

The Service Quality - Customer Satisfaction Nexus: A Study of Employees and Students Perceptions in Kenyan Private Universities

Eric E. Mang'anyi
Krishna K. Govender

Abstract

The Higher Education Performance (HEdPERF) instrument was adapted to measure service quality (SQ) in private Kenyan higher education institutions (HEIs). Exploratory factor analysis was used to determine the scale's validity, and path analysis examined the model linking the SQ and customer satisfaction (CS) constructs. It was ascertained that with respect to Kenyan private higher education, SQ is an antecedent of customer satisfaction (CS) in that it directly influences CS. Given that employees and students of selected private universities were surveyed, the results provide an opportunity for HE managers to develop strategic SQ delivery deliverables for their universities. HEdPERF was also found to be a valid measurement tool that could be used for measuring service delivery in the private higher education sector in Kenya.

Keywords: Private Higher Education, Service Quality, Customer Satisfaction, Higher Education Performance.

Introduction

With the increasing number of students qualifying for higher education, and the mushrooming of universities (especially privates) in Kenya, the question of service quality management in the institutions of higher learning (IHL) becomes very fundamental (Ngome 2010). Hogg and Hogg (1995) argue that university customers have different experiences as service consumers, in that they want quality, and their expectations for better service performance is increasing, thus the need for increased customer satisfaction (Dohert 1994). For many years, higher education provision has been considered a service calling requiring its providers to adopt a customer-focused approach (Angell, Heffernan & Megicks 2008).

Furthermore, Vaill (2008) asserts that education is a service and not a product therefore providers have to be mindful and responsive to the characteristics, needs and expectations of its customers, specifically the student by adopting a student-customer approach.

Some stakeholders in higher education (Quinn, Lema, Larsen & Johnson 2009) have argued that the measurement of service quality and customer satisfaction in educational institutions is a challenging task. This is because over the years, issues concerning the quality of service have taken on new dimensions and received varied treatment. The increasing pressure towards service quality and the desire to achieve business excellence and high performance to become a world-class organization drives the adoption of service improvement initiatives (Kimani 2011). This mindset has urged organizations to continuously improve their services and adopt new ways to deliver the same services, which has become a common practice especially in fast-developing countries such as Kenya.

Oswald (2009:1) cites Bounds, Lyle, Mel and Gipsie (1994), who assert that over three decades, organizations throughout the developed world have been aggressively pursuing quality management.

This has been attributed to a commonly held view that high quality products and services result in improved organizational performance.

Educational establishments have adopted various ways of addressing quality issues, for example total quality management (TQM) in order to meet stakeholders' expectations and needs efficiently, without compromising the underlying moral principles (Ngome 2011). The need for continuous quality improvement especially in universities means that Kenya is not an exception in pursuing service quality in HE. TQM also implies that quality should not only be perceived from a student-customer perspective, since staff is also recipients of services as the 'internal' customers of the HEIs.

In light of the above, this paper examines the relationship between certain service quality attributes/dimensions and the overall services quality (SQ), as well as the relationship between SQ and satisfaction (CS) from both the HE students' and employees' perspectives.

Service Quality and Customer Satisfaction

The debate on the association between service quality and customer satisfaction is on-going, and these two constructs have sometimes been used

interchangeably, albeit incorrectly. Perez, Juan, Gemaand, and Raquel (2007) argued that the growth in the importance of service quality has been greatly influenced by the customers' changing needs, preferences and tastes, and more so, the changing nature of global markets. As a significant factor, service quality has enabled firms to achieve a differential advantage over competitors (Perez *et al.* 2007) and service quality is viewed as a critical construct of competitiveness (Shahinand & Samea 2010). Seth, Deshmukh and Vrat (2005) posit that SQ is a function of the differences between expectation and performance along the quality dimensions. According to Hung *et al.* (2003), although providing service quality excellence and superior customer satisfaction is vital, it still remains a challenge facing the service industry. Regardless of the sector (public or private), SQ remains an important subject for consideration among leaders, managers and researchers (Zahari, Yusoff & Ismail 2008).

Some researchers (Seilier 2004; Zahari *et al.* 2008) define service quality as the extent to which a service meets or exceeds customer needs and expectations, and others (Khodayari & Khodayari 2011) argue that perceived service quality reflects the difference between consumer expectations and perceptions.

Through an investigation of the five dimensions of SERVQUAL (Parasuraman, Ziethaml & Berry 1988), Ham and Hayduk (2003) found that a positive relationship existed between satisfaction and each of the SERVQUAL dimensions, with the Reliability dimension having the strongest relationship, followed by Responsiveness, Empathy, Assurance and Tangibility. By assessing the importance of CS, SQ and service performance of a library in Taiwan, Wang and Shieh (2006) found that the overall, service quality has a significantly positive effect on satisfaction. Some researchers such as Hasan and Ilias (2008) explained that Empathy and Assurance are critical factors that contribute most to students' satisfaction. However, Hishamuddin and Azleen (2008) argued that all the service quality attributes were significantly related with satisfaction and highly correlated with one another as well. Leading sources of information on students' expectations of universities include past experiences, advertising, and word of mouth (Prugsamatz, Pentecost & Ofstad 2006). The aforementioned researchers suggested that by explicitly and implicitly making service promises, the desired and predicted expectations of the uni-

versity's service quality become higher.

From the above, it may be deduced that customer satisfaction is directly or indirectly a central issue for universities and the university management. Therefore, satisfaction with the quality of service provided by the university becomes vital, and this requires the university to focus on both internal and external customers.

Several researchers have alluded to the importance of service quality and customer satisfaction (Cronin & Brady 2001; Perez *et al.* 2007; Maddern, Roger & Andi 2007; Kara, Lonial, Tarim & Zaim 2005), and organizational competitiveness (Rust, Danaher & Sajeev 2000). Being a major area of attention for practitioners, managers and researchers, SQ has had a strong impact on business performance, costs, customer satisfaction, allegiance, return on investment, and profitability (Seth & Deshmukh 2005; Chang, Wang & Yang 2009; Yee, Yeung & Cheng, 2010; Siddiqi 2011).

The rapid development of and competition for service in both developing and developed realms has made it important for organizations to measure and evaluate the quality of service encounters (Brown & Bitner 2007). Furthermore, several aspects of service quality have cumulative outcomes on its perception, thus they complement each other and therefore cannot be treated in isolation. Therefore, by focusing on SQ, organizations may risk their competitiveness, since satisfaction and competitiveness are inter-related (Hishamuddin & Azleen, 2008).

Hishamuddin and Azleen (2008) affirm that service quality is a widely accepted antecedent of satisfaction, and their view has been supported by several other researchers, inter-alia, Jamal and Naser (2002), Hensley and Sulek (2007), and Herington and Weaven (2007).

Several researchers have differing opinions on the issue of service quality and its determining factors (Siddiqi 2011; Yee *et al.* 2010; Hasan & Ilias 2008; Hishamuddin & Azleen 2008), and have alluded to a relationship between service quality, customer satisfaction and to an extent institutional excellence.

Employees as Customers

While HE possesses the traditional characteristics of a service offering, the unique characteristics are notable which differentiate it from any other retail service. One such characteristic is the conflicting views on the customer,

since various stakeholders inter alia employees, students, parents, sponsors, and the government utilize the services of HE (Quinn *et al.* 2009). Although students are possibly the first and most obvious customers because they pay for the education service (sometimes), or if the cost of education is met by their parents or guardians, these individuals act as a point of contact for some service interactions with the HEI.

Similarly, employees (academic and administrative), exercise control in the design of some of the services, and therefore also make use of a number of the HEI's services (Quinn *et al.* 2009:141). Whereas residence halls exclusively serve student-customers' accommodation needs, administrative areas in a university have explicit internal and external customers.

For example, a research function or office serves internal staff and graduate students as well as government agencies and research sponsors (Quinn *et al.* 2009). The involvement of different stakeholders within the HE environment makes the measurement of HE services complicated compared to retail services, including how each stakeholder perceives the indicators of service which may also be conflicting (Becket & Brookes 2006; Quinn *et al.* 2009).

In light of the above, it is important to examine employees' (internal customers of HE) and students' (external customers), perceptions of service quality and service satisfaction. The perceived experiences of the employees are important since, it may provide more objective and practical information for assessing service quality and customer satisfaction in the HE context. Thus, this paper reports exploratory research conducted among a sample of employees (administrative and academics), and students (undergraduates and postgraduates) at select Kenyan private universities, to determine their perceptions of the quality of services delivered, and whether this perception determines their satisfaction with the service.

The HEdPERF Model

The management of quality issues has been the focus of many managers within the education service industry. By referring to the work of Hill (1995), DeJager and Gbadamosi (2010: 253), argue that in an education setting, service provision and customer satisfaction rely on the interface between students and staff. Through this contact and its labour intensive nature, this service translates into a potentially highly heterogeneous service

quality experience.

Within the services marketing literature, debates revolve around the use of the 'gap' measures, and great interest seems to be on the service-quality-service performance (SERVPERF) relationship (Cronin & Taylor 1994). For example, by citing Babakus and Mangold (1992), Cronin and Taylor (1994: 126) recognized in equal measure, strong support for the use of performance-based evaluations.

Although there has been wide-ranging use of the SERVQUAL tool in the measurement of service quality in higher education (Rajasekhar, Muninarayanappa & Reddy 2009; Sunanto, Taufiquarrahman & Pangemanan 2007; Shekarchizadeh, Rasli & Hon-Tat 2011), its use in this study was avoided for inter-alia, reasons that follow.

For instance, Aldridge and Rowley (1998) argue that SERVQUAL application in HE has had its fair share of criticisms, which include the need to ask the same questions twice, and the fact that the instrument captures a snapshot of perceptions at one point in time. Furthermore, Buttle (1996) argues that the model lacks complete applicability since its five dimensions are not universal. However, with careful modification, the SERVQUAL instrument could lead to its successful use since it has been employed in HE (Hair 2006: 11).

Due to inter-alia, the limitations of using SERVQUAL in the HE environment alluded to above, and bearing in mind that service quality is a construct that fits a specific context (Roostika, 2009), the HEdPERF tool developed by Firdaus (2005) was used. Modified to a six-factor structure with 41 items (Firdaus 2006), the HEdPERF instrument has clear distinct dimensions, namely, academic aspects, reputation, non-academic aspects, access, program issues and understanding characterized within HE.

Several researchers (Ham & Hayduk 2003; Firdaus 2006; Wang & Shieh 2006; Calvo-Porall *et al.* 2013; Govender & Ramroop 2013;) applied various instruments to measure the impact of SQ on customer satisfaction within HE. However, the aforementioned studies have solely focused on students' perception of quality, and little attention was paid to the perspectives of both the students and employees (academic and administration) or on other non-academic aspects of the educational experience.

Research Questions and Hypotheses

The main purpose of this research is to explore the relationship between service quality (SQ) and customer satisfaction (CS) among employees and students in Kenyan private universities. The study endeavoured to recognize the dimensions of university service quality, assess dimensions/attributes of quality that contribute to customer satisfaction, and determine the association between SQ and CS. In order to address the aforementioned, two research questions were formulated:

- **RQ1:** What are the service quality dimensions that impact on the employees and students perceived SQ?
- **RQ2:** Is there a difference in the satisfaction of employees and students in HE?

In relation to the above-mentioned research questions the following hypotheses have been formulated:

- **H1:** The HEdPERF service equality dimensions (academic aspects, non-academic aspects, programme aspects, reputation, access and understanding) form the perceived service quality construct, and these dimensions have a significant positive relationship with the overall service quality.
- **H2:** There is no significant difference in the satisfaction between the students and employees as university customers.

Methodology

A cross-sectional survey was conducted among a sample of 600 students and 250 employees from four private universities in Kenya. Using stratified random sampling based on the type of private university (faith-oriented and commercial), employees in the academic and administrative departments and

students (both undergraduate and postgraduate), were selected to participate in the study. Of the total 655 valid cases, 133 were full-time employees and 522 were fully registered students in the selected private universities. Participation in the study was voluntary and the participants were required to complete a pre-designed questionnaire.

Each of the items in the structured instrument was anchored on a 7-point Likert scale, and respondents were required to indicate their agreement with the each item, ranging from 1 absolutely disagree to 7 absolutely agree. The first part of the questionnaire addressed attributes of service quality contributing to customer satisfaction in private universities, and the second part included statements pertaining to customer satisfaction and overall evaluation of satisfaction. The same (although with slight modification in wording where necessary) questionnaires were administered to both samples. The data was collected over a four-month period extending from late September 2013 to January 2014.

To measure perceived SQ in HE, the 41-item HEdPERF scale developed by Firdaus (2006) was adapted to suit the Kenyan context. Perceived SQ is captured in six dimensions/attributes namely: non-academic, academic, reputation, access, programme issues and understanding.

The data was subject to Exploratory Factor Analysis (EFA) and structural equation models (SEM) using SPSS (AMOS), since SEM allows for identification of the influence of each of the HEdPERF dimensions on perceived SQ in HE (Schumacker & Lomax 2004). Levene's t-test was also performed to compare the employee and customer samples in the study.

Results

Reliability of the Research Instruments

The internal consistency of the two questionnaires was determined through calculating the Cronbach alpha (α) coefficients using Stepwise Reliability Analysis, whereby internally inconsistent items were sequentially deleted, therefore maximizing the scales' reliability (Sekaran & Bougie 2010: 325). Table 1 reflects that the Cronbach coefficient alphas were acceptable (exceeding 0.7), as suggested Hair *et al.* (2006; 2010), implying that the measurement instruments were fairly reliable.

Instrument	Student-Employee Instrument	
	Final No. of Items	Final Cronbach Alpha Coefficients
Non-academic Aspects	22	0.875
Academic Aspects	14	0.854
Reputation	10	0.886
Access	10	0.911
Programmes	4	0.750
Understanding	3	0.832
Overall Satisfaction	7	0.887

Table 1: Instrument Reliability

Validity of the Instruments

To address the issues of dimensionality, construct and discriminant validity, Exploratory Factor Analyses (EFA) was conducted using Principal Component Analysis (PCA) with oblique rotation, to summarize the factor loadings (Browne 2001), which resulted in items with factor loadings below 0.4 being deleted (Hair *et al.* 2006).

As illustrated in Table 2, the validity measures of the employee-student instrument reveal that discriminant validity was achieved since none of the correlation coefficients of the factor loadings was equal to or more than 0.9 (Browne, 2001).

Furthermore, from the rotated factor loadings presented in Table 2, it is evident that the data for the combined sample loaded on three factors which were labelled as follows: Factor 1 - Service Satisfaction, Factor 2 - Health Service Quality and Factor 3 - Programme Quality. Since all factor loadings exceeded 0.4 this implies that the combined instruments had internal consistency, and that they were considered ideal measures of reliability (Hair *et al.* 2006).

	Satisfaction Factor 1	Health Service Quality Factor 2	Programme Quality Factor 3
NOACD1	.755	.335	.160
NOACD2	.659	.450	.138

NOACD3	.435	.149	-.019
NOACD4	.514	.064	.111
ACD1	.751	.054	.224
ACD2	.726	.047	.336
REP1	.499	.539	.248
REP2	.539	.506	.454
ACC1	.530	.528	.403
ACC2	.448	.578	.304
PRG1	.188	.328	.751
PRG2	.260	.345	.717
PRG3	.205	.199	.793
PRG4	.012	.091	.650
UND1	.137	.741	.401
UND2	.116	.764	.306
UND3	.246	.783	.106
OvrQual	.374	.221	-.015

Table 2: Rotated Factor Matrix for Combined Student-Employee Measurement Instruments

**Note: NOACD = non-academic, ACD = academic, REP = reputation, ACC = access, PRG = programme, UND = understanding, OvrQual = overall quality

Structural Equation Modelling Results

From the AMOS output reflected in Table 3, it is clear that the model fitted the data well, and therefore the proposed model was adequate in explaining the relationship among the variables. The resulting maximum likelihood estimates are indicated in Figure 1.

Result (Default model)					
Minimum was achieved					
Chi-square = 29.977					
Degrees of freedom = 33					
Probability level = .618					
Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	33	29.977	33	.618	.908
Saturated model	66	.000	0		
Independence model	11	3484.801	55	.000	63.360
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.991	.986	1.001	1.001	1.000
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
RMSEA					
Model	RMSEA	LO 90	HI 90	PCLOSE	
Default model	.000	.000	.025	1.000	
Independence model	.310	.301	.318	.000	

Table 3: Model Fit Indices for the Combined Employee-Student Measures

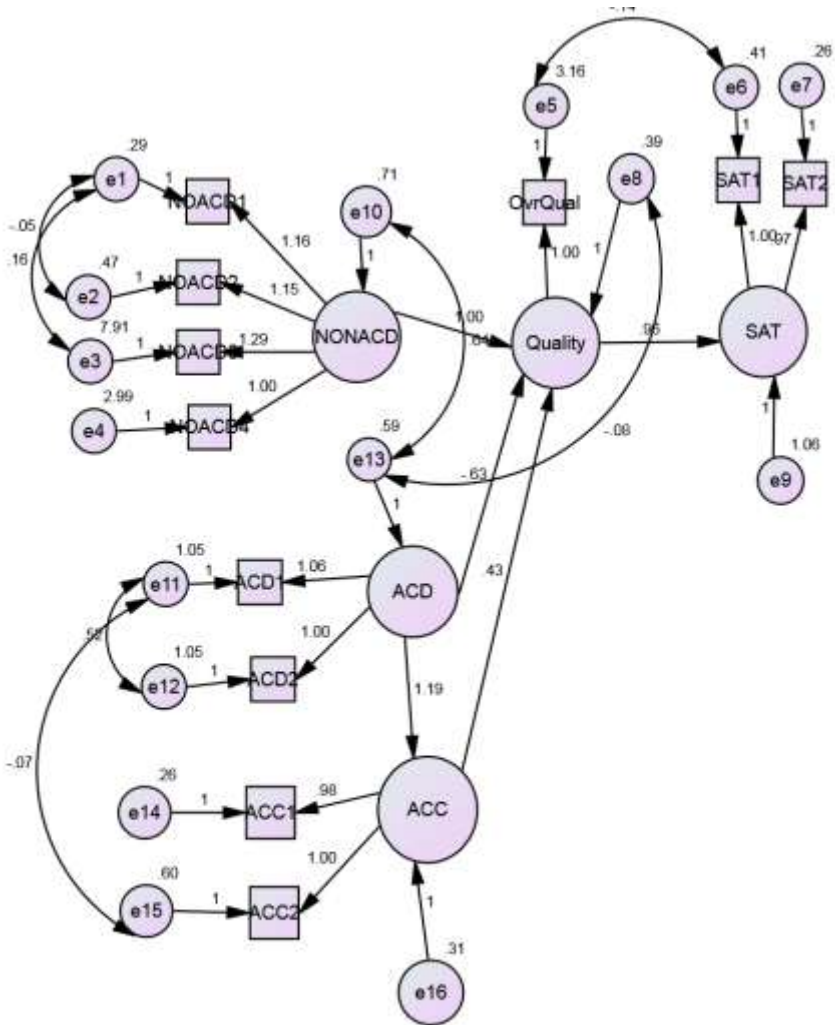


Figure 1: Structural Model for Employee-Student-Service Quality

The estimates also confirm a good fit of the data, since the chi-square value is 29.997 (Hair *et al.* 2006). The RMSEA value yielded an exact/good fit at 0.00, and the CMIN/DF was 0.908, further supporting the goodness-of-fit. The p-value (with a level of significance of 0.05) was greater than 0.05 (0.618), hence the model was declared adequate (Schumacker & Lomax 2004; Hair *et al.* 2006). Furthermore, the incremental fit measures of the two constructs, namely, university service quality and customer satisfaction and, the resultant structural models from the combined data showed a proper fit considering that the Comparative Fit Index (CFI), Relative Fit Index (RFI), Incremental Fit Index (IFI) and Tucker-Lewis Index (TLI) had values greater than 0.90 (Schumacker & Lomax 2004; Hair *et al.* 2010).

After evaluating the model in relation to the merged employee-student data, the goodness of fit results and corresponding findings of EFA, the researchers carried out an analysis on the weighting and influence of the HEDPERF service quality dimensions on perceived SQ from merged employee-student standpoint. The findings reflected in Table 4 show that, only two dimensions have a positive and significant influence on higher education perceived service quality and no empirical evidence emerged to support a positive significant influence of some HEDPERF dimensions such as reputation, understanding, and programme.

Besides, the p-value for the path co-efficient from the academic activity to the quality of service is insignificant ($\beta = -.630$; $CR = -2.383$; $p > 0.0001$), indicating that academic activities do not positively affect service quality. These results therefore imply that the hypothesised relationship between the academic dimension and perceived service quality is not supported in Kenya's private higher education industry.

Dimensions and Relationships	Estimate	SE	t-value	p-value	Outcome
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Quality	←	Academic	-.630	.264	-2.383	.017	Not Supported
Quality	←	Non-academic	1.000	Fixed	Fixed	-	Supported
Quality	←	Access	.435	.196	2.213	.027*	Supported
Satisfaction	←	Employee-student quality	.959	.117	8.194	***	Supported

Table 4: Summary of Significant Relationships between SQ and CS of the Employee-Student Model

*** Significant Regression Coefficient $p < 0.0001$;

* Significant Regression Coefficient at $p < 0.05$

On the other hand, the p-values for the path coefficients from non-academic activities (1, fixed path) and access ($\beta = 0.435$; t-value = 2.213) to service quality, were positive and significant ($p < 0.05$), which confirms that the non-academic aspects and access positively influence service quality in the private higher education industry.

Therefore, the hypothesis that non-academic and access dimensions will significantly and positively influence perceived service quality is supported (Firdaus 2006; Owlia & Aspinwal 1996; Leblanc & Nguyen 1997; Soutar & McNeil 1996). It can be stated that support provided through administrative duties will enable employees to fulfill their work obligations, thus enabling students' to fulfill their study obligations as well. Moreover, this implies that the more attention the academic institution places on issues such as approachability, ease of contact, availability of both academic and

administrative staff and convenience, the higher the perceived SQ from the employees' and students' standpoint. These findings are consistent with Firdaus (2006) who observed that students perceive access as an important element in determining service quality in HE environments. The p-value for the path coefficient from employee-student quality to satisfaction is positive ($\beta = 0.959$; t-value = 8.194) and significant ($p < 0.0001$), which indicates that service quality positively affects employee and student satisfaction levels in private higher education in Kenya.

This is supported by previous research (Lassar, Manolis & Winsor 2000) where the overall service quality influences satisfaction. Thus, the hypothesis that SQ impacts customer satisfaction (CS) is fully supported. Finally, by considering the effect sizes, it may be concluded that the 'non-academic' dimension has a greater impact on perceived SQ in private higher education. Thus, it is concluded that the 'non-academic' dimension of HEDPERF is the most relevant dimension in explaining perceived service quality, followed by access with a relatively lower influence on perceived service quality (Figure 2).

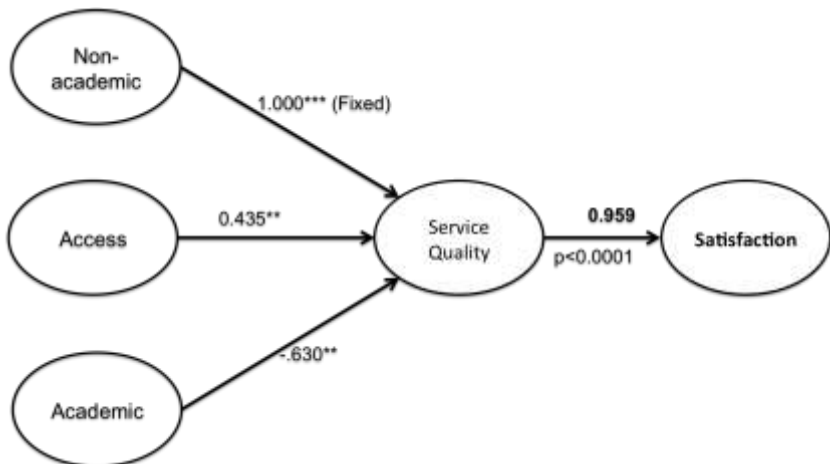


Figure 2: Employee-Student Model for Perceived SQ and CS Outcomes
** Means Significant at $p < 0.05$; *** means significant at $p < 0.0001$

Comparison of Satisfaction between Employees and Students

To test the null hypothesis, which implied that there is no significant difference in satisfaction between the students and employees (as university customers), a new variable score called satisfaction was computed by summing the facets of satisfaction. The lowest value that this variable could take is 7, while the maximum value is 49 (Field 2009). Table 5 below summarises the distribution of this satisfaction score.

	N	Minimum	Maximum	Mean	Std. Deviation
Satisfaction Score	576	7.00	49.00	37.7	6.698

Table 5 Satisfaction Score

The mean score (37.7) is greater than the midpoint of 28, meaning that the customers are fairly satisfied with the service that they receive. Further analysis entailed ascertaining if the satisfaction score varied by the type of customer, and in particular, if there is difference in satisfaction between staff and students. However, before this we done, an exploratory analysis using a box plot (Figure 3) was conducted to determine (graphically) if the difference existed.

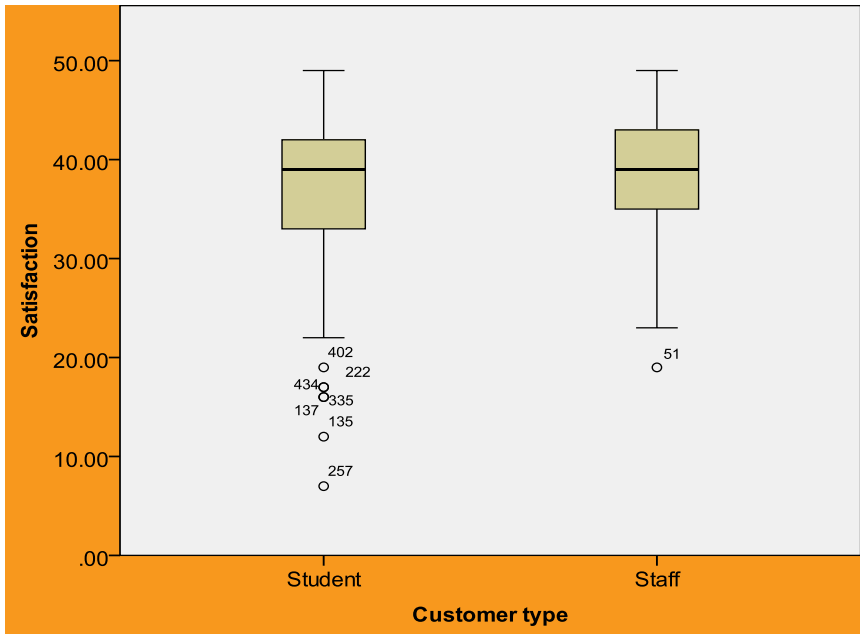


Figure 3 Satisfaction by Customer

From Figure 3 above, it is evident that although both students and employees have almost the same satisfaction score, some students had very low satisfaction, hence forming outliers represented by circles. Only one employee’s score was categorised as an outlier. To check whether there is a significant difference between the students’ and employees’ (as customers) satisfaction, the student’s t-statistical test results were calculated as shown Table 6.

	Customer Type	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction	Student	450	37.5044	6.89671	.32511
	Staff	126	38.3968	5.90739	.52627

Table 6 Satisfaction Score by Customer Type

From Levene’s test of homogeneity of variances results indicated in Table 7 below, the null hypothesis of equal variances between employees and students is rejected since $F (4.555), p = 0.03$

	Levene’s Test for Equality of Variances		T-test for Equality of Means					
	F	P-value	T	P-value	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	4.555	.033	-1.323	.186	-.89238	.67466	-2.21749	.43273
Equal variances not assumed			-1.443	.151	-.89238	.61860	-2.11124	.32648

Table 7: Levene’s test and T-test for Comparison of Satisfaction between Employees and Students

The results of the Levene’s test indicated that equal variances could not be assumed and, an alpha level of 0.05 was chosen. If $p > 0.05$, then we fail to reject the null hypothesis while a $p \text{ value} < 0.05$ implies significant results. The equality of means between the employees and students and the associated p -value was found to be 0.151, (which is greater than 0.05), which implies that no significant differences existed between the mean satisfaction of the employee and student groups. Although staff have a

slightly superior quality satisfaction index score ($\bar{X} = 38.39$, $SD = 5.91$) than students ($\bar{X} = 37.50$, $SD = 6.89$), there is no significant statistical difference between these averages. Thus, the null hypothesis is not rejected, and it can be concluded that there is no statistically significant difference in satisfaction between employees and students. The findings concur with some previous studies (De Jager & Gbadamosi 2010), where it was revealed that significant lower perceived service experience by students to what they believed to be vital in their learning centres.

The universities used in the study were all private, thus it was assumed that all employees and students in similar universities were subjected to similar conditions from a service perspective. Thus, it may be concluded that the test is not biased to any customer

Conclusion and Recommendations

The findings reveal that with reference to the service quality dimensions in this study, “access” and “non-academic” are most significant determinants of perceived SQ in the private HE institutions. It was also ascertained that the ‘non-academic’ dimensions contributed most towards the respondents’ perception of service quality. This study did not find any empirical support for a positive and significant relationship between the academic dimension and perceived service quality in HE.

These findings provide insight to the management of HE institutions in that they may use the findings to enhance both employee and student perceptions of service quality. Therefore, a private university provider can prioritize and allocate resources and/or emphasize the non-academic quality, access quality and academic quality in order to meet “employee-students” expectations.

A limitation of the study is that it adopted a purely quantitative paradigm and was also limited to select private universities in Kenya. Therefore, the findings should be confirmed by further evidence employing a different equally rigorous methodology such as mixed methods.

References

- Angell, RJ, TW Heffernan & P Megicks 2008. Service Quality in Postgraduate Education. *Quality Assurance Higher Education* 16, 3: 236–254.
- Bejou, D 2005. Treating Students Like Customers. *BizEd Magazine* 44-47.
- Bounds, G, YA Lyle & R Gipsies 1994. *Beyond Total Management toward the Emerging Paradigm*. New York: McGraw-Hill. Inc.
- Brochado, A 2009. Comparing Alternative Instruments to Measure Service Quality in Higher Education. *Quality Assurance in Higher Education* 17, 2: 74-190.
- Brown, SW & MJ Bitner 2007. Mandating a Service Revolution for Marketing. In Lush, RF & SL Vargo (eds): *The Service-Dominant Logic of Marketing: Dialogue, Debate and Directions*. New York: M.E. Sharp.
- Browne, MW 2001. An Overview of Analytic Rotation in Exploratory Factor Analysis. *Multivariate Behavioral Research* 36: 111-150.
- Buttle, F 1996. SERVQUAL: Review, Critique, Research Agenda. *European Journal of Marketing* 30, 1: 8–32.
- Calvo-Porall, C, JP Levy-Mangin & I Novo-Corti 2013. Perceived Quality in Higher Education: An Empirical Study. *Marketing Intelligence and Planning* 36, 6: 60.
- 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 of Commerce Dissertation, Cape Town: University of the Western Cape.
- Cooper, RD & SP Schindler 2008. *Business Research Methods*. 8th Edition. New Delhi: Tata McGraw-Hill.
- DeJager, J & G Gbadamosi 2010. Specific Remedy for Specific Problems: Measuring Service Quality in South African Higher Education. *Higher Education* 60, 3: 251–267.
- DeShields Jr, WO, A Kara & E Kaynak 2005. Determinants of Business Students' Satisfaction and Retention in Higher Education: Applying Herzberg's Two-factor Theory. *International Journal of Educational Management* 19, 2: 128–139.

- Douglas, J, R McClelland, & J Davies 2008. The Development of a Conceptual Model of Student Satisfaction with their Experience in Higher Education. *Quality Assurance in Education* 16, 2: 19-35.
- Eagle, L & R Brenman 2007. Are Students Customers? TQM and Marketing Perspectives. *Quality Assurance in Education* 15, 1: 44-60.
- Field, A 2009. *Discovering Statistics Using SPSS*. 3rd Edition. London: Sage Publications Ltd.
- Firdaus, A 2005. The Development of HEDPERF: A New Measuring Instrument of Service Quality for the Higher Education Sector. *International Journal of Consumer Studies* 30, 6: 569-581.
- Firdaus, A 2006. Measuring Service Quality in Higher Education: HEDPERF versus SERVPERF. *Marketing Intelligence & Planning* 24, 1: 31-47.
- Govender, KK 2013. Service Performance and Service Quality: Exploring the Post-graduate Research Students' Perceptions of the Service Encounter. *Journal of Social Sciences* 37, 3: 217-224.
- Govender, KK 2013. The Relationship between the Postgraduate Research Climate and Supervisor Research Service Quality. *Journal of Social Sciences* 2, 3: 146-158.
- Hair, JF, WC Black, BJ Babin, RE Anderson & RL Tatham 2006. *Multivariate Data Analysis*. 6th Edition. Singapore: Prentice-Hall.
- Hair, JF, WC Black, BJ Babin & RE Anderson 2010. *Multivariate Data Analysis: A Global Perspective*. New York: Pearson Prentice Hall.
- Ham, L, & S Hayduk 2003. Gaining Competitive Advantages in Higher Education: Analyzing the Gap between Expectations and Perceptions of Service Quality. *International Journal of Value-Based Management* 16, 3: 223-242.
- Hasan, HFA & A Ilias 2008. Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. *International Business Research* 1, 3: 163-175.
- Hensley, RI & J Sulek 2007. Customer Satisfaction with Waits in Multi-stage Services. *Managing Service Quality* 17, 2: 152-173.
- Hishamuddin, FAH & I Azleen 2008. Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. *International Business Research* 1, 3: 163-175.

- Kara, A, S Lonial, M Tarim & S Zaim 2005. A Paradox of Service Quality in Turkey: The Seemingly Contradictory Relative Importance of Tangible and Intangible Determinants of Service Quality. *European Business Review* 17, 1: 21-27.
- Khodayari, F & B Khodayari 2011. Service Quality in Higher Education. *Interdisciplinary Journal of Research in Business* 1, 9: 38–46.
- Kimani, WS 2011. *Business Students' Perception of Service Quality in Kenyan Private and Public Universities*. Nairobi: CUEA Press.
- Lassar, WM, C Manolis & RD Winsor 2000. Service Quality Perspectives and Satisfaction in Private Banking. *Journal of Service Marketing*. 14, 3: 244–271.
- Leblanc, G & N Nguyen 1997. Searching for Excellence in Business Education: An Exploratory Study of Customer Impressions of Service Quality. *International Journal of Education Management*. 11, 2: 72–79.
- Little, B & R Williams 2011. Students' Role in Maintaining Quality and Enhancing Learning: Is There a Tension? *Quality High Education*. 16, 2: 115-127.
- Maddern, H, M Roger & S Andi 2007. Customer Satisfaction and Service Quality in UK Financial Services. *International Journal of Operations and Production Management* 27, 9: 999 -1019.
- Ngome, CK 2010. Massive Growth of University Education in East Africa and the Challenges Facing the Sector between 2000–2010: The Case of Kenya. Paper presented at the 10th Anniversary Celebrations of the Revitalization of the Inter-University Council for East Africa (IUCEA), Kampala. Available at: http://www.iucea.org/downloads/Massive_Growth.pdf. (Accessed on 15 June 2010.)
- Owlia, MS & EM Aspinwall 1996. A Framework for the Dimensions of Quality in Higher Education. *Quality Assurance in Education* 4, 2: 12–20.
- Perez, MS, CGA Juan, MMC Gema & SF Raquel 2007. Effects of Service Quality Dimensions on Behavioural Purchase Intentions: A Study in Public Sector Transport. *Managing Service Quality* 17, 2: 134-151.
- Prugsamatz, S, R Pentecost & L Ofstad 2006. The Influence of Explicit and Implicit Service Promises on Chinese Students' Expectations of

- Overseas Universities. *Pacific Journal of Marketing and Logistics* 18, 2: 129-145.
- Quinn, A, G Lemay, P Larsen & DM Johnson 2009. Service Quality in Higher Education. *Total Quality Management* 20, 2: 139–152.
- Rajasekhar M, M Muninarayanappa & SVS Reddy 2009. The GAP Model Analysis of Service Quality in Indian Higher Education. *Journal of Social Sciences*. 1, 2: 214-229.
- Roostika, R 2009. *The Role of Customer Value within the Service Quality, Customer Satisfaction and Behavioural Intentions Relationships: An Empirical Examination in the Indonesian Higher Education Sector*. Unpublished PhD thesis in Business Management, Melbourne: Swinburne University of Technology.
- Rust, RT, PJ Danaher & V Sajeew 2000. Using Service Quality Data for Competitive Marketing Decisions. *International Journal of Services Industry Management* 11, 5: 438–469.
- Schumacker, RE & RG Lomax 2004. *A Beginner's Guide to Structural Equation Modelling*. New Jersey: Lawrence Erlbaum Associates.
- Seilier, VL 2004. *Examining Service Quality for Homebuyers in the Residential Real Estate Brokerage Industry*. Unpublished PhD thesis in Marketing. Sydney: University of Western Sydney.
- Sekaran, U & R Bougie 2010. *Research Methods for Business: A Skill Building Approach*. 5th Edition. New York: John Wiley & Sons, Inc.
- Seth, N, SG Deshmukh & P Vrat 2005. Service Quality Models: A Review. *International Journal of Quality & Reliability Management* 22, 9: 913-949.
- Shekarchizadeh, A, A Rasli & H Hon-Tat 2011. SERVQUAL in Malaysian Universities: Perspectives of International Students. *Business Process Management Journal* 17, 1: 67
- Siddiqi, KO 2011. Interrelations Between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh. *International Journal of Business and Management* 6, 3: 12-36.
- Soutar, G & M McNeil 1996. Measuring Service Quality in a Tertiary Institution. *Journal of Educational Administration* 34, 1: 72–82.
- Sunanto, S, T Taufiquarrahman & R Pangemanan 2007. An Analysis of University Services Quality Gap and Student Satisfaction in

- Indonesia. *The International Journal of Knowledge, Culture and Change Management* 7, 7: 1-10.
- Vaill, P 2008. *Beware the Idea of the Student as a Customer: A Dissenting View*. Available at: <http://www.people.veu.edu/~rsleeth/NotCustomers.html>. (Accessed on 4 July 4 2012.)
- Wang, I & C Sheih 2006. The Relationship between Service Quality and Customer Satisfaction: The Example of CJCUC Library. *Journal of Information and Optimization Sciences* 27, 1: 193–201.
- Yee, R, A Yeung & T Cheng 2010. An Empirical Study of Employee Loyalty, Service Quality and Firm Performance in the Service Industry. *International Journal of Production Economics* 24, 1: 109.
- Yoon, MH, JHJ Seo, & TS Yoon 2004. Effects of Contact Employee Supports on Critical Employee Responses and Customer Service Evaluation. *Journal of Services Marketing* 18, 5: 395–415.
- Yunus, NKY, A Ismail, S Ishak & ZR Juga 2009. Service Quality Dimensions, Perceived Value and Customer Satisfaction: ABC Relationship Model Testing. *IBES* 2, 1: 1-18.
- Zahari, W, W Yusoff & M Ismail 2008. FM-SERVQUAL: A New Approach of Service Quality Measurement Framework in Local Authorities. *Journal of Corporate Real Estate* 10, 2: 130–144.

Eric E. Mang'unyi
School of IT, Management and Governance
University of KwaZulu-Natal
mangunye@gmail.com

Krishna K. Govender
School of Management, IT and Governance,
University of KwaZulu-Natal and
Regenesys Business School,
Johannesburg, South Africa
krishnag@regenesys.co.za