SERVICE QUALITY IN TOURISM: A CASE STUDY OF THE 2001 STUDY TOUR OF TAIWAN

Alvin Hung-Chih Yu
Leisure Studies, The Pennsylvania State University
201 Mateer Building
University Park, PA
huy100@psu.edu

Duarte Morais
Leisure Studies, The Pennsylvania State University

Garry Chick
Leisure Studies, The Pennsylvania State University

Abstract

Every year, the government of Taiwan sponsors a six-week program for approximately 800 foreign-born, young Chinese, "The Overseas Chinese Youth Language Training and Study Tour", which is aimed at familiarizing the participants with their Chinese language and culture. The purpose of this study was to assess perceptions of service quality among participants in this program. Out of the 803 individuals that participated in this program, 596 finished the survey in this study. The quality was measured by the REQUAL model, and factor analysis extracted three dimensions including reliability, responsiveness, and assurance with adequate internal consistency (0.85; 0.77; 0.71). These dimensions differed from REQUAL's five-dimension model because of a difference in service context, i.e., from a domestic recreation activity to an international tourism program. Regression analysis suggested that assurance and reliability were significant predictors of overall service quality. The findings revealed that another effective service evaluation model is needed for tourism-related study, and a different service scenario will possibly yield a different service focus.

1.0 Introductions: Headings

More and more American college students, motivated primarily by their interests in learning, are likely to participate in educational travel programs, according to some institution's reports. The Institute of International Education (IIE), for example, reported that in 2002 there were about 2,700 short-term study abroad programs, and it indicated a more than 50 percent increase in ten years in the number of study tour programs when compared to IIE's report in 1990. More and more study abroad programs are offered to satisfy students' different learning needs, and it has become a "megatrend" for education to extend beyond classroom learning to include studying abroad to acquire knowledge. In 2001, 833 ethnically Chinese college students from all over the world joined a 6-week, education-oriented travel program, the Overseas Chinese Language Training and Study Tour (hereafter referred to as the Study Tour), to learn Chinese culture and language. This study would use the Study Tour as the case to explore the service quality and how participants' needs are satisfied under different contexts. This study also tried to compare with the previous service studies and testify whether the current recreation service evaluation model (REQUAL) could capture the Study Tour service phenomena. Because this study focused only on the 2001 Overseas Chinese Youth Language Training and Study Tour in Taiwan (although the program began in 1966), generalizations from this study are limited to 2001.

2.0 Relevant Literature Review
2.1 The Study Tour

The Study Tour was developed for ethnically Chinese youth living overseas and has been held in Taiwan and sponsored by the Taiwanese government since 1966. This 6-week, study abroad program is divided into two parts: an educational section that includes 28 days of language and folk art classes as well as a nine-day trip around Taiwan. Each participant might pay only one-fifth tuition fees, and the Taiwanese government would pay the rest of their tuition. The government hopes such financial support would encourage more and more ethnical Chinese students to join the program in order to meet the three different expectations among the government, the student's parents, and the student.

As for the government, it had hoped that the program would lead to interactive opportunities between the participants and their "roots" in real life situations and make the participant understand and support

Taiwanese policies in their own local societies or countries. The hidden political ambitions of the government for sponsoring this program were to avoid diplomatic isolation from the international society and to keep overseas Chinese friendly to Taiwan (personal communication with Dr. Pan, Chief Director of the Study Tour, 2001). On the other hand, for both parents and students, the Study Tour is a "Love Boat" because the potential for marriage would be the first priority for them during the 6-week program. In-keeping with traditional marriage expectations, the parents hoped their daughters or sons could find their life partner with the same ethnic background. Since the traditional Chinese marriage should involve the same ethnic backgrounds, the Study Tour offered an excellent chance for those participants to find Chinese males/females for their life partner. The other consideration for parents would be roots-finding, or reunderstanding Chinese culture and language, through language and heritage classes. For students, friendship-finding might be their main motivation for this program instead of learning and understanding Chinese culture and language. In this situation, the program service quality would play a crucial role for their satisfying program experience, and it also could contribute to their successful learning experience. The program sponsors, the China Youth Corps and Overseas Chinese Administration Committee, were responsible for designing, developing, and implementing this program.

2.2 Service Quality and Tourism

2.2.1 Service Quality and SERVQUAL model.
Backman & Veldkamp (1995) stated that quality of service is an essential factor involved in a service provider's ability to attract more customers. Unlike the quality of goods, which may be measured objectively by such indicators as durability and number of defects, service quality is an elusive construct that is difficult to measure (Crosby 1979). Mackay and Crompton (1990) defined service quality as "the relationship between what customer's desires from a service and what they perceive that they receive" (p. 47). Additionally, service quality is also a way of thinking about how to satisfy customers so that they hold positive attitudes toward the service they have received (Ostrowski, O'Brian, & Gordon 1993).

To help service providers identify their strengths and weaknesses, Parasuraman, Zeithaml, & Berry (1988) developed the SERVQUAL model, a diagnostic tool including 22 items to appraise five key service factors: tangibles, reliability, responsiveness, assurance, and empathy. Parasuraman et al. (1988, 1991) found that the five-dimensional format of SERVQUAL allows researchers to assess the level of service quality along each dimension, as well as overall. The purpose of this model is to serve as a diagnostic method for uncovering broad areas of weaknesses and strengths in the quality of service a company delivers. A lot of service-related research was evaluated by SERVQUAL, and they might have results consistent with Parasuraman et al.'s (1988, 1991) suggestions. SERVQUAL has offered a model for measuring service quality for over 10 years. However, some researchers have suggested that a revised measurement scale is needed specifically for providers of tourism services. The new service instrument might be needed for research in tourism fields.

2.2.2 Service Quality and Tourism.
The quality of service involved with tourism plays an important role in the process of delivery (Wyllie 2000) and thus is the standard used to assess the effectiveness of a particular leisure service agency, including the tourism service sector (Godbey 1997). Service quality is an intangible, but crucial, area of interest to travel service providers. As described above, the major service evaluation tool is SERVQUAL model, and Parasuraman et al. stated that this model could apply to various service contexts. Many tourism researchers use this model to evaluate the quality of services provided in tourism and affiliated industries (Baker & Fesenmaier 1997; Childress & Crompton 1997; Fick & Ritchie 1991; Leblanc 1992; Ostrowski, O'Brien, & Gordon 1993; Vogt & Fesenmaier 1995). For example, SERVQUAL was tested by Mackay (1987) in the Canadian municipal parks, and he extracted the same five dimensions as Parasuraman et al.'s (1985) model (as cited in Crompton et al. 1991). In another study, Brown and Swartz (1989) expanded SERVQUAL and found that service providers do not understand the level at which customers evaluate their experiences. Bigne et al. (2003) also employed SERVQUAL to test the quality of service received from travel agencies, and they found that it is still a valid and reliable model with

which to evaluate the service quality provided by travel agencies.

Although SERVQUAL was designed to measure service quality, it provides only a framework or skeleton and thus has had to be adapted and modified to evaluate specific services (Parasuraman et al. 1988, 1991; Beckman & Velfkamp 1995). MacKay and Crompton (1988) proposed a conceptual framework for studying service quality in the recreation and leisure industries––the REQUAL model (REQUAL). In addition, Crompton et al. (1991) stated that SERVQUAL cannot be used to evaluate service quality in the different types of recreation services sectors and suggested the need to develop a new scale to fit tourism or other recreation services sectors. Thus, in 1990, using SERVQUAL as a basis, Mackay and Crompton developed REQUAL, which is used to evaluate the quality of recreational services. In 1995, Backman and Veldkamp (1995) reviewed and offered empirical studies; they concluded that these findings from current empirical studies suggest that the new model in the YMCA project, REQUAL, can serve as a template for other researchers to use in their investigation of recreational service quality.

After considering the settings and the context of this study, the REQUAL model, along with the performance-based evaluation tool, SERVPER (Cronin & Taylor 1992), will be utilized in this study to determine the service dimensions and their relation to the overall service quality for Study Tour.

3.0 Methodology
3.1 Setting
The setting for this study was the Study Tour. The tour, which is situated in Taipei, Taiwan, was held July 5–August 11, 2001. Two locations were utilized: the Chien-Tan campus, which is located in the downtown of Taipei, and the National Ocean University, which is located in the northern part of the Taipei metropolitan area.

3.2 Method
Because of the abstract nature of service quality in the recreational service industry, it was important to use an objective scale of service quality to evaluate participants'

perceptions of the service quality provided by the Study Tour. This study will employ REQUAL and adopt a performance-based model, like SERVPER (Cronin & Taylor 1992) to fit the Study Tour context and time limitation. This study predicted that the five service-quality dimensions (derived from the REQUAL model) would be indicators of perceived overall service quality. To do that, factor analysis was utilized to reduce the 22 items on the service-quality questionnaire into categories. The principal components analysis was conducted utilizing a varimax rotation, as Mertler and Vannata (2002) suggested one of possible statistic analysis for confirmation analysis purpose.

3.3 Instrument
The instrument used for this study was an on-site and self-administered questionnaire comprised of modified REQUAL items. The staff of the Study Tour helped to distribute and collect the survey sheets from the participating students at the end of the Study Tour.

4.0 Findings and Discussion
4.1 Findings
Three criteria as Tabachnick and Fidell (1996) suggested were used to determine the appropriate number of components to retain: eigenvalue not less than 1, variance explained, and scree plot. In addition, the Cronbach alphas to assess the internal consistency of assurance, responsiveness, reliability, and tangibles were 0.85, 0.77, 0.71, and 0.37, respectively.

Based on the criteria, the tangibles component was taken out of further discussion because of its low accountability for the variance and its low Cronbach alpha value. Thus, three factors were retained (assurance, responsiveness, and reliability), which were employed in further regression analyses to isolate their relationships with the perceived overall service quality of the 2001 Study Tour. See Table 1 for a breakdown of which items were categorized under each of the three factors.

The three categories extracted from the items on the questionnaire were analyzed for how predictive they were of the perceived overall service quality. The results of the regression analysis for how predictive these categories were are shown in Table 2. The R square was 0.35; about

Table 1.—Factor analysis of the items on the service quality questionnaire used for the 2001 Study Tour

Factors and Items	Factor1	Factor 2	Factor 3	Factor 4
Assurance				
22. The staff should be credible.	0.800			
21. The staff should be polite.	0.799			
20. The staff should be competent.	0.713			
18. The staff should understand my needs.	0.558			
1. The staff should be neat and well dressed.	0.544			
19. The staff should be trustworthy.	0.543			
24. The staff should be enthusiastic.	0.521			
10. The staff should perform their duties consistently well.	0.508			
17. The staff makes us feel like we belong.	0.504			
Responsiveness				
14. Problems should be solved quickly.		0.625		
13. The sponsors should act on participants' suggestions.		0.596		
12. The staff should respond to requests quickly.		0.563		
11. The staff should be willing to go that extra mile to help				
Participants		0.519		
16. The staff should give me individual attention.		0.508		
15. The staff should take time with the participants.		0.493		
Reliability				
7. Information provided should be accurate.			0.713	
9. What is promised should be delivered.			0.682	
8. The program should start on time.			0.662	
4. The equipment provided by this program should be up-to-date.			0.447	
6. The sponsors should be concerned with quality control.			0.449	
Tangibles				
2. The facility should be comfortable.				0.700
5. The facility should be visually aesthetically attractive.				0.477
3. The other participants should not be bothersome.				0.446
Eigenvalues	7.163	1.748	1.138	1.048
Percentage of Total Variance	32.56%	7.95%	5.17%	4.76%
Cumulative Percentage of Variance	32.56%	40.51%	45.68%	50.44%
Cronbach's Alpha	.85	.77	.71	.37
Number of Items Per Factor	9	6	5	3

35 percent of the variance in predicting the perceived overall service quality could be explained by the items in this questionnaire. The beta values indicate that the assurance dimension (0.47) made the most statistically positive and significant contribution among the items in the questionnaire. The beta values for assurance (0.47) and reliability (0.21) were both statistically significant at the .001 levels. However, responsiveness was not statistically significant in predicting the perceived overall service quality.

Table 2.—Summary of results of the regression analysis for the three dimensions in predicting the perceived overall service quality of the 2001 Study Tour and satisfaction equation

Factors	B value	Standardized alpha value	p-value
Assurance	.54	.05	.47***
Responsiveness	.02	.05	.01
Reliability	.25	.05	.21***

$R^2 = .35$, ***$p < .001$
Satisfaction= 2.07 + 0.54 Assurance + 0.25 Reliability

Table 3.—A Comparison of factor Cronbach alpha values between the SERVQUAL model, Crompton et al.'s (1991) model, and the (2001) Study Tour findings

The SERVQUAL model	Cronbach alphas	The (2001) Study Tour model	Cronbach alphas	Crompton et al.'s (1991) model	Cronbach alphas
Tangibles	0.92			Tangibles	0.79
Reliability	0.93	Reliability	0.71	Reliability	0.88
Responsiveness	0.93	Responsiveness	0.77	Responsiveness	0.82
Assurance	0.95	Assurance	0.85	Assurance	0.91
Empathy	0.93				

4.2 Discussions

Compared to the REQUAL model, these results revealed that the fourth and fifth dimensions, empathy and tangibles, did not affect the perceived service quality of the Study Tour. Furthermore, the Cronbach alphas values were also lower for each of the dimensions in this questionnaire than they are for each of the dimensions of the REQUAL and SERVQUAL models (also see Table 3).

Factor 1 included nine items relating to the assurance dimension, which has to do with courteous and knowledgeable staff members, who convey a sense of competence and confidence (Parasuraman et al. 1988, 1991). This is different from an a priori comparison with Crompton et al.'s design (1991). Four extra items, which in the REQUAL model were located in other factors, were added to this dimension. "The staff should understand my needs" and "The staff should make us feel like we belong" were originally designated as belonging in the empathy dimension, which did not emerge in this study. These two items appear to be consistent instead with the definition of assurance. The ethnically Chinese youth needed some extra care to increase their trust and confidence because it was the first time for most of them to leave their own country and attend a study abroad program. "The staff should be neat and well dressed" and "The staff should perform duties consistently well" were originally designated as items belonging in the factors "Tangibles" and "Responsiveness," but they also seemed to be consistent with the definition of "Assurance," reflecting the ability of the staff to build trust and confidence. Crompton et al. (1991) also found the same results, except for "The staff should understand my needs," and they believed that aside from this item, these items would be more appropriate in the assurance dimension, reflecting Parasuraman et al.'s (1988, 1991) suggestions.

Factor 2, "responsiveness," involves the "staff's willingness to help customers and provide prompt services" (Parasuraman et al. 1988, p. 6). "The staff should give me individual attention" was originally designated as belonging under "Empathy," according to Crompton et al. (1991). This extra item could also be conceptualized as a provision of "individual attention by the staff promotes good service." Factor 3, "Reliability" means

the "ability to perform the promised service dependably and accurately" (Parasuraman et al. 1988, p. 6). Furthermore, the item, "The equipment provided by this program should be up-to-date," referring to the facility, transportation, and lodging used by the 2001 Study Tour, was originally designated as belonging in the "Tangibles" dimension, but it could also be seen as contributing to the evaluation of the "Reliability" dimension.

One reason that might account for the fact that the Cronbach Alpha is lower for the dimensions examined by this questionnaire than for the dimensions in REQUAL is that the scale did not fit the context of the 2001 Study Tour very well, because it was originally designed for users of public parks instead of tourists studying abroad. Some researchers (e.g. Crompton et al., 1991) brought up the importance of the context of tourism for the measurement scale being used. In comparison to Crompton et al.'s (1991) study on Canadian park users, as well as Backman and Veldkamp's (1995) study on YMCA users, the increased complexity of this study, including the different goals of recreational settings, might also have contributed to differences in the dimensions of the service quality model. The 2001 Study Tour was a study abroad program held overseas, while the other studies involved domestic park users and consumers in non-profit institutions. Different dimensions might be expected because of differences between domestic and overseas settings.

In order to obtain higher Cronbach alpha values, the study setting must be taken into account when creating the content of the scale, since the function of the measurements on a scale is to link abstract concepts to empirical indicators (Graefe 2003). Additionally, a statistical indication of the extent to which each item is correlated with each factor is given by the factor loading. Existing research shows the necessity of modifying REQUAL or constructing a new scale to evaluate contexts such as those of the 2001 Study Tour. Crompton et al. (1991), for example, found four dimensions (assurance, reliability, responsiveness, and tangibles) in their study of government-supported recreational services. The current findings suggested that a revised service-quality evaluation model is needed for the context of tourist services.

As for the significant indicators of the overall service quality, assurance and reliability factors were both statistically significant indicators, which means that the staff's inspiring knowledge and enthusiasms would be the positive force for perceived service quality. For those students from various corner of the world, trust in staff would be the most important index for their service quality definitions.

5.0 Conclusion

Three dimensions were found in the 2001 Study Tour model, which are also different from other studies that employed REQUAL. That result, which is due to various differences in the environmental settings of this study, makes sense in light of Babakus and Boller's (1992) suggestion that the dimensions of the model might vary depending on the type of service sector under investigation. In this study, different service context would be the main reason that different dimensions were found in the Study Tour, as compared to other tourism-related studies. Crompton et al. (1991) stated that the context of different service industries should be considered in future studies, as SERVQUAL is not "one size fits all." More specifically, different characteristics of the places where the survey takes place may influence an analysis of service quality. In order to improve the quality of this study, more accurate evaluation scales are needed based on educational tourism specifically.

Overall, 70.7 percent of the participants were satisfied with the service quality of the 2001 Study Tour, and the dimensions of assurance (i.e. the courtesy and knowledge of the employees and their ability to inspire trust and confidence) and reliability (i.e. the ability to provide the promised service dependably and accurately) best predicted their perceptions of the overall service quality. Since a major characteristic of tourism is that it is a "people industry" (Vogt & Fesenmaier 1995), meaning that the personal or individualized care of the participants is "the index for the quality of service" (Peters & Waterman 1982, as cited in Vogt & Fesenmaier 1995, p. 765), it makes sense that the most important factor in predicting the overall perceived service quality for the Study Tour participants is assurance, followed by reliability.

Finally, the results of this study indicate that it might be possible to create service quality evaluations that are more accurate instruments for measuring the quality of service in the various service sectors, as Crompton et al. (1991) suggested. Moreover, for the best indicators of service quality in the tourism sector, the tourist's experience, might be the key indicator for evaluating tourism quality, because the tourism industry is essentially people serving people. Therefore, future studies of tourism quality should evaluate the tourist's experience, instead of the five dimensions used in previous evaluation tools, as Otto and Ritchie (1996) stated. Additionally, Fick and Ritchie (1991) also suggested that qualitative methods are needed to examine service quality in the tourism industry. Service quality will be one of the crucial issues in the tourism field in the future.

7.0 Citations

Babakus, E. and Ho, S.K. 1998. **Service quality and tourism.** Journal of Travel RESEARCH. 37: 71-75

Backman, S.J., and Veldkamp, C. 1995. **Examination of the Relationship between service quality and user loyalty.** Journal of Park and Recreation Administration. 13(2): 29-41.

Baker, D.A., and Fesenmaier, D.R. 1997. **Effects of service climate on managers' and employees' rating of visitors' service quality expectations.** Journal of Tourism Research. 36(1): 15-22.

Bigne, J.E., Martinez, C., Miquel, M.J., and Andreu, L. 2003. **SERQUAL reliability and Validity in travel agencies.** Annal of Tourism Research. 30(1): 258-262.

Brown, S.W., and Swartz T. 1989. **A gap analysis of professional service quality.** Journal of Marketing. 53: 92-98.

Childress, R.D., and Crompton, J.L. 1997. **A comparison of alternative direct and discrepancy approaches to measuring quality of performance at a festival.** Journal of Tourism Research. 36(2): 43-57.

Corsby, P.B., ed. 1979. **Quality is free: The art of making quality certain.** New York: New American Library.

Crompton, J.L., Mackay, K.J., and Fesenmaier, D.R. 1991. **Identifying dimensions of service quality in public recreation.** Journal of Park and Recreation Administration. 9(3): 15-27.

Cronin, J.J. and Taylor, S.A. 1992. **Measuring service quality: A reexamination and extension.** Journal of Marketing. 56: 55-68.

LeBlanc, G. 1992. **Factors affecting customer evaluation of service quality in travel agencies: An investigation of customer perceptions.** Journal of Travel Research. 30(4): 10-16.

MacKay, K.J., and Crompton, J.L. 1990. **Measuring the quality of recreation services.** Journal of Park and Recreation Administration. 8(3): 47-56.

MacKay, K.J., and Crompton, J.L. 1988. **A conceptual model of consumer evaluation of recreation service quality.** Leisure Studies. 7: 41-49.

Mertler, C.A., and Vannata, R.A. 2002. **Advanced and multivariate statistical methods: Practical application and interpretation.** Los Angels: Pyrczak.

Ostrowski, P.L., O'Brien T.V., and Gordon, G.L. 1993. **Service quality and customer loyalty in the commercial airline industry.** Journal of Marketing. 22(2): 16-24.

Otto, J.E., and Ritchie, R.B. 1996. **The service experience in tourism.** Tourism Management. 17(3): 165-174.

Pan, C.Y. 2001. Personal communication.

Pan, Z., Chaffee, S.H., Chu, G.C., and Ju, Y. 1994. **To see ourselves: Comparing traditional Chinese and American Cultural Values.** Boulder: Westview Press.

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

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. 64(1): 12-40.

Tabachnick, B.G. and Fidell, L.S. 1996. **Using multivariate statistics. 3rd ed.** New York: Harper Collins

Vogt, C.A., and Fesenmaier, D.R. 1995. **Tourist and retailers' perceptions of services.** Annals of Tourism Research. 22(4): 763-780.

Wyllie, R.W. 2000. **Tourism and society.** State College, PA: Venture Publishing.