

Students' Perceptions of Service Quality at a South African Traditional University and a University of Technology

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ABSTRACT The importance of service quality in service marketing is widely acknowledged by many practitioners and academics worldwide, yet there seems to be limited research on service quality in higher education institutions (HEIs). Therefore, in order to gain an understanding of students' learning experiences, this paper reports on a study undertaken to determine students' perceptions of the level of service quality delivered at a traditional university and a university of technology. The study was conducted at two selected higher education institutions located within the Gauteng Province of South Africa. A descriptive research design was employed, whereby a questionnaire survey consisting of item indicators adopted from the SERVPERF model was conducted to analyse the relevant first-, second- and third-year business and marketing management students' perceptions of each higher education institutions' respective business schools. The results of the paper suggest that differences exist between the students' perceptions of service quality between the two types of institutions, with the students indicating a significantly more positive perception of service quality delivery at the traditional university. These findings provide insight into students' perceptions of the level of service delivery at two types of South African HEIs.

INTRODUCTION

Service industries are playing an increasingly important role in the economy of many nations. The service industry is viewed as one of the fastest growing sectors worldwide and this is especially true in South Africa (Weeks 2009). Owing to the South African economy undergoing several structural changes and having high unemployment rates (Gbadamosi and de Jager 2009), the potential for development in the service industry has received significant attention (Lehloenya 2012). Since the 1990s, the service industry has been the main source of growth for the South African economy (Hodge 2001). Compared to developed countries, where the service industry constitutes approximately 80 percent of the total workforce (Petzer et al. 2008), the service industry in South Africa, which is a developing country, accounts for approximately 67 percent (2011 est.) of the gross domestic prod-

uct (GDP) and contributes approximately 65 percent (2007 est.) to the workforce (The World Factbook 2012). Higher education is one of the most important sectors in the service industry, and as such, has flourished to be as important as any other sector (Ahmed et al. 2010).

Service quality is an important focus in service marketing. Research shows that service quality is one of the most powerful competitive trends currently shaping marketing and business strategy (Abdullah 2006b), making it a vital concept of modern-day marketing (Karami and Olfati 2012). Service quality is closely tied to an increase in profitability and is linked to presenting an essential competitive advantage, which is formed through repeated sales, positive word-of-mouth communications, consumer loyalty and service differentiation (Kimani et al. 2011). Jain and Gupta (2004) concur stating that service quality is central in obtaining operational efficiency and in enhancing business performance. According to Kimani et al. (2011), the notion of service quality in higher education is similar to the conception of service quality in other service contexts. Oldfield and Bar-on (2000) advise that Higher education institutions (HEIs) should view service quality from an organisational perspective.

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Higher education in South Africa has experienced various changes. The first democratic elections of 1994 brought about unprecedented political, social, economic and educational changes in South Africa. Specifically, the restructuring required the obliteration of the binary between universities and technikons, which, in turn, induced the concept of institutional differentiation by means of institutional mergers and incorporations (Council of Higher Education (CHE) 2000). As part of the reconfiguration of the higher education landscape, which started from 2004 onwards, universities of technology came into being. Through a process of mergers and redesignations, South Africa's 36 higher education institutions (21 'traditional' universities and 15 technikons) were decreased to 23 universities. These comprised 11 traditional universities (some of which were merged with others), 6 'comprehensive' universities (developing out of mergers between traditional university and a technikon), and 6 universities of technology (created from 11 merged and unmerged technikons) (CHE 2010).

The process of change within the Higher Education sector created a variety of institutions to serve diverse functions (McKenna and Powell 2009). Traditional universities primarily offer Bachelor's degrees and retain a large base of postgraduate students, having a strong focus on research outputs. In comparison, universities of technology offer higher certificates, diplomas and degrees in technologically focused areas, with a limited base for postgraduate students and research outputs (Higher Education in Context 2011). However, these changes brought forth various advantages and challenges, including combining and eliminating inequalities within the educational systems, increased student enrolments, congregating national and global opportunities and challenges, such as increased competition, new technologies, research and training (Arnolds et al. 2013).

In today's world of global competition, rendering quality service is a key determinant of success. Increased competition in the higher education environment (Abdullah 2006b; Dlaë et al. 2014), due to economic forces increasing commercial competition because of expansions within global education markets and reduced government funding has contributed to the growing importance of service quality measurement (Abdullah 2006a). Over the past decade, HEIs have experienced dramatic changes, which are evident in both the funding structures and the

student enrolments. Prior to the 1990s, competitive advantage was an unknown concept in the higher education sector; however, HEIs need to acknowledge the importance of being in a 'market' (Oldfield and Baron 2000). HEIs should do extensive marketing (Hemsley-Brown and Oplatka 2010) and learn how to market themselves (Ivy 2008) in order to remain competitive. HEIs need to manage the challenges arising from increased competitive pressures and operate in a manner that ensures productivity (Mammen 2006). Saunders (2008) concurs stating that changes and developments in the service industry necessitate that HEIs measure the quality of their service encounters continuously. Service quality is a key determinant of success in that it allows HEIs to differentiate themselves from competitors (Ivy 2008; Kimani et al. 2011).

Higher education, like any other service industry, must aim to meet the needs and wants of its customers, namely the student who is the primary beneficiary (Redmond 2008). The challenge is that education differs from most other services because it is referred to as a 'pure service', since there is no physical product involved (Evans and Lindsay 2005). The quality of the service is based on the responsiveness, dialogue and relationship that exist between academics and students as well as in the appropriateness and methods used to achieve stated learning outcomes. In practice, this transfers to the knowledge, skills and attitudes and the ways in which these are used to facilitate the students' learning experiences. In South Africa, HEIs need to understand how students perceive their service offerings (Gbadamosi and de Jager 2009). As such, HEIs should constantly monitor service quality as it represents a salient tool for attracting and retaining students (Faganel 2010).

Against this background, it is important to investigate students' perceptions of HEIs service quality in South Africa and determine how students perceive their service offerings. The following section provides a theoretical framework, concentrating on defining service quality, the dimensions of service quality and the service quality models.

Theoretical Framework

Service Quality

Service quality is an attitude formed by consumers' long-term, intellectual assessment of an organisation's service delivery process

(Bateson and Hoffman 2011). Consumers measure service quality in terms of the service organisation either meeting or exceeding their service expectations and perceptions (Zeithaml et al. 1990; Nell and Cant 2014). Gronroos (2000) concurs stating that service quality is determined by the manner in which the consumer perceives it to be. Cronin and Taylor (1992) advise that "service quality should be conceptualised and measured as an attitude." Lovelock and Wright (1999) add that consumers use different dimensions to evaluate the quality of the service provided. For the purpose of this paper, service quality is viewed as an attitude that consumers develop by utilising various dimensions of service quality in order to determine whether a service organisation has or has not met their service expectations and perceptions.

Dimensions of Service Quality

Various researchers hold different perceptions on the dimensions of service quality. Gronroos (1998) states that perceived service quality has two underlying dimensions, namely functional and technical quality. Functional quality relates to the manner in which the service is delivered and technical quality involves what the consumer is actually receiving from the service.

Research by Zeithaml et al. (1990) identified five main dimensions of service quality, namely tangibles, reliability, responsiveness, assurance and empathy. Tangibles relate to the presentation of physical facilities, equipment, employees and the communication component, whereas reliability directs to the ability to deliver the promised service accurately and attentively. Responsiveness refers to the employees' eagerness to help consumers and to provide immediate service. Lastly, assurance refers to the employees' required knowledge and courteousness, and empathy relates to the ability in providing caring and individualised customer attention (Smith et al. 2007).

Oldfield and Baron (2000) suggest three important service quality dimensions, namely service processes, interpersonal factors and physical evidence. These three dimensions of service quality relate to those of Gronroos (1998) and Zeithaml et al. (1990). For example, functional quality relates to service processes, interpersonal factors and physical evidence in a non-technical manner.

Boshoff and du Plessis (2009) define service processes in terms of identifying all the com-

bined methods (procedures, programmes, devices, activities and operations) used to ensure the delivery of a service. Interpersonal factors relate to elements such as the appearance, behaviour and attitude displayed by both the employees and consumers of the service organisation, which can affect the service environment (Kurtz and Clow 1998). Physical evidence relates to the tangible objects and images confronted by consumers in the service delivery process (Lovelock and Wright 1999). Oldfield and Baron (2000) utilised these three core dimensions of service quality as a starting point in the development of a service quality model. These dimensions of service quality guided the development of service quality models.

Service Quality Models

Wilson et al. (2008) state that a valid measure of service quality is essential in guiding an organisation in determining which aspects of the service require performance improvements, the extent of improvement required on each aspect and assisting in evaluating the impact of each improvement. Selecting an appropriate measurement tool is important, as it will guide managers to assess the quality of offered services, thereby improving the value of the service delivery process (Brochado 2009). Given the complex nature of service quality, it is not surprising that there have been divergent views about the best way to conceptualise and measure it.

A review of the literature reveals that the most popular scales used to measure service quality are the SERVQUAL (Parasuraman et al. 1988), and to measure service performance, the SERVPERF (Cronin and Taylor 1992). However, additional dimensions that relate to higher education could be included in the higher education performance scale, the HEDPERF (Firdaus 2005).

The SERVQUAL model is a well-known instrument used by many researchers in the services marketing field measuring consumers' expectations and perceptions of service quality (Gronroos 2000; Boshoff and du Plessis 2009; Palmer 2009). The model consists of 22 expectation- and performance-based statements, used to depict the five dimensions of service quality (Zeithaml et al. 1990). The SERVQUAL methodology identifies five gaps where there may be shortfall between expectations and perceptions of actual service delivery (Palmer 2011). Despite

the wide use and popularity of the SERVQUAL model, its conceptual and operational dimensions have been criticised (Abdullah 2006a). In an attempt to re-examine and extend the SERVQUAL model measure of service quality, Cronin and Taylor (1992) developed the SERVPERF model.

SERVPERF is a variant from the SERVQUAL scale that is based on the perception component alone. Cronin and Taylor (1992) compared the 22 expectation- and performance-based items in the SERVQUAL model with the 22 items in the SERVPERF model, which only incorporates the performance-based section of the SERVQUAL model. The results of their study show that the contemporary conceptualisation and measurement of service quality is based on a defective paradigm and that the empirical and literature presentations of the SERVPERF model are a sufficient and valid method for measuring service quality, in comparison to the SERVQUAL model.

More recently, in a quest to develop an industry specific measuring instrument of service quality for the higher education sector, Abdullah (2006a), developed the Higher Education Performance-only (HEdPERF) measuring scale, measuring students' experiences on a range of service and academic components. Limitations that have been noted on the HEdPERF model include that there is no profound difference in the concept of service quality between HEIs and other service organisations (Kimani et al. 2011) and that the model measures service quality from a macro rather than a micro (faculties or schools within HEIs) perspective (Yildiz and Kara 2009). Therefore, the SERVPERF model was employed for the purpose of this paper.

The original SERVPERF model (Cronin and Taylor 1992) consisted of the five dimensions pertaining to the SERVQUAL model; however, Abdullah (2006a) advises that models measuring service quality should be adapted to meet context-specific requirements for particular service industries. In line with this way of thinking, Oldfield and Baron (2000) developed and validated the SERVPERF model, which comprises 24 variables relating to three distinctive service quality dimensions of service processes, interpersonal factors and physical evidence. These three dimensions include items essential to a consumer in the service delivery process (requisite), items that consumers view as desirable but not essential (acceptable) and items that relate

to the practical or serviceable environment in the service delivery process (functional).

Objectives

The primary objective of this paper was to provide a comparative view on undergraduate business and marketing management students' perceptions of service quality at a traditional university and a university of technology in South Africa, in order to gain an understanding of their learning experiences at these two institutions.

The paper addressed the following research question: Do students registered at the traditional university differ from those registered at the University of Technology concerning their perceptions of the service quality delivery from these two institutions?

METHODOLOGY

Sampling Method

The sampling frame comprised 23 registered South African public HEIs, as listed by the Higher Education in South Africa (Higher Education in South Africa 2009). From the sampling frame, a convenience sample of two HEIs - one traditional university and one University of Technology - located within the Gauteng Province (the demarcated area for the paper) of South Africa was selected. These two HEIs were deemed suitable as this paper focused on two sister institutions located within the same province and on two schools offering similar educational programmes. A non-probability convenience sample of 800 full-time undergraduate students registered at the two HEIs was drawn, allowing a sample size of 400 full-time undergraduate students per HEI. The sample was defined as full-time first- second- and third-year business and marketing management students registered at each of the HEIs.

Research Instrument and Data Collection

Oldfield and Baron's (2000) SERVPERF measuring scale was adapted in order to collect information pertaining to the students' perceptions of service quality. The self-administered structured questionnaire consisted of two sections, whereby Section A included demographic ques-

tions and Section B included the 24 items pertaining to the adapted SERVPERF scale. The responses to these variables were measured on a five-point Likert scale ranging from 1= Strongly disagree to 5= Strongly agree. The questionnaire included a cover letter describing the nature and purpose of the paper and requesting participation.

In order to assess content validity, two experienced marketing academics examined the questionnaire. Thereafter, the debriefing approach to pre-testing was administered on three respondents representative of the target population to ensure understanding. From this pre-testing, an identified double-barrelled question (staff do not always show a willingness to help students) was split into two separate questions (one pertaining to academic staff's willingness and one pertaining to administrative staff's willingness). Therefore, the final research instrument included 25 variables.

The questionnaire was then pilot tested on a non-probability judgement sample of 37 full-time students that did not form part of the final study and returned an acceptable Cronbach alpha value of 0.923. After soliciting permission telephonically, the questionnaires were hand-delivered to participants and the completed questionnaires then subsequently collected.

RESULTS

Sample Characteristics

From the sample of 800 participants, 651 complete questionnaires were received, which translates into a response rate of 81 percent. Thus, the final sample for this paper consisted of 288 students from a traditional university and 363 students from a university of technology. Table 1 provides a description of the two samples.

Table 1: Description of samples

		<i>Traditional university</i>	<i>University of technology</i>
Sample size (N)		288	363
		<i>Percentage (%)</i>	<i>Percentage (%)</i>
<i>Year of Study</i>	1 st Year	32.3	30.6
	2 nd Year	39.6	36.4
	3 rd Year	27.1	32.5
<i>Gender</i>	Male	39.1	39.1
	Female	59.4	60.3

Confirmatory factor analysis, using principle component analysis varimax rotation, was conducted on the data sets to determine whether the 25 variables used within the scale produced the three proposed constructs. In accordance with the study conducted by Oldfield and Baron (2000), three constructs emerged with eigenvalues greater than 1.0. The requisite construct, pertaining to items which are essential to enable students to fulfil their study obligations (15 items, $\alpha = 0.893$), acceptable construct, pertaining to items which are desirable but not essential during students course of study (seven items, $\alpha = 0.879$) and functional construct, pertaining to items of a practical or utilitarian nature (three items, $\alpha = 0.688$). Although the majority of the items did load as intended, not all loaded on the intended constructs as indicated by Oldfield and Baron (2000). The three-construct model explained 51.074 percent of the total variance, which can be used to indicate that this is an acceptable model.

The Cronbach alpha was 0.937 for the entire scale, and 0.932 and 0.915 for the two sample groups respectively, which all surpassed the recommended level of 0.70 (Pallant 2007). For the entire sample, the mean score ratings of the three constructs can be placed in order from the highest to the lowest. Construct 1 (requisite variables) indicates the highest mean rating of 3.28, followed by Construct 3 (functional variables) with a mean rating of 3.24 and followed by Construct 2 (acceptable variables), which indicates the lowest mean rating of 3.19. Therefore, it may be inferred that the participants consider the requisite variables (Construct 1) as the most important contributor to service quality, followed by functional variables and then acceptable variables. The standard deviation values computed returned values below 1.00, and therefore the arithmetic mean was viewed as providing a suitably satisfactory indication of the responses. The largest standard deviation obtained was 0.947 for Construct 3 (functional variables). The standard deviation obtained for all of the constructs was below 1.00, indicating that the samples were relatively homogenous and thus the mean gave a satisfactory indication of the responses.

In order to determine whether the returned means are significant, a z-test was performed for the traditional university and the University of Technology, with the expected mean set at mean

> 3 and the significance level at the conventional 0.05 level. The calculated z-values and related p-values for the traditional university is presented in Table 2 and the university of technology in Table 3.

As indicated in Table 2, P-values of $p < 0.05$ were recorded for all three constructs signalling each to be statistically significant. This suggests that students at the traditional university have a significantly positive perception towards the quality of service delivery at the institution at which they are registered.

In contrast to the traditional university, the University of Technology returned P-values greater than $p < 0.05$, indicating that each construct is not statistically significant. Therefore, students at the University of Technology do not have a significantly positive perception towards the quality of service delivery at the institution at which they are registered.

In order to determine whether a significant difference exists between perceptions of quality

at the traditional university and the University of Technology, a two independent sample t-test was performed, where the significance level was again set at the conventional level of $p < 0.05$. The results are presented in Table 4.

The three constructs each returned P-values of 0.000, which were below the recommended level of $p < 0.05$. Therefore, at a 95 percent confidence interval, it may be inferred that there is a significant statistical difference between the participants of the two sample groups' perceptions of service quality, with the participants from the university of technology perception being statistically and practically lower. This suggests that, across the three constructs measured, the undergraduate students' perception of service quality delivered by each school differ between the responses obtained in the two sample groups.

Cohen's D calculations were conducted to assess whether there were any practically significant differences found on the three con-

Table 2: Descriptive statistics of the traditional university

<i>Construct</i>	<i>Valid N</i>	<i>Mean</i>	<i>Std. error</i>	<i>Z-values</i>	<i>P-values</i>	<i>Cohen's D</i>
Requisite	288	3.627	0.034	18.415	0.000*	1.085#
Acceptable	288	3.522	0.040	13.055	0.000*	0.769#
Functional	288	3.710	0.045	16.004	0.000*	0.943#

* Statistically significant at $p < 0.05$ # Large effect, practically significant

** Small effect, practically non-significant

*** Medium effect and moving towards practical significance

Table 3: Descriptive statistics of the University of Technology

<i>Construct</i>	<i>Valid N</i>	<i>Mean</i>	<i>Std. error</i>	<i>Z-values</i>	<i>P-values</i>	<i>Cohen's D</i>
Requisite	363	3.005	0.034	0.151	0.440	1.690#
Acceptable	363	2.924	0.040	-1.905	0.971	1.002#
Functional	363	2.870	0.048	-2.731	0.997	0.405**

* Statistically significant at $p < 0.05$ # Large effect, practically significant

** Small effect, practically non-significant

*** Medium effect and moving towards practical significance

Table 4: Independent sample t-test

<i>Construct</i>	<i>Traditional university Mean (n=288)</i>	<i>University of technology Mean (n=363)</i>	<i>Z-values</i>	<i>P-values</i>	<i>Cohen's D</i>
Requisite	3.627	3.005	10.41416	0.000*	0.97#
Acceptable	3.522	2.924	6.110527	0.000*	0.78#
Functional	3.710	2.870	6.466239	0.000*	0.92#

* Statistically significant at $p < 0.05$ # Large effect, practically significant

** Small effect, practically non-significant

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structs, between the two sample group's perceptions pertaining to the two HEIs. The requisite variable (Construct 1) returned the largest effect size, with a value of 0.97. As presented by Table 4, all three constructs returned large effect sizes, which were practically significant.

To provide a comparative view on students' perceptions of service quality, mean scores on the 25 items in the scale were computed for the subsets of students from a traditional university ($n = 288$) and students from a university of technology ($n = 363$) on the business and marketing management courses. The students at each of the two institutions, frequent the same building, classrooms, and use the same library, IT, and catering facilities. They encounter the same administrative and support staff, and some of the same academic staff. The results are presented in Table 5.

It is noticeable that the mean scores for the university of technology students were lower than those of the traditional university students. The largest difference is between the items the

students of these two groups perceived as unsatisfactory, in relation to the mean scores they rated the lowest. The traditional university students perceived "responding to a request for assistance" and "sincere interest in solving problems" the lowest and therefore, the largely unsatisfactory. In disagreement, the university of technology students viewed the items "providing service within promised time" and "promises kept" to be the most unsatisfactory. The greatest similarity identified between these two groups is represented within the items the students rated the highest, namely "staff's professional appearance/image" and "knowledgeable service provision".

Pearson's correlation coefficient was computed to determine whether there was a positive or negative relationship between the constructs. Table 6 outline the correlations for the entire sample.

Table 6 shows significant positive correlations between all three of the constructs. The relationship is an indication that the constructs

Table 5: Description of mean scores of the different sample groups

Variables	Traditional university($n=288$)		University of technology($n=363$)	
	Mean	Std. deviation	Mean	Std. deviation
<i>Construct 1: Requisite</i>				
Sincere interest in solving problems	3.31	0.976	2.79	1.131
Knowledge of needs	3.56	0.912	3.00	1.063
On-time service provision	3.41	0.944	2.52	1.116
Efficient/punctual dealing with queries	3.48	0.899	2.83	0.992
Responding to request for assistance	3.11	1.09	2.66	1.117
Accurate and retrievable records	3.76	0.879	3.40	1.111
Timely dealing with assistance	3.51	0.922	3.13	0.973
Knowledgeable in service provision	4.02	0.824	3.63	1.041
Promises kept	3.53	0.925	2.43	1.194
Considerate attention	3.42	0.992	2.76	1.022
Appealing physical facilities	3.83	1.069	2.63	1.249
Feeling secured with transactions	3.89	0.852	3.38	1.069
Feeling confident in staff	3.68	0.938	3.00	1.143
Staff's professional appearance/image	4.06	0.826	3.57	1.099
Attractive materials associated with service delivery	3.82	0.928	3.34	1.210
<i>Construct 2: Acceptable</i>				
Responding to request for assistance	3.38	0.907	2.81	1.011
Giving individualised attention	3.65	0.984	2.95	1.156
Sincere interest in solving problems	3.52	0.855	3.05	1.031
Providing services within a reasonable time	3.52	0.847	2.69	1.093
Equal treatment and respect	3.34	0.902	2.79	0.896
Academic staff willingness to help	3.70	0.832	3.12	1.120
Administrative staff willingness to help	3.54	0.894	3.07	1.073
<i>Construct 3: Functional</i>				
Convenient opening hours	3.77	1.038	3.45	1.137
Up-to-date equipment	3.74	0.961	2.68	1.312
Providing service within promised time	3.63	0.905	2.48	1.208

Table 6: Construct correlations – whole sample

	<i>C1</i>	<i>C2</i>	<i>C3</i>
Construct 1	1.00	0.79*	0.69*
Construct 2		1.00	0.63*
Construct 3			1.00

*Marked correlation significant at > 0.5

are closely linked to one another, implicating that a change in one construct will automatically imply a change for the other constructs. As such, an increase in one construct will cause an increase in the other constructs. The largest relationship strength calculated in this paper is between the requisite variables (Construct 1) and the acceptable variables (Construct 2), indicating a correlation value of 0.792. This indicates that there is a potentially strong relationship between these two constructs and, therefore, equal attention is required to these constructs in both of the sample groups.

DISCUSSION

This paper sought to examine students' perceptions of the level of service quality delivered at a traditional university and a university of technology. The students of the traditional university were in agreement with the level of service quality delivered for all three constructs. In comparison, the students from the University of Technology were in agreement with the level of service quality delivered for the requisite construct and in disagreement with the level of service quality delivered for the acceptable and functional constructs. In order to provide a satisfactory level of service quality to students, the University of Technology would need to uplift the level of service quality delivered for the acceptable and functional constructs and the traditional university should focus on sustaining the level of service quality delivered for all three constructs.

Similarly, the findings of this paper support the results of previous studies in other countries, which compared student's perceptions of service quality offered by two or more various types of universities (Al-Alak 2009; Gudlaugsson 2009; Ibrahim et al. 2012). The results of these studies indicated that students perceptions and satisfaction levels of service quality delivered by their respective university differs from those of other universities, when compared.

Furthermore, the findings of this paper contradict previous studies (Pariseau and McDaniel 1996; Kimani et al. 2011). The results of these studies did not identify a difference in students' perceptions of service quality delivered by two or more universities.

Universities of technology are seen as a sector better placed than traditional universities, to respond to employers demands through making students more skilled, competent and employable by providing constant upgrading through short courses, liaising with employers thereby ensuring that graduates remain relevant (CHE 2010). The concept of universities of technology and Further Education and Training (FET) colleges were created to address issues such as skills shortage and demand for higher education (CHE 2000).

For this reason, it is imperative that universities of technology focus attention on delivering quality service in order to attract students (Dlaëia et al. 2014) and thereby contribute to the economy.

CONCLUSION

Owing to an influx of pressure created by an increase in competition, HEIs need to find ways in order to stay abreast of attracting and retaining students and in generating student intakes, positive word-of-mouth communications, consumer loyalty and service differentiation. Providing a quality service is a means to combat the challenges currently facing HEIs, in creating a local and global competitive advantage. However, HEIs should continuously measure their own levels of service quality in order to identify any defections in the level of service quality delivered.

RECOMMENDATIONS AND IMPLICATIONS FOR PRACTICE

In order to provide superior service quality, HEIs could concentrate on allocating their resources on all three constructs. However, the relationship between these three constructs implies that an increase in one construct may have a general effect on increasing the student's perceptions on the other two constructs. For example, if the HEIs were to improve the quality of services offered within the acceptable variables (Construct 2), the students' perceptions on the

level of service quality delivered for requisite variables (Construct 1) and functional variables (Construct 3) would similarly increase, thus generating an improvement of the students' perceptions for all three constructs.

Requisite variables (Construct 1) are essential to the service provision process and relate to both the administrative and academic staff members. In order to improve service quality on this construct, it is essential that academic and non-academic staff members work together to ensure appropriate quality of service for students through increasing co-ordination, sharing information and ideas, keep to promises made, and delivers services within a timely manner.

Variables from the acceptable construct (Construct 2) are solely the responsibility of academic staff members. Students' perceptions of service quality on this construct will be improved if academic staff have wide subject knowledge, are available to students out of class time and listen to students' needs. HEIs should effectively communicate when staff is available for consultation or an appointment system should be in place.

Functional variables (Construct 3) are of a practical nature and rely mainly on faculty or university rules and decisions. Student concerns relating to the variables within this construct will be expressed to academic staff members even though they are not responsible for the decisions made. However, they need to report these issues to higher decision-makers. HEIs should ensure that opening hours and general facilities (library, administrative departments, infrastructure, equipment and computer laboratories) are adequate and meet students' perceptions.

The implementation approach, based on students' perceptions of service quality, may be recommended at micro, intermediate and macro levels. At the micro level, academic staff members should proactively provide the services in line with students' perceptions. Communication is important, as students should be able to communicate their perceptions and any complaints to either the academic staff members or higher authorities. This can be done by performing regular student feedback surveys, or creating a complaints box whereby students can anonymously report on any issues. Higher authorities need to inform academic staff members of any issues students report on by creating channels of com-

munication through informal discussion groups or formal meetings.

At the intermediate level, it is recommended that operational and strategic managers ensure academic programme design, syllabus formulation and content design, meet the service quality standards of the HEI industry. Academic staff members should regularly attend skills development training (workshops or advanced training sessions), study material should be relevant, and effective resources are utilised to measure the level of service quality offered to the students. Managers can conduct random performance evaluations on academic staff members, which may include impromptu class check-ups and surveys. Performance bonuses, opportunities for competitions amongst academic staff members, rewards systems for high service quality delivery and events that allow collaboration between staff members should be utilised to motivate academic staff members to deliver superior service quality.

At the macro level, service quality should be incorporated into the HEIs' service processes, vision, mission, institutional plan, campus and faculty plans, performance agreements and performance evaluations. For example, HEIs should evaluate potential staff members before they are formally appointed by conducting psychometric testing on the prospective candidates or scheduling an interview whereby the candidate needs to present a lecture. Standards can be developed on the levels of qualifications current or potential staff members have by motivating staff members to further their qualifications through offering attractive study benefits or only accepting potential staff members with higher qualification levels. Policy formulation and strategy development should direct towards transcending short-term realities and interests to invest in service quality, thereby allowing institutions to create a sufficient understanding of students' perceptions, comprehensively market themselves and communicate service quality to potential consumers.

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