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# **Modeling consumers' perceptions of service quality: A triangulation approach using phenomenological and structured equation analysis**

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**Abstract**--It has been established in numerous literature that service quality is an important measure of business performance. Its impacts are registered by its direct effect on customer satisfaction and the indirect effect on customer loyalty. The main objective of the present study is to measure hotels' service quality from the customers' perspective. A performance-only measurement scale (SERVPERF) was administered to customers who stayed in three-star, four-star, and five-star hotels in China. Although the importance of service quality and its measurement have been recognized, there was limited research that addressed the structure and antecedents of the concepts for the hotel industry. The findings of the dimensions are important for managers in the hotel industry as they identify the bundle of service

attributes the consumers find important. The results of the study also demonstrate that SERVPERF is a reliable and valid tool to measure service quality in the hotel industry. The instrument consists of five dimensions, namely "tangibles", "responsiveness", "empathy", "assurance" and "reliability". Hotel customers are expecting more improved services from the hotels in all the service quality dimensions. It was also found that the hotel customers have the lowest perception scores on empathy and responsiveness among the five dimensions. In the light of the results, possible managerial implications are discussed, and future research subjects are recommended.

**Keywords**---Service quality, SERVPERF, Chinese, Hotels.

## 1. Introduction

The tourism industry has experienced phenomenal growth worldwide in recent times, and a similar pattern is emerging in China. The tourism industry in China has established itself to be one of the fastest growing among their counterparts in Asia (Hartline and Ferrell, 1996). Specifically, the tourism industry is the largest employer in China and has become one of the key drivers of the Chinese economy today. It is growing rapidly by the year. The tourism industry encompasses infrastructure and services, and the hotel industry is one of the most important contributors. Chinese tourism industry was estimated to provide about 350,000 jobs, which included direct and indirect employment. About 83.5% of the employment is in the hotel and the restaurant industries. Tourism is often viewed as a global business bringing tremendous value to a country's economy. Asia has seen considerable development, attracting a huge and increasing number of arrivals with 89.2 million tourists in 2012, 102.1 million in 2013, and 105 million in 2014 (Association of Southeast Asian Nations, 2015). In China, the tourism business is considered as a promising prospect towards the nation's development. It has attracted more than 9.2 million visitors in 2012, more than 12.6 million visitors in 2013, and nearly 13 million visitors in 2014. According to statistics, as of January 2015, the total number of service hotels in China has reached 164,469, of which 10,079 were high-star hotels, economic hotels numbered 154,390, an increase of 3648, the total number of rooms are 1,525,471, an increase of 289,638 (increase of 23.44%) (Askci.com, 2015). The total revenue of the hotel industry grew rapidly from RMB 212.379 billion in 2011 to RMB 231.482 billion in 2012, RMB 243.022 billion in 2013, RMB229, 293 million in 2014, contributing to more than 5% of China's GDP (Chinabgao, 2014). Hotel service is regarded as one of the core businesses of the tourism business, which is one of the fastest growing industries in China during the past decade. The intensively competitive market requires hoteliers to continuously renew and improve themselves to attract customers. (Jiayuan et al., 2018) In order to survive the competition, Chinese hoteliers must be innovative and creative to make sure their hotels can meet the customers' need and that their services are superior to its competitors. Many hoteliers found that the quality of customer service was considered by the customers as the most important factor that determines how they feel about the hotel, and also the most important factor to decide on the development of the hotel in the tourism industry (Wong et al.,

1999). A study by Liu and Lin (2003) reveal that the quality of customer service is key to the success of a service organization, including the hotel industry. In this context, attention to service quality from the customer's perspective is considered as one of the most important factors influencing the success of the tourism and hotel businesses. Therefore, hotels that have good customer services quality tend to improve their market share and thus boost their profitability (Bitner and Hubbert, 1994). Meanwhile, the measurement of service quality and the evaluation of its impact on the customer satisfaction has been a growing topic of interest for academics and practitioners in many service industries including the tourism and hotel industries. Studies by Al Khattab and Aldehayyat (2010) found that SERVPERF is a reliable and valid tool to measure service quality in the hotel industry. The instrument consists of five dimensions, namely tangibles, responsiveness, empathy, assurance and reliability. Karunaratne and Jayawardena (2003) research based on the SERVQUAL model showed that customers expressed their satisfaction with the overall service they received from the hotel, as a direct influence of tangibility, responsiveness and assurance dimensions. Juwaheer and Ross (2008) found that reliability and empathy are very important dimensions rated by the customers. These studies provided mixed results on the impacts of different service quality dimensions on customer satisfaction and customer loyalty in various regions including Asian countries. (Jiayuan et al., 2018) Despite the numerous studies on hotel service quality, the application of such frameworks in measuring service quality in the Chinese hotel businesses is still limited where most research studies on customer service quality are found in developed countries. There are relatively lesser research studies on emerging markets or developing countries, and we should pay attention to customer service quality in these countries. This paper intends to fill the gap in the current literatures, and to provide empirical evidence, and investigate the relationship between dimensions of service quality and customer satisfaction in the hoteling industry.

## **2. Literature Review**

Service quality has always been the key factor in deciding whether a company is successful, especially in the service industry. Many aspects of the business are related to customers, be it the provision of goods, or services. Tourism based organizations like hotels, which survive on its services, should continuously improve its service quality in order to increase their market share and profit (Carman, 1990). It is obvious that with more players coming into the industry, the competition in the hotel industry has intensified. Historical data in 2018 shows that the total revenues of all the star rated hotels was more than RMB211 billion. This figure include revenue collected from affiliated restaurants and room related services. All these are generated with mean occupancy rate of 55.6%, and RMB190.95 per night per room, giving rise to an annual revenue per room of RMB 37,767.47. If a hotel wants to stay competitive, it must provide products and services which are different, or even superior to others. The way for hoteliers to outperform others is to always take care of their customers, listen to them, and design and establish action plans to meet their needs. The hoteliers need to think out of the box, and anticipate the needs of the future generations of customers. The Department of Tourism (2011) pointed out that a useful way to be competitive in the tourism industry is to consider everything from the perspective of customers

based on research findings by Shahin and Debestani (2010). It was also established in previous research studies that, SERVQUAL, is considered as the most useful instrument to measure service quality. SERVQUAL is widely used in the world, as it contains the five most essential dimensions of service quality (Parasuraman et al., 1988).

SERVQUAL scale is widely used “to measure information system service quality” (Iwaarden et al., 2003), and thus includes “e-commerce system service quality” (Sahadev and Purani, 2008). The scale has been employed in various contexts of service. For example, Yoo and Donthu (2001) have used it for web-based services; Lee and Lin (2005) have implemented it on internet retailing while Choi et al., (2013), Huang, Luo and Wang (2019) used it for online shopping platforms; Herington and Weaven (2009) used it in electronic banking; Asim and Kumar (2018), Ali et al., (2019) and Shurair and Pokharel (2019) applied SERVQUAL for education industry. Majority of those researchers have emphasized on revising the items of the scale.

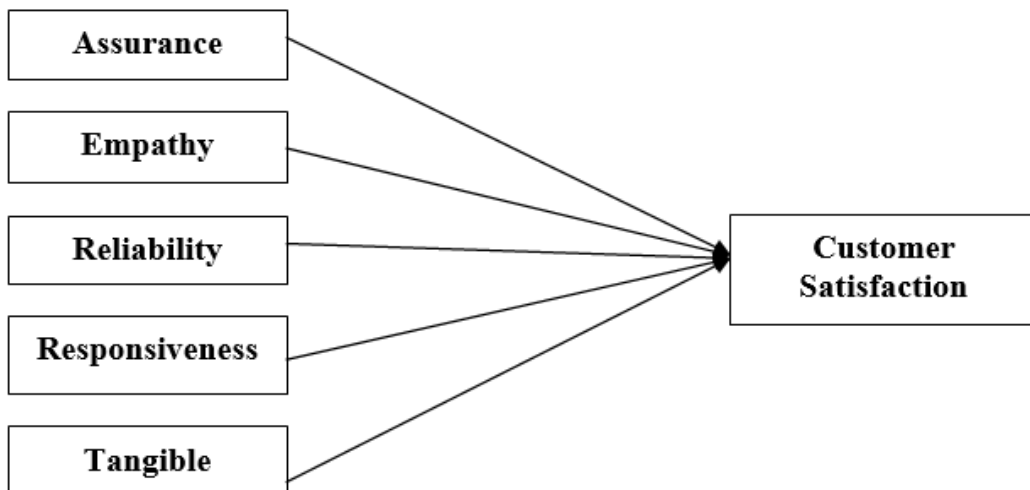
A useful method to evaluate a company’s service quality is to gauge the differences between customers’ expectation and the actual performance of the company. This difference can be broken down in more detail in order to measure every dimensions of service quality that matters to the customers. In the present research, service quality is subdivided into five dimensions. They are responsiveness, reliability, empathy, tangibles, and assurance. There is, however, an argument put forward by Cronin and Taylor (1994) that service quality of a company is more related to the long-term preferences of customers rather than individual differences between expectations and perception of customers. Hill (1986) argued that SERVPERF is a more efficient method for evaluating service quality, since it is based on the performance and it adjusts the items that need to be measured. There are only 22 items to be measured in SERVPERF compared to 44 items in SERVQUAL. It is opined that perceived service quality is a reflection of the firm’s performance. In addition, the experience of the customers toward the services provided is best measured by the SERVPERF model, as claimed.

The intangible element in service quality is not easy to measure by any standard means (Parasuraman et al., 1985). To overcome this issue, an instrument named SERVQUAL was developed with a scale of 44 items to measure service quality based on five different dimensions namely reliability, responsiveness, assurance, empathy and tangibles. SERVQUAL was tested and used widely by the financial sector relating to the banking and credit card services, as well as long distance telecommunication for repairs and maintenance services, particularly in advanced countries. Nevertheless, researchers remained doubtful about its effectiveness and practicality although it was widely used in both academic and business. One major reason is that the five dimensions structure has not been proven beyond reasonable doubt. It was also doubtful as to whether expectations can be used as a factor for comparison (Gartner and Shen, 1992). Cronin and Taylor (1992) opined that SERVPERF could be a better alternative as it is performance-based and is considered more efficient in that SERVPERF contains only 22 measurable items as compared to 44 in SERVQUAL and in this respect, the perceived service quality would be able to reflect the performance of the company. When customers use the services or products provided by the firm, their attitude and satisfaction

level would be reflected by the firm's service quality level. Researchers believe that SERVPERF would be able to determine a firm's service quality by asking simple and direct questions. Nel (1993) suggested that by understanding the relative significance of each factor of service quality, firms would be able to improve their performance by utilizing more effort and resources to improve the level of customer satisfaction. Furthermore, this allows them to be more effective by focusing on the appropriate factor to improve customer's loyalty as well.

To summarize, it is rather difficult for firms to measure their service quality as there are many dimensions in service (Oliver and John, 1989). The difference between SERVQUAL and SERVPERF is that the latter treats service quality and customer satisfaction as equal. In other words, while SERVQUAL focuses on customers' expectations and perceptions, SERVPERF evaluates the firm's actual performance based on customer's level of satisfaction. Cronin and Taylor (1992) employed SERVPERF to examine the service quality in four industries. They used 22 items of perception contained in the SERVQUAL scale. This was done to eliminate the effect of the expectation element. The four industries include pest control, fast food, dry cleaning and banking. The result showed that the variance was better explained by using SERVPERF. These findings are based on the hypothesis that service quality is closely related to customer's level of satisfaction, whereby, customer's level of satisfaction would lead to a higher level of customer's intention to purchase the product or services. It would be helpful for marketing managers to make decision if they are able to determine whether customer's intention to purchase is affected by the "service quality provided by the firm" or the "customer's satisfaction on the service quality". Amongst these models, the SERVQUAL model has remained the most dominant service quality model until today whereby the SERVQUAL model was designed to measure service quality across a range of businesses. (Rahman et al., 2017)

### 3. Methodology



Research Framework

**The following hypotheses are brought forth:**

H1: There is a positive and significant relationship between assurance and customer satisfaction.

H2: There is a positive and significant relationship between empathy and customer satisfaction.

H3: There is a positive and significant relationship between reliability and customer satisfaction.

H4: There is a positive and significant relationship between responsiveness and customer satisfaction.

H5: There is a positive and significant relationship between tangible and customer satisfaction.

**3.1 Qualitative Study**

The authors used semi-structured interviews to collect data from consumers (Thompson et al., 1989), and utilized phenomenological interviewing techniques (Patton, 1990) to conduct a total of 15 interviews. A total of 8 females and 7 males, with ages ranging from 20 to 24 years old took part in the interview that lasted approximately one hour for each respondent. The interviews were aimed to tap consumers' perceptions of service quality in Chinese Hotels. This method was used to ensure that pertinent issues were covered (McCracken, 1988). Standard processes were applied to record and analyze the data. The results revealed that five dimensions of the SERVQUAL model, namely tangible, responsiveness, reliability, assurance and empathy were applicable to measure service quality in the Chinese hotels.

**3.2 Quantitative Study****3.2.1 Research population and sample**

This research paper sampled customers who would choose to book three-star, four-star or five-star hotel while they were on a business trip or vacation in China as its research target group. Beijing and Shanghai were choosing as they are two of the most populated cities in China, which face a lot of competitions and challenges (Israel, 2003). This research used self-administered questionnaires as the primary data collection method, and the participants were customers of three-star, four-star or five-star hotels in Beijing or Shanghai. Participants were selected based on random sampling. Participants were invited to complete the questionnaires after they completed their stay in the hotels.

To be more specific, the questionnaire was divided into two sections. Section one estimated customer satisfaction by examining the quality of customer services via five dimensions namely responsiveness, tangible, empathy, reliability, and assurance. Section two contained questions related to customers' demographic information. Five hundred questionnaires were distributed to hotel customer during in Beijing and Shanghai. Out of the five hundred questionnaires, four hundred questionnaires were collected back, and three hundred of these were fully completed. This equates to 75% valid responses from the four hundred returned questionnaires.

**3.2.2 Measures**

The questionnaire contained a wide range of questions, which are intended to reflect the various service quality dimensions of the Chinese hotel industry. Specifically, four of them are related to customer satisfaction, and twenty one related to the level of service quality based on a study by Pedhazur and Schmelkin (1991). The answers are designed by using a typical five-level Likert scale, which include strongly disagree, disagree, neutral, agree, strongly agree. Analysis of the collected data was conducted using Partial Least Squares (PLS) method.

**3.3.3 Profile of Respondents**

The result is summarized in Table 2. There are 48% male and 52% female respondents. Further analysis shows 74.7% of them are married. In term of education level, 36% of the customers hold BA degree (36%).

**4.0 Data Analysis and Results**

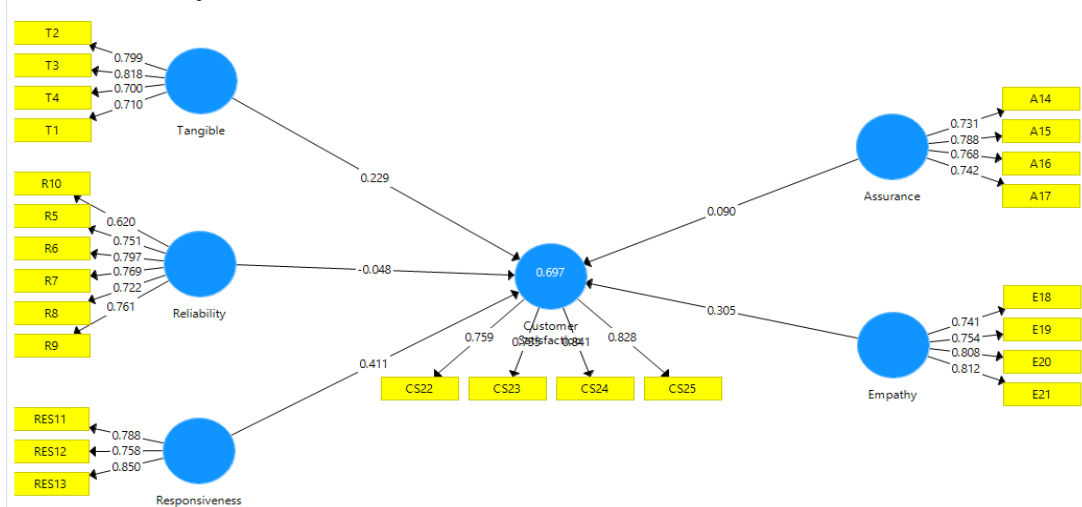


Figure 1

**4.1 Measurement Model**

Figure 1 shows the overall results for the hypothesized model. The good fit of the model is presented with the acceptable R<sup>2</sup> and good constructs reliability (Gefen et al., 2000). The ability of the model to predict revealed by the R<sup>2</sup> value, is another important factor in the model (Chin, 1998; Komiak and Benbasat, 2004). For the reliability, composite reliability and average variance extracted (AVE) assessment, shown in Table 3 are the two main measurements applied in this research. Composite reliability does not presume that all indicators are equally weighted (Chin, 1998) which implies that composite reliability may be more appropriate to evaluate reliability. Composite reliability is suggested to be higher than 0.7 (Barclay et al., 1995; Fornell and Larcker, 1981). The other measurement, AVE, point out the variance amount that a construct confines from its indicators relative to the amount due to measurement error (Chin, 1998). For

the first-order factor, the proposed minimal critical value for AVE is 0.5 (Hu et al., 2004). The composite reliability and AVE values shown in Table 1 are looked to achieve these requirements.

Table 3: Constructs Validity & Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Assurance	0.752	0.752	0.843	0.574
Customer Satisfaction	0.8	0.8	0.87	0.627
Empathy	0.784	0.79	0.861	0.607
Reliability	0.832	0.835	0.878	0.546
Responsiveness	0.723	0.754	0.841	0.639
Tangible	0.752	0.761	0.844	0.575

Convergent validity is items in a scale capability to come or load simultaneously as a sole construct. It is estimated by probing each loading for each block of indicators. The standardized loadings should be higher than 0.7, meaning that the indicators share more variance with their respective latent variable than with error variance. A lower bound of 0.50 may be adequate (Chin, 1998). The entire path coefficients in this study are statistically significant. Discriminant validity signifies how well individual item factor connects to its hypothesized construct comparatively to others (Kerlinger, 1973; Swafford et al., 2006). Discriminant validity is approximated via cross-loadings and the relationship between correlations among first-order constructs and the square roots of AVE (Chin, 1998; Fornell and Larcker, 1981).

Table 4: Variable Correlation Matrix against AVR Square Root

	Assurance	Customer Satisfaction	Empathy	Reliability	Responsiveness	Tangible
Assurance	0.758					
Customer Satisfaction	0.683	0.792				
Empathy	0.661	0.706	0.779			
Reliability	0.757	0.677	0.62	0.739		
Responsiveness	0.708	0.745	0.589	0.708	0.799	
Tangible	0.595	0.641	0.566	0.771	0.542	0.758

The cross-loadings depicted in Table 5 show sufficient discriminant validity levels for each construct. Each item factor in the bold value of Table 3 displays strong loading values to the corresponding latent construct and low loading values to other constructs. The linkage between AVE square roots values and the correlations among first-order latent constructs hold the similar conclusion. In Table 4, it is clearly indicated that the square roots of AVE (bold numbers in diagonal) are higher than the correlations among the constructs (off-diagonal values).

Table 5: *Cross-Loading*

	Assurance	Customer Satisfaction	Empathy	Reliability	Responsiveness	Tangible
A14	<b>0.731</b>	0.501	0.49	0.564	0.548	0.507
A15	<b>0.788</b>	0.499	0.492	0.555	0.543	0.49
A16	<b>0.768</b>	0.526	0.552	0.562	0.524	0.424
A17	<b>0.742</b>	0.539	0.466	0.608	0.531	0.388
CS22	0.541	<b>0.759</b>	0.606	0.559	0.547	0.58
CS23	0.527	<b>0.735</b>	0.656	0.577	0.461	0.62
CS24	0.574	<b>0.841</b>	0.497	0.531	0.703	0.434
CS25	0.515	<b>0.828</b>	0.47	0.469	0.644	0.387
E18	0.566	0.533	<b>0.741</b>	0.495	0.47	0.406
E19	0.493	0.477	<b>0.754</b>	0.467	0.42	0.395
E20	0.515	0.608	<b>0.808</b>	0.495	0.531	0.438
E21	0.49	0.572	<b>0.812</b>	0.476	0.409	0.517
R10	0.527	0.467	0.499	<b>0.62</b>	0.513	0.416
R5	0.513	0.479	0.483	<b>0.751</b>	0.464	0.693
R6	0.607	0.539	0.475	<b>0.797</b>	0.57	0.572
R7	0.587	0.546	0.447	<b>0.769</b>	0.566	0.578
R8	0.574	0.467	0.426	<b>0.722</b>	0.527	0.555
R9	0.537	0.491	0.418	<b>0.761</b>	0.488	0.599
RES11	0.57	0.512	0.494	0.568	<b>0.788</b>	0.439
RES12	0.557	0.504	0.496	0.544	<b>0.758</b>	0.405
RES13	0.579	0.727	0.445	0.589	<b>0.85</b>	0.457
T2	0.415	0.498	0.417	0.579	0.38	<b>0.799</b>
T3	0.515	0.544	0.482	0.643	0.458	<b>0.818</b>
T4	0.395	0.432	0.433	0.58	0.386	<b>0.7</b>
T1	0.475	0.463	0.381	0.536	0.418	<b>0.71</b>

#### 4.2 Hypotheses Testing and Results

The hypotheses adequacy evaluation as represented in the model was carried out via R2, regression weights, bootstrap critical ratios (t-values) and path variance (Table 6). Out of five (5) direct relationship hypotheses tested only three (3) direct relationship are found to be significant and supported. In H2, empathy is predicted to have positive impact on customer satisfaction. Results in Table 6 supported this hypothesis with path coefficient of 0.305 and T-value of 3.356. Meanwhile, in H4, it is predicted that responsiveness has a positive impact on customer satisfaction. The results in Table 6 supported H4 with the path coefficient of 0.411 and the T-value of 6.43. In H5, it is hypothesized that tangible has a positive impact on customer satisfaction and this hypothesis is supported where the path coefficient is 0.229 and the T-value is 3.708. Another two direct relationship hypotheses, H1 and H3 are found to be not supported from the hypotheses testing. For H1, the path coefficient is found to be 0.09 and the T-value is 1.155 and for H3, the path coefficient is -0.048 and the T-value are 0.615.

Table 6: *Hypotheses Result*

	Path Coefficient	T-Value	Conclusion
H1: Assurance → Customer Satisfaction	0.09	1.155	Not Supported
H2: Empathy → Customer Satisfaction	0.305	3.356	Supported
H3: Reliability → Customer Satisfaction	- 0.048	0.615	Not Supported
H4: Responsiveness → Customer Satisfaction	0.411	6.43	Supported
H5: Tangible → Customer Satisfaction	0.229	3.708	Supported

## 5.0 Discussion

This section collates the findings from the qualitative and quantitative findings and provides a discussion.

### 5.1 Responsiveness

Interview respondents revealed that responsiveness is a very important dimension in hotel service quality. Respondents refer to responsiveness as the willingness to help customers and to provide prompt service. This dimension is also supported by a number of research studies. As a result of the absence of human to human interaction in today's technology driven medium, this measure has become more valuable which strengthens the needs for an effective form of customer service in the event that any unmanageable issue or problem happens while the buying and selling process are ongoing (Martin, 1995). In summary, responsiveness dimension has become more important to the customer especially if the person is faced with a complex situation and needs a form of mediation.

The following comments were choosing from the interview and were recorded:

"I just wish to talk to someone when I am faced with problems in completing my purchase." (male, 24)

"I am frustrated when no one is able to communicate with me as I need more information about the products I am going to buy. Sometimes, technology does not really help." (female, 21)

"When I am not sure with the product information that I want to buy, I am not going to buy. Face to face communication is more important to me rather than searching online." (female, 22)

### 5.2 Tangible

Interview respondents revealed that tangible is a very important dimension in hotel service quality. Respondents refer to tangible as the physical evidence of service including physical facilities, appearance of personnel, tools, and equipment used to provide the service. This dimension is also supported by a number of research studies. Tangible refers to the products' physical support and the extent that customers can see, feel, hear, taste or smell (Rowley, 2006). According to Omar (2011), tangible factors of service quality in the hotel industry can be categorized into the exterior and interior design of hotels, the equipment which can be found at hotels as well as the environment of the hotels. The hotel tangible factors including physical environment which have some influences on customers in service organizations and employees. Bitner (1992) postulated that for the tangible aspects, there are three different environment dimensions:

surrounding condition, spatial layout and functionality. Wakefield and Barnes (1996) also mentioned that the tangible and physical surroundings are more like to have some effects on customers' effective responses.

The following comments are selected from the interviews:

“I feel comfortable when the hotel provided good facilities.” (female, 21)

“I am not going to choose the hotel again if the hotel's equipment are difficult to use or easily broken.” (male, 21)

“The hotel's employees are the main reason for me to continue staying, because if they are neat-appearing, it makes me feel good.” (male, 20)

### **5.3 Assurance**

Interview respondents revealed that assurance is a key dimension influencing hotel service quality. Respondents refer to assurance as the knowledge and courtesy of employees and their ability to convey trust and confidence. This dimension is also supported by a number of research studies. By using a modified SERVQUAL model, Juwaheer and Ross (2003) found that an overall evaluation of service quality in Mauritian hotels were determined largely by ‘assurance factors’ — such as security and safety of guests, and effective handling of complaints and problems by hotel staff. Assurance means that hotel customers should be able to trust the recommendations of staff, feel confident that the service is free from contamination and be able to voice any concern without fear. Assurance factors are primarily associated the human performance (Parasuraman et al., 1988), in which the main focus is on the service encounter. The significance of assurance allows suggestion that the investing in employee training to improve the service quality should be seen as a necessity.

The following quotes are selected from respondents during the interviews:

“Employees' behavior of hotel actually improves my confidence when I am away from home and stay one or a few nights in another place.” (male, 22)

“I need someone to guide me when I am traveling, therefore the employees in the hotel have to be able to allay all my worries.” (female, 21)

“The courtesy of employees go a long way in making my hotel stay a memorable one.” (female, 22)

### **5.4 Empathy**

Interview respondents revealed that empathy is a very important dimension in hotel service quality. Respondents refer to empathy as caring, individualized attention to its customers. This dimension is also supported by a number of research studies. A hotel manager needs to remember that empathy is one of the critical dimensions in protecting hotel consumers' overall perception through the evaluation of service quality. Empathy covers staff availability, attention paid by employees, employees' flexibility and hotel services for consumers' necessities (Karunaratne and Jayawardena, 2010). Based on a research done by Ozler et al. (2009), empathy is a process where you can share and understand how others feel and their emotions. Furthermore, empathy is very important in the hotel industry because it is a sector in which people are both service provider and service users. It is a must for hotels to understand their customers' needs and

wants as well as evaluate their complaints correctly in order to provide better services.

The following comments were selected from the interviews:

“Hotel should pay close attention to all their customers and provide personalized services.” (female, 21)

“I will feel comfortable if the hotel employees give me personal attention because I need my issues to be sorted quickly.” (male, 20)

“I hope that hotel can understand everyone's need and provide different services to different types of people.” (male, 22)

## **5.5 Reliability**

Interview respondents revealed that reliability is a very important dimension in hotel service quality. Respondents refer to reliability as the ability to perform the service dependably, consistently and accurately. This dimension is also supported by a number of research studies. According to Jasmina (2007), the quality of hotel services is the most important factor of a successful business. Hotel reliability can be defined as the capability of selling a product or provide some services in a reliable manner which consumers feel satisfied (Jasmina, 2007). The reliability dimension means the ability and capability of the staff from the hotel front office, providing dependable and accurate services (Dabholkar et al., 1996). Furthermore, hotel employees are said to have the ability to resolve different types of problems encountered by their consumers and the service performance has to meet their customers' expectation (Srinivas and Padma, 2013). In conclusion, the services must be done on time, every time, in the same way and manner as well as without any errors.

The following comments are selected from the respondents' answers:

“I will come again to the hotel if the hotel provides immediate services when I need their help.” (female, 22)

“Hotel employees have to provide good services to their consumers.” (male, 21)

“A hotel must have no error records and good comments from consumers.” (female, 21)

## **6.0 Implications**

The result of this paper shows that there are five dimensions that could affect consumers' choice of hotels, which include responsiveness, tangible, assurance, empathy and reliability.

The priority of hoteliers should to be pay attention to customers' expectations and perceptions toward service quality, since it changes as fast as the competitive business environment. Thus, if hoteliers want to earn more market share, they need to keep the same pace with their customers wants by addressing the feedback forms filled by customers. Looking at the customers' feedback forms is a straightforward way to study customer satisfaction, on one hand, it could motivate employees to produce good performance. On the other hand, hoteliers could identify the gaps on time and fix it in order to maintain its competitiveness in the market.

With respect to the *assurance* dimension, hotel manager should ensure employees are able to give the customers the feelings of safety, employee politeness, and have the necessary knowledge to carry out their duties. This research showed that the most important aspect within the assurance dimension was whether employees' service behaviors instill customers' confidence. The significance of assurance suggested that the expenditures in employee training and improving the service quality should be seen as a necessary investment. The hotel manager should thus pay more attention to training and empowering their service employees to look for ways to make the customers' hotel experience an impressive one for their customers. The hotel manager can use this service quality measurement scale as an evaluation tool to assess the level of quality they provide to their consumers and to spot those dimensions and attributes of service where their companies require improvement.

*Empathy* was the most significant predictor of hotel tourists' satisfaction as it has highest correlation coefficient value. Customers felt that the hotel staffs should understand specific needs of clients, show sincere interest while delivering the service. In this respect, hotel staff should offer personalized attention and analyze the guests' interests to ensure a more effective service quality. Therefore, hotel managers should pay particular attention to how tourists' feel during the service delivery process to better realize and articulate client needs in creating a pleasurable and happy emotion or ambivalence for better hotel productivity.

*Reliability* dimension refers to the staff's ability to provide prompt service, maintain a safe environment, and provide the promised service to guests (Wong et al., 1999). For customers, it is important for employees to be professional, understand their needs, be willing to help, have a neat appearance, etc. Hotel managers should keep promises, provide accurate and timely service, and ensure a safe and secure stay. Therefore, a hotel should maintain their services under a quality standard so that they could meet customers' basic needs.

The *tangible* facilities result in relatively low scores from respondents, therefore it is suggested that hotels should not only ensure the existence of tangible facilities, but also assure facilities' quality along with the room services for customers. In addition, hotels should consider having more advancing and customizing facilities in their rooms in order to attract and impress customers. For instance, more TV channels should be available in order to satisfy customers from different country, sometimes customers would not mind to pay a reasonable fee to watch TV they want as long as it is achievable. Other facilities such as health care facilities which are maintained regularly, warm and neat lobby are all other forms of tangible facilities that could attract and impress existing and potential customers.

*Responsiveness* is considered as one of the most important dimension towards improving customers' service quality, since the speed and the effectiveness of responsiveness affects the satisfaction of customers. To be more specific, hotel should address consumers' issues and complains within 24 hours, moreover, they should also keep updating their order status and customers' information as well as deliver goods and services in the fastest way. Hotels could fail if they keep their customer waiting, since this is digital age and everything is changing so fast. Thus, the efficiency of responsiveness is important for most service business, especially

for hotels. In order to improve the efficiency, hotels should provide application such as live chats on their website, so customers could get feedback timely, and keep a healthy relationship between hotel and customers.

## **7.0 Future Research and Limitations**

The future directions for this study are numerous regardless of the mentioned limitations. The first step for future studies is that the empirical findings from this research should be further fine tuned to produce more in-depth analysis. For instance, a large data sample should be used and focus can be made on newer hotel service quality dimensions, such as technical and functional dimensions. Future studies could include different geographical areas and analyses their effect on the customer's perception of service quality.

Future studies should also cover employees role in customer satisfaction, which is a much under-researched area currently. The relationship between job Satisfaction versus service quality and customer satisfaction could be areas to be further explored. Using the SERVQUAL model and other scales the satisfaction levels of the employees can be collected and analyzed to see if a relationship exists between their level of job satisfaction, their service quality and customer satisfaction.

Respondents for data collection are only selected from customers visiting three-star, four-star and five-star hotels in Beijing and Shanghai, therefore the results might not be generalized to the larger population in China, and thus, the sample size for this study is too small. This study did not include many of the key provinces in China. China has 34 provinces and these key provinces were not part of the sampling plan. These provinces should be included in future studies. Future research should be extended to medium and small sized hotels to provide a more generalizable study. Besides that, this study utilized self-administered questionnaire to collect quantitative data. Other forms of quantitative data collection should be applied to form a higher accuracy of the data collection process.

This study is limited to 5 variables affecting customer satisfaction. There are many other factors which affect hotel customer satisfaction. For example, the location, selected hotel, and different levels of hotels and customers needs and wants as well as their expectations will be affected. More variables are suggested in future studies.

## **7.1 Managerial Implications**

As previously mentioned, the analysis of hotels in China revealed that the most important dimension of service quality in customer satisfaction of guests is reliability. This is a key factor in determining customer satisfaction. The implications of this are numerous; firstly it means that hotels should increase their customer satisfaction by placing more focus on the reliability dimension of their service. This is an important dimension, which can impact satisfaction greatly as revealed in Juwaheer's (2004) study on Mauritius hotels.

Additionally, the tangible dimension of the Chinese hotels was significant and positive. This indicates that hotel managers should focus their attention on the decor, attractiveness and general appeal of their hotels. Many other studies support this dimension as being strongly predictive of customer satisfaction. Hoteliers must, therefore, apply a lot of detail in their decisions concerning tangibles. (Jiayuan et al., 2018)

The third significant dimension is empathy. Managers, therefore, should micro-manage their customers to identify their specific needs and to respond with a positive disposition when receiving feedback. This dimension has been supported by research carried out by Hossain (2012) on the Bangladesh tourism industry to examine the impacts of the service dimensions on customer satisfaction. Assurance as an individual dimension also made a significant impact on the satisfaction levels of guests in the hotel. Being an intangible dimension, managers should ensure that their employees are adequately trained in their respective jobs, and possess the ability to impart feelings of confidence and relaxation to the customers. This dimension is also supported by a study conducted by Mei et al., (1999) which highlighted the importance of assurance as a service quality dimension.

The importance of these five dimensions of service quality as seen from the qualitative and quantitative results of this paper implies that performance of the hotel industry will improve if these dimensions are given adequate attention. In order for hotels to create greater customer satisfaction, they must first place focus on the tangible aspects of service quality. These were things such as the physical appearance of employees, the location of the hotel, and the interior decorations, ability to perform the promised service dependably and accurately. With this, it is suggested that hoteliers should invest more in-depth training and development programs for their staff. Thereby the employees will have increased confidence in handling their duties

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