

Customer Satisfaction of Mainland Chinese Tourists in Cairns, Australia

Yiqian Peng

James Cook University, Smithfield, Queensland, Australia

Yiqian.peng@my.jcu.edu.au

Abstract

China has become a considerable international tourist generating region for Cairns, Australia. Cairns, a world-known tourism destination in Queensland, is famous for the Great Barrier Reef and Daintree rainforest. Recently, Cairns has received significantly increasing number of tourists from China. With survey data collected in 2012, this study provides insights into the socio-demographic profile, travel characteristics and customer satisfaction of Chinese tourists visiting Cairns. The study is based on the expectancy-confirmation model by Oliver (1980) and examines Chinese tourists' expectations and perceptions. A questionnaire was developed to collect the data required for the study, and distributed to a convenience sample of Chinese tourists visiting Cairns between April and October 2012. The results show strong correlations between the Chinese tourists' expectations and perceptions. In turn, findings indicate that their expectation-confirmation significantly influenced their overall satisfaction. Also, results of the analysis showed moderate levels of overall satisfaction with the destination and a need to improve service standards of tourism related business in the Cairns area. This study enables tourism businesses in Cairns to learn about visitors from different culture background and so, develop strategies that meet their needs and enhance their travel experiences.

Key words: Cairns, Chinese tourists, customer satisfaction, demographics, expectation, perception

Introduction

Mainland China has shown a strong economic growth in the last decade. Aligning with this, tourism has grown sharply (Lickorish & Jenkins, 1997; Boniface & Cooper, 2005). China is one of the top ten markets into Australia when ranked by visitor numbers and when regarding total inbound economic value (Tourism Australia, 2007). It is reported that China has overtaken Japan and is now Asia's leader of outbound tourism generating nation. In 2012, more than 82 million Chinese tourists visited overseas destinations, which increased by 16.7% as of 2011 (Huangfu, 2013). Having more disposable income provided through economic boom, the number is expected to reach 100 million by 2020 (Verikios, 2008).

Along with the increase of Chinese outbound tourism, China has become one of the major markets to Australia. According to Australian Bureau of Statistics, total arrival of Mainland Chinese tourists in year 2012 reached 626,000, making China Australia's second largest inbound market¹. Tropical North Queensland (TNQ) is famous for its world heritage Great Barrier Reef and Daintree Rainforest. By end of June 2012, China became TNQ's largest international tourism source market with 94,000 arrivals of 27% increase from the previous year and an increase of 21% to 226,000 stay nights (Tropical North Queensland Regional Snapshot, 2012). Cairns as the major tourism destination in TNQ received most of the Chinese tourists visiting the region. However, Cairns does not receive as many Chinese tourists as other regions in Australia though it has well-developed tourism, boasting easy access to the Great Reef, rainforest and an international airport. In the financial year June 2010-June 2011, TNQ only ranked fifth in arrivals of Chinese visitors, after Sydney (277,000), Melbourne (233,000), Gold Coast (118,000) and Brisbane (83,000) (Tourism Australia, 2012).

As a result, the Mainland China market has become increasingly important to the tourism industry in Australia, considering its rapid growth of visitation into Australia and strong economic growth. This study of visitor satisfaction regarding service quality is focused on Mainland Chinese tourists who were on holiday in Cairns. It is based on Oliver's (1980, 1981) expectancy-disconfirmation model.

Literature Review

According to WTO 1985, customer satisfaction is "a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service" (cited in Pizam, 1994, p.327). Customer satisfaction has been widely explored by researchers (Chu & Choi, 2000; Gronroos, 2001; Li, Song, van der Veen, & Chen, 2011; Parasuraman, 1998; Vela, Wang, & Tyler, 2008). Pizam (1994) suggests that businesses that are customer-oriented are more likely to achieve the goal of satisfying customers in the past, present and future. Hasan and Kerr (2003) indicate that customer satisfaction plays a significant role in deciding purchases while service quality has a strong influence on satisfaction. Customer satisfaction involves two aspects: customer expectation and customer perception. Berry et al. (1990) assert that the customers, as the only judge of service quality, evaluate the service by comparing what they received to what they expected. It is suggested that a company will find that it is difficult to exceed or surprise customers' expectations by only being reliable because there is involvement of service (Atkinson, 1989; Bialowas & Tabaszewska, 2001; James, Fink, Bakstran, & Hatten, 2008; Johnsen & Ford, 2008; Laaksonen, Jarimo, & Kulmala, 2008). Any difference between expectation and

¹ See <http://www.abs.gov.au/>, viewed 25 November 2012.

perception by customers can lead to disconfirmation (Kamndampully & Duddy, 2001). Gronroos (2001) also notes that customers often perceive what they are provided with and how those things or services are provided, which is more important to businesses.

To measure customer satisfaction, this study adopted the expectancy-disconfirmation model to explore Chinese tourists' satisfaction in Cairns (Figure 1). This model involves four elements: expectation, perceived performance, confirmation and satisfaction. It asserts that customers hold expectations toward products or services that they are to purchase. After the purchase and experience with the product or service, they compare their expectation with their experience. A confirmation forms when their experience exceeds the expectation. If it not exceeds, a disconfirmation comes into being.

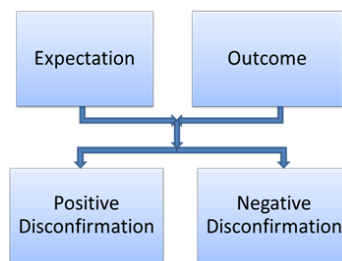


Figure 1: Expectation-Disconfirmation Model

There are two categories of variables included in this model, pre-exposure and post-exposure. They were measured by Likert scale. The pre-exposure variables include overall expectation measure, overall attitude, and behavioural intention measure. It generates people's overall judgement or overall disconfirmation based on a better-worse than expected comparison. The overall expectation measure examines overall belief about outcomes by asking the extent to which that they expected "to rest and relax". The overall attitude measures people's attitudes toward inoculation with questions involving business, incentive tour and promotion for the destination. The behavioural intention measure probabilistic intention toward 'do' what they decide to do. For example, the respondents were asked degree of expectation "to experience Western Culture".

Post-exposure variables include overall better-worse than expected measure and satisfaction measure. It measures people's emotion with references to their 'outright satisfaction, regret, happiness, and general feelings' about their decision to do certain things. The satisfaction measure includes a 6-item Likert scale (Oliver, 1980):

1. I am satisfied with my decision to do or not to do it;
2. If I had it to do all over again, I would feel differently about it;

3. My choice to do or not do it was a wise one;
4. I feel bad about my decision concerning what I did;
5. I think that I did the right thing when I decide to do or not do it;
6. I am not happy that I did what I chose to do.

In comparison with the increase of Chinese outbound travel, research into this market is relatively limited. There has been some researches into outbound travel motivation of Chinese tourists (Wong & Lau, 2001; Yu & Weiler, 2001); Yet, only a few studies have been conducted focusing on mainland Chinese tourists' satisfaction for their outbound travels. To attract more Chinese tourists, for both first-time visit and repeat visit, service quality plays an important role to ensure continuous development for tourism destinations (Pan, Noel, & Eric, 2006; Toy, Kerstetter, & Rager, 2002; Henning-Thurau & Kell, 1997). The Chinese tourists are from a very different but traditional oriental culture background. Such culture is very different from that of the tourism businesses in Cairns which are from Western culture and adopt managing strategies rooted deeply in Western culture. Thus, this study seeks to explore information that enables tourism businesses in Cairns to learn about visitors from different culture background and so, develop strategies that meet their needs and enhance their travel experiences.

Methods

Two surveys were conducted in 2012 among Chinese tourists (over 18 years) who travelled to Cairns. Satisfaction items used in the surveys were based on previous studies, e.g. Oliver (1980, 1981), Perkins, Waters, Baum and Basen Engquist (2009). Some additional items were drawn from conversations with randomly selected Chinese tourists. The survey includes 15 expectation items for travelling to Cairns, with '1' being 'not at all important' and '5' being 'very important'. Also, 18 perception items were included to measure respondent's satisfaction a 5-point Likert-type scale was used, with '1' being 'much worse than expected' and '5' being 'much better than expected'. The questionnaire also collected respondent's overall satisfaction evaluation and demographic information. A focus group was conducted in December 2011 to justify the items. Questionnaires were randomly distributed between April and October 2012 to Chinese tourists at the domestic departure lounge at Cairns airport. A total of 311 usable questionnaires were collected.

Data analysis included paired t-test to identify discrepancies between expectation and perception items. Factor analysis was conducted to explore areas of the respondents' interests in visiting to Cairns. Multiple-regression was used to determine influential elements upon respondents' overall evaluation of satisfaction. Cronbach's Alpha for satisfaction was 0.946 (>0.9).

Results

The paired t-test was conducted on 19 pairs of expectation and perception. The Pearson's Correlation coefficient report (Appendix 1) shows significance $p < 0.5$ for all the compared groups except 'to go shopping' as the expectation versus satisfaction of 'trading hours of shops'. Thus, on average, the respondents' perception exceeded their expectation.

The paired-sample test (Appendix 2) performed on 13 pairs comparing perception with expectation showed $p < 0.5$ significance for: Western culture experience, aboriginal culture experience, relaxation and rest, business travel, new opinion about life gained during the travel, variety of optional tours relating to water activities, special Australian outdoor activities as attractions, variety of scenery, variety of animals only in Australia, simple process at the airport and Custom House, and elements relating to shopping including variety of goods, shopping atmosphere and professional level of shop assistance. Six aspects were non-significant: outdoor activities generally available elsewhere, location of smoking areas, trading hours of shops, and elements regarding dining including quality of food, environment and facility of dining places as well as professional level of restaurant staff.

Within the 13 comparisons with significance of $p < 0.05$, there are three pairs where the perception value is lower than that of expectation. The first one indicates less variety of attractions in regard of special Australian outdoor activities than expected. The second one shows Chinese tourists found less scenery in Cairns than they expected. The last one identifies respondents' idea that they should have been able to see more animals than just Australian ones.

Nonetheless, with consideration of effect size there are only four pairs of comparisons which show that Chinese tourists' perceptions significantly exceed their expectations (Appendix 2). The figures indicate that respondents consider Cairns as a suitable for business travel and conference ($M=3.02$, $SD=1.27$) compared to their expectation of Cairns for just business travel ($M=2.29$, $SD=1.33$). This difference is considered as large size, 95% CI $[-.924, -.526]$, $t(209)=-7.18$, $p=-.56$. The comparison of expecting to see Cairns scenery ($M=4.12$, $SD=1.08$) and perception of variety of the scenery attractions ($M=3.38$, $SD=1.02$) again indicates a large effective size 95% CI $[.60, .884]$, $t(232)=-10.44$, $p=-.71$.

Based on above findings, it is observed that the majority of the Chinese visitors were on business travels with Cairns having exceeded their expectation. Compared to their expectation, most of the respondents perceived better scenery in Cairns but fewer animals only available in Australia. Also, they were satisfied with shopping atmosphere and the high professional level of shop assistants.

Factor analysis using principal axis factoring with Varimax rotation produced Kaiser-Meyer-Olkin (KMO) of $0.878 > 0.6$ and a Bartlett's Test of Sphericity is of great significance ($p < 0.05$), evidencing

that the data can be explained by the factors which result in the analysis. Ten factors (with Eigenvalues exceeding 1) were identified (Table 1). In total, these factors accounted for over 69.38% of the variance in the questionnaire data detailing in Appendix

3. **Table 1: The Ten Factors**

	Factors	% of Variance
1	convenience access to quality destination services	31.31
2	likelihood of re-visit	8.12
3	personal and family refreshment	5.42
4	expense worth value	4.68
5	shopping experience	4.12
6	freedom to choose	3.69
7	friendly and professional tour guide	3.39
8	improvement for servicing staff	3.04
9	difference among service staff	2.92
10	business travel experience	2.70
Cronach's α		0.94

Therefore, there were several aspects that the Chinese tourists were interested about Cairns. First, they paid considerable attention toward service standard, facility standard and attitude of servicing staff that they encountered. Second, they sought freedom to choose products at the destinations either servicing products or commodities in shops. Third, they considered Cairns as a business as well as holiday destination. Also, they focused on value for money.

Multiple-regression showed that influential elements on overall satisfaction (Table 2) On Step 1, items of expectation were the independent variables and overall satisfaction as the dependent variable, $R^2=.416$, $F(34, 114)=2.392$, $p=.000$ (<0.05). On Step 2, items of perceptions were added for the independent variables and accounted for an additional 26.9% of the variance compliance, $\Delta R^2=.269$, $\Delta F(38, 76)=1.708$, $p<0.05$. In combination, the predictor variables explained 38.7%, $R^2=.685$, Adjusted $R^2=.387$, $F(72, 76)=2.298$, $p=.000$ (<0.05). The f^2 with a magnitude of ($>.35$), can be considered to have a 'large' combined effect.

Table 2: 2-Step Multiple Regression

Variable	B	B [95.0% CI]		sr ²
		Lower Bound	Upper Bound	
Step 1				
To expect sex and romance	.325	.112	.579	.210
To see Cairns scenery	.255	.046	.595	.166
Convenient transport to travel around	.271	.032	.611	.157
To make dream come true	.211	.009	.404	.148
Casual life style in Cairns	.243	.008	.640	.145
To experience different things	-.203	-.490	-.006	-.145
Ideal climate and clean environment	-.229	-.562	-.005	-.144
step 2		2.818	7.056	
Will feel differently if I can do it over again	.375	.152	.802	.188
Service staff can meet all needs of the tourists	-.369	-.816	-.150	-.186
Quality of food	-.355	-.828	-.120	-.172
Various goods in shops	.301	.022	.652	.137
Business travel	-.312	-.636	-.017	-.135

CI= confidence interval

$p < 0.05$

Result from the Multiple Regression shows great difference in Step 1 and Step 2. In Step 1, the influential elements were only based on expectation items. It shows that overall satisfaction of the Chinese tourists was largely influenced by their expectations for experience, scenery and climate as well as convenient transport at destination. When perception items were added in Step 2, none of the expectation variable held influence while the perception items predominantly influenced their overall satisfaction. Their satisfaction relied on their perceptions regarding quality and variability of dining and goods in shops. Also, they held strong opinions about the services that they received and about Cairns as truly suitable for business travel. Moreover, their belief was absolute to have a different experience when they could visit Cairns again.

Conclusion and Future Work

This study adopted Oliver's (1980, 1981) Expectancy-Disconfirmation model to explore the Chinese tourists' satisfaction in Cairns, Australia. The Paired T-Test shows that their perceptions generally exceeded their expectations. The Factor Analysis indicates that the respondents were interested in service standard, facility standard and attitude of servicing staff, freedom to choose products, and Cairns being suitable for holiday and business travel. The Multiple Regression result identifies different influential elements where Step 1 was only examined on expectation items and Step 2 on both expectation and perception items.

Noteworthy, this study is limited due to the limited time period for the data collection. Future studies may integrate areas such as value, travel motivation, national culture to further explore possible root causes of differences between the expectation and perception of respondents from different culture background.

References

1. Atkinson, W. (1989). KNOW THY CUSTOMER: PURCHASERS REDEFINE SUPPLIER RELATIONSHIPS. *Management Review*, 78(6), 18.
2. Berry, L., Zeithaml, V., & Parasuraman, A. (1990). Five Impreatives for Improving Service Quality. *Sloan Management Review*, 31(4), 1.
3. Bialowas, P., & Tabaszewska, E. (2001). How to evaluate the internal customer-supplier relationship. *QUALITY PROGRESS*, 34(7), 63-67.
4. Chu, R., & Choi, T. Y. (2000). Levels of satisfaction among Asian and Western travellers. *International Journal of Quality & Reliability Management*, 17(2), 116-132.
5. Gronroos, C. (2001). The perceived service quality concept - a mistake? *Management Service Quality*, 11(3), 3.
6. Huangfu, N. (2013). China Tourism Industry Report 2012 Retrieved 20 March 2013, from http://res.meadin.com/IndustryReport/2013-3-13/1331347211_2.shtml
7. James, W. L., Fink, R. C., Bakstran, L., & Hatten, K. J. (2008). Supplier strategies to increase customer purchases over the duration of customer-supplier relationships. 23(8), 529. Retrieved from
8. Johnsen, R. E., & Ford, D. (2008). Exploring the concept of asymmetry: A typology for analysing customer-supplier relationships. *Industrial Marketing Management*, 37(4), 471-483.
9. Kamndampully, J., & Duddy, R. (2001). Service System: A Strategic Approach to Gain a

- Competitive Advantage in the Hospitality and Tourism Industry. *International Journal of Hospitality and Tourism Administration*, 2(1), 27-47.
10. Laaksonen, T., Jarimo, T., & Kulmala, H. I. (2008). Cooperative strategies in customer-supplier relationships: The role of interfirm trust. *International Journal of Production Economics*, 120(1), 79-87.
 11. Li, G., Song, H., van der Veen, R., & Chen, J. L. (2011). Assessing mainland Chinese tourists' satisfaction with Hong Kong using tourist satisfaction index. *International Journal of Tourism Research*, 13(1), 82-96.
 12. Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460-469.
 13. Oliver, R. L. (1981). Measurement and Evaluation of Satisfaction Processes in Retail Settings. *Journal of Retailing*, 57(3), 25-48.
 14. Parasuraman, A. (1998). Customer Service in Business-to-business markets: an agenda for reserach. *Journal of Buisness and Industrial Marketing*, 13(4/5), 13.
 15. Tropical North Queensland Regional Snapshot. (2012) Retrieved 10 October 2012, from http://www.tq.com.au/fms/tq_corporate/research/destinationsresearch/tropical_north_qld/TN_Q.pdf
 16. Vela, M. R., Wang, Y., & Tyler, K. (2008). Cultural perspectives: Chinese perceptions of UK hotel service quality. *International Journal of Culture, Tourism and Hospitality Research*, 2(4), 312-329.
 17. Wong, S., & Lau, E. (2001). Understanding the Behavior of Hong Kong Chinese Tourists on Group Tour Packages. *Journal of Travel Research*, 40(1), 57-67. doi: 10.1177/004728750104000108
 18. Yu, X., & Weiler, B. (2001). Mainland Chinese pleasure travelers to Australia: A leisure behavior analysis. *Tourism, Culture & Communication*, 3(2), 81-91.