

Service quality of entertainment parks in Vietnam: A replication study

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Abstract

The purpose of this study was to test the SERVQUAL instrument in entertainment parks in Vietnam. It also examined the relationship between the components of SERVQUAL and satisfaction, and the relationship between satisfaction and loyalty. A pilot study was conducted via 20 in-depth interviews to modify the measures, and a sample of 307 customers of entertainment parks was surveyed to test the measurement and the theoretical models. A two-step approach to structural equation modelling was used to analyse the data via the AMOS program. The results indicated that the two components of SERVQUAL, ie., responsiveness and assurance were found to be unidimensional. The results also indicated that customer satisfaction was an antecedent of customer loyalty, however the reliability and empathy components had no impact on customer satisfaction.

Introduction

It is now more than 15 years since the SERVQUAL instrument was first introduced in the literature on services marketing by Parasuraman et al. (1988). From that time on, the instrument has been widely used in different services. However, SERVQUAL has also been widely criticized (Behara et al. 2002, Robinson 1999). The purpose of this study was to provide a further assessment of the applicability of SERVQUAL in an emerging market by testing the SERVQUAL instrument with entertainment parks in Vietnam. In addition, it explored the relationship between each component of service quality and customer satisfaction together with the relationship between customer satisfaction and loyalty. The paper is organised around four main points, (1) the literature on service quality, customer satisfaction and loyalty, (2) method, (3) data analysis and results, and (4) discussion and conclusions.

Service quality, customer satisfaction and loyalty

Service quality and customer satisfaction

There are a number of conceptualisations of service quality. For example, Lehtinen & Lehtinen (1982) state that service quality includes process quality and output quality. Gronroos (1984) suggests two different areas of service quality, ie., technical quality and functional quality. However, there seems little doubt that Parasuraman et al. (1985) have initiated a research stream on service quality. They propose a five-gap model of service quality and defined service quality based on the gap between customer's expected service and perceived service.

Parasuraman et al. (1988) suggested five components of service quality, i.e., reliability, responsiveness, assurance, empathy, and tangibles, and developed a scale consisting of 22 items to measure these five components of service quality, termed SERVQUAL. They claim that SERVQUAL is a reliable and valid measure of service quality and can be applicable to a wide variety of services. However, a number of researchers have argued that “the measure of service quality is far from complete” (Robinson 1999:22). This is because of the characteristics of services. For a comprehensive review, see Robinson (1999).

The degree of importance of service quality also varies with service contexts (Shostack 1977), depending on the involvement of people and equipment during the process of providing, distributing, and consuming a service. Some services have high labour content whereas others have high tangibles content (Mehta et al. 2000). In the case of entertainment parks, where the labour content is relatively low, tangibles may be more important than other components such as empathy. Customers are likely to seek modern and sophisticated equipment that they have not experienced.

Another contribution to the incompleteness of conceptualization and measurement of service quality is the economic development of the market under investigation. In advanced countries, where SERVQUAL has been developed and tested, customers are more sophisticated. The degree of sophistication of customers is much lower in developing countries (eg., Porter 1990), resulting in a difference in terms of numbers of components, or at least, in terms of the degree of importance of each component of service quality. Consequently, it can be argued that SERVQUAL serves as a base for measuring service quality. However, the numbers of components and their degree of importance may vary from service to service and from country to country.

Customer satisfaction and loyalty

Several perspectives on customer satisfaction have been found in the literature (Oliver 1997). Bachelet (1995:81) defines “satisfaction as an emotional reaction by the consumer in response to an experience with a product or service”. The issue of the distinction between service quality and satisfaction is still controversial. Practitioners tend to use these two concepts interchangeably (Zeithaml & Bitner 2000). Zeithaml & Bitner (2000:74) argue that “satisfaction is generally viewed as a broader concept while service quality assessment focuses specifically on dimensions of service”. In general, researchers agree that these two constructs are conceptually distinct, and service quality is an antecedent of satisfaction (eg., Cronin & Taylor 1992, Lassar et al. 2000, Spreng & Mackoy 1996). However, little attention has been paid to the impact of each component of service quality on customer satisfaction (eg., Lassar et al. 2000).

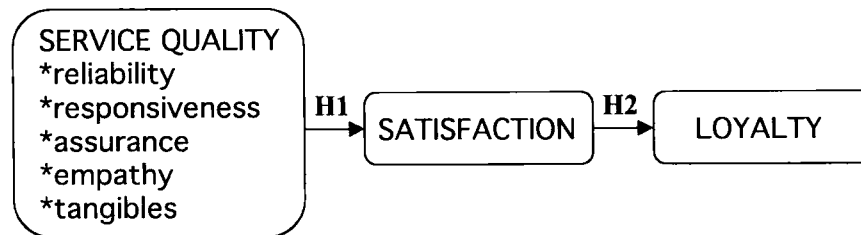
In a review of customer satisfaction, Szymanski & Henard (2001) point out that the literature on satisfaction is lacking research on the relationship between customer satisfaction and loyalty. Oliver (1997:392) defines “customer loyalty is a deeply held commitment to rebuy or repatronise a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour”. A number of researchers have argued that satisfaction is a mediator of quality and loyalty (eg., Oliver 1997, Fornell 1992) (see Figure 1).

Hypothesis

H1: *There are positive relationships but at different degrees between the components of service quality (reliability, responsiveness, assurance, empathy, and tangibles) and customer satisfaction.*

H2: *There is a positive relationship between customer satisfaction and customer loyalty.*

Figure 1: Relationships between service quality, customer satisfaction, and loyalty



Method

The design of this study included two steps – a pilot study and a main survey. The pilot phase was conducted via in-depth interviews. There were 20 in-depth interviews conducted in April 2003. The respondents were customers of three popular entertainment parks in Ho Chi Minh City, Vietnam, namely, Damsen, Kyhoa and Suoitien. The purpose of this pilot study was to qualitatively assess and modify the items of SERVQUAL used for this industry. The main survey was conducted by face-to-face interviews with 320 in-service training students of the University of Economics, Ho Chi Minh City, Vietnam in June 2003. Of 320 completed questionnaires, 13 were found useless due to several missing cases. The final sample size was 307. The purpose of this survey was to validate the measures used in this study and to test the model.

For measurement, SERVQUAL includes five components, ie., reliability (measured by 5 items), responsiveness (3 items), assurance (4 items), empathy (4 items), and tangibles (5 items). SERVQUAL covers almost all aspects of a quality service, however, each service has its own characteristics. This is the same for entertainment parks in Vietnam. Based on the result of the pilot study, a number of items were deleted and others were included.

After being modified, the service quality scale comprised 24 items. Reliability was measured by 3 items. Responsiveness was measured by 4 items. Assurance was measured by 5 items. Empathy was measure by 3 items. Tangibles was measure by 9 items. Customer satisfaction was measured by 3 items, borrowed from Hayes (1994). Finally, loyalty was measured by 3 items, based on Aaker (1991).

Data analysis and results

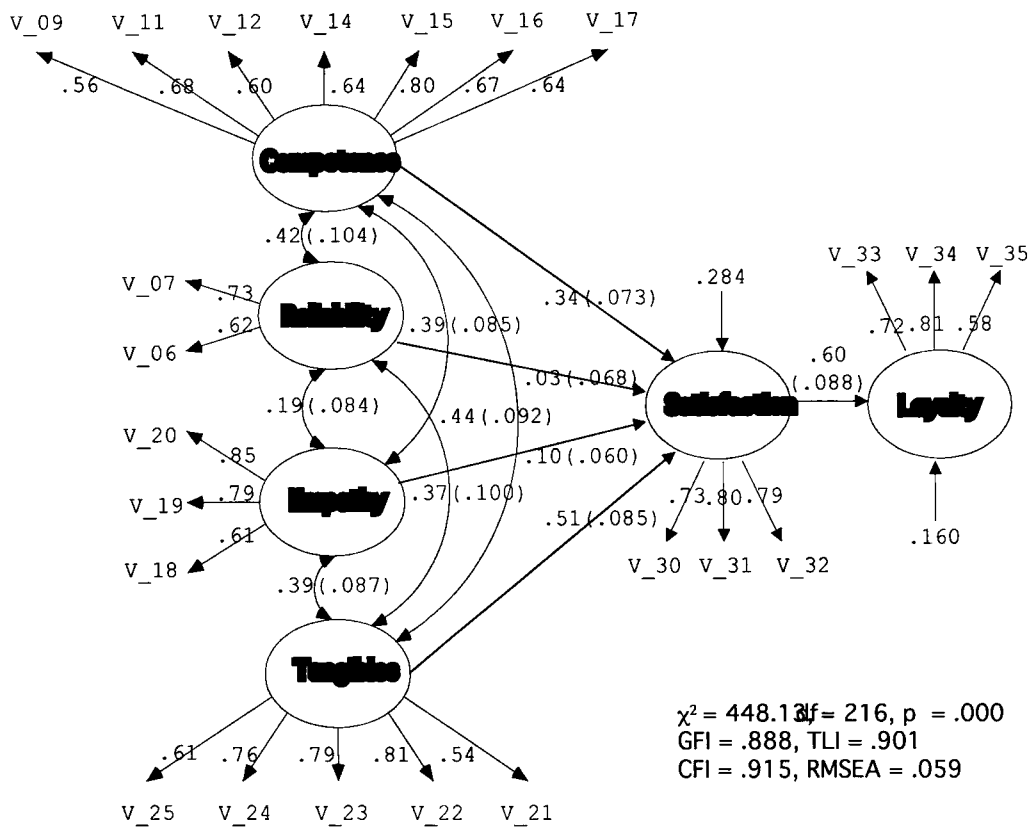
A two-step approach to structural equation modelling (SEM) (Anderson & Gerbing 1988) was used to test the measurement and the structural models. The measures were first validated by Cronbach alpha and exploratory factor analysis (EFA) via the SPSS program and then, tested by confirmatory factor analysis (CFA) using the AMOS program. The principal axis factoring via promax rotation was used in the EFA (Gerbing & Anderson 1988). The maximum likelihood estimation method was used in the CFA and SEM because the data had a slight deviation from multivariate normality (Muthen & Kaplan 1985) (the detailed analysis, the covariance/correlation matrix and the items will be provided if requested).

The Cronbach alpha assessment revealed that one item of the reliability scale and one item of the tangibles scale were deleted due to their low item-total correlations ($< .30$) (Nunnally & Bernstein 1994). The EFA results showed that one item of the responsiveness scale, and two items of the tangibles scale were also deleted due to their low factor loadings ($< .40$) (Gerbing & Anderson 1988). The EFA extracted four factors at an eigenvalue of 1.24 and 49.59% variance extracted. The results indicated that two components of service quality, i.e., responsiveness and assurance were combined into one factor, termed competence.

After the preliminary assessment, reliability had a Cronbach alpha of .62; competence had a Cronbach alpha of .84; empathy had a Cronbach alpha of .79; tangibles had a Cronbach alpha of .83. Customer satisfaction had a Cronbach alpha of .82. The EFA extracted one factor at an eigenvalue of 2.21 and 59% extracted variance. Finally, customer loyalty had a Cronbach alpha of .73. The EFA extracted one factor at an eigenvalue of 1.96 and 51.19% extracted variance.

The CFA results of the service quality scale indicated that one further item of the competence scale was deleted due to its low factor loading ($< .50$). After this item being deleted, the measurement model of service quality had 111 degrees of freedom. The results showed that the measurement model of service quality had an acceptable fit to the data. Even though chi-square was significant ($\chi^2 = 262.56$, $p = .000$), other measures of fit were acceptable (GFI = .913, TLI = .901, CFI = .919, and RMSEA = .063).

Figure 2: Structural results of the model (standardized)



The theoretical model had 216 degrees of freedom. The SEM results indicated that the model had an acceptable fit to the data ($\chi^2 = 448.13$, $p = .000$, GFI = .888, TLI = .901, CFI = .915, and RMSEA = .059) (see Figure 2). The results also indicated that only two components of service quality, ie., competence and tangibles, were antecedents of customer satisfaction ($p = .000$). The reliability and empathy components had no impact on customer satisfaction ($p = .64$ and $.11$, respectively). Also, the results showed that customer satisfaction was an antecedent of loyalty, ie., H1 was partly supported and H2 was supported.

Summary and conclusions

Of particular interest of this study was to test the SERVQUAL instrument in entertainment parks in Vietnam. Also, it explored the relationships between service quality and customer satisfaction, and between customer satisfaction and service loyalty. The results indicated that, after being modified, the SERVQUAL instrument satisfied the requirements for scale reliability and validity. However, the two components of SERVQUAL, ie., responsiveness and assurance integrated into one, termed competence. Based on these results, it can be concluded that, in the entertainment parks, service quality comprises four components, ie., competence, reliability, empathy, and tangibles. The results also indicated that, among four components of service quality, only two, ie., competence and tangibles, were antecedents of customer satisfaction, which is, in turn, an antecedents of customer loyalty.

The results of this study give further evidence to the argument that the components and measures of service quality vary depending on service contexts such as types of services, cultural and economic factors of the market, etc. (eg., Behara et al. 2002, Espinoza 1999, Mehta et al. 2000). Researchers and practitioners should be aware of this context-specific characteristic of services. Some components of service quality may have no impact on satisfaction (reliability and empathy in this study). This implies that they are components of service quality, however, their contributions to customer satisfaction are minimal. The contribution of each component to customer satisfaction depends not only on labour-intensive or tangibles-intensive services but also on the sophistication of customers. Practitioners should take this issue into consideration when designing their marketing programs for a specific service in a particular target market.

There are several limitations. Firstly, this study examined only one type of entertainment services, ie., entertainment parks. There may be different from other entertainment services. Therefore, replication research on other entertainment services is necessary for further research. Secondly, the survey only conducted in Ho Chi Minh City, replication research for other cities of the country will be needed for future research. Thirdly, the use of students as respondents limits the generalization of the results. Uses of other types of respondents are proposed for future research. Finally, there may be other factors that affect service quality, customer satisfaction, and loyalty such as communications, perception of price and quality. This is a direction for future research.

References

- Anderson, J. C. & D. W. Gerbing (1988), Structural Equation Modelling in Practice: A Review and Recommended Two-Step Approach, *Psychological Bulletin*, 103(3): 411-423.
- Bachelet, D. (1995), *Measuring Satisfaction; or the Chain, the Tree, and the Nest*, in Customer Satisfaction Research, Brookes, R. (ed.), ESOMAR.
- Behara, R. S., Fisher, W. W., & J. G. A. M. Lemmink (2002), Modelling and Evaluating Service Quality Measurement Using Neural Networks, *International Journal of Operations & Production Management*, 22(10): 1162-1185.
- Cronin, J. J. & S. A. Taylor (1992), Measuring Service Quality: A Reexamination and Extension, *Journal of Marketing*, 56(July): 55-68.
- Espinoza, M. M. (1999), Assessing the Cross-Cultural Applicability of a Service Quality Measure – A Comparative Study between Quebec and Peru, *International Journal of Service Industry Management*, 10(5): 449-468.
- Fornell, C. (1992), A National Customer Satisfaction Barometer: The Swedish Experience, *Journal of Marketing*, 56(Jan.): 6-21.
- Gerbing W. D. & J. C. Anderson (1988), An Update Paradigm for Scale Development Incorporating Unidimensionality and Its Assessments, *Journal of Marketing Research*, 25(2): 186-192.
- Gronroos, C. (1984), A Service Quality Model and Its Marketing Implications, *European Journal of Marketing*, 18(4): 36-44.
- Hayes, B. E. (1994), *Measuring Customer Satisfaction – Development and Use of Questionnaires*, Wisconsin: ASQC Quality Press.
- Lassar, W. M., C. Manolis, & R. D. Winsor (2000), Service Quality Perspectives and Satisfaction in Private Banking, *International Journal of Bank Marketing*, 18(4): 181-199.
- Lehtinen, U & J. R. Lehtinen (1982), *Service Quality: A Study of Quality Dimensions*, Working Paper, Service Management Institute, Helsinki, Finland.
- Mehta, S. C., A. K. Lalwani, & S. L. Han (2000), Service Quality in Retailing: Relative Efficiency of Alternative Measurement Scales for Different Product-Service Environments, *International Journal of Retail & Distribution Management*, 28(2): 62-72.
- Muthen, B. & D. Kaplan (1985), A Comparison of Some Methodologies for the Factor Analysis of Non-Normal Likert Variables, *British Journal of Mathematical and Statistical Psychology*, 38: 171-180.
- Nunnally, J. & I. H. Bernstein (1994), *Psychometric Theory*, 3rd ed., New York: McGraw-Hill.
- Oliver, R. L. (1997), *Satisfaction, A Behavioral Perspective on the Consumers*, New York: McGraw-Hill.
- Parasuraman, A., V. A. Zeithaml, & L. L. Berry (1985), A Conceptual Model of Service Quality and Its Implications for Future Research, *Journal of Marketing*, 49(Fall): 41-50.
- Parasuraman, A., V. A. Zeithaml, & L. L. Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality" *Journal of Retailing*, 64(1): 12-40.
- Parasuraman, A., V. A. Zeithaml, & L. L. Berry (1994), Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria, *Journal of Retailing*, 70(3): 201-230.
- Porter, M. E. (1990). *The Competitive Advantage of Nations*, London: MacMillan.
- Robinson, S. (1999), Measuring Service Quality: Current Thinking and Future Requirements, *Marketing Intelligence & Planning*, 17(1): 21-32.
- Shostack, G. L. (1977), Breaking Free from Product Marketing, *Journal of Marketing*, 41(April): 73-80.
- Spreng, R. A. & R. D. Mackoy (1996), An Empirical Examination of a Model of Perceived Service Quality and Satisfaction, *Journal of Retailing*, 72(2): 201-14.
- Svensson, G. (2002), A Triadic Network Approach to Service Quality, *Journal of Services Marketing*, 16(2): 158-179.
- Szymanski, D. M. & D. H. Henard (2001), Customer Satisfaction: A Meta-Analysis of the Empirical Evidence, *Journal of the Academy of Marketing Science*, 29(1): 16-35.
- Zeithaml, V. A. & M. J. Bitner (2000), *Services Marketing*, Boston: McGraw-Hill.