Drivers of Satisfaction with Chinese Hotels

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ABSTRACT
Hotel reviews provide important opportunities for researching the components of hotel experiences and related guest satisfaction. The study presented in this paper explored what factors are generally mentioned in hotel reviews and if and how specific comments could be linked to overall satisfaction ratings and behavioral intentions. Chinese hotels were selected to form the context of the study as insights on experience elements and satisfaction are especially important in an emerging hospitality market. A total of 983 reviews posted by international travelers were content analyzed. Experience components mentioned in the reviews were then linked to satisfaction ratings, review sentiment and behavioral intentions expressed in the reviews. Implications for tourism experience theory, future research, and hospitality management practice are discussed.

Keywords: hotel experience, online hotel reviews, service quality, satisfaction, behavioral intentions.

INTRODUCTION
Tourism and hospitality is one of the fast growing sectors in the experience industry (Pine & Gilmore, 1999) stimulated by the transformation of economic offerings and postmodern consumption demands. Tourism is primarily an experience-developing industry which sells a staged experience (Sternberg, 1997). Hotel stays are highly experiential (Gilmore & Pine, 2002b) and an integral part of the overall tourism experience. In tourism studies, unique experience has been recognized as the ultimate benefit and value that tourists search in destinations (e.g., Driver, Brown, Stankey & Gregoire, 1987; MacCannell, 1989; Manning 1986).

Since the experience economy is at a different stage from the service economy, it is natural to expect nuances between experience quality and service performance quality. Cole and Scott (2004) have differentiated the two constructs, advocating that the former is the psychological outcome of service involvement. Simply put, experience quality can be compared to component guest satisfaction (e.g., Cole & Scott, 2004). Tourism experiences have been explored across different tourism sectors such as tours and attractions (Cole & Scott, 2004; Otto & Ritchie, 1996), hotels (Oh, Fiore and Jeoung, 2007; Otto & Ritchie, 1996) as well as those of diverse types of tourists including backpackers (Uriely, Yonay, & Simchai, 2002; Noy, 2004),
and sport tourists (Boucher, Lebrun & Auvergne, 2004), culinary tourists (Quan & Wang, 2004), cultural tourists (Prentice, 2001) and heritage tourists (Beeho & Prentice, 1997). However, the factors constituting tourism experiences deserve further exploration since empirical studies of tourism experiences in terms of their individual components are not readily available. For instance, Knutson, Beck, Kim and Cha (2008) have pointed out the shortcomings in the hospitality literature with respect to identifying and measuring hotel experience dimensions.

The development of the Internet has had great impact on the tourism and hospitality sector. The use of the Internet by potential tourists goes beyond searching for information and making reservations on websites by tourism marketers and suppliers. The Internet can provide an unbiased source of market intelligence through online reviews supported by web 2.0 technology, which makes online information-sharing among strangers easy. In the Web 2.0 era, tourism consumers increasingly voice their opinions and present their evaluations of service performances online by means of online travel reviews. Online hotel reviews constitute the majority of reviews in tourism, having the greatest impact on travel decision-making (Gretzel, Yoo & Purifoy, 2007). They are deemed to be more believable information sources than supplier-provided information (Smith, Menon & Sivakumar, 2005) because online consumer reviews and ratings are independently generated by consumers (Yoo & Gretzel, 2008; Yoo & Gretzel, 2009). Research on online reviews focuses on motivations of review writing and effects of online reviews on consumers’ attitudes or decisions. However, studies on the contents of online reviews per se to extract tourism experience information are rare. Exceptions are Jeong and Jeon (2008) and Crotts, Mason and Davis (2009), with both papers emphasizing the importance of consumer-generated media for deriving information about hotel experience elements and satisfaction. Thus, the current paper explores this issue by content-analyzing online hotel reviews about Chinese hotels posted by international travelers. It reviews previous literature on tourism experience and tourist satisfaction as a starting point to inform the coding and analysis scheme. The goal of this study was to explore what factors are generally mentioned in hotel reviews and if and how specific comments could be linked to overall satisfaction ratings and behavioral intentions. Since insights regarding drivers of satisfaction are especially important in an emerging tourism market, the context selected for the study was Chinese hotels.

LITERATURE REVIEW

Tourism experiences

The tourism industry has shifted from a service industry with experiential elements (Otto and Ritchie, 1996) to an experiential industry (Pine & Gilmore, 1999; Gilmore & Pine 2002a, 2002b). According to Pine and Gilmore (1999), there are four realms or dimensions of experience differentiated by the level and form of guest involvement in business offerings. Passive or active participation of guests in business or destination offerings dictate whether they have entertainment-esthetic experiences or education-escapist experiences. Pine and Gilmore’s four experience realms have been incorporated into the tourism and hospitality literature (Gilmore & Pine 2002b; Stamboulis & Skayannis, 2003). For instance, Ellis and Rossman (2008) proposed a conceptual model of staging experience creation in recreation, parks and tourism settings, integrating service quality and experience quality. Moreover, the four experience dimensions have been empirically tested and validated by Oh et al. (2007) within the US B&B lodging industry.

Pine and Gilmore’s (1999) tourism experience dimensions, are important to understand in terms of how satisfying and memorable experiences can be constructed. It is of same importance
to identify the potential antecedents and consequences of these experiences. Indeed, assessing experience quality, evaluating the effect of various factors on tourists’ satisfaction as well as establishing links between quality perceptions and future behaviors are some of the most studied topics in the tourism marketing literature. Identified antecedents of tourism experiences include tourist motivations (e.g., Loker-Murphy 1996; Prentice, Witt & Hamer 1998), service quality perceptions (e.g., Baker and Crompton 2000; Tian-Cole, Crompton & Willson, 2002), among others, while the consequences of tourism experiences literature is composed of satisfaction, return intention and word-of-mouth studies (e.g., Cole & Scott, 2004; Baker & Crompton 2000; Tian-Cole, Crompton & Willson, 2002).

Tourism experiences are dependent on and created by service quality (Ellis & Rossman, 2008). Service quality is mainly measured using the SERVQUAL framework developed by Paramasuran et al. (1985, 1988). SERVQUAL is a cognitive quality measurement model emphasizing the functional and technical aspects of service delivery through guests’ perceptions of the process. In the integrate experience model proposed by Ellis and Rossman (2008), the five elements of service quality capture the essence of technical performance of the overall guest experience. Also, Cole and Scott (2004)'s research showed that performance (service) quality accounted for a significant amount of variance in experience quality.

Tourist experiences are so varied, individualized and elusive that it is unrealistic to define and operationalize them in a universal fashion. To measure tourism experiences, researchers have used structured surveys, structured or unstructured interviews, tourist behavior observation, travel diaries or logs, and GPS systems (Bowen, 2002; Takinami, 1998; Hull & Stewart, 1995; Chhetri & Arrowsmith, 2002; Arnberger & Brandenburg, 2002; Janowsky & Becker, 2002; Rauhala, Erkkonen & Isalo, 2002). These methods each have their specific merit but also their challenges. The current study contributes to hotel experience identification by content-analyzing online hotel reviews. Hotel reviews, as a type of consumer-generated media, provide a new source of data that reflects first-hand experiences (Tussyadiah & Fesenmaier, 2009). Opinion mining of reviews can provide important insights for customer relationship management (Pekar & Ou, 2008). Taking advantage of this rich source of data, the current study set out to investigate how tourists describe their hotel experiences and whether specific experience descriptions could be linked to affect, satisfaction and behavioral intentions to return to or recommend the hotel.

Tourist satisfaction

Satisfaction is a key outcome influenced by experience quality. Mannell and Kleiber (1997) differentiated between attribute satisfaction and overall satisfaction. Besides this distinction, the cognitive-affective dimensions of guest satisfaction have also been recognized by tourism and hospitality scholars as important aspects of satisfaction measurement (Rodriguez del Bosque & San Martin, 2008; Wirtz, Mattila & Tan 2000). Affective factors comprise a substantial portion of guest satisfaction with a tourism experience (Otto & Ritchie, 1996). However, the affective aspects of satisfaction are often ignored, and studies measuring the quality of experiences in tourism/hospitality industry are lagging behind in terms of recognizing affect.

Satisfaction can be viewed as a major precursor of purchase-related attitudes. The mediating role of satisfaction in the relation between service quality and behavioral intentions has been examined by previous studies with mixed findings. It is noteworthy that among those studies, Tian-Cole and Illum (2006) tested the relationship among performance quality,
They found that experience quality fully mediates the relationship between performance quality and overall satisfaction, which eventually leads to behavioral intentions. Based on this review of the satisfaction literature, the study presented in this paper took affective satisfaction components as well as behavioral intentions into account in addition to overall satisfaction ratings.

**METHODOLOGY**

A total of 983 reviews posted between 2006 and 2008 on Tripadvisor.com, one of the most popular hotel comment platforms (Yoo & Gretzel, 2008), were retrieved. These reviews were written by English-speaking travelers recording their hotel experiences in mainland China and also included their overall satisfaction ratings. The reviews were then content-analyzed and manually coded in terms of whether they contained certain experience elements, whether these experiences had been influenced by the recommendations of others, and whether they included behavioral intentions to return or to make recommendations to others. Experience elements included hotel attributes in online reviews summarized by Pekar and Ou (2008) as well as emerging themes related to other hotel experience attributes captured by the authors. As far as behavioral intentions and recommendations are concerned, the reviews were coded as not including any, including positive intentions and recommendations, including unwillingness to return and recommendations to not patron, as well as conditional intentions and recommendations (e.g. “Stay only if location is all that matters”).

Satisfaction was expressed by the reviewers in the forms of ratings ranging from 1 to 5. The affective dimension of satisfaction was operationalized as sentiment. For this purpose, positive and negative word counts were first generated by General Inquirer, a computer assisted tool for content analysis (Stone et al., 1966) as indicators of positive and negative sentiments. The results were next screened and revised manually to make sure that positive/negative words selected by General Inquirer truly expressed corresponding sentiments. Positive and negative sentiments of a review were then encoded as the ratio of the number of positive/negative words counts to the total number of words in the review. The first author and another PhD student did the coding independently. In general, an inter-coder reliability check was performed to avoid misinterpretation. Disagreement was reconciled by discussion between the two coders. Independent t-tests and Chi-square were performed to detect relationships between experience quality aspects, satisfaction and behavioral intentions/recommendations.

**RESULTS**

Common experience elements in the 983 reviews were identified through their frequency of occurrence and are presented in Table 1. The most popular topic in the reviews is descriptions of hotel room characteristics (Room). Over 80% reviews have commented on this aspect. Other frequently mentioned attributes include amenities inside hotel rooms (Amenity), the performance of hotel employees (Service), food experiences (Food) and the district of the city where the hotel is located (e.g., downtown, rural area, business district, etc.) (Location). A total of 36.1% of the reviews included price-related information (Price/Value). Some of them directly provided the room rate (e.g., “We got a great rate in April $90/night”), others compared the price they paid with the perceived value they obtained (e.g., “The hotel was really good value.”). Over one third (35.1%) of the reviews included information about the length of stay (Length of Stay) and 31.1% of the reviews talked about outside-room facilities (Facility), mostly the lobby or check-in area. Other experiences mentioned included the health center (Health) (e.g., “The health club is
modern and well equipped.”) and the business center (Business) (e.g., “Downpoint was no free internet access and cost of use in the business centre is pricey compared to other places” ).

Another two experience elements associated with hotel location are the destination characteristics (Destination) (e.g., “Many of the laneways in the Hutong area are closed to motor vehicles after 10pm however, Beijing was very safe and we made the most of taking a couple of walks late at night to walk off the wonderful food.”) and the transportation from or to the hotel (Transportation) (e.g., “It is also well situated in the Guo Mao area with a line of taxis behind for easy travel (easy being relative because as soon as you leave the hotel by taxi you enter the city's increasingly horrid traffic”). A total of 23.3% of the reviews expressed that their choice of the hotel was influenced by online information provided by other travelers (e.g., “We booked the Holiday Inn Central Plaza for 3 nights early June after reading the reviews on tripadvisor”).

The results indicate that the hotel experience is indeed constructed as a multi-faceted experience by the hotel guests that includes not only the tangible hotel products and the service but also the overall experience at the destination. This stresses the interdependence of hotel and tourism experiences and means that hotel experiences should be conceptualized more broadly within the overall context of the destination experience.

Table 1
Review Topics

<table>
<thead>
<tr>
<th>Review topics</th>
<th>Percentage</th>
<th>Review topics</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>83.2</td>
<td>Length of stay</td>
<td>35.1</td>
</tr>
<tr>
<td>Amenity</td>
<td>62.9</td>
<td>Facility</td>
<td>31.1</td>
</tr>
<tr>
<td>Service</td>
<td>68.6</td>
<td>Destination</td>
<td>25.7</td>
</tr>
<tr>
<td>Food</td>
<td>60.8</td>
<td>Transportation</td>
<td>24.4</td>
</tr>
<tr>
<td>Location</td>
<td>60.7</td>
<td>Reference to eWOM</td>
<td>23.3</td>
</tr>
<tr>
<td>Behavioral intentions*</td>
<td>40.0</td>
<td>Health</td>
<td>18.7</td>
</tr>
<tr>
<td>Price/Value</td>
<td>36.1</td>
<td>Business</td>
<td>18.3</td>
</tr>
</tbody>
</table>

*Behavioral intentions: intentions of return or recommendation (27.6); intentions of no return or recommendation (6.6); intentions of conditional return or recommendation (5.8).

Further, 40% of the reviewers explicitly commented on whether they would like to return to the hotel or whether they would like to recommend the hotel to others. Among them, 27.6% showed they were willing to return to the hotel or recommend the hotel to others. Conditional behavioral intentions can be generalized into three categories. In general, willingness to return or to recommend the hotel to others could be dependent on the type of guests or type of trip (e.g., “I would recommend it for singles or short stays.”), the improvement of some aspects of the hotel (e.g., “Probably not ideal for tourist until metro is back up and running apart from that would recommend.”) or, could be limited to only one or two advantages of the hotel (e.g., “Would recommend only if you want a quiet out of the way place to stay.”).

Satisfaction and sentiment related results are described in Table 2. Satisfaction was generally high with a mean rating of 3.99 and a standard deviation of 1.124. Moreover, the reviews also, on average, included more positive words than negative words. Positive sentiment ranges from 0 to 44%, with the mean of 6.39% and a standard deviation of 3.749. Negative sentiment ranges from 0 to 17%. Its mean value is 2.11% and standard deviation is 1.916.
Table 2
Descriptive Statistics of Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Max.</th>
<th>Min.</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction rating</td>
<td>0</td>
<td>1</td>
<td>3.99</td>
<td>1.124</td>
</tr>
<tr>
<td>Positive Sentiment</td>
<td>0</td>
<td>44</td>
<td>6.39</td>
<td>3.749</td>
</tr>
<tr>
<td>Negative Sentiment</td>
<td>0</td>
<td>17</td>
<td>2.11</td>
<td>1.916</td>
</tr>
</tbody>
</table>

Table 3 presents the results of T-tests, examining the influence of experience dimensions included in the review on satisfaction and affect measures. As far as relationships are concerned, when room aspects were mentioned, negative sentiment was significantly greater than when no room aspects were mentioned. The same is true for business center, health club, transportation, and destination. No significant relationships were found for amenity descriptions, and, surprisingly, service descriptions. Food, location, price/value, and length of stay were significantly related with both increased positive and negative sentiment, suggesting that the evaluations of these factors were very mixed. Reference to having based the decision on other people’s online recommendations was connected with positive sentiment. Only food, facility, and health club comments could be directly linked to increased satisfaction.

Table 3
T-Test Results

<table>
<thead>
<tr>
<th>Source</th>
<th>Satisfaction Rating</th>
<th>Positive Sentiment</th>
<th>Negative Sentiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>.551</td>
<td>3.143</td>
<td>6.529*</td>
</tr>
<tr>
<td>Food</td>
<td>12.667*</td>
<td>4.112*</td>
<td>25.858*</td>
</tr>
<tr>
<td>Amenity</td>
<td>.120</td>
<td>.796</td>
<td>.394</td>
</tr>
<tr>
<td>Facility</td>
<td>9.212*</td>
<td>.127</td>
<td>.000</td>
</tr>
<tr>
<td>Business</td>
<td>.155</td>
<td>3.299</td>
<td>4.530*</td>
</tr>
<tr>
<td>Health</td>
<td>5.397*</td>
<td>.422</td>
<td>21.522*</td>
</tr>
<tr>
<td>Location</td>
<td>1.091</td>
<td>6.136*</td>
<td>25.655*</td>
</tr>
<tr>
<td>Price/Value</td>
<td>2.774</td>
<td>8.066*</td>
<td>14.315*</td>
</tr>
<tr>
<td>Service</td>
<td>.043</td>
<td>.521</td>
<td>1.650</td>
</tr>
<tr>
<td>Transportation</td>
<td>2.004</td>
<td>2.680</td>
<td>12.246*</td>
</tr>
<tr>
<td>Length</td>
<td>1.727</td>
<td>4.762*</td>
<td>6.229*</td>
</tr>
<tr>
<td>Destination</td>
<td>.028</td>
<td>21.966</td>
<td>18.281*</td>
</tr>
<tr>
<td>Reference to eWOM</td>
<td>.744.</td>
<td>7.988*</td>
<td>.033</td>
</tr>
</tbody>
</table>

To examine the relationship between behavioral intentions and other topics, the variable of behavioral intentions was decomposed into four dummy variables, representing four types of intentions identified in the reviews. Table 4 presents the results of whether comments on specific hotel experience attributes have different impacts on the four types of behavior intentions.
### Table 4
Chi-Square Test Results

<table>
<thead>
<tr>
<th>Source</th>
<th>No intentions expressed</th>
<th>Intention of return or recommendation</th>
<th>Intention of not return or recommendation</th>
<th>Conditional Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>8.737*</td>
<td>4.012*</td>
<td>2.844</td>
<td>.328</td>
</tr>
<tr>
<td>Food</td>
<td>.021</td>
<td>2.653</td>
<td>2.124</td>
<td>3.483</td>
</tr>
<tr>
<td>Amenity</td>
<td>.067</td>
<td>.418</td>
<td>7.249*</td>
<td>1.173</td>
</tr>
<tr>
<td>Facility</td>
<td>.009</td>
<td>2.082</td>
<td>2.555</td>
<td>1.574</td>
</tr>
<tr>
<td>Business</td>
<td>1.831</td>
<td>.388</td>
<td>.001</td>
<td>2.592</td>
</tr>
<tr>
<td>Health</td>
<td>.058</td>
<td>1.772</td>
<td>7.222*</td>
<td>.665</td>
</tr>
<tr>
<td>Location</td>
<td>.031</td>
<td>.249</td>
<td>3.861*</td>
<td>2.262</td>
</tr>
<tr>
<td>Price</td>
<td>.678</td>
<td>.830</td>
<td>.166</td>
<td>.203</td>
</tr>
<tr>
<td>Service</td>
<td>6.049*</td>
<td>12.708*</td>
<td>.157</td>
<td>4.334*</td>
</tr>
<tr>
<td>Transportation</td>
<td>.377</td>
<td>1.290</td>
<td>2.117</td>
<td>.438</td>
</tr>
<tr>
<td>Length</td>
<td>6.768*</td>
<td>4.314*</td>
<td>.735</td>
<td>.325</td>
</tr>
<tr>
<td>Destination</td>
<td>.329</td>
<td>2.801</td>
<td>3.903*</td>
<td>.011</td>
</tr>
<tr>
<td>Reference to eWOM</td>
<td>1.316</td>
<td>.676</td>
<td>3.163</td>
<td>1.120</td>
</tr>
</tbody>
</table>

Postings that mentioned service, length of stay and room quality were significantly more likely to include positive intentions to return/recommendations. In contrast, postings that included comments on amenities, health club, location and destination were more likely to include negative intentions/recommendations. Conditional intentions/recommendations were significantly linked to comments made about the hotel service.

**DISCUSSIONS AND IMPLICATIONS**

The objective of this study was to find out what experiences international guests had when they were accommodated in hotels in Mainland China. From the analysis of online hotel reviews written by English-speaking travelers on TripAdvisor, we found that reviewers focused on not only the key hotel attributes, e.g., room interiors, food experience, room amenity and outside-room facilities, but also on aspects of their overall tourism experiences, such as destination features, how they obtained the information of the hotel (reference to eWOM) and the length of stay in the hotel. A considerable proportion of the reviews also included indications of future intentions to return or recommend or not, hinting at strong favoring or disapproval of the hotel experience. It can be assumed that these statements are very persuasive to travel planners as they are ultimate measures of satisfaction.

Location, Food, Room, Service, Facilities (outside hotel rooms, e.g., swimming pool, lounge, lobby, casino) and Price (the value for the money) are the major hotel experience features identified from online reviews by Pekar and Ou (2008). Jeong and Jeon (2008) pointed out that TripAdvisor offered evaluation scales across seven performance attributes such as Room, Value, Cleanliness, Location, Check-in & Check-out service and business, assuming that these attributes potentially have greatest impacts on guests' attitudes and future behaviors toward hotels but also probably making consumers more aware of these dimensions. They further validated that value was one of the key predictors of guest satisfaction, which leads to return intentions. The current study echoed these findings to some respect but not completely as far as specific influences are concerned. Also, the current study identified additional factors, e.g.,
decision based on other people’s online recommendations that seem to be important drivers. This suggests that relationships between hotel experience elements and satisfaction and behavioral intentions are complicated. Or, there are other potential factors accounting for the variance in satisfaction and behavioral intentions that cannot be explained by service quality. The results also showed that drivers of negative or positive sentiment are not necessarily linked to satisfaction and that those who recommend mostly had something positive to say about the service and the rooms and had also indicated their length of stay. It has to be considered of course that these relationships could be unique to the context of Chinese hotels.

In general, the findings illustrate that important information can be derived from online hotel reviews in terms of what it is about their experience that people find worth mentioning. They also show that overall satisfaction ratings alone might not be a good dependent variable to use if one wants to determine what experiences visitors had in a specific place or a particular hotel.

Limitations and future studies

This study is a tentative exploration of hotel guests’ experiences in mainland China. It could serve as a framework to establish a full hotel experience model and provide information to hotel managers, especially those are operating hotels in mainland China, in terms how to enhance guests’ satisfaction and elicit their future purchase intentions. However, this study has limitations due to the nature of text-based data resource and the data analysis method at this stage. The primary problem of dummy-coding of opinions lies in that it is unable to capture the meaning behind the words. For example, although the appearance of varied factors leading to satisfaction measures can be identified, how these factors impact satisfaction is unclear. Moreover, it is also possible that those positive/negative words were not referring to the same items, implying that the comparison between factors influencing the three satisfaction measures deserve a closer look. Another problem is that the hotel experiences discovered in this study cannot fully represent the experience realms proposed by Pine and Gilmore (1999). Rather, they are more functional than experiential. Further research should use content analysis to explore the subjective evaluation of reviews and affect beyond overall sentiment. Further, the study needs to be replicated with hotel reviews at another destination before it can be generalized.

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