Full Length Research Paper

Assessing the link between service quality dimensions and knowledge sharing: Student perspective

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The purpose of this study is to examine the link between service quality dimensions and knowledge sharing. Data were collected through a survey in a faculty of business of a private university in Malaysia. The SERVQUAL model was used to evaluate the service quality dimensions in association of knowledge sharing in which the study conducted with data gathered from 300 students which constitute an overall response rate of 83.33%. The study shows students' evaluations regarding service quality does affect knowledge sharing activities. It was found that the assurance and the reliability dimensions of service quality are the two most important dimensions and have significant positive relationship with knowledge sharing.

Key words: Service quality, knowledge sharing, SERVQUAL, student perceptions, Malaysia.

INTRODUCTION

There is such a great urgency for every business to improve its operations so as to deal with the ever changing and unpredictable challenges ahead. This is also a major contributing factor in order to stay in business. It is more so particularly in the service industry as meeting the customers' satisfaction has become an uphill task as compared to those before the 1990s with the ever more competitive environment. According to Yasin et al. (2004), if an organization of a service business is hesitant to go through this type of business operation revamping, it will bound to be only the second best among its competitors. A crystal clear example is the higher learning institutions in the likes of the universities, colleges etc.

Based on the research done by Combrinck (2006), since 1994, these types of institutions have faced drastic changes especially in financial assistance and the negative growth in the student numbers. Therefore, the management of these institutions has to find ways to tackle these or else they will have to bid adieu to their business. They are also the ones who stay actively competitive in business today. The solution to this is applying "service quality" in their operations which makes the difference among all higher learning institutions (O'Neill

and Palmer, 2004).

Service quality has turned out to be very crucial especially in those organizations which provide services as these organizations have to draw the attention from the customers and to retain them in order to survive in the ever-competitive market today (Potluri and Zeleke, 2009). For instance, it is like a customer getting a $2 service for only $1 service that he or she is paying. According to Wang and Pho (2009), it is necessary to provide good quality products and at the same time excellent service as a way to satisfy the customers' needs. However, if a particular higher learning institution does not possess much experience in education and training quality, it will very likely to fail miserably (Singh, 2002). Hence, it is imperative to have service quality in their daily operations.

Customers always have the feeling of being wanted and appreciated without needing to make such a request. Therefore, their perceptions on service quality are truly important and becoming more essential to the service industry (Wannenburg et al., 2009). It is important to understand what the perception of the customers on service quality is as this could offer precious information for the management to act on how to improve further on customer satisfaction (Seymour, 1992). This also serves as a way to understand how and what the customers (students) requirements are in a higher learning institution particularly within a faculty.

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In attempting to measure the quality level of service rendered in higher learning institutions, data and information of students' view are deemed as major components of information input by the management in education service (Hill et al., 2003). Consequently, in the literatures of service industry like education, analyses for the measurement of service quality have been conducted by looking into the definitions of quality (Lagrosen et al., 2004; Nadiri et al., 2009), dimensions of service quality (Joseph and Joseph, 1997; Lagrosen et al., 2004; Owlia and Aspinwall, 1996) and the level of service quality in meeting customer (student) satisfaction (Rowley, 1997).

Although service quality is being used as an evaluation tool, it does have the tangible features as described by Combrinck (2006). A service is something that a customer could not see but could only be experienced. Therefore, to them the facilities, equipment and brochures in the higher learning institutions are some-thing no longer important because these items are used only as "indication" (Zeithaml et al., 1992).

A higher learning institution will definitely gain if it could provide high service quality to its customers and in this case, the students. An institution like a university which provides high quality teaching, helpful lecturers, excellent results, conducive learning environment etc, is deemed to possess good service quality. It is important that lecturers have the willingness to share their knowledge in class or through the consultation sessions to the students while the students provide their feedback to the university to make complaints or suggestions. The students, in turn, share what they have learnt with other students or fellow classmates. This is known as knowledge sharing which has various advantages. Therefore, knowledge sharing is another essential tool for everyone especially the students because knowledge is commonly known as one of the sources for power.

Based on this reasoning, this paper gives us an idea of what the link is between service quality dimensions and knowledge sharing. We will look at the literature reviews on service quality, knowledge sharing as well as their relationships. This is followed by the creation of a research framework and the various research methodologies applied. Besides, this paper includes a discussion section, a brief conclusion as well as an implication section and its limitation. Finally, we also incorporate in the last section some suggestions for the future researchers' usage.

LITERATURE REVIEW

Service quality

A common definition of service quality is that the service delivered should fulfill the customers' requirements, expectations and satisfactions. Customers play an important role with regard to the perception of effect on quality of service delivered (Gan et al., 2006; Oyeniyi and Joachim, 2008). Since service quality is constructed from multi-elements, it may be assessed based on the characteristic of service delivery system, the level of customer satisfaction and/or the relations of the service meeting the various factors of the service system (Yasin et al., 2004; Chase and Bowen, 1991; Klaus, 1985; Parasuraman et al., 1988).

In today's competitive environment, most organizations would agree and recognize that service quality is essential for them to become winners by consistently meeting or exceeding customers' expectations (Chowdhary and Prakash, 2007; Dawkins and Reichheld, 1990; Parasuraman et al., 1985; Reichheld and Sasser, 1990; Zeithaml et al., 1990). Quality in education sector can be simplified under service quality dimensions as it is considered as service because of its characteristics (Dotchin and Oakland, 1994; Zimmerman and Enell, 1988). Students' perceptions of service quality have become a main issue in the management of higher learning institutions as students are deemed to be their customers (Hill, 1995; Brochado, 2009).

Many researchers carried out numerous studies to evaluate the service quality and subsequently Parasuraman et al. (1988) have developed SERVQUAL model (based on functional quality rather than technical quality) which has became an adapted model for many to be used for measuring of service quality in higher learning institutions. The SERVQUAL model is constructed based on a gap model in terms of the differences between perception and expectation. These differences are measured from the evaluation by the customers from their perception of pre-consumption and post-consumption of a service using 22 perception items. The measurement of these 22 items developed by Parasuraman et al. (1988) are grouped under five headings namely assurance, responsiveness, reliability, tangibles and empathy. The five elements of SERVQUAL model are as shown in Table 1.

Based on the in-depth review, the five dimensions of service quality were developed by Parasuraman et al. (1985). The model is selected in this study for the main reason that these dimensions have been widely accepted as a common platform for works in service quality implementation (Palmer and O'Neill, 2003). At the same time, we tweaked the elements in each of the five dimensions to suit the study in an institution of higher learning. These five dimensions appear as the knowledge and courtesy of the teachers and the their ability to convey trust and confidence to students (assurance), the willingness to perform prompt service to students (responsiveness), the ability to provide accurate and promised service to students (reliability), the appearance of the physical facilities, equipment and personnel (tangibles) and the ability to show care and personal attention to students (empathy)

Knowledge sharing

Knowledge has many definitions from different areas of

Table 1. Dimensions of service quality.

Dimension	Description
Assurance	It refers to the degree to which employees are encouraged to be trusted and confident.
Responsiveness	It refers to the degree to which employees are reacting quickly or favorably.
Reliability	It refers to the degree to which employees are executing the promised service.
Tangibles	It refers to the degree to which employees' appearance, condition of physical facilities and communication materials.
Empathy	It refers to the degree to which employees are giving care and provide individualized attention to customers

Source: Adapted from Parasuraman et al. (1988).

organization. It is defined as an organized body of data, information, skills and expertise for the purpose to create new information when carrying out a task (Schreiber et al., 1999). According to Nonaka (1994) as cited by Ooi (2009), knowledge is referred as a wide range of perceptions both in theory and practice that are effective and useful on the improvement of organization.

In today's business environment, knowledge has become a main factor of gaining a competitive advantage and towards the economic growth of a country (Pinelli et al., 1997). Generally, there are two forms of knowledge; tacit knowledge and explicit knowledge. Tacit knowledge is not accessible or obtainable from the books; it is an individual belief, insights, values and understanding (Pan and Scarbrough, 1999) and exists as individual's experience and work knowledge (Nonaka and Takeuchi, 1995). Whereas, explicit knowledge is defined as formal language data or information in terms of technical or academic such as handbook, patent and copyright (Smith, 2001; Ooi et al., 2009).

Knowledge sharing is an activity of disseminating inforation, values and ideas about the perception between two parties to agree or disagree. The two parties could be between individuals or between organizations (Lee, 2001; An et al., 2004; Cheah et al., 2009). Liebowitz (2001) stated that organizations gain competitive advantages when the employees have the attitude of sharing knowledge among themselves. It is said that useful and appropriate knowledge can enhance employees' performance to the achievement of its goals in an efficient and effective manner (Alavi and Leidner, 2001; Hansen et al., 1999).

In an institution of higher learning, the sharing of knowledge constitutes a general understanding of learning methods among teaching staff and students. According to Petrides and Nodine (2003), knowledge sharing is known as the essential components of the knowledge management process in association with the exchange of information and transferring of knowledge among the lecturers, administrative staff and students. The knowledge sharing activities are normally implemented by a set of principles, processes, organizational structures, and application of technology that motivate people to share and influence their knowledge to meet organization goals. By investing social values of positive knowledge sharing

helps to be better in innovation (Guzman and Wilson, 2005; Sohail and Daud, 2009). However, top managers and practitioners would encounter difficulties of knowledge sharing as some faculty staff refuses to do so even among themselves.

Relationship between service quality and knowledge sharing

Service quality is a necessity in today's business world. In short, how an organization provides its service which not only satisfy but exceeds the requirement of the customers. It is even more crucial to those business service industries such as in a higher learning institution (Ford et al., 1999).

The management of a higher learning institution is very dependent on how the students' perceptions of the service provided whether it is acceptable or otherwise. This research uses five dimensions of SERVQUAL model developed by Parasuraman et al. (1988). As mentioned above, these five dimensions are: assurance, responsiveness, reliability, tangibles and empathy. The rest of this section provides the detail explanation of these practices.

Assurance

Assurance is known as the level of the service delivered to customers that is believable and can be trusted (Parasuraman et al., 1988). The *assurance* dimension of service quality refers to the ability of lecturers and administrative staff to provide trust and confidence to students. It is seen as highly dependent as it gives an idea in connection with the interpersonal communication to which achieving the level of knowledge sharing. In addition, it is also expected that the ability to show credibility and courtesy play an important role in the process of knowledge sharing among lecturers, administrative staff and students. Therefore, the first hypothesis is proposed:

H1. Assurance is positively related to knowledge sharing.

Responsiveness

Responsiveness can be defined as the level of services
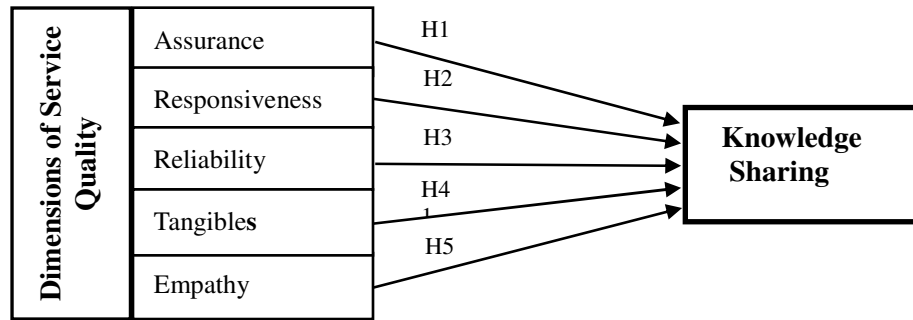
Figure 1. Relationship between service quality and knowledge sharing.

provided is able to help customer promptly (Yong, 2000). The responsiveness dimension of service quality directly involves the willingness to provide prompt or favorable services by the lecturers and administrative staff to students. If the students perceived that services delivered could not be effective and in a comprehensive way, the services are deemed to have a negative impact. Therefore, the second hypothesis is proposed:

H2. Responsiveness is positively related to knowledge sharing.

Reliability

Reliability is referring to goods that are error-free in a specified time or a promised service is executing dependably, whereas, in terms of service in educational institution it is defined as the level of the knowledge and information learnt are accurate (Yong, 2000; Garvin, 1987). The reliability dimension of service quality is defined to which extent the correct, accurate and up-to-date knowledge and information are fulfilling and also perform the services promised to students. By keeping the ability to execute the promised service dependably and accurately will encourage the knowledge being communicated. If the knowledge learnt from the lecturers is incorrect, inaccurate and not up-to-date, the sharing of knowledge among students will give a negative result. Therefore, the third hypothesis is proposed:

H3. Reliability is positively related to knowledge sharing.

Tangibles

Tangibles refer to the appearance of the visible facilities and equipment that are serving in good condition to customers (Parasuraman et al., 1985; 1988; Yong, 2000). The *tangibles* dimension of service quality refers to the tangible condition and facilities in higher learning institutions. It is important for setting up a clear transmission of knowledge in the learning and teaching process with the presence of equipment and facilities like well-equipped

laboratories; adequate stocked library with textbooks, reference books and etc; updated computer facilities; comprehensive information system and also the support facilities like sports and recreation centres. If the equipment and facilities are insufficient and unavailable, the transmission of knowledge will be more challenging. Therefore, the fourth hypothesis is proposed:

H4. Tangibles are positively related to knowledge sharing.

Empathy

Empathy is defined as the ability of the organization to provide personal attention and care to customers (Parasuraman et al., 1985; 1988; Yong, 2000). The *empathy* dimension of service quality is defined as showing care and provides individualized attention to students. A good academic environment in a higher learning institution is not only to establish a good teaching and learning culture for sharing of knowledge but also to be able to involve in the student's personal development as well as academic matters by giving care and advice. Hence, the fifth hypothesis is proposed:

H5. Empathy is positively related to knowledge sharing.

RESEARCH FRAMEWORK AND QUESTIONS

From the discussion above, we propose a framework to examine the impact of service quality on customers' satisfaction in which service quality evaluation using the following model as illustrated in Figure 1.

The two main research questions are articulated as follows:

RQ1: What is the nature of the relationship between service quality dimensions and knowledge sharing in the faculty of business?
RQ2:   Which service quality dimension has a greater association with knowledge sharing in the faculty of business?

Table 2. Demographic profile of respondents.

		Frequency	Percentage
Gender	Male	147	49.00
	Female	153	51.00
Age	< 20 years	152	50.67
	21 - 25 years	146	48.67
	26 - 30 years	2	0.66
Highest level of academic qualification	Secondary	173	57.67
	Vocational/technical	14	4.67
	College	97	32.33
	Foundation studies	16	5.33

RESEARCH METHODOLOGY

In this section, we discuss sample and procedures of data collection and the variables of operational measures used in the study as well as the statistical test which is used to examine the hypotheses.

Sample and procedures

A self-administered questionnaire was developed to test the above mentioned hypotheses. The study began by collecting the data from the students from the faculty of business of one of the progressive private universities located in the state of Perak, Malaysia. The main purpose of this study is to examine the five service quality dimensions as well as the link between these dimensions and knowledge sharing. The target population would mainly be focusing on students from the faculty of business in from the said private university. A total of 360 respondents participated in this survey, and out of these samples, 12 samples were rejected due to partial response and/or missing data, thus leaving a total response of 300 that generates a response rate of 83.33% which is considered as acceptable.

Variable measurements

Independent variables - service quality dimensions

Service quality dimensions were utilized based on the SERVQUAL model proposed by Parasuraman et al. (1985). These dimensions evaluate the level of service quality adopted in the faculty. There are 22 items altogether in the service quality dimensions section of the questionnaire which were adapted from the research done by Pariseau and McDaniel (1997), where each respondent needs to answer each question using a five-point Likert scale with 1 being rated strongly disagree while 5 denotes strongly agree. Sample questions of each service quality dimensions include: 'Good lecturers instill confidence in students' (*assurance*); 'Good lecturers give prompt service to students' (*responsiveness*); 'Good lecturers have students' best interest at heart' (*empathy*); 'Good lecturers perform services right the first time' (*reliability*) and 'A good faculty has modern equipment' (*tangibles*).

Dependent variable - knowledge sharing

The measurement of knowledge sharing behaviors was adapted from the previous research studies (Lin and Lee, 2004; 2005). This idea demonstrates a good strength and consistency which reflects knowledge sharing. The behavior of knowledge sharing was measured based on four items. Sample items include: "Students in my faculty share know-how from learning experience with one another". The respondents are required to use the same five-point Likert scale.

Data analysis

Profile of respondents

Table 2 summarized surveyed respondents which shows demographic profile with 49% of the respondents are male and 51% are female. The majority of the respondents aged in the range of 20 - 25 years old, 50.67% are below 20 years old and 48.67% are between 21 - 25 years old. In terms of highest level of academic qualification of respondents, 57.67% are secondary level, 4.67% are from vocational/technical school, 32.33% are diploma holders and 5.33% are holding pre-university qualification.

Scale reliability

Reliability analysis was performed in order to determine the data reliability for the independent variables (that is service quality dimensions) and the dependent variable (that is knowledge sharing behaviors). The results of the reliability tests are presented in Table 3. All the independent and dependent variables have a Cronbach alpha's value range of 0.793 and 0.832 which are greater than 0.7 thus the measurement of the variables are valid and reliable (Nunnally and Bernstein, 1994).

Correlation analysis

Correlation analysis was conducted to examine the relationship between the independent and dependent variables respectively. Hair et al. (1998) proposed that the correlation coefficient (r-value) between each pair of independent variables in the Pearson's correlation should not exceed 0.90. If there is a case that the correlation value exceeds 0.90, it may be suspected to exhibit multicollinearity (Hair et al., 1998). In Table 4, the highest value of coefficient is 0.670 (empathy dimension with reliability dimension) which is smaller than 0.90. Therefore, it is assumed that there is no multi-collinearity problem in this research study (Ooi et al., 2006; Hair et al., 1998; Chong et al., 2009; Teh et al., 2009; Ooi et al., 2008). The result of the correlation analysis indicates that reliability dimension was perceived as the dominant dimension of service quality that can enhance the level of knowledge sharing within the faculty of

Table 3. Reliability analysis.

Variables	No. of items	Cronbach's alpha
Assurance	4	0.828
Empathy	5	0.796
Reliability	5	0.832
Responsiveness	4	0.804
Tangibles	4	0.793
Knowledge sharing	4	0.811

business as this element have high correlations with knowledge sharing.

Multiple regression analysis

Multiple regression analysis was conducted to examine the association between service quality dimensions and knowledge sharing behaviors. It is a constructive statistical technique that can be used to analyze the associations between a set of independent variables and a single dependent variable (Hair et al., 1998). All these are shown in Table 5.

Hypothesis testing

From Table 5, it can be observed that the coefficient of determination (R^2) was 0.258, representing that 25.8% of knowledge sharing behaviors can be explained by the five dimensions of service quality. The proposed model was adequate as the F-statistic = 20.405 were significant at the 1% level ($p < 0.01$). This indicates that the overall model was reasonable fit and there was a statistically significant association between service quality dimensions and knowledge sharing behavior. The individual model variables revealed that *assurance*, ($\beta = 0.197$, $p < 0.01$) and reliability ($\beta = 0.283$, $p < 0.01$) were found to have a significant and positive relationship with knowledge sharing.

Therefore, the hypo-theses H1 and H3 were supported. Meanwhile responsiveness ($\beta = 0.057$, $p > 0.05$), tangibles ($\beta = 0.033$, $p > 0.05$), and empathy ($\beta = 0.037$, $p > 0.05$) had no significant relationship with knowledge sharing. However, these dimensions have provided long-term, infra-structural benefits necessary for the continued improvement over time, but with an indirect relationship towards knowledge sharing.

DISCUSSION

This research study is important as it provides a picture of quality in higher learning institutions from the perspective of students based on the five service quality dimensions in SERVQUAL model as proposed by Parasuraman et al. (1985) in association with the knowledge sharing as a tool for continuous improvement in fulfilling or exceeding the students' expectation.

This study shows that assurance has a significant influence on knowledge sharing in the students' perception of service quality rendered by the faculty. The degree of students' response to knowledge sharing showed the positive link with trust and confidence. This is particularly true when students believe the knowledge and information received from the lecturers are credible and trustworthy. It is vital that the lecturers maintain a good reputation in providing trustworthy and reliable services to the students. For example, accurate and consistent responses are encouraged to be given by the lecturers as well as guaranteed services to be delivered to the students. Besides, the faculty administrative staff are also encouraged to provide polite and friendly services. This will provide an assurance to the students where they would be confident of getting help when they face any problems or uncertainty.

This study also shows that there is no significant relationship between *responsiveness* and knowledge sharing in the students' perception of service quality rendered by the faculty. This is probably due to the policy in the faculty that all queries will need to be responded appropriately in a promptly manner. Thus, the question of responsiveness or promptness of service linking to the knowledge sharing does not arise in the mind of the students.

In terms of *reliability*, this study shows that it has a significant influence on knowledge sharing in the students' perception of service quality rendered by the faculty. It is a prerequisite for administrative staff and lecturers to be able to response and answer the students' query reliably by giving their answers accurately and con-sistently. With the expectation to be reliable, the students would perceive the knowledge sharing is disseminated properly from the faculty.

On the other hand the study finds that there is no significant relationship between tangibles with knowledge sharing in the students' perception of service quality rendered by the faculty. There are two possible explanations for this finding. The first one is possibly both the facilities and equipment are not the main concern for the students in the process of knowledge sharing from the faculty's lecturers and staff. On the other hand, pre-sumably with the adequate existing facilities, it does not prompt the students to think of physical or tangibles as the necessity infrastructure for the process of knowledge sharing.

Similarly, this study shows that empathy also has no significant influence on knowledge sharing in the students' perception of service quality rendered by the faculty. The finding observes that personal care and individualized attention to the students is not an important factor for the understanding of students' needs. Perhaps the students do understand in carrying out their pro-fessional duty of knowledge sharing, the faculty academic and administration staff are not necessarily expected to go one step further.

From the findings of the measurement among the five dimensions of service quality identified in this study, it provides useful pointers for the management and practitioner to know what is perceived as important by the students in the process of knowledge sharing from the faculty and the administrative staff, which are 'assurance' and 'reliability'. The result may actually point to the areas where the faculty could place more emphasis for further

Table 4. Correlation analysis.

	AQ	RQ	EQ	REQ	TQ	KS
AQ	1.000					
RQ	0.542 **	1.000				
EQ	0.459 **	0.527 **	1.000			
REQ	0.520 **	0.664 **	0.670 **	1.000		
TQ	0.469 **	0.647 **	0.518 **	0.508 **	1.000	
KS	0.408 **	0.386 **	0.364 **	0.465 **	0.315 **	1.000

Note (1): AQ = Assurance; RQ = Responsiveness; EQ = Empathy; REQ = Reliability; TQ = Tangibles; KS = Knowledge Sharing. Note (2):** p-value < 0.01.

Table 5. Relationship between service quality dimensions and knowledge sharing.

	Unstandardised coefficients		Standardised coefficients		
	B	Std. error	Beta (β)	t	Sig.
(Constant)	1.277	0.227		5.637	0.000
AQ	0.184	0.060	0.197	3.095	0.002**
RQ	0.056	0.070	0.057	0.794	0.428
EQ	0.037	0.071	0.037	0.521	0.603
REQ	0.277	0.078	0.283	3.573	0.000**
TQ	0.032	0.062	0.033	0.517	0.606

Note (1): AQ = Assurance; RQ = Responsiveness; EQ = Empathy; REQ = Reliability; TQ = Tangibles.
Note (2): **p < 0.01; R^2 (coefficient of determination) = 0.258; Adj. R^2 = 0.245; D-W = 1.846; F = 20.405 (p < 0.01); N = 300.

improvement to render better service to the students.

Conclusion

In summary, the objective of this study is to examine the link between service quality dimensions and knowledge sharing as perceived by students within the faculty of business in a private university in Malaysia. In responses to RQ1 and RQ2, the findings obtained shows that service quality dimensions are significantly and positively associated with knowledge sharing of the faculty. It was further discovered that the dimensions of assurance and reliability were positively linked to knowledge sharing, primarily the construct of reliability, as it was found to be the leading service quality element that is associated strongly with knowledge sharing within the faculty of business in a private university in Malaysia.

RESEARCH IMPLICATIONS

There are two categories of implications from the findings of this study: theoretical and managerial.

Theoretical implications

This research study indicates the theoretical perspectives

of the importance of the relationship between service quality dimensions and knowledge sharing in higher learning institutions. The elements of service quality as proposed for the theoretical study model would influence and reflects what it stands for and what it believes in association of creating a knowledge sharing environment. A better knowledge sharing environment would be established with the highest level of service quality. Therefore, this proposed study may provide a framework for top management and practitioners to examine the application of the dimensions of service quality as a useful guideline to enhance the knowledge sharing.

Managerial implications

From the findings of this study, several important issues have been identified to managers and practitioners. First, the study results suggest that the assurance and reliability dimensions of SERVQUAL model have strong links with knowledge sharing. The assurance dimension explains that the students' perception of transmission of knowledge is important that knowledge and information received are credible and trustworthy. A regular survey at least once a year to gather the latest information of the students' satisfaction in connection with continual improvement of service quality level could be implemented. Seminars, workshops and training programs should be

conducted periodically to enhance the proficiency and confidence of lecturer and administrative staff in communication of the information to students. In addition, with the implementation of a student feedback system and meeting with students frequently or regularly would improve the understanding of students' needs and expectations in identifying the strengths and weaknesses of the level of service delivered. Thus, it would encourage the continual improvement towards the success in a long-term satisfaction and this in turn will improve the knowledge sharing.

Secondly, the other three elements of service quality namely: responsiveness, tangibles and empathy show insignificant relationship with the knowledge sharing. Responsiveness is essential to treat students more promptly by giving swift and accurate response to them. Therefore, staff appraisals should be reviewed regularly and group discussion with students should be carried out in order to have better understanding of students' expectation and dissatisfaction so that necessary action could be taken to overcome the weaknesses by motivating the staff to deliver better service to the students.

Thirdly, the study also shows that tangibles have an insignificant link with knowledge sharing. However, it is argued that the knowledge sharing process could not be possibly fully exercised without the availability of a full set of physical facilities, equipment and communication materials. Therefore, the senior management and practitioners should still provide further improvement in facilities such as WIFI accessibility; and establishment of sports and recreation centres that would provide a healthy study environment to students.

Finally, the last dimension in service quality, empathy shows insignificant association with knowledge sharing could be solved by showing more care and providing individual attention to students. For instance, appropriate student counseling and advisory service centre should be set up with the aim to provide caring and counseling to students regarding their personal or academic developments.

RESEARCH LIMITATIONS AND FUTURE RESEARCH

In this study, there are some limitations which we need to know in which these can be improved in future research. The study is done by only focusing on a particular faculty thus this certainly may not provide us a completely comprehensive picture of the link between the students' perception and knowledge sharing. A more extensive research should be conducted including collecting data from other universities. When the questionnaires were used, it is said to have been affected by some biases of respondents. Hence, a more precise item analysis must be used to remove items that do not differentiate on the framework where it argues to quantify. Lastly, it is noted that the cross-sectional data analysis cannot confirm the route of causality as stated in the research model thus we

need to be more alert about causality in conclusions. It is highly recommended that future research to address all these concerns as much as possible.

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REFERENCES

Alavi M, Leidner D (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. Manage. Inf. Syst. Quarterly. 25(1): 107-136.
An F, Qiao F, Chen X (2004). Knowledge sharing and web-based knowledge-sharing platform. Proceedings of the IEEE International Conference on E-Commerce Technology for Dynamic E-Business, Sept. 15-15, Tongji Univ. Shanghai. pp. 278-281.
Brochado A (2009). Comparing alternative instruments to measure service quality in higher education. Quality Assurance Educ., 17(2): 174-190.
Chase RB, Bowen DE (1991). Service quality and the service delivery system – a diagnostic framework. In S.W. Brown, E. Gummesson, B. Edvartsson, and B. Gustavsson (Eds.). Service quality – multidisciplinary and multinational perspectives. New York: Lexington Books.
Cheah WC, Ooi KB, Teh PL, Chong AYL, Yong CC (2009). Total quality management and knowledge sharing: Comparing Malaysia's manufacturing and service organizations. J. Appl. Sci. 9(8): 1422-1431.
Chong AYL, Ooi KB, Sohal A (2009). The relationship between supply chain factors and adoption of e-Collaboration tools: An empirical examination. Int. J. Prod. Econ., 122: 150-160.
Chowdhary N, Prakash M (2007). Prioritizing service quality dimensions. Manage. Serv. Qual. 17(5): 493-509.
Combrinck T (2006). A Pilot Empirical Investigation into Student Perceptions of Service Quality at the Department of Management of the University of the Western Cape (Master dissertation). University of the Western Cape.
Dawkins P, Reichheld F (1990). Customer retention as a competitive weapon. Directors Boards, 14(4): 42-47.
Dotchin JA, Oakland JS (1994). Total quality management in services – part 1: Understanding and classifying services. Inter. J. Qual. Reliab. Manage., 11(3): 9-26.
Ford JB, Joseph M, Joseph B (1999). Importance-performance analysis as a strategic tool for service marketers: The case of service quality perceptions of business students in New Zealand and the USA. J. Serv. Mark. 13(2): 171-186.
Gan C, Cohen D, Clemes M, Chong E (2006). A Survey of Customer Retention in the New Zealand Banking Industry. Banks Bank Syst., 1(4): 83-99.
Garvin DA (1987). Competing on the eight dimensions of quality. Harv. Bus. Rev., 65(6): 101-109.
Guzman G, Wilson J (2005). The soft dimension of organisational knowledge transfer. J. Knowledge Manage., 9(2): 59-61.
Hair JF, Anderson RE, Tatham RR, Black WC (1998). Multivariate data analysis. New Jersey: Prentice-Hall International Inc.
Hansen MT, Nohria N, Tierney T (1999). What's your strategy for managing knowledge?. Harvard Business Rev., 77(2): 106-116.
Hill FM (1995). Managing service quality in higher education: The role of student as primary consumer. Quality Assurance Educ., 3(3): 10-21.
Hill Y, Lomas L, MacGregor J (2003). Students' perceptions of quality in higher education. Quality Assurance Educ., 11(1): 15-20.
Joseph M, Joseph B (1997). Service quality in education: A student perspective. Quality Assurance Educ., 5(1): 15-21.
Klaus P (1985). Quality epiphenomenon: The conceptual understanding

of quality in face-to-face service encounter. In Czepiel J, Soloman MR, Surprenant CF (Eds). The service encounter. Lexington, MA: Lexington Books.

Lagrosen S, Sayyed-Hashemi R, Leitner M (2004). Examination of the dimensions of quality in higher education. Quality Assurance Educ. 12(2): 61-69.

Lee JN (2001). The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. Info. Manage., 38(5): 323-335.

Liebowitz J (2001). Knowledge management and its link to artificial intelligence. Expert Syst. Appl., 20(1): 1-6.

Lin HF, Lee GG (2004). Perceptions of senior managers toward knowledge sharing behavior. Manage. Decision, 42(1): 108-125.

Lin HF, Lee GG (2005). Impact of organizational learning and knowledge management factors on e-business adoption. Manage. Decision, 43(2): 171-188.

Nadiri H, Kandampully J, Hussain K (2009). Students' perceptions of service quality in higher education. Total Qual Manage. Bus. Excel., 20(5): 523-535.

Nonaka I, Takeuchi M (1995). The knowledge creating company: how Japanese companies create the dynamics of innovation. Oxford: The Oxford University Press.

Nunnally JC, Bernstein IH (1994). Psychometric theory. 3rd edition. New York: McGraw-Hill Inc.

O'Neill MA, Palmer A (2004). Importance-performance analysis: A useful tool for directing continuous improvement in higher education. Quality Assurance Educ., 12(1): 39-52.

Ooi KB (2009). TQM and knowledge management: Literature review and proposed framework. Afr. J. Bus. Manage. 3(11): 633-643.

Ooi KB, Arumugam V, Teh PL, Chong AYL (2008). TQM practices and its association with production workers. Ind. Manage. Data Syst., 108(7): 909-927.

Ooi KB, Safa MS, Arumugam V (2006). TQM practices and affective commitment: A case of Malaysian semiconductor packaging organizations. Int. J. Manage. Entrepreneurship. 2(1): 37-55.

Ooi KB, Teh PL, Chong AYL (2009). Developing an integrated model of TQM and HRM on KM activities. Manage. Res. News. 32(5): 477-490.

Owlia MS, Aspinwall EM (1996). A framework for the dimensions of quality in higher education. Quality Assurance Educ., 4(2): 12-20.

Oyeniyi O, Joachim AA (2008). Customer service in the retention of mobile phone users in Nigeria. Afr. J. Bus. Manage., 2(2): 26-31.

Palmer A, O'Neill M (2003). The effects of perceptual processes on the measurement of service quality. J. Serv. Mark. 17(3): 254-274.

Pan SL, Scarbrough H (1999). Knowledge management in practice: An exploratory case study. Technol. Anal. Strat. Manage., 11(3): 359-374.

Parasuraman A, Zeithaml VA, Berry LL (1985). A conceptual model of service quality and its implications for future research. J. Mark. 49: 41-50.

Parasuraman A, Zeithaml VA, Berry LL (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. J. Retailing. 64(1): 12-40.

Pariseau SE, McDaniel JR (1997). Assessing service quality in school of business. Inter. J. Qual. Reliab. Manage., 14(3): 204-218.

Petrides L, Nodine T (2003). KM in education: Defining the landscape. Half Moon Bay, CA: Institute for the Study of Knowledge Management in Education.

Pinelli TE, Barclay RO, Kennedy JM, Biship AP (1997). Knowledge diffusion in the US aerospace industry: Managing knowledge for competitive advantage. Greenwich, CT: Ablex Publishing Corporation.

Potluri RM, Zeleke AA (2009). Evaluation of customer handling competencies of Ethiopian employees'. Afr. J. Bus. Manage. 3(4): 131-135.

Reichheld F, Sasser WL Jr (1990). Zero defections: Quality comes to services. Harv. Bus. Rev., 68(5): 105-111.

Rowley J (1997). Beyond service quality dimensions in higher education and towards a service contracts. Quality Assurance Educ., 5(1): 7-14.

Schreiber G, Akkermans H, Anjewierden A, De Hoog R, Shadbolt N, De Velde WV, Wielinga B (1999). Knowledge engineering and management: The commonkads methodology. Cambridge. MA: MIT Press.

Seymour DT (1992). On Q: Causing quality in higher education. New Jersey: Macmillan Publishing Company.

Singh M (2002). Founding document: Higher education quality committee council on higher education. South Africa Government: Higher Education Quality Committee Report.

Smith EA (2001). The role of tacit and explicit knowledge in workplace. J. Knowledge Manage., 5(4): 311-321.

Sohail MS, Daud S (2009). Knowledge sharing in higher education institutions: Perspectives from Malaysia. J. Inf. Knowledge Manage. Syst., 39(2): 125-142.

Teh PL, Yong CC, Arumugam V, Ooi KB (2009). Does total quality management reduce employees' role conflict? Ind. Manage. Data Syst., 109(8): 1118-1136.

Wang JS, Pho TS (2009). Drivers of Customer Intention to Use Online Banking: An Empirical Study in Vietnam. Afr. J. Bus. Manage. 3(11): 669-677.

Wannerburg E, Drotsky T, Jager Jd (2009). Gamers' Perceptions of the Service Quality in the Gaming Areas of Selected Casinos in South Africa. Afr. J. Bus. Manage., 3(7): 317-324.

Yasin MM, Alavi J, Kunt M, Zimmerer TW (2004). TQM practices in service organizations: An exploratory study into the implementation, outcome and effectiveness. Manage. Serv. Qual. 14(5): 377-389.

Yong JK (2000). A multidimensional and hierarchiral model of service quality in the participant sport industry. Unpublished doctoral dissertation, The Ohio State University.

Zeithaml VA, Parasuraman A, Berry LL (1990). Delivering quality service: Balancing customer perceptions and expectations. New York: The Free Press.

Zeithaml VA, Parasuraman A, Berry LL (1992). Strategic positioning on the dimensions of service quality. In Swartz TA, Bowen DE, Brown SW (Eds.). Advances in services marketing and management: Research and practice. JAI Press, Greenwich, CT. 1: 207-228.

Zimmerman CD, Enell JW (1988). Service industries. In Juran J, Gryna JM (Eds.). Juran's quality control handbook (4th ed.). New York: McGraw Hill.