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A Review of Service Quality at Higher Learning Institutions

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Abstract
In light of plenty of challenges and obstacles facing higher learning institutions, that include increasing tuitions fees, funding shrinkages, if not cuts, worries of decreasing numbers of students or preventing them in pursuing their education, and more importantly, accomplishing a sustainable competitive advantage in the marketplace of higher education, universities pay more attention and make all these challenges and obstacles at the top of its agendas. These pressing challenges have called on universities around the world to look for ways through which they can tackle them. Universities in the Kingdom of Saudi Arabia have not also been left behind in the wind of change that seems to have swept through the service sector. Service quality is a model developed under the management field in order to facilitate effective measurement of quality of services provided by any organisation, whether public or private. Therefore, the objective of this paper is to determine which of the five instruments of service quality has the relative superior measuring capability in measuring service quality in Saudi Arabian higher learning institutions. It also attempts to review the various models developed in service quality. The overall literature focuses on service quality at higher learning institutions. The conclusion of this paper shows that although higher learning institutions in Saudi Arabia have already joined in the implementation of service quality using various instruments, they still have not yet made a significant progress in the newly adopted system and there is lack of enough so far on this regard.
Keywords: Service Quality, Higher Learning Institutions.

1. Introduction

Service quality is one of the management quality instrument models that have attracted the attention of researchers and practitioners in the field of management. It has been studied from various angles and at different levels of analysis, from the small, basic and simple organisations to the larger, more advanced and sophisticated ones. Doing so is necessary as to indicate research gaps that need to be filled by other studies. Over the last thirty years, much literature has been written in the service marketing arena. Most of the research done has paid attention to the dimensionalities of service quality across industries, cultures and organisations. Some measurements and scales have been developed in order to measure the quality. One of the most important and widely accepted measurements is the SERVQUAL which has been developed by Parasuraman et al. (1985). According to Parasuraman et al, (1985) service quality dimensions employed in evaluating higher learning institutions, including Reliability, responsiveness, customisation, credibility, competence, Access, Courtesy, Communication, Tangibles and understanding customers. These dimensions have been amended by Ghobadian et al; (Jusoh, et al, 2004). However, although there are a number of studies that have been undertaken in service quality, only few studies have concentrated on the predictors to service quality (Dabholkar et al., 2000; Gounaris et al., 2003; Sultan, and Yin Wong, 2010).

Over the last twenty years or so, it is observed that the role of service quality at higher learning institutions has gained a great interest increasingly. Higher learning institutions, however, must ensure that all services are managed and delivered properly so as customers can perceive the quality. The significance of service quality has also received a consensus in higher education. However, its applicability and measurement remain a challenge. With this in mind, researchers and practitioners are trying to study the measurement of service quality and find a suitable measurement to gauge the services perceived by the students (Jelena, 2010). Hence, this paper is yet another effort that aims at reviewing the literature that focuses on the application of service quality in the context of Saudi Arabian higher education system and the instruments of service quality that yield the best result.

2. Service quality at higher learning institutions

Various studies have been conducted that look into service quality in higher education sector. Service quality at higher learning institutions seems to be thought-provoking assignment (Khodayari and Khodayari, 2011). As it is a complex and versatile concept and there is a lacking in the appropriate definition of higher education (Harvey & Green, 1993). It is suggested by Cheng and Tam (1997) that education quality is a rather vague and

controversial concept. By defining service quality, companies will be able to deliver services with higher quality level, presumably resulting in increased customer satisfaction (Ghylin et al., 2008, p. 76). Service quality has been defined in different ways. However, one of the most straightforward definition states that it is the overall assessment of a service by the customer (Eshghi et al., (2008).

Service quality in the educational sector has been studied within a number of various countries. In Greece, a study has looked at the multi-criteria decision-making methodology in evaluating the relative significance of service quality determinants that affect students' satisfaction. The study has employed the analytical hierarchical process (AHP) in measuring the relative weight of each and every service quality factor. Therefore, this study has been able to find out the relative weights of factors that lead to the quality of educational services in Greece as perceived by students themselves (Tsinidou, Gerogiannis and Fitsilis , 2010).

Another study in British higher education focused on the role of students as the major consumers of higher education services by exploring and monitoring a group of students' expectations and perception of service quality in higher education. However, due to the limited scope of the study, the findings of the study cannot be generalised, but can be used to pave the way for higher learning institutions to understand the need for them to gather information about students' expectations at the stage of their enrolment and during their time in the institutions for them to meet the students' expectation and provide the best quality service (Hill, 1995).

Yet another study in the UK was undertaken to examine the perception of service quality at the University of Manchester. The study has used focused groups in collecting primary data where the viewpoints of undergraduate students from different academic year have been collected using both qualitative and quantitative techniques to triangulate the methodology and increase the credibility of the study's findings. The conclusion drawn from the study indicated that perceptions of different service quality features are complex as they vary in terms of importance and performance. In addition, a disparity has been detected between different academic year groups. However, there were certain characteristics that were held by all in terms of their perception of service quality (Beaumont, 2012). This is an indication that when assessing the perception of service quality in a particular educational institution, it is imperative to consider such variables among various segments of respondents.

Focusing on the non-EU full-fee-paying postgraduate students at one institution in the UK, a study has been conducted to test the dimensions for measuring service quality in higher education. The study has adopted Lehtinen and Lehtinen (1991) framework while at the same time using Q-sort and factor analysis. The study has also highlighted four dimensions of service quality including, recognition, quality of instruction and interaction with faculty, sufficiency of resources and aspects of physical quality. More importantly, the findings of the study showed that how much significance the students attached to their university's recognition (Pereda, Airey and Bennett, 2007).

Various studies have juggled different measuring instruments of service quality. For instance, Jelena (2010) has tried to find out the relative efficacy of two measuring instruments of HEdPERF – Higher Education Performance is an instrument that considers not only the academic components, but the service environment in general as experienced by students (Firdaus, 2006) - and SERVPERF – Service Performance is a variant of SERVQUAL scale that focuses on perception component alone (Oliveira-Brochado and Marques, 2007) - at the University of J.J. Strossmayer using a pilot test data that were collected from 1494 students which were subjected to factor analysis. The results of the study have indicated that students' perceptions of service quality are changing over the study period which, corresponds with class attendance and faculty achievement. Last year students have been found satisfied with service quality. Therefore, they have achieved good attendance and better grades (Jelena, 2010). The study shows that there is a significant correlation between students' sense of service satisfaction and their seriousness in discharging their academic duties. When the students feel satisfied with the service of their institution, it automatically influences their class attendance and other academic responsibilities.

Likewise, SERVQUAL model has been used to examine the impact of service quality on the satisfaction level of students and willingness to put more efforts. The study has used the model proposed by Parasuranaman (1998) which encompasses assurance, empathy, reliability, tangibility and responsiveness. The findings have shown that among all the five dimensions only tangibility is found to be insignificant in terms of students' satisfaction (Khan, Ahmed and Nawaz, 2011).

Similar relationship between academic performance and students' sense of service satisfaction has also been studied, albeit using a different approach in studying undergraduate service satisfaction with college services and environment at a large southeastern doctoral/research. The study has employed stratified random sample of 468 of undergraduate students. The study found that students were satisfied with the library and dissatisfied with parking and course availability, mostly at the target university which affect their overall academic performance. Likewise, there were some significant differences in students' satisfaction with the college services and an environment based on a student's age, gender or ethnicity (Kelso, 2008).

SERVPERF is among the most widely employed service quality measuring instrument among

researchers. It is found that its applicability in measuring service quality during the Bologna Process and Higher Education reform in Serbia. Sampling 109 students of a Faculty of Management at a Serbian University, the research questionnaires were designed based upon the SERVPERF survey. The findings of the study have suggested a change of the proposed scale, particularly on the dimension of responsiveness which was found out to be different across gender. Based on the perceptions of the respondents of the study, the most important dimensions were assurance and reliability, followed by responsiveness and empathy (Kontic, 2014).

Higher education used to be monopolised by the developed world early on. However, in the later part of the 20th century and the beginning of the 21st, several developing countries began to realise the significance of the sector hence bent towards excelling in it. For this reason, several studies have been conducted to study service quality in higher education in several developing countries. The emerging demand of quality in higher education of Bosnia Herzegovina has been explored using SERVQUAL model which measures quality from the students' point of view (Đonlagić and Fazlić , 2015). The study has used Faculty of Economic in one of the Bosnian universities as a case study. Using the SERVQUAL model, the study has provided relevant information as to which areas to be improved in the quest of enhancing service quality.

Using the same dimensions above, students' satisfaction of service provided by the higher education institutions of Malaysia has been also assessed in which the study has found out that there is a significant relationship between tangibility, reliability, responsiveness, empathy and assurance, known as SERVQUAL and students' satisfaction. All the dimensions that were considered by the research were found to be positively correlated with students' satisfaction. The findings have indicated that a majority of students is satisfied with the facilities provided by universities (Hanaysha, Abdullah and Warokka, 2011).

In Malaysia, another study was conducted to measure the service quality performance of a faculty in a public university. Using a stratified random sampling of 229 students, the study has measured six dimensions of quality attributes including tangible, competence, attitude, content, delivery and reliability. The study has found out that the level of service quality performance of this faculty is moderate. It has further shown that there is a significant difference in the students' perception of the faculty based on time spent on the faculty and race. On the other hand, there are no significant differences based on courses and gender, and no relationship, whatsoever, between students' academic performance and evaluation of service quality (Jusoh, et al. (2004).

A different aspect of service quality in relation to Malaysian higher education has also been studied using SERVQUAL five dimensions of tangibility, reliability, responsiveness, assurance and empathy.The study measured the perception of Iranian Postgraduate students on Malaysian higher education services. The study has employed stratified sampling in administering 163 pilot study instruments on five top Malaysian public universities. The findings driven out from the study are that all the dimensions measuring the gaps are significantly negative with empathy registering the highest gap (-0.681), followed by reliability at (-0.673), responsiveness at (-0.670), assurance (-0.612) and finally tangible at (-0.601) (Rasli, Shekarchizadeh and Iqbal, 2012).

A similar study of Iranian university has also been carried out using two different questionnaires consisting of 22 questions with seven-point Likert scale. The study measured the perceptions and expectations of service quality. The findings of the study have indicated that there is gap between students' perceptions and expectations (Khodayari and Khodayari, 2011).

Using SERVQUAL, the factors determining service quality of private universities in Bangladesh have been evaluated. The study adds two more factors, country image and price, alongside the five dimensions of SERVQUAL using a simple random sampling technique for data collection. The conclusion drawn from the study stated that private institutions should have the proper infrastructure, proficient faculty members and competent staffs (Sultan and Tarafder, 2007).

In South Africa, the gap, which causes unsuccessful service delivery at a University of Technology, has been investigated. The study has utilised SERVQUAL employing a quantitative research design, collecting data from 280 respondents at the Durban University of Technology via convenient sampling technique, and measuring service quality with the SERVQUAL five dimensions including tangibles, responsiveness, empathy, assurance and reliability. The findings of the study have revealed that on average, customers had high expectations in tangibles, reliability and assurance dimensions, whereas their highest expectations were placed on the assurance dimension (Green, 2014).

Table 1. Summary of the literature on service quality at higher learning institutions

Study	Model	Dimensions
Tsinidou, Gerogiannis and Fitsilis, 2010	Analytical Hierarchical Process (AHP)	Academic staff, Administrative services, Library services, Curriculum structure, Location, Infrastructure, Career prospects.
Hill, 1995	Bitner's model of service encounter evaluation	Expectations, Perceived service performance, Disconfirmation, and the relationship between Consumer satisfaction and Perceived service quality.
Beaumont, 2012		
Pereda, Airey and Bennet, 2007	Q-sort and factor analysis model	Recognition, Quality of instruction, Interaction with faculty, Sufficiency of resources and aspects of physical quality.
Jelena, 2010	HedPERF and SERVPERF models	
Kelso, 2008		
Kontic, 2014	Service Performance (SERVPERF)	Assurance, Reliability, Responsiveness, Empathy.
Đonlagić and Fazlić, 2015	Service Quality (SERVQUAL)	Tangibles, Reliability, Responsiveness, Assurance, Empathy.
Khan and Nawaz, 2011	SERVQUAL	Assurance, Empathy, Reliability, Tangibility, Responsiveness.
Hanaysha, Abdullah and Warokka, 2011	SERVQUAL	Assurance, Empathy, Reliability, Tangibility, Responsiveness.
Jusoh, et al, 2004	SERVQUAL & SERVPERF	Tangibles, Competence, Attitude, Content, Delivery, Reliability.
Rasli, Shekarchizadeh and Iqbal, 2012	SERVQUAL	Tangibility, Reliability, Responsiveness, Assurance, Empathy.
Khodayari and Khodayari, 2011	SERVQUAL	Tangibility, Reliability, Responsiveness, Assurance, Empathy.
Sultan, and Tarafder, 2007	SERVQUAL	Tangibility, Reliability, Responsiveness, Assurance, Empathy.
Green, 2014	SERVQUAL	Tangibility, Reliability, Responsiveness, Assurance, Empathy.

The first row indicates the authors' name and the year in which the work was published. The second row shows the model of service quality that they employed in guiding their researches. This is indicative of the variety of models available in determining service quality in higher education. Most commonly used models among others are SERVQUAL, SERVPERF and HEDPERF. However, there are other models equally employed such as Bitner's model of service encounter evaluation, AHP and Q-sort and factor analysis model. The last row of the table contains information on dimensions of service quality measured by the researchers. As much as their chosen models vary so are the dimensions of the service quality.

4. Measurements of service quality

The development of service quality as a widely-accepted model means it attracts abundant of academic works from various points of view. At the backbone of this context, the five different alternative measuring tools of service quality, including, SERVQUAL, Importance-weighted SERVQUAL, SERVPERF (Service Performance), Importance-weighted SERVPERF and HedPERF (Higher Education Performance) have been evaluated. The study of Brochado and Marques (2007) attempted to determine which of the five instruments has the relative superior measuring capability. They gathered their data using pilot questionnaires distributed to 360 students' sample of a Portuguese University in Lisbon where a scale is set in terms of unidimensionality, reliability, validity and explained variance. The results have shown that all the five instruments show good results in terms of measuring capability, albeit Importance-weighted SERVPERF and Importance-weighted SERVQUAL seems to be the best model according to RMSEA indicator. On the other hand, the HedPERF and Importance-weighted SERVPERF are better in terms of internal consistency, whereas for the best in validity are SERVPERF and HedPERF instruments (Oliviera-Brochado and Marques, 2007).

Likewise, the relative effectiveness and usefulness of three different measuring instruments of service quality, including, HEdPERF, SERVPERF and the moderating scale of HEdPERF-SERVPERF at higher learning institutions have been assessed. The study tried to determine which of the instruments are superior in

terms of validity, reliability and explained variance. The outcome of the tests of the study suggested that HEdPERF instrument leads to a greater and more reliable estimations, criterion and construct validity, and superior explained variance and overall a better instrument than the other two (Abdullah, 2006).

It has been proposed a new measuring tool which could be used in measuring service quality in the sector of higher education called HiEdQUAL which covered various service quality dimensions. The new instrument could be used with both qualitative and quantitative data. The dimensions of the newly proposed instrument include teaching and course content, administrative services, academic facilities, campus infrastructure and support services of service quality at higher learning institutions. This instrument has been tested for validity, reliability. It is also suitable through employing "exploratory factor analysis and confirmatory factor analysis" (Annamdevula and Ballamkonda, 2012).

Several factors that influence service quality at higher learning institutions have been assessed through scrutinizing the studies that have dealt with such a theme in the field of service quality. These factors include physical (infrastructure, modern equipment and support services), reliability (accuracy, consistency, trustworthiness and punctuality), competence (knowledge, expertise, communication, method and experience), personal interaction (friendliness, concern, caring, impartial and career counseling), course structure (relevance, adequate coverage, conceptual knowledge and content) and policy (fee structure, training, placement, courtesy, financial support and reward) (Prasad and Jha, 2013).

Table 2 the model developed in service quality which include 6 factors.

Study	Factors	Dimensions
Prasad and Jha, 2013	Physical: infrastructure, modern equipment and support services. Reliability: accuracy, consistency, trustworthiness and punctuality. Competence: knowledge, expertise, communication, method and experience. Personal interaction: friendliness, concern, caring, impartial and career counseling. Course structure: relevance, adequate coverage, conceptual knowledge and content. Policy: fee structure, training, placement, courtesy, financial support and reward.	All

As service quality has a great of importance, a growing body of research has documented its historical evolution. The table below details the various models developed in service quality some of which have already been mentioned above among the various literatures reviewed.

Table 3 The various models developed in service quality

Study	Model	Dimensions
Grönroos, 1984	Service Quality Model	Technical quality, Functional quality, corporate Image.
Philip and Hazlett, 1997	PCP Model	Pivotal, Core, Peripheral attributes
Parasuraman et al., 1985	GAP Model	Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding/Knowing the Customer, Tangibles
Haywood-Farmer, 1988	Service Quality Attributes	Physical facilities, processes and procedures, People behavior and conviviality, professional Judgment
Parasuraman et al., 1988	SERVQUAL	Tangibles, Reliability, Responsiveness, Assurance, Empathy
Cronin and Taylor (1992)	SERVPERF	Same as SERVQUAL but with performance only statements
Dabholkar et al., 1996	Retail Service Quality Scale (RSQS)	Physical aspects, Reliability, Personal interaction, Problem solving, Policy
Frost & Kumar, 2000	INTSERVQUAL	Reliability, Tangibles, Assurance, Responsiveness, Empathy (SERVQUAL)
Brady and Cronin, 2001	Service Quality Model	Personal interaction quality, Physical service environment quality, Outcome quality

Source:Yarimoglu, (2014).

According to the above table, it can be summed up that there were two categories that arrayed the models. For instance, the first one was represented by the models of Grönroos (1984) and Philip and Hazlett (1997) through which the dimensions of service quality were determined based on categorising the services such

as technical or functional services, and pivotal characteristics having key significance that impact quality, fundamental characteristics having subordinate significance, and peripheral characteristics having substantial tertiary (Yarimoglu, (2014).

The second one was represented by the SERVQUAL model. As it is noted that there were correlations among the dimensions of Haywood-Farmer Service Quality Characteristics (1988) and Parasuraman et al.'s GAP Model (1985), Haywood-Farmer's model was added to the second category. However, SERVQUAL model that has been developed by Parasuraman et al.,1988 briefed all these dimensions in five dimensions including Tangibles, Reliability, Responsiveness, Assurance, and Empathy. While other models such as SERVPERF and INTSERVQUAL have utilised the same dimensions of SERVQUAL (Yarimoglu, (2014).

5. Higher learning institutions in Saudi Arabia and service quality

This is an area that remains largely unsearched which this study aims to capitalize on. Before surging forward it is important to discuss the context of higher education in Saudi Arabia. According to AlSeddiqi (2014), the development of higher education in Saudi Arabia has gone through a number of phases. During the first phase, a preparatory school was established in 1927 after which the students studied in Egypt, the establishment of the faculty of Shari'ah in Mecca in 1950 to certify judges and public staffs and later joined King Abdul Aziz University in 1981, the establishment of 1952 teachers' college in Mecca and finally the establishment of 1953 Faculty of Arabic language and Shari'ah in Riyadh that later was catalyzed to establish Imam Mohammed Bin Saud Islamic University in 1974.

In the second phase during the actual higher education actually began in Saudi Arabia, a number of universities came to be established some of which are: King Saud University Riyadh 1957, the Islamic University Medina 1961, King Abdul Aziz University Jeddah 1967, Imam Mohammad Bin Saud University Riyadh 1974, King Fahd University of Petroleum and Minerals Dhehran 1975, King Faisal University Dammam, 1975 and Umm Al Qura University Mecca 1981 (Al Khateeb, 2003). During the third phase, the board of higher education and universities was formed in 1993 along with yet another university, King Khalid University Abha 1998.

The final phase, the fourth, witnessed the establishment of more higher learning institutions such as the University of Qasim, Taibah in 2004, University of Jazan, Al Jawf, Ha'il and Al Bahah in 2005, and Northern Boarders University and King Abdullah University for Science and Technology in 2007 (Al-Mudairis and Al-Husain, 2008). The increasing number of universities through the phases which reached its peak in 2008 with 25 public and 20 private universities indicates the changing attention of authorities in the quality of universities. This was further underscored by the establishment of the National Center for Measurement and Assessment and Higher Education Fund (Al-Mudairis andAl-Husain, 2008; AlSeddiqi, 2014).

With the view of quality provision in higher education, there have been various institutions established through the years that include: Ministry of Higher Education which governs all universities in the country, public and private, General Organization for Technical and Vocational Training which governs technical and communication institutions as well as the post-secondary vocational institutions, Ministry of Health through which all colleges and institutes of health are governed, Royal Commission in Jubail and Yanbu which governs two faculties of industry in both places, and finally security and military colleges and institutes which are governed by Ministry of Defense, Ministry of Interior, National Guard and Ministry of Civil Service.

There are quite a few studies conducted on service quality in Saudi higher learning institutions. One of the studies demonstrated using survey questionnaires and interviews, applied Quality Function Deployment (QFD) in identifying the challenges of implementing TQM in public universities of Saudi Arabia. The current situation of Saudi Arabian public universities in relation to the implementation of TQM has been analysed. The study found out that when it comes to the awareness of TQM among faculty members of Saudi public universities 81.7% know at least the basic about it whereas 69.4% of the Saudi public universities have implemented TQM. Moreover, only 30% of Saudi public universities have a successful implementation of TQM. Among the conclusions drawn from the study are that, the reason for the unsuccessful implementation of TQM stems from the lack of leadership, the lack of qualified people working on the evaluation and quality implementation, absence of quality culture, the lack of top management commitment, the lack of adequate training for the implementation of the program of TQM, the lack of communication, resistance to change from the employees. Likewise, the study has concluded that there are other five least critical challenges Saudi public universities face which are: unhealthy and unethical rivalry among faculty member, fear of failure, the lack of students' feedback, unrealistic university vision and mission and the lack of data analysis in the process of TQM implementation (AlSeddiqi, 2014).

6. Conclusion

This paper has extensively discussed related and relevant studies in relation to service quality in higher education. The work done on service quality in higher education in theory and concept has been presented with emphasis on

the studies conducted in measuring the service quality perceived by students' satisfaction. It is concluded that this area has to be extensively studied because different angles such as satisfaction, loyalty and commitment of the area have been subjected to rigorous scientific investigations by scholars, researchers and students. It is also found that there are still gaps yet to be filled-in by further investigations. It is also concluded that although various criticisms were made about SERVQUAL model, it is still the most utilised model in assessing service quality and become the most broadly utilised scale in conducting researches. Finally, it is concluded that quality implementation in Saudi higher learning institutions is still a far cry therefore further investigations have to be undertaken in the developing countries such as Saudi Arabia to test SERVQUAL model and link it with other effective factors that affect students' satisfaction. This particular reason formed the essence of this study.

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