

Examining the structural relationships of tourist characteristics and destination satisfaction

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Abstract—The objectives of this study is to understand the destination tourist satisfaction by examining the theoretical and empirical evidence on the causal relationships among tourist characteristics, expectation, perceived value and overall satisfaction. The data was collected at Shenzhen and the respondents are inbound tourists from nine main different source markets. The data were analyzed using structural equation modeling. The results supported the proposed satisfaction model but the tourist characteristics did not have positive effect on tourist satisfaction as supposed. The managerial implications were drawn based on the study findings.

Keywords—Structural Equation Modeling, Satisfaction, Tourist characteristics

I. INTRODUCTION

Undoubtedly, satisfaction has been playing an important role in decision on products and services provided by destinations. Tourist satisfaction is widely accepted as being of central importance to destination management organization and tourism-related sectors. High tourist satisfaction is likely to contribute benefit not only to tourism goods/service providers, but also local governments and residents. Thus much effort goes into establishing strategies and operating procedures which will lead to high satisfaction and to measuring satisfaction index of key product/service providers through benchmarking initiatives.

However, many companies have noticed a high customer defection despite satisfaction ratings (Oliver 1999; Taylor, 1998). High survey satisfaction index could not guarantee the increase the number of visitors and the destination's revenue. This phenomenon has encouraged some researchers to criticize the mere satisfaction measurement and shift to the causal relationship of satisfaction. Therefore, the mere satisfaction indices and measures are of little use unless they acquire a role as a theoretical construct in a system of cause-effect relationships. The causal linkage between the causes and results of consumer satisfaction was considered to be an essential focus by a number of scholars (Oliver, 1980; Fornell, 1992; Fornell et al. 1996).

Among the tourism literature, an assessment of tourist satisfaction has been attempted using various perspectives and theories. Most of the studies conducted to evaluate consumer satisfaction have utilized models expectation/disconfirmation (Oliver, 1980). The purpose of this research is to explore the interrelationship among tourist satisfaction based on the expectation/disconfirmation model

and, on the basis, to predict the results of satisfaction which is to predict tourists revisit intentions.

Although most of the related literature shows that, the major driving forces of tourist satisfaction such as tourist expectations, perceived quality, perceived value and destination image were identified, few theoretical and empirical investigated the relationship between the tourist characteristics with these driving factors, tourist satisfaction and the revisit intentions. This study aims to fill this gap to understand the formation process and behavior consequence of tourist satisfaction.

The empirical study will focus on inbound tourists at Shenzhen, including the most important nine source markets. The contribution of these source markets on visitor numbers and revenues is continually growing and stands for 90% of total inbounds. (Shenzhen Tourism Bureau, 2010) It's of key and practical importance to evaluate their satisfaction levels and predict their post purchase behavior for Shenzhen.

II. LITERATURE REVIEW

The academies believe the causes of tourist satisfaction contribute to destination loyalty which companies care most. The relationships between service qualities, customer attributes and customer satisfaction are viewed as a very important and much debated research issue (Yooshik Yonn et al., 2005; Christina Geng Chi, 2008). A review of tourism literature reveals an abundance of studies on satisfaction and tourist motivation, but the relationship between the antecedents, the consequences and the overall satisfaction is not thoroughly investigated. Especially the causal relationship with the constructs of tourist characteristics, satisfaction and destination loyalty have been only conceptually or superficially discussed. Additionally, conceptual clarification, distinctions, and logical linkages among the constructs have been lacking

A. Antecedents or Causes of Satisfaction

The sequence of tourist satisfaction has been attempted using various perspectives and theories. Some researchers accept the following sequences and view the destination image or travel motivation as the antecedents of tourist satisfaction: tourist motivation (destination image) \rightarrow tourist satisfaction \rightarrow destination loyalty. Destination image and tourist travel motivation are generally viewed as causes of tourist satisfaction, while tourist loyalty or complaint listed as the results of satisfaction.

But the most often applied consumer satisfaction models is the expectancy-disconfirmation model developed by Oliver (1980). It has four elements: expectation, perceived performance, disconfirmation and satisfaction (Yi, 1990; Andreassen, 2000). Consumers develop expectations of a product or service before purchasing it, and then compare the actual performance of the product/service with their expectations about the product/service. If the performance of the product/service surpasses their expectations, positive disconfirmation is reached, which would then lead to consumers' satisfaction and willingness to purchase, and vice versa. This model has been further refined by introducing additional constructs to the framework. The hypothetical model utilized in this study was based on the model contribute by Olive, thus the antecedents of satisfaction include expectation, perceived quality, assessed value.

Moreover, the relationship of customer characteristics with consumer satisfaction levels are of obvious interest to firms in formulating effective marketing strategies in areas such as product positioning, market segmentation, pricing, advertising and sales promotion (Lai K. Chan et al. 2001). Therefore, instead of using tourists' expectations and perceptions of product performance to indirectly reflect all consumer differences, a tourist characteristics construct is introduced into the hypothetical models utilizing in this study.

B. Overall Satisfaction

As an integrated system that consists of a number of sectors such as accommodation, catering, transportation, attractions, retail shops and tourism-related public sectors, tourism industry needs to be considered as a whole system. Moreover, tourists consider overall destinations when deciding where to vacation. Within a destination, many independent businesses as well as local government organizations all contribute to the visitor experience and post-purchase behavior in different ways. Benchmarking overall destination tourist satisfaction is therefore challenging since so many different elements contribute tourist satisfaction (Tse, Wilton, 1988; Oliver, Swan, 1989).

Recently, there emerged an attribute-level conceptualization of the antecedents of satisfaction (Oliver, 1993; C.G. Chi, H.Qu, 2008). Under this attribute-level approach, overall satisfaction is a function of attribute-level evaluations. We will avoid this relationship between overall satisfaction and attribute-level satisfaction and focus on the interrelationship between satisfaction and the four antecedents listed in A, which should be the core parts of tourist satisfaction evaluation model. The further research will focus on overall evaluation, attribute satisfaction and the relationship between two because we can't solve these two complicated questions at the same time.

C. Consequences or Results of Tourist Satisfaction

There is little argument about consequences of tourist satisfaction. Tourist loyalty or complaint listed as the results of satisfaction.

Repeat visits or recommendations to others are normally referred to as tourists' loyalty in most tourism literature, which is one of the critical indicators to measure the

marketing strategies (Y. Yoon, M.Uysal, 2006; Cole & Scott, 2004; Kozak&Remington 2000). Repeat visitors not only provide a constant source of income, but may also generate positive word of mouth (Lau&McKercher, 2004).

Conversely, dissatisfied consumers have the options of existing/switching and voicing their complaints. Since exit/switch is difficult to directly measure but can be indirectly represented by loyalty, the study uses tourist complaints and tourist loyalty to reflect the total consequences of tourist satisfaction. It's evident that increased consumer satisfaction should decrease the incidence of complaints (Richiins, 1983) and increase the occurrence of appraisals. It is also true that satisfied customers are likely to be loyal customers. In other words, loyalty is a proxy for repeat visit compared with satisfaction, which studies have shown that there are differences in the perception of satisfactions between people, therefore, satisfied experiences in a particular destination may not be adequate to fully explain the repeat visit phenomenon.

III. THE PROPOSED HYPOTHETICAL MODEL

Fig 1. Depicts the hypothetical causal model. Each component of the model was selected on the basis of the part 2: literature review. The hypothesized causal relationships between satisfaction and destination loyalty is referred to as tourism destination loyalty theory. Subsequently, the model examines the structural, causal relationships among the tourist characteristics, expectation, satisfaction and the loyalty. There are 12 path hypotheses connecting the seven constructs with each path representing a hypothesized causal relationship with the direction identified as either positive or negative (the only two negative paths are tourist satisfaction to complaint and complaint to loyalty).

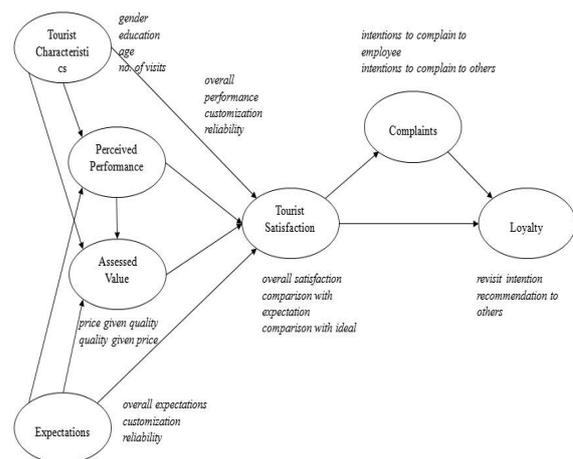


Figure 1. tourist satisfaction model

The **tourist characteristics** were modeled as a formative constructs consisting of consumer's socio-economic

characteristics, past consumption experience. Adding the tourist characteristics and the value components to the model also allows one to distinguish tourists' satisfaction levels when their demographic and cultural backgrounds are different (Fornell, Johnson, Anderson, Cha, & Bryant, 1996).

Satisfaction is the consumer's evaluation of the perceived discrepancy between his or her prior expectation and perceived performance of a product or service after consumption. It is natural to view perceived quality and expectation to be the antecedents of tourist satisfaction. **Perceived performance** is usually referred to as perceived quality in consumer satisfaction literature which stands for the overall excellence of a product or service. It shows that tourist satisfaction depends on value to some extent (Caruana et al. 2000). Three primary components are viewed as the indicator of this latent constructs: customization or fitness for consumption, reliability and the overall quality, which could capture the broader meaning of perceived quality in measuring tourist satisfaction.

Expectation is parallel to perceived performance in content and accordingly measured with similar indicators: overall expectations, expectation for customization and expectation for reliability.

As for **assessed value**, the tourism literature shows that tourist satisfaction is generally value or price related. It is natural for consumers to take both price and quality into account when assessing a selective destination's value. Thus this study operationalizes the assessed value with two dimensions: price given quality and quality given price.

Tourist satisfaction was measured using a multi-item scale based on Fornell (2000) adaption of the universal scale of Oliver (1997): general or overall satisfaction, comparison with the expectation and comparison to ideal. The **loyalty** constructs was operationalized with two items pertaining to revisit intention and recommendations. According to Hirschman's exit-voice theory, **complaint** constructs is considered to be operationalized with two items, intentions to complain to employees and others.

IV. METHODOLOGY

A. Questionair design

The questionnaire was composed of 7 parts: tourist characteristics, perceived performance, assessed value, expectation, tourist satisfaction, tourist complaints and loyalty. Different from many tourist satisfaction researches where direct measurement was adopted, in this study the tourist satisfaction is measured as latent variable associated with 3 indicators: overall satisfaction, confirmation of expectations and comparison with ideal. It's more scientific because recent consumer satisfaction studies conclude that satisfaction is a theoretical construct or a latent variable, which cannot be measured directly, as with attitude and emotion (Fornell, 1992). The survey questions relating to their indicators use 11-point rating scales from 0 for poor to 10 for excellent. The 11-point scales are commonly used in CSI surveys (Chan et al., 2003).

B. Sampling and data collection

Various consumer satisfaction index studies illustrate the ACSI framework and evaluate the satisfaction level, but few focus on interpretation of the structural relationships between the customer satisfaction and its determinants. In addition, Kozak (2001) found that the relationship between the overall satisfaction and destination loyalty was stronger for mature destinations than for less well known destinations. The sample in former studies only relates to U.S., Hong Kong and other developed and mature tourism destinations. Whether these finding apply in developing and not well-known destination is still an open point that has yet to be fully examined. This study aims to fill this gap and chose Shenzhen, the most promising developing destination in the near future.

The framework has been applied to six large datasets representing different tourism-related service sectors in Shenzhen. A two-stage quota sampling method was employed to obtain a representative sample of inbound tourists from 9 source markets. The survey data was collected at (i) popular tourist sites (Happy Valley, Windows of the World, Splendid China etc.), (ii) ferry terminals, (iii) hotels, (iv) checking points and (v) transport interchanges over a month period in July 2010. 3953 valid questionnaires were obtained covering six sectors across nine source markets to fulfill the study's objectives.

V. FINDINGS AND RESULTS

By including formative measures, partial least square was used to estimate the satisfaction models using the SmartPLS software program (Ringle, Wende, & Will, 2005). While missing values were imputed before estimating the model with expectation-maximization (EM) algorithm.

A. Reliability test

The reliability analysis was conducted to test the level of internal consistency for the measurements of all the reflective constructs. The indicators of the reflective constructs (satisfaction, performance, expectations, assessed value) are reliable because all the standardised indicator loadings for the six tourists' related sectors are positive and significant ranging from 0.790 to 0.949.

TABLE I. STANDARDIZED INDICATOR LOADINGS (%)

Sector	Range Min - Max
Attractions	0.819 - 0.901
Hotels	0.830 - 0.917
Tourist related public sector	0.830 - 0.949
Restaurants	0.829 - 0.88
Retail Shops	0.824 - 0.921
Transportation	0.790 - 0.920

Each reflective construct is reliable as shown by the average variance extracted in Table 2. For all the six sectors examined, the average variance extracted (AVE) is consistently above 70%, higher than the critical value of 50%

as recommended by Fornell (1992). This indicates that each reflective dimension and its respective indicators were highly correlated (Chan et al., 2003).

B. Path coefficients and hypothesis testing

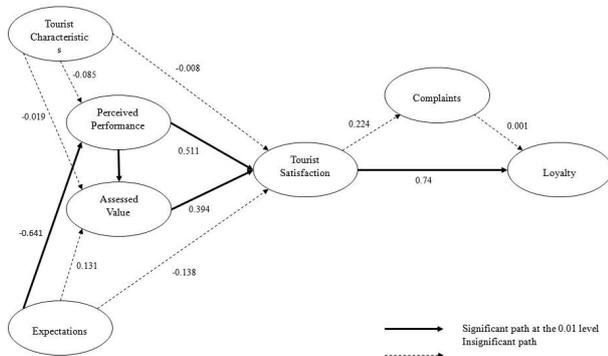


Figure 2. Competing destination models of attraction.

The majority of the t-values of the estimated path coefficients are significant and support the hypothesized paths (1.96 for alpha level 0.05 and 2.56 for alpha level 0.01, see table 2). In addition, most of the estimated path coefficients are well above 0.30 or close to it, which indicates that the proposed model has a strong predictive power. The results are also summarized in Figure for all the relationships significant at the .01 level. Figure 2 depicts the significant path of attraction sectors. It is clear that tourist characteristics have no strong causal relationships with tourist satisfaction, performance and value constructs, which need further empirical research.

VI. CONCLUSIONS

Empirical results of this study provide evidence that the proposed structural equation model need further investigation. We can't prove tourist characteristics have causal relationships with satisfaction, perceive performance of product or service provided by the destination and the assessed value. But the perceived performance and the assessed value do have a positive effect on tourist satisfaction as well as destination loyalty.

Examining the structural relationships in the tourist satisfaction model is important in order to identify critical issues and to track changes in service performance of relevant organizations. In the past, customer characteristics was viewed as of obvious importance to tourist satisfaction, thus it is a must study factors when firms formulating effective marketing strategies in areas such as product positioning, market segmentation, pricing, advertising and sales promotion. Now the organizations need reconsider the

influencing factors while making effective marketing strategies.

ACKNOWLEDGMENT

The author gratefully acknowledges the very helpful support given by Prof. Haiyan Song from School of Hotel and Tourism Management, Hong Kong Polytechnic University.

REFERENCES

- [1] Andreassen T. W. and Lindestad B., "The effects of corporate image in the formation of customer loyalty," *Journal of Service Research*, 1998, Vol.1 No.1, pp.82-92.
- [2] Chan, L. K., Hui, Y. V., Lo, H. P., Tse, S. K., Tso, G. K., & Wu, M. L. "Consumer satisfaction index: New practice and findings." *European Journal of Marketing*, 2003, 37(5/6), 872-909.
- [3] Christina Geng-Qing Chi, Hailin Qu. "Examining the structural relationships of destination image, tourist satisfaction and destination loyalty", *Tourism Management*, 2008, 29, 624-636
- [4] Fornell, C. "A national customer satisfaction barometer: The Swedish experience". *Journal of Marketing*, 1992, 56(1), pp.6-21
- [5] FFornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. "The American customer satisfaction index: Nature, purpose, and findings". *Journal of Marketing*, 1996, 60(4), pp. 7-18.
- [6] Haiyan Song, Gang Li, Robert van der Veen and Jason L. Chen, "Assessing mainland Chinese tourists' satisfaction with Hong Kong using tourist satisfaction index." *Internation Journal of Tourism Research*, 2010, DOI: 10.1002/jtr.801
- [7] Michael D. Johnson, Anders Gustafsson, Tor Wallin Andreassen, Line Lervik and Jaesung Cha., "The evolution and future of national customer satisfaction index models", *Journal of Economic Psychology*, 2001, 22, pp.217-245.
- [8] Kozak, M., & Rimmington, M.. *Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination*. *Journal of Travel Research*, 2000, 38(3), 260-269.
- [9] Lau, A.L.S., & McKercher, B. *Exploration versus acquisition: A comparison of first time and repeat visitors*. *Journal of Travel Research*, 2004, 42(3), 279-285
- [10] Oliver, R. L. "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, 1980, 17(4), 46-49
- [11] Oliver, R. L. "Cognitive, affective, and attribute bases of the satisfaction response". *Journal of Consumer Research*, 1993, 20, 418-430
- [12] Oliver, R. L. "When consumer loyalty?" *Journal of Marketing*, 63, 33-44
- [13] Richins, M. "Negative word of mouth by dissatisfied consumers: a pilot study", *Journal of Marketing*, 1983(47), 68-78
- [14] Taylor, T. B. "Better loyalty measurement leads to business solutions", *Marketing News*, 1998, 32(22), 41-42
- [15] Tse, D. K. and Wilton, P. C. "Models of consumer satisfaction formation: an extension", *Journal of Marketing Research*, 1988(25), 204-212
- [16] Yi, Y. A critical review of consumer satisfaction [C], *Review of Marketing 1990*, American Marketing Association, Chicago, IL, 68-123.
- [17] Yoon, Y., & Uysal, M.. An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, 2005, 26(1), 45-56

TABLE II. PATH COEFFICIENTS OF SECTORAL SEMS

	Characteristics to			Complaint to loyalty	Expectation			Performance to		Satisfaction to		Value to Tatisfaction
	performance	satisfaction	value		performance	satisfaction	value	satisfaction	value	complaint	loyalty	
attraction	0.085	0.008	0.019	-0.001	0.614**	-0.138	0.131	0.511**	0.615**	0.224	0.740**	0.394**
	0.029	0.401	1.023	0.714	12.148)	0.732	0.041	5.421	6.225	1.125)	12.506	3.484
hotel	-0.017	0.009	0.074	0.047	0.835**	0.028	-0.073	0.408**	0.835**	-0.226	0.850**	0.412**
	0.219	0.082	0.919	0.476	14.557	0.199	0.558	2.759	8.592	1.028	30.019	3.735
Tourist related public sector	0.077	-0.022	0.109	0.003	0.634**	-0.073	0.134	0.506**	0.642**	0.176	0.712**	0.404**
	0.870	0.379	1.127	0.003	7.609	0.809	1.280	4.563	7.239	0.851	13.075	4.014
restaurants	-0.150	-0.025	-0.066	0.162	0.759**	-0.195	-0.030	0.649**	0.695**	0.078	0.620**	0.413**
	0.867	0.189	0.764	0.979	12.327	2.043	0.290	6.388	5.135	0.435	6.956	4.451
Retail shops	0.070	0.014	0.005	-0.247	0.795**	-0.178	0.150	0.729**	0.610**	-0.060	0.620**	0.305**
	0.980	0.139	0.042	1.342	18.757	1.401	0.879	5.160	3.921	0.273	9.173	3.148
transportation	0.113	-0.043	0.056	-0.114	0.718**	-0.168	0.317*	0.517**	0.501**	0.073	0.711**	0.459**
	0.755	0.404	0.562	0.839	9.817	1.906	2.018	4.889	3.467	0.565	12.507	4.306

Note. The values in the second line are t-statistics. * p< .05. ** p< .01.