safe and secure place. Third factor (Facilities) includes accommodation, food, shopping. The fourth factor (Attractions) includes three variables-people, unique life, and welcome and hospitality.

Tab. 4. Comparison of fit index of the first 2006 tourist and second 2007 sample

Sample year	Chi-square (χ^2)	df	GFI	AGFI	RMSEA	CFI	TLI
2006	200	80	.906	.858	.079	.852	.887

Conclusions and Implications

Destination service quality has growing importance for the success of tourist destinations. On one hand, tourists are demanding quality services in a destination as they are not in dependent position (Fache, 2000) and have many choices as an increasing number of destinations are trying to attract tourists. On the other hand every country has understood the importance of tourism for the economic development of the country. Therefore, countries or destinations are competing with each other to get more tourists (Go and Govers, 2000).

There are gaps between quality as perceived by management and customers (Parasuraman, et al., 1985). So measurement of customer's perception of service quality is important for management to improve the quality of the services. In the case of destinations, understanding tourists' perception of service quality in a destination is important to improve the service quality of the destination.

This research study has found four dimensions of destination service quality and successfully developed a measurement scale that can be used to measure the basic service quality in a destination. Initially 31 variables were developed using a qualitative survey. An initial five dimensions with 15 items were

developed from sample using EFA. Results have been contrasted using a CFA (Albacete-Sáez, 2007). One of the dimensions has been named Tangible as in Parasuraman et al. (1988) that has signposts, tourist information centres, nightlife and entertainment facilities and transportation facilities as items. The other three dimensions are named as security, facilities and attractions.

The findings of the study have implications for the destination managers of a country in how they understand how tourists access the service quality in the destination. As the study has developed scales to measure the destination service quality basic variable, destinations like city, region, and rural destinations can also be used to measure the service quality as perceived by visitors. Being that destination service quality variables of the SERVQUAL model are amalgams of service provided by private and public sectors, a joint approach to improving service quality in the destination may be the best approach to service quality management initiatives .

A few limitations of the research should be addressed. Firstly, the sample was drawn from the tourists who departed from the international airport of Nepal and only English speaking tourists could take part in the study. Secondly, tourists from a large number of countries have taken part in the research; the cultural differences might have generated particular service quality dimensions in a destination. Future research can further investigate the basic destination quality dimension using the basic quality variables in other destinations.

REFERENCES

- ALBACETE-SAEZ, C.A. ; FUENTES-FUENTES, M.M. and LLORENS-MONTES, F.J. (2007), *Service Quality Measurement in Rural Accomodation*, Annals of Tourism Research, 34 (1), 45-65.
- AUGUSTYN, H. and HO, S.K. (1998), *Service Quality and Tourism*, Journal of Travel Research, 37, 71-75.
- BUHALIS, D. (2000). *Marketing the Competitive Destination in the Future*, Tourism Management, 21 (1), 97-116.
- CARMAN, J. (1990), *Consumer's Perception of Service quality: An Assessment of SERVQUAL Dimension*, Journal of Retailing, 66 (1), 33-55.
- CHURCHIL, G.A. (1979), *A Paradigm for developing Better Measure of Marketing Constructs*, Journal of Marketing Research, 16, 64-73.
- CROCKER, L. and ALGINA, J. (1986), *Introduction to Classical and Modern Test Theory*, New York: Wadsworth.
- CRONIN, J.J. and TAYLOR, S.A. (1992), *Measuring Service Quality: A Reexamination and Extension*, Journal of Marketing, 56 (3), 55-68.

- CRONIN, J.J., and TAYLOR, S.A. (1994), *SERVPERF versus SERVQUAL: Reconciling Performance - Based and Perceptions - Minus Expectations Measurement of Service quality*, Journal of Marketing, 58, 125-31.
- CROTTS, J. C. (1999), "Consumer Decision Making and Pre purchase Information Search", Pizam, A. and Mansfeld, Y., Consumer Behavior in Travel and Tourism, Binghamton: The Haworth Hospitality Press.
- DEMING, E. (1986), *Out of Crisis: Quality, Productivity and Position*, Cambridge: Cambridge University Press.
- FACHE, W. (2000), *Methodologies for Innovation and Improvement of Services in Tourism*, Managing Service Quality, 10 (6), 356-366.
- FICK, G., and RITCHIE, J. (1991), *Measuring Service Quality in the Travel and Tourism Industry*, Journal of Travel Research, 30 (2), 2-9.
- GO, F. M. and GOVERS R. (2000), *Integrated Quality Management for Tourism Destination: A European Perspective on Achieving Competitiveness*, Tourism Management, 21, 79-88.
- GITELSON, R. J. and CROMPTON, J. L. (1984), *Insights into the Repeat Vacation Phenomenon*, Annals of Tourism Research, 11, 199-217.
- HAIR, J.F.; BLACK, W.C.; BABIN, B.J.; ANDERSON, R.E. and TATHAM, R.L. (2006), *Multivariate Data Analysis*, New Jersey: Pearson Prentice Hall.
- HUDSON, S. and SHEPHARD, G. (1998), *Measuring Service Quality at Tourist Destinations: An Application of Importance Performance Analysis to an Alpine Ski Resort*, Journal of Travel and Tourism Marketing, 7(3), 61-77.
- International Organization for Standardization (1994), *ISO 9000: Quality Management*, International Organization for Standardization, Geneva.
- JURAN, J. M. (1989), *Juran on Leadership for Quality*, New York: Free Press.
- JURAN, J. M. and GRYNIA, F. M. (1993), *Quality Planning and Analysis*, New York: McGraw-Hill.
- KHAN, M. (2003), *ECOSERV: Ecotourists' Quality Expectation*, Annals of Tourism Management, 30, 109-124.
- KNUTSON, B., STEVENS, P., WULLAERT, C. and M. PATTON (1991), *LODGSERV: A Service Quality Index for the Lodging Industry*. Hospitality Research Journal, 14 (7), 277-284.
- KNUTSON, B., STEVENS, P., and M. PATTON (1991), *DINESERV: Measuring Service Quality in Quick Service, Casual Theme, and Fine Dining Restaurants*, Journal of Hospitality and Leisure Marketing, 3 (2), 35-45.
- LANQUAR, R. (1989), "Quality Control: the Key to Excellence", F. S. Witt and L. Moutinho (eds), *Tourism Marketing and Management Handbook*, New York: Prentice Hall, 345-349.
- LAWS, E. (1995), *Tourist Destination Management: Issues, Analysis, and Policies*, Routledge, London.
- LOCKWOOD, A. (1994), *Using service quality to identify quality improvement points*, International Journal of Contemporary Hospitality Management. 6 (1/2), 75-80.
- MACKEY, K. J. (1989), "Tourism Quality". Witt, F. S. and Moutinho, L., *Tourism Marketing and Management Handbook*, New York: Prentice Hall.
- PARASURAMAN, A., ZEITHAML, V., and BERRY, L.L. (1985), *A Conceptual Model of Service Quality and its Implications for Future Research*, Journal of Marketing, 49 (4), 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(1, pp): 12-40.

- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L. L. (1991), *Refinement and Reassessment of the SERVQUAL Scale*. Journal of Retailing, 67 (4), 420-450.
- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L. L. (1994), *Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Future Research*, Journal of Marketing, 58, 111-124.
- POSTMA, A. and JENKINS, A. K. (1997), "Improving the Tourist's Experience: Quality Management Applied to Tourist Destinations", Murphy, P. E. (ed.) Quality Management in Urban Tourism, Chichester: Willey.
- SCHUMACKER, R. E. and LOMAX, R. G. (2004), *A Beginner's Guide to Structural Equation Modeling*, New Jersey: Lawrence Erlbaum Associates Publishers.
- TRIBE, J. and SNAITH, T. (1998), *From SERVQUAL to HOLSAT: holiday satisfaction in Varedero*, Cuba, Tourism Management, 19 (1). 25-34.
- Tourism Office Worldwide Directory (2006), visited on April 5, 2006 on (www.towd.com).
- WEIERMAIR, K., and FUCHS, M. (1999), *Measuring Tourists Judgement on Service Quality*. Annals of Tourism Research, 26 (4), 1004-1021.
- WEIERMAIR, K. and FUCHS, M. (2004), *Destination Benchmarking: An Indicator-System's Potential for Exploring Guest Satisfaction*, Journal of Travel Research, 42 (February), 212-225.
- WOODS, M., and DEEGAN, J. (2003), *A warm Welcome for Destination Quality Brands: the Example of the Pays Cathare Region*, International Journal of Tourism Research, 5, 269-283.