Quality of Service in Public Higher Education Institution (HEI) Facilities: A Critical Literature Review

Amilia Hasbullah[1*], and Wan Zahari Wan Yusoff[2]
[1]Faculty of Economics, Krisnadwipayana University, Jakarta, Indonesia
Faculty Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu
[2]Pahat, Malaysia
[*]amilia.hasbullah@gmail.com

Abstract: This study presents an initial step for the development of a suitable approach to assess public higher education institution (HEI) facilities' service quality. Nowadays, spirit of service excellence has become prominent within HEIs. In this sense, research focused on quality of service in public HEI context. This topic mostly discusses about service quality in programmes and processes in HEIs. Nevertheless, studies focusing on service quality, particularly in facilities, are still lacking. This justifies the development of an approach to assess quality of service in public HEI facilities.

Keywords: service quality, facilities services, higher education institution

Paper type: Conceptual paper

1. Introduction

Education is the decisive factor to determine the development of a nation. Higher education institutions (HEIs) are expected to bring about changes that would have an impact on the development of a nation. Currently, HEIs have become a global business and thus must continuously explore options to increase quality of higher education services.

HEIs as a service based organization is likely to strive in achieving excellence on service quality. Service quality, which is important to all organizations as it is regarded as a driver of corporate marketing and financial performance (Buttle, 1996), has now become a strategic option for many HEIs around the globe and is critical to the success of an organization (Sohail and Rahman, 2003). Thus, to face global competition, synthesizing service quality becomes a key factor for the success of HEIs. In HEIs, like any other organizations, to provide excellent service, HEIs need to have a substantial infrastructure; this often includes an extensive estate, buildings, and facilities services (Finch *et al.*, 2009). In fact, most universities experience facilities services deficiencies that can occur at any time (Isa, 2013). Facilities services in the service quality context encompasses a facility's ability to satisfy the objective of teaching and learning in

universities (Dilanthi *et al*., 2000). Therefore, this paper seeks to explore the literature review on service quality, particularly on facilities services in HEIs.

2. Literature Review

A.   Service quality concept

Service quality has since emerged as a pervasive strategic force and key strategic issue on management's agenda. Thus, practitioners and academics deliberate on precisely measuring service quality to recognize its antecedents and consequences, and finally establish methods for enhancing quality to obtain competitive advantage and initiate consumer loyalty (Firdaus, 2005).

Research on service quality started in the early 1980s. Previous researchers assumed that service quality involves a comparison of expectations with performance. Lewis and Brooms (1983) argued that service quality is a measure to what extent the service level delivered accommodated customers' expectations. Gronroos (1984) described two dimensions of service quality, which are functional quality and technical quality. Lastly, Parasuraman *et al.* (1985) conceptualized service quality using a disconfirmation model that measures customers' expectation and perception, with the development of the SERVQUAL instrumentation (Parasuraman *et al*., 1991).

The original SERVQUAL scale was comprised of 10 dimensions, which eventually reduced to 5 dimensions. These five dimensions are identified as follows:

- Reliability - refers to the ability to perform the promised services dependably and accurately.
- Responsiveness - refers to willingness to help customers and provide prompt service.
- Assurance - refers to knowledge, courtesy of employees, and ability to convey trust and confidence in customers towards the service provider.
- Empathy - refers to the provision of caring and individualized attention provided to customers.
- Tangibles - refers to the appearance of physical facilities, equipment, personnel, and communication materials.

Service quality in the higher education context

Research on service quality in HEIs has become popular in the literature. It reveals two main approaches to measure service quality: SERVQUAL (Parasumaran et al., 1988) and SERVPERF (Cronin and Taylor, 1992). SERVQUAL has its theoretical foundations in the gaps model and defines service quality in terms of the difference between customer expectations and performance perceptions, based on 22 items. Meanwhile, SERVPERV explains more of the variance in an overall measure of service quality compared to SERVQUAL (Cronin and Taylor, 1994).

The other approaches of service quality in reference to higher education context also applied Lehtinen and Lehtinen's framework (1991). It separately defined service quality into three aspects i.e. the physical quality (product and services), the interactive quality (interaction between consumer and service provider), and the corporate quality (image). It is confirmed by Pereda (2007) that research on service quality in higher education in overseas education applied these three elements as shown in Table 1. This research interpreted the physical quality dimensions: general services, teaching and learning facilities, accommodation; interactive quality: academic instruction, guidance, interaction with staff and students; and corporate quality: recognition, reputation, and value for money.

Table 1. Higher education matrix

Author (Year)	Physical Quality	Interactive Quality	Corporate Quality
Mavondo *et al.* (2004)	√	√	
Wiers-Jenssen (2003)		√	√
Wright and O'Neill (2002)	√	√	
Elliot and Shin (2002)	√	√	
Wiers-Jenssen *et al.* (2002)	√	√	√
Clemes et al. (2001)	√	√	
Gatfield (2000)	√	√	√
Oldfield and Baron (2000)	√	√	
Gatfield *et al.* (1999)	√		√
Ford *et al.* (1999)	√	√	√
Patterson *et al.* (1998)	√	√	
Joseph (1998)	√	√	√
Aldridge and Rowley (1998)	√	√	
Athiyaman (1997)	√	√	
Bourke (1997)	√	√	√
Tomkovick *et al.* (1996)	√	√	
Soutar and McNeil (1996)	√	√	
Rogers and Smith (1993)	√	√	
Hampton (1993)	√	√	
Lapidus and Brown (1993)	√	√	
Stewart (1991)	√	√	

Source: Pereda (2007)

More recently, a new industry-scale, called HEdPERF was developed comprising a set of 41 items (Firdaus, 2006). This instrument aims at considering not only the academic components, but also aspects of the total service environment as experienced by students. Five dimensions of the service quality concept are identified:

- Non-academic aspects - Items that are essential to enable students to fulfil their study obligations and relate to duties carried out by non-academic staff.
- Academic aspects - Responsibilities of academics.
- Reputation - Importance of higher learning institutions in projecting a professional image.
- Access - Includes issues such as approachability, ease of contact, availability, and convenience.
- Programme issues - Importance of offering wide flexible structures and health services.

In terms of facilities services, Sirvanci (2004) classifies HEIs' services into two categories, namely academic programmes and facilities. This model describes students' flow in higher education, from admission to graduation. In this context, it showed that those services will impact a student's teaching and learning experiences.

Facilities services in HEIs
Facilities services are important resources to higher educational institutions in providing its core business (Maimunah, 2009). According to Maimunah (2009) there are six factors in higher education sectors that influence students' experience for higher educational services. Those factors are teaching and learning

delivery, support services facilities, accommodation and social facilities, course administration, teaching and learning facilities, and teaching and learning services.

- Teaching and learning delivery
Course content, teaching staff quality, examination method, teaching staff attitude, teaching style, assignment method, course organization, extent and distribution of subject, coordination between subject expertise, and library.

- Support service facilities
Outside activities, recreation and sport services, student union building, recreation and sport, student union services, and career services.

- Accommodation and social facilities
On-campus accommodation, on-campus accommodation services, off-campus accommodation services, off campus accommodation, and child care.

- Course administration
Form of payment, enrolment period, registration process, and enrolment process.

- Teaching and learning facilities
Science laboratory and library services.

- Teaching and learning services
Size of classroom, condition of lecture room, teaching appearance, and visual equipment.

3. Discussion

The literature review on service quality in HEIs has been done on numerous studies, most of which applied the SERVQUAL instrument. Legcevic (2009) found that students' expectation exceeded their perception in Osijek University, Croatia. Meanwhile, Khan (2010) assessed the service quality among eight business schools in Pakistan showing that students perceived low quality in all five dimensions of service quality. On the other hand, Khodayari (2011) revealed that there was a gap between students' expectation and perception in Islamic Azad University. Next, Muhammad Yusuf *et al.* (2012) examined service quality between research universities and non-research universities; the results showed that the tangible dimension was the most important.

Al Alak and Alnaser (2012) examined the relationship between service quality dimensions with students' satisfaction in University of Jordan. It found that assurance and reliability dimensions were the two most important factors with respect to improvement of university. Besides that, Amelia *et al.* (2011) examined the quality of technology information services in Indonesia; a gap between expectation and service performance was noted.

Prior research on service quality in HEI context put much attention on quality of educational services (Chua, 2004; Tan Jie, 2008; Ferrira, 2009), which are highly related to lecturer-student relationship. On the other hand, Pereda (2007) conducted research on service quality in HEI within the international student context. Moreover, research on facilities services are mostly demonstrated solely rather than attempting to combine service quality and facilities services in HEI context (Hakim, 2005; Maimunah, 2009).

4. Conclusion

This review illustrated the conceptual aspect of service quality in the HEI context. SERVQUAL instrument was mostly applied to measure the extent of service quality delivered and perceived by students, the main client in HEIs. Researches on service quality in HEIs revealed that service quality has become a prominent tool, which enables universities to increase effectiveness of educational provision and concurrently to achieve excellent service.

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