



Service quality as an antecedent in enhancing customers' behavioural intentions: A case study of Malaysian army medical centers

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Abstract

Behavioural intention is a customer preference to use services provided by service providers and this preference manifests itself in the form of the customer's readiness to recommend, intention to repurchase, and deliver positive words of mouth regarding the services provided. This has a lot to do with the ability of providers to effectively offer services which are not only tangible but also reliable, responsive, reassuring, and empathic. Extant studies in this field reveal that the ability of service providers to appropriately deliver these qualities in performing daily job may have a significant impact on customers' behavioural intentions. Even though this relationship has been studied widely the role of service quality as an important antecedent has been relatively ignored in current organizational quality research literature. In this light, this study was undertaken to measure the relationship between service quality and behavioural intention. Primary data were gathered from 128 customers and eleven administrative staff and doctors of the military hospitals in Peninsular Malaysia. The outcome of a SmartPLS path model analysis confirmed that the ability of organizations to properly implement quality in medical services would enhance the intention of customers to continuously use the services.

Keywords: behavioural intention, customers, medical centers, service providers, service quality, SmartPLS

Introduction

Service quality is a subjective term (Zaimah et al., 2012) where it has been extensively discussed two international quality schools: Nordic school (Grönroos, 1982, 1984, 1990) and American school (Zeithaml, 1988; Parasuraman, Zeithaml & Berry, 1988). Nordic school suggests a total perceived service quality model where by service quality is broadly defined as a comparison between customer expectations of the service and their experience of the service they received (Gronroos, 2007). On the contrary, American school suggests a gap analysis model where by service quality is broadly defined as a long-run overall evaluation (Zeithaml, 1988; Parasuraman et al., 1988) and overall appraisal of service at multiple levels in an organization (Brady & Cronin, 2010; Sureshchandar, Rajendran & Anantharaman, 2002). From this perspective, if customers' expectations for service performance match their perceptions of the service received from the organizations, service quality may be enhanced. Consequently, it may lead to greater corporate image (Bolton & Drew, 1991; Gronroos, 2007; Parasuraman et al., 1988; Suhana & Kartini, 2015). Although Nordic and American schools proposed different conceptual definitions of service quality, their principal meanings are similar. For example, if customers perceived the services provided by an organization have fulfilled their expectations, this may indicate that the quality of service is achieved (Brady & Cronin, 2010; Kitapci, Akdogan & Dortyol, 2014; Wu, 2009). Further, it may lead

to many significant impacts like increased satisfaction among shareholders, business growth, successful business strategies, improved critical learning experience, reduced business failures, enhanced customer satisfaction, reduced employee turnover, motivate employees to maximize their capabilities, and reinforce the efficiency of the manufacturing and service organizations (AMINTELLIGENT HELP DESK BLOG, August 5, 2014; Singh, Feng & Smith, 2006; Kaziliūnas, 2010).

Nordic and American schools highlight the disconfirmation paradigms of effective service quality components. For example, Nordic school led by Gronroos (1984) identified two major components of service quality, which are technical and functional qualities. Technical quality refers to what customers' received from services provided by an organization (i.e., an outcome of service act); while, functional quality refers to how an organization delivers services to its customers (i.e., customers' perceptions about the interactions that take place during service delivery) (Brady & Cronin, 2010). If an organization is able to appropriately implement both quality dimensions, it may enhance positive customer perceptions about the quality of given services and the outcomes of evaluation process (Kitapci et al., 2014). Then, this model was adjusted by Rust and Oliver (1994) by adding three important components: service product (i.e., technical quality), service delivery (i.e., functional quality), and service environment. Although the adjusted model by Rust and Oliver (1994) is not empirically tested, support has been found for similar models applied in the health care and retail banking sectors (Brady & Cronin, 2010; McAlexander, Kaldenberg & Koenig, 1994).

Conversely, American school led by Parasuraman et al. (1988) proposed a customer-organization relationship based service quality; whereby its effectiveness depends upon five core components: tangible (physical facilities, equipment, and appearance of workers), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customer and provide prompt service), assurance (knowledge and courtesy of workers and their abilities to inspire trust and confidence), and empathy (caring, individualized attention that the organization provides to its customers). This theory was then restructured by Dabholkar, Thorpe, and Rentz (1996) by presenting service quality components in a high-order form: first level, customers' overall perceptions of service quality. Second level, primary dimensions. Third level, sub dimensions. The discussion reveals that many scholars around this world have advanced modified versions of either Parasuraman et al.'s (1988) five factor American model or Gronroos's (1982) two-factor Nordic conceptualization in determining the constructs for service quality models (Brady & Cronin, 2010; Rust & Oliver, 1994). Among these models, Parasuraman et al.'s (1988) five-factor has been found to ease researchers and practitioners to measure the impact on customers' attitudes and behavior of service organizations (Azman, Norazila, Ahmad Azan & Rosnan, 2014; Brady & Cronin, 2010; Işık, Tengilimoğlu & Akbolat, 2011; Saunders, 2008).

Unexpectedly, extant studies about the work place service quality program reveal that the ability of service providers to appropriately implement service quality while executing their daily jobs may have a significant impact on customer outcomes, especially behavioural intention (Kitapci et al., 2014; Kuruuzum & Koksak, 2010; Ridzuan, Ismail & Kadir, 2013). From the customer behaviour's perspective, many scholars like Zeithaml, Berry and Parasuraman (1996), Cronin, Brady and Hult (2000), Choi, Cho, Lee, Lee and Kim (2004), and Saibou and Kefan (2010) generally define behavioral intention as a customer preference to use services provided by his/herservice provider and this preference manifests in terms of customers readiness to recommend, intention to repurchase and deliver positive word of mouth.

Within an organizational service quality model, many scholars think that service quality components and behavioural intention are distinct, but strongly interrelated concepts. For example, the ability of service providers to appropriately implement tangible, reliability, responsiveness, assurance and empathy in executing their jobs may strongly enhance customers' behavioural intentions (González et al., 2005; Gracia, Cifre, Grau, 2010; Jooyeon & Jang, 2009). Even though the nature of this relationship has been studied, the role of service quality as an important antecedent is left unexplained in the workplace service quality research literature. Many researchers argue that this situation happened due to the emphasized by previous studies debating the conceptual definitions and disconfirmation paradigms of service quality components (Brady & Cronin, 2010; Chang, 2008; Gronroos, 2007; Parasuraman, Berry & Zeithaml,

1990); and the utilization of simple conceptual, correlation and gap analysis methods in determining the acceptance of employees toward service quality components as well as measuring the degree of association between several service quality components and general customer outcomes (Azman et al., 2014; Ridzuan et al., 2013). Consequently, these studies' approaches provided inadequate findings to be used as useful references by practitioners in understanding the complexity of service quality and designing strategic missions to enhance service quality programs in different types of organizations (Azman et al., 2014; Gracia et al., 2010; Kitapci et al., 2014; Ridzuan et al., 2013). Thus, this has motivated the researchers to discover the gap in the literature by exploring the nature of this relationship.

Purpose of study

This study consists five important objectives: first, to measure the relationship between tangible and behavioural intention. Second, to measure the relationship between reliability and behavioural intention. Third, to measure the relationship between responsiveness and behavioural intention. Fourth, to measure the relationship between assurance and behavioural intention. Finally, to measure the relationship between empathy and behavioural intention.

Literature review

Parasuraman et al. (1988) developed a gap analysis model to measure the influence of service quality based on the integrated view of consumer-company relationship. The essence of this model focuses on the premise that service quality is dependent upon the size and direction of the five important gaps: Gap 1 - the gap between customer expectations and those perceived by management to be the customers' expectations. Gap 2 - the gap between management perceptions about consumer expectations and the firm's service quality specifications. Gap 3 - the gap between service quality specifications and service delivery. Gap 4 - the service delivery, external communication gap. Gap 5 - the perceived service quality gap, the difference between expected and perceived service (Parasuraman et al, 1990). The first four gaps show the functions in which service is delivered from the service provider to the customer, while gap five connects to customers where by their views will determine the achievement of service quality instrument (i.e., tangible, reliability, responsiveness, assurance and empathy). For example, the ability of service provider to appropriately implement the service quality components while undertaking its daily job will meet customers' standards; thus it may lead to decreased service performance gap and increased positive customer attitudes toward the quality systems (Parasuraman et al., 1985). Meanwhile, Adams' (1963) equity theory introduces the concept of social comparison, whereby individuals assess their own input/output ratios based on their comparison with the input/outcome ratios of other employees. If individuals perceive that they are fairly treated, this will strongly invoke their positive attitudes and behavior. Further, Vrooms' (1964) expectancy theory explains that individuals will be motivated to perform certain actions if they expect to get valuable outcomes. Application of these theories in a service quality model shows that fair treatment and recognition of valuable outcome will be enhanced if a service provider appropriately implement service quality components (i.e., tangible, responsiveness, reliability, assurance and empathy) in organizations.

These theories have received strong support from the workplace quality service research literature. For example, several extant studies using a direct effects model had examined service quality based on different samples, such as the perceptions of 537 out patients in general hospital located at Sungnam, South Korea (Choi et al., 2004), 287 participants of an outdoor program in Lake Plasteera, Greece (Kouthouris & Alexandris, 2005), 610 customers of five star hotels at a Balek Tourism District in Antalya, Turkey (Kuruuzum & Koksai (2010), 341 soldiers from the Malaysian Battalion Peacekeeping Mission Management at a Middle East country (Ridzuan et al., 2013), and 369 patients using a range of services in a public health care (Kitapci et al., 2014). The outcomes of these surveys found that the ability of service

providers to appropriately provide tangible, responsiveness, reliability, assurance and empathy in their daily jobs have been essential antecedents to customers' behavioural intentions (Choi et al., 2004; Kitapci et al., 2014; Kouthouris & Alexandris, 2005; Kuruuzum & Koksal, 2010; Ridzuan et al., 2013). Therefore, it can be hypothesized that:

- H1: There is a positive relationship between tangible and behavioral intention.
- H2: There is a positive relationship between reliability and behavioral intention.
- H3: There is a positive relationship between responsiveness and behavioral intention.
- H4: There is a positive relationship between assurance and behavioral intention.
- H5: There is a positive relationship between empathy and behavioral intention.

Methodology

Research design

A cross-sectional research design was utilized because it allows the researchers to combine the service quality literature, semi-structured interview, pilot study and actual survey as the main methods of collecting data for this study. The main advantage of using this procedure is that it helps the researchers to gather accurate, less biased and high quality data (Creswell, 1998; Sekaran, 2000). This study was conducted at medical centers under the administration of Malaysian army. It was established in 1960 to care for wounded and sick military personnel, as well as provide preventive and curative medical care for military personnel and their families. Currently, this organization has an established quality management system in order to upgrade staff capability at providing better medical services during peace time and conserving the fighting strength during wartime (Zin, 2003).

At the initial stage of data collection, a semi structured interview was conducted involving eleven participants namely four administrative staff and doctors from military hospitals, non-hospitals and health institutes in Peninsular Malaysia. These respondents were selected using a purposive sampling technique; where they had working experiences from four to nineteen years or more and adequate knowledge and experiences in the organizations. The information gathered from the interviews had helped the researchers to understand the service quality features, behavioral intention facets, and the relationship between such variables in the organizations. After that, the information gathered from the interviews was used to improve and verify the content and format of the survey questionnaire for the actual research. Further, a back translation technique was used to translate the content of questionnaires in Malay and English in order to increase the validity and reliability of the research findings (Hulland, 1999; Sekaran, 2000).

Measures

The survey questionnaire had two sections: first, service quality features, i.e., tangible had 3 items, reliability had 6 items, responsiveness had 9 items, assurance had 4 items and empathy had 4 items that were adjusted from Parasuraman et al. (1985) SERVQUAL scale. The dimensions used to measure tangible were adequate equipment, suitable equipment, suitable location and communication network. The dimensions used to measure reliability were solving, good service, schedule and performance. The dimensions used to measure responsiveness were feedback, priority, take care and urgent action. The dimensions used to measure assurance were comfortable, polite, confident, no complaint and believe. The dimensions used to measure empathy were cooperation, understanding and delivery. Second, customers' behavioural intentions had 5 items that were modified from the service quality related behavioural intention literature (Gracia et al., 2010; Ridzuan et al., 2013; Zeithaml et al., 1996). The dimensions used to measure behavioural intention were recommendation, repurchase and word of mouth. All these items were measured using a 7-item scale ranging from "very strongly disagree" (1) to "very strongly agree" (7). Demographic variables were only used as controlling variables because this study focused on customer attitudes.

Sample

A convenient sampling technique was employed to distribute 300 survey questionnaires to customers who received treatments at the medical centers. This sampling technique was employed because the researchers have no detailed record on the customers who received treatments at the organizations and this situation did not allow the researchers to use a random technique in selecting the participants of this study. Of the total number, 128 usable questionnaires were returned to the researchers, yielding 43 percent response rate. The survey questionnaires were answered by participants with their consent and on a voluntary basis.

Data analysis

As recommended by Henseler, Ringle and Sinkovics (2009), SmartPLS 2.0 should be employed to analyze the survey questionnaire data because it may deliver latent variable scores, avoid small sample size problems, hasslestringent assumptions about the distribution of variables and error terms, estimate every complex models with many latent and manifest variables and handle both reflective and formative measurement models. Data for this study were analyzed using the following steps: first, construct and item validities were determined using convergent and discriminant validity analyses. Second, construct reliability was assessed by Cronbach alpha and composite reliability analyses. Third, the structural model was assessed by examining the path coefficients using standardized betas (β) and t statistics ($*t > 1.96$). The value of R^2 was used as an indicator of the overall predictive strength of the model (i.e., 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 2010; Henseler et al., 2009). Thus, a global fit measure was conducted to validate the adequacy of PLS path model globally based on Wetzels, Odekerken-Schroder & Oppen's (2009) global fit measure. Results of this test may confirm that the PLS path model has better explaining power in comparison to the baseline values: GoF small=0.1, GoF medium=0.25, GoF large=0.36 (Wetzel et al., 2009).

Findings

Sample profile

Table 1. Profile of respondents (n =128)

Respondent Characteristics	Sub-Profile	Percentage
Gender	Male	64.1
	Female	35.9
Age	Less than 20 years	44.5
	21-30 years	45.3
	31-40 years	8.6
	More than 41 years	1.6
Marital status	Single	83.6
	Married	16.4
Patient	Army	97.7
	Army family	1.6
	Civilian staff	0.8
Type of treatment	Ordinary/acute	93.8
	Chronic	0.8
	Dental	5.5
Frequency of treatment in a month	1 time	75.8
	2 to 4 times	20.3
	More than 5 times	3.9

Table 1 shows that the majority of respondents were male (64.1%), aged between 21 to 30 years old (44.5%), unmarried employees (83.6%), army patients (97.7%), patients who received ordinary treatments (93.8%), and patients who received one treatment in a month (75.8%).

Validity and reliability analyses for the instrument

Table 2 shows the factor loadings and cross loadings for different constructs, and composite reliability for different constructs. The loadings of variables are stronger on their own constructs in the model, with greater than 0.70 being considered as adequate. Besides that, the correlation between items and factors had higher loadings than other items in the different constructs (Chin, 2010; Fornell & Larcker, 1981; Gefen & Straub, 2005). This measurement model met the validity criteria. Further, the composite reliability had values of greater than 0.8, indicating that the measurement scale used in this study has high internal consistency (Nunnally & Benstein, 1994).

Table 2. Factor loadings and cross loadings for the constructs, and composite reliability

Construct/Items	No. of Item	Factor Loading	Composite Reliability
Tangible	3	0.800071 to 0.889555	0.871
Reliability	6	0.821113 to 0.909889	0.955
Responsiveness	9	0.841183 to 0.913617	0.966
Assurance	4	0.765072 to 0.963171	0.923
Empathy	4	0.701049 to 0.884838	0.869
Behavioural Intention	4	0.845524 to 0.903076	0.932

Table 3 shows the results of convergent and discriminant validity analyses. All constructs had the values of average variance extracted (AVE) larger than 0.5 indicating that they met the acceptable standard of convergent validity (Barclay, Higgins & Thompson, 1995; Fornell & Larcker, 1981; Henseler et al., 2009). Besides that, all constructs had the values of AVE square root in diagonal were greater than the squared correlation with other constructs in off diagonal, showing that all constructs meet the acceptable standard of discriminant validity (Henseler et al., 2009).

Table 3. Fornell-larckercriterion test

Construct	AVE	1	2	3	4	5	6
1. Tangible	0.6912	0.8314					
2. Reliability	0.7781	0.6731	0.8821				
3. Responsiveness	0.7580	0.584	0.764	0.8706			
4. Assurance	0.7506	0.386	0.607	0.560	0.8664		
5. Empathy	0.6257	0.398	0.474	0.534	0.350	0.7910	
6. Behavioral Intention	0.7339	0.261	0.431	0.389	0.5749	0.557	0.8567

Analysis of the constructs

Table 4 shows the results of variance inflation factor and descriptive statistic. The means for the variables are from 5.3 to 5.7, showing that the levels of tangible, reliability, responsiveness, assurance, empathy and behavioral intention ranged from high (4) to highest level (7). The values of variance inflation factor for the relationship between the independent variable (i.e., tangible, reliability, responsiveness, assurance and empathy) and the dependent variable (i.e., behavioral intention) were less than 10, signifying that the data are not affected by serious collinearity problem (Hair, Anderson, Tatham & Black, 2006). These results further confirm that the instrument used in this study has met the acceptable standards of validity and reliability analyses.

Table 4. Pearson correlation analysis and descriptivestatistics

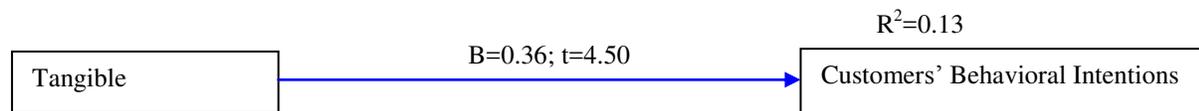
Variable	Mean	Standard Deviation	Variance Inflation Factor						
			1	2	3	4	5	6	
1. Tangible	5.6	.63							2.060
2. Reliability	5.6	.75							3.451
3. Responsiveness	5.7	.67							2.632
4. Assurance	5.3	.76							1.639
5. Empathy	5.5	.63							1.420
6. Behavioral Intention	5.4	.71							

Note: Significant at **p<0.01

Reliability estimation are shown diagonally

Outcomes of testing hypotheses 1, 2, 3, 4 and 5

Figure 1 shows that the inclusion oftangiblehad contributed 13percent in the variance of customers' behavioral intentions. Next, the outcomes of testing the research hypothesis showed that tangible was significantly correlated with customers' behavioral intentions (B=0.36; t=4.50), therefore H1 was supported. This result demonstrates that tangible is an important antecedent of customers' behavioral intentions in the organizations.

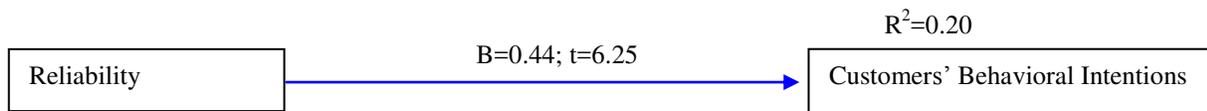


Note: Significant at *t >1.96

Figure 1. The results of testing hypothesis 1

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2)}$ =0.30, indicating that it is lesser than the cut-off value of 0.36 for large effect sizes of R². This result provides moderate support to validate the PLS model globally (Wetzel et al., 2009).

Figure 2 shows that the inclusion of reliability had contributed 0.20 percent in the variance of customers' behavioral intentions. Next, the outcomes of testing the research hypothesis showed that reliability was significantly correlated with customers' behavioral intentions (B=0.44; t=6.25), therefore H2 was supported. This result demonstrates that reliability is an important antecedent of customers' behavioral intentions in the organizations.

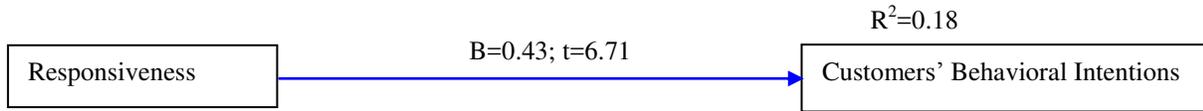


Note: Significant at *t >1.96

Figure 2. The results of testing hypothesis 2

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2)}$ =0.39, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R². This result strongly provides the support to validate the PLS model globally (Wetzel et al., 2009).

Figure 3 shows that the inclusion of responsiveness had contributed 0.18 percent in the variance of customers' behavioral intentions. Next, the outcomes of testing the research hypothesis showed that responsiveness was significantly correlated with customers' behavioral intentions ($B=0.43;t=6.71$), therefore H3 was supported. This result demonstrates that responsiveness is an important antecedent of customers' behavioral intentions in the organizations.

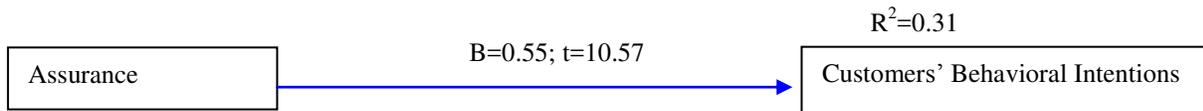


Note: Significant at * $t > 1.96$

Figure 3. *The results of testing hypothesis 3*

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2\text{)}} = 0.36$, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R^2 . This result provides a strong support to validate the PLS model globally (Wetzel et al., 2009).

Figure 4 shows that the inclusion of assurance had contributed 0.31 percent in the variance of customers' behavioral intentions. Next, the outcomes of testing the research hypothesis showed that assurance was significantly correlated with customers' behavioral intentions ($B=0.55;t=10.57$), therefore H4 was supported. This result demonstrates that assurance is an important antecedent of customers' behavioral intentions in the organizations.

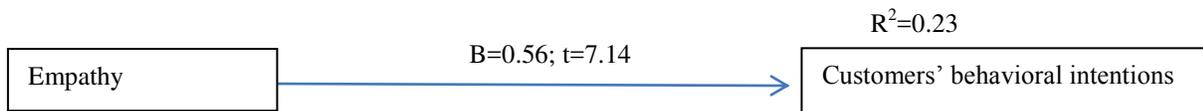


Note: Significant at * $t > 1.96$

Figure 4. *The result of testing hypothesis 4*

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2\text{)}} = 0.48$, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R^2 . This result provides adequate support to validate the PLS model globally (Wetzel et al., 2009).

Figure 5 shows that the inclusion of empathy had contributed 0.23 percent to the variance of customers' behavioral intentions. Next, the outcomes of testing the research hypothesis showed that empathy was significantly correlated with customers' behavioral intentions ($B=0.56;t=7.14$), therefore H5 was supported. This result demonstrates that empathy is an important antecedent of customers' behavioral intentions in the organizations.



Note: Significant at * $t > 1.96$

Figure 5. *The results of testing hypothesis 5*

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times$

MEAN (R^2)=0.40, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R^2 . This result provides strong support to validate the PLS model globally (Wetzel et al., 2009).

Discussion and implications

The findings of this study show that tangible, reliability, responsiveness, assurance and empathy are important antecedents of customers' behavioral intentions. In the context of this study, management teams have taken proactive actions to plan, maintain, and monitor their services to customers based on the broad policies and procedures set up by their stakeholders. The majority of the respondents view the levels of tangible, reliability, responsiveness, assurance, empathy and behavioural intention as high. This condition shows that the ability of organization to appropriately implement the quality components in performing daily job may enhance the intention of customers to continuously use the services.

This study provides three major implications: theoretical contribution, robustness of research methodology, and practical contribution. With respect to theoretical contribution, this study reveals that tangible, reliability, responsibility, assurance and empathy play important roles as important antecedents to customers' behavioral intentions. This finding also supported and extended the studies by Choi et al. (2004), Kouthouris and Alexandris (2005), Kuruuzum and Koksal (2010) and Ridzuan et al. (2013).

In regard to the robustness of research methodology, the survey questionnaires used in this study have satisfactorily met the requirements of validity and reliability analyses. As a result, this may lead to accurate and reliable findings. In terms of practical contribution, the findings of this study can be used as guidelines by the management to improve the quality of work processes of organizations. In order to achieve this objective, management should pay attention to the following aspects: first, quality service training program needs to be provided to all staff in order to increase their soft skills and improve their confidence in handling various customers' attitudes and behaviour. Second, better recognition has to be provided to staff who show high commitment at maintaining service quality to customers. Third, recruitment policy needs to be adjusted in order to select knowledgeable and experienced staff to fulfil senior management positions. Their capabilities may be used to mentor and coach junior managers and supervisors in practicing service quality based on international quality management standards. Fourth, communication openness needs to be used to disseminate policies and procedures via printed materials, online and face to face interaction with customers. This communication may decrease misconceptions and increase good rapport between customers and medical staff. If these suggestions are strongly considered, this may motivate customers to support the organizational service quality goals.

Conclusion

This study tested a theoretical framework that is developed based on the workplace service quality research literature. The instrument used in this study satisfactorily meets the requirements of the validity and reliability analyses. The outcomes of SmartPLS path model analysis confirmed that tangible, reliability, responsiveness, assurance and empathy are the important antecedents of customers' behavioural intentions. This result also supports and broadened the studies which are mostly published overseas. Therefore, current research and practice within service quality models need to incorporate tangible, reliability, responsiveness, assurance and empathy as key drivers to the organizational quality domain. This finding further suggests that the ability of organization to appropriately implement the service quality components in executing daily job may strongly enhance subsequent positive customer outcomes (e.g., satisfaction, perceive important and loyalty). Thus, these positive outcomes may lead to maintained and enhanced organizational competitiveness in this era of borderless world.

However, this study's findings should be treated with caution due to the methodological and conceptual limitations. First, a cross-sectional research design used in this study may not capture causal connections between the variables of interest. Second, the outcomes of SmartPLS path model analysis

have not measured the relationship between specific indicators of the independent and dependent variables. Finally, the sample for this study was only taken from patients who received treatments at one medical centre sector. Thus, these limitations may decrease the generalization of the results to other organizational settings.

This study may be strengthened if future research consider the following suggestions: first, several organizational and personal characteristics should be further explored; as this may show meaningful perspective in understanding how individual similarities and differences influence the implementation of service quality by organizations. Second, other research designs (e.g., longitudinal studies) should be utilized to collect data and describe the patterns of change and the direction and magnitude of causal relationships amongst variables of interest. Third, to fully understand the effect of service quality on individual attitudes and behaviours, more varied organizations need to be involved. Fourth, other specific theoretical constructs of service quality such as technical and management skills need to be considered because they have widely been acknowledged as an important link between service quality and many aspects of customer outcomes (Chang, 2009; Gronroos, 2007; Isik et al., 2011). Fifth, response bias and common-method variance are common issues in survey method. In order to decrease these weaknesses, the use of a larger sample size may characterize the studied population. Finally, other specific elements of behaviour intention such as customers readiness to recommend, intend to repurchase and deliver positive word of mouth need to be given attention because their roles are often discussed in many service quality research literature (Kitapci et al., 2014; Ridzuan et al., 2013; Saibou & Kefan, 2010). The importance of these issues needs to be further discovered in future study.

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