RESEARCH ARTICLE

Student Satisfaction Regarding Service Quality at Ethiopian Public Higher Education Institutions: A Case Study

Solomon L. Lodesso,* Eldridge J. van Niekerk,** Cecelia A. Jansen*** & Hélène Müller****

Abstract

The quality of services rendered to stakeholders at Higher Education Institutions (HEIs) is of critical importance to the esteem of these institutions. Perceptions of the quality of such services can be measured in various ways. This study assesses the extent of service quality as evaluated in students' satisfaction with services received at Ethiopian HEIs. To this end, data was collected from final-year undergraduate students at Ethiopian Public Higher Education Institutions (PHEIs). The Service Quality (SERVQUAL) questionnaire was administered. The collected data was analysed using the methodology of the Importance-Performance Analysis (IPA) model. Findings indicated that the majority of the elements that constitute attributes of service quality were perceived by students to be very poor. This is reflected in low satisfaction scores. It is recommended that HEIs identify those service areas that have high perceived importance scores and low perception scores on service-experience in order to redeploy some of the resources and implement measures to improve service quality.

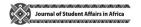
Keywords

Importance-Performance Analysis (IPA) model; public higher education institutions in Ethiopia; service quality; service quality improvement; student satisfaction

Introduction

Service quality in education, and particularly in higher learning, is a fundamental and important aspect of educational excellence (Malik, Danish & Usman, 2010). Universities are cognisant of the fact that exceptional service quality will set them apart from their competitors and therefore HEIs strive to incorporate sound market-orientation strategies into their business plans (Järvinen & Suomi, 2011). Universities in Ethiopia are no exception to this.

- * Prof. Solomon L. Lodesso is Associate Professor, Department of Educational Planning and Management, College of Education, Hawassa University, Ethiopia. Email: soleysus7@gmail.com
- ** Prof. Eldridge J. van Niekerk is Professor, Department of Educational Leadership and Management, College of Education, University of South Africa, Pretoria, South Africa. Email: vniekej@unisa.ac.za
- *** Prof. Cecelia A. Jansen is Associate Professor, Department of Educational Leadership and Management, College of Education, University of South Africa, Pretoria, South Africa. Email: janseca7@gmail.com
- **** Dr Hélène Müller is Research Associate/Statistician, Department of Curriculum and Instructional Studies, College of Education, University of South Africa, Pretoria, South Africa. Email: helenemuller23@gmail.com











Total enrolment at PHEIs¹ in Ethiopia escalated from 326318 in 2007/08 to 729028 in 2014/15 (Ministry of Education, 2016). This illustrates that the annual intake of undergraduate students has increased dramatically. Limited numbers of academic staff, many of whom are inexperienced, have accompanied this expansion of higher education. The situation has been exacerbated by limited funding and insufficient infrastructure, which have had a negative effect on the quality of education offered, resulting in stakeholder dissatisfaction (with reference to both the academic and administrative components of service). Therefore, to improve the sense of dissatisfaction and other conditions, several service quality improvement initiatives are currently underway at HEIs. However, despite dissatisfaction being expressed frequently, it is not common practice in Ethiopian education to measure service quality against variables of student satisfaction or dissatisfaction. This study identified satisfaction measurement as a gap in research knowledge and, in the research discussed in this article, measured service quality against specific dimensions which are based on the SERVQUAL (Service Quality) methodology and questionnaire (Malik et al., 2010). Malik et al. (2010) define service quality in terms of stakeholders'/students' perceptions of service once exposed to a specific service – be it academic or administrative - offered at their institution. According to SERVQUAL methodology, characteristics of quality can be identified, defined and measured (Malik et al., 2010). For example, identifiable service quality characteristics/quality criteria may include the reliability of the service (will the service/s be constantly available when required?); assurance (the assurance that issues raised will be attended to); tangibility (general appearance and upkeep of physical structures); empathy (the attitude of staff rendering services); and responsiveness (whether service requests are dealt with speedily). Mentioned quality characteristics are also referred to as SERVQUAL dimensions. These dimensions are further elaborated on in the methodology section of the article.

HEIs need to understand the quality attributes held by their stakeholders (Zafiropoulos & Vrana, 2008). For Shah (2009), institutions can improve the quality of service they offer if they listen to and incorporate feedback given by stakeholders. In 2008, all "first-generation universities" (universities established prior to 1998 are said to be first generation) carried out formal institutional self-evaluation processes for the first time to highlight good practices and identify ways of enhancing quality in all aspects of their institutions. HERQA's (Higher Education Relevance and Quality Agency) quality audit teams assessed each HEI's self-evaluation document and feedback was given to each university. HERQA reported the strengths and weaknesses of these institutions; however, students' satisfaction with service delivery was not incorporated in this assessment. This fact motivated the current research because similar research into service quality in the Ethiopian context has not been undertaken. Accordingly, the purpose of the research reported in this article is to provide insight into the extent of students' satisfaction regarding the service delivery at Ethiopian PHEIs by posing the following research questions:

The Higher Education Proclamation (Federal Democratic Republic of Ethiopia, 2003) regards "HEIs" and "PHEIs" as umbrella terminology for all universities, university colleges, colleges and institutes. In this study, "universities" is used interchangeably with "HEIs".

- To what extent are students satisfied with the service quality improvements at PHEIs?
- · Which dimensions of service quality need to be prioritised because they are considered crucial by students in improving the service quality?
- Are there any gaps between the perceptions and importance of dimensions of service quality improvement?

The concepts of service quality and the measurement of service quality will be elaborated on in the following two sections. This is followed by a methodology section and the presentation of deductions derived from the quantitative results. Recommendations and conclusions form the last sections of the article.

Service Quality

Brysland and Curry (2001, p. 391) define service quality as "providing something intangible in a way that pleases the consumer and that gives some value to that customer". Parasuraman, Zeithaml and Berry (1988), in an earlier work, provide a comprehensive definition of service quality as a function of the difference between perceptions of service quality and expectations of what service quality ought to be. The literature furthermore defines service quality as the extent to which the quality of a service rendered matches the customer's expectations (Kitchroen, 2004; Kassim & Zain, 2010; Parasuraman, Zeithaml & Berry, 1985).

According to Gbadamosi and Jager (2009), service quality in higher education is determined by the extent to which stakeholders' needs and expectations are satisfied. Okunoye, Frolick and Crable (2008) support this idea by stating that meeting the needs and expectations of stakeholders and complying with their values is an important competitive factor for the success of HEIs.

One of the fundamental and challenging steps in the improvement of service quality is the identification of the key stakeholders (Jongbloed, Enders & Salerno, 2008). According to Alves, Mainardes and Raposo (2010), stakeholders are individuals or groups of individuals who have the power to affect an institution, or to affect the objectives of the institution. Okunoye et al. (2008) describe staff (administrative), faculty and students as key stakeholders of services provided by HEIs. The research reported in this article focuses on the perceptions of students as stakeholders.

Ethiopian HEIs are expected to provide quality service to students. With reference to types of services students may expect to receive, the Business Process Re-engineering Document (Hawassa University, 2008) of the Hawassa University, for example, specifies services such as quality education at reasonable cost; swift and quality student services (e.g. registration, dissemination of examination results, and assured and reliable responses to valid queries); a peaceful and conducive environment; courteous treatment when dealing with university staff; proper advocacy and guidance services; and opportunities to develop leadership potential - to name but a few. Providing these and other services to students requires that university management and providers of services (both academic and administrative staff) be aware of students' satisfaction or dissatisfaction with such services.

The conceptual relationship between student satisfaction and service quality

Satisfaction is the difference between stakeholders' expectations and their perception of the service quality improvement. The higher the perceived service quality improvement, the higher stakeholders' satisfaction will be (Petruzzeluca, Uggento & Romanazzi, 2006). Knowledge of the stakeholders' expectations helps HEIs to reduce the gap between their expectations and service delivery. It also aids in identifying the strengths and weaknesses of the service delivery of institutions. As a result, the institution improves its performance (Jackson, Helms & Ahmadi, 2011; Chen, Yang, Lin & Yeh, 2007; Petruzzeluca et al., 2006).

There is a positive correlation between satisfaction and loyalty, where an increase in satisfaction leads to an increase in loyalty (Douglas, Douglas & Barnes, 2006; Chen et al., 2007). The loyalty of stakeholders has implications for institutions and is manifested through returns to the organisation. Jongbloed et al. (2008), state that HEIs should frequently evaluate their level of commitment and degree of involvement in serving the demands of students. Superior service quality is achieved in an institution where students' needs are identified and addressed (Toremen, Karakus & Yasan, 2009; Jongbloed et al., 2008). Kitchroen (2004) contends that the dissatisfaction of students with HEIs' service quality is expressed in a decline of student admissions. Therefore, student satisfaction is a critical measure of service quality and HEI management should regularly evaluate student satisfaction.

In general, according to Chen et al. (2007), when student satisfaction is assessed to be low (dissatisfaction), such an assessment assists the institution in prioritising improvement initiatives. Knowledge of the perceptions of students assists institutional management in maximising satisfaction and minimising dissatisfaction. Jackson et al. (2011, p. 393) argue that "educational institutions, like businesses, are forced to confront the fact that, since perception is reality to customers, it is the perceptions that must be considered if improvements are to be recognized". The argument set out in the discussion up to this point leads to the deduction that the service-quality criteria of the SERVQUAL methodology (mentioned in the Introduction section of this article), namely: tangibles; responsiveness; reliability; assurance and empathy – when expressed as quantitative measurable concepts in the empirical research – serve as the operational framework for the study.

Models developed to quantify service quality attributes

Literature on service quality in the educational field proposes several models that measure or quantify criteria of service quality. These include, for example, the SERVQUAL model (Parasuraman et al., 1988), the SERVPERF (Service Performance) model (Cronin & Taylor, 1992), the Evaluated Performance (EP) model (Teas, 1993), the IPA model (Martilla & James, 1977) and the HEdPERF (Higher Education Performance) model (Firdaus, 2006). This research uses a combination of the most commonly used models, namely the Importance-Performance Analysis (IPA) model and the SERVQUAL model to measure students' experience of service quality in Ethiopian HEIs.

Several empirical studies in various fields have been conducted using IPA models to assess service quality, for instance in higher education (Wright & O'Neill, 2002), amongst university students (Angell, Heffernan & Megicks, 2008; Douglas et al., 2006; O'Neill & Palmer, 2004; Joseph & Joseph, 1997) and in the transport service sector (Wang, Feng & Hsieh, 2010). Wright and O'Neill (2002) investigated the service quality at Western Australian higher education institutions by employing the IPA model. Douglas et al. (2006) measured student satisfaction at Liverpool John Moores University in the United Kingdom, using the IPA model. Angell et al. (2008) also used the IPA model for identifying the service factors used for quality evaluation by postgraduate students to analyse the appropriateness of IPA in the assessment of service quality and to provide a working example of IPA's application at a British university. They confirm that the IPA is a suitable tool for measuring service quality in HEIs.

In Wright and O'Neill's (2002) investigation of service quality at Western Australian HEIs based on the IPA model, results revealed that students' satisfaction level differed statistically significantly for certain core service quality dimensions compared to other dimensions. These results illustrate the usefulness of the IPA technique in evaluating service quality in a HEI context. Angell et al. (2008) similarly used the IPA model to quantify and identify critical service factors in a quality evaluation research project with postgraduate students of a HEI. Identification of specific critical factors in this instance again illustrates the suitability of the IPA model in measuring service quality at HEIs.

The IPA technique was originally developed by Martilla and James (1977). This technique seeks to identify the underlying importance ascribed by consumers to various quality criteria being assessed, when compared with perceived service satisfaction of delivered services (Wright & O'Neill, 2002). The objective of the IPA is to identify which attributes or combinations of attributes are the most influential in student satisfaction. Martilla and James (1977) state that the IPA assesses the underlying importance accorded by consumers to quality criteria, while simultaneously expressing satisfaction with services delivered according to the same quality criteria. The technique therefore delivers, pairwise, importance/perceived service satisfaction ratings, which gauge agreement between perceived importance of a service and perceived service experienced.

Methodology

Sampling

The population for this quantitative study consisted of all final-year undergraduate students registered for an academic degree at 6 of the 31 public universities in Ethiopia (Ministry of Education, 2012). The six mentioned universities were selected as a first step of a two-stage stratified random sampling process. The establishment date of universities served as the firstlevel stratification classifier: universities established prior to 1998; those established between 1998 and 2011; and universities established after 2011. Two universities per stratum were randomly selected (universities per stratum were numbered and two numbers per stratum were drawn using a table of random numbers), namely Hawassa and Addis Ababa

universities from the first stratum (first-generation universities); Dilla and Woliata Soddo universities from the second stratum (second-generation universities); and Meda Wolabo and Dibre Markos universities from the third stratum (third-generation universities). Subsequently, students (250 per university) were proportionately and randomly selected per faculty for each university – faculties serving as a second-level stratification classifier. (The alphabetic faculty lists of undergraduate third-year students per university were numbered in each case. Using a table of random numbers, a proportion of 250 students was then randomly selected per faculty (depending on faculty size) for each university. This resulted in a total of 1500 (6 x 250) students being selected from six universities.

Ethics

The ethical aspects of research were addressed in that ethical clearance for the research (which originally formed part of the doctoral studies of the first author) was applied for and granted by the Ethics Committee of the College of Education at Unisa. The necessary permission – via permission letters addressed to relevant academic managers – was also obtained from each university and faculty prior to questionnaire distribution and completion. Student respondents indicated their willingness to partake in the study by means of informed consent on the questionnaire.

Measuring service quality satisfaction perceptions: The SERVQUAL questionnaire

The modified SERVQUAL questionnaire (Parasuraman et al., 1991) was used to assess respondents' perceptions/or satisfaction of their expectations of service quality; perceived experience of service quality; and the importance of service quality at their university. Respondents expressed these three types of perceptions (importance, experience of services rendered and expectations) by rating three sets of 22 identical service criteria issues on a seven-point Likert rating scale. Importance perceptions were expressed according to a rating scale where 1 indicates "not important at all", up to 7, which indicates "extremely important". Likewise, expected and experienced perception scale ratings measured agreement: a score of 1 indicates "very strong disagreement", up to 7, which indicates "very strong agreement". The 22-item questionnaire probed dimensions/criteria of service quality labelled as tangibles (items 1–5), reliability (items 6–10), responsiveness (items 11–14), assurance of service delivery (items 15–18) and empathy (items 19–22). Of relevance to the discussions in this article are the rating responses of importance and experienced service perceptions to the 22 questionnaire items.

Parasuraman et al. (1988) explain that the *tangibles* dimension of the SERVQUAL questionnaire refers to the surroundings, physical facilities and equipment used in the delivery of services (e.g. the particular HEI) and to the appearance of the personnel. The dimension of *reliability* describes the ability of the service provider to deliver dependable and accurate services as promised. *Responsiveness* describes the service provider's willingness to assist stakeholders by providing prompt service, while *assurance* addresses the service provider's knowledge and ability to instil confidence in its stakeholders. The dimension

of empathy refers to the institution's readiness to provide individual care and attention to stakeholders.

Questionnaire administration

The responses to a total of 1425 completed questionnaires (of 1500 distributed) were electronically captured to an EXCEL spreadsheet for analysis purposes. The 1425 questionnaires represented a 95% response rate, which can be regarded as very good, since this far exceeds the response rate of similar studies (Nadiri, Kandampully & Hussain, 2009). The excellent response rate can be ascribed to the fact that respondents at each university completed the questionnaire in a single session, convened specifically for this purpose at each university.

The IPA strategy

The analysis and interpretation of captured data according to IPA methodology is based on the analysis strategy and reasoning set out below:

Mean rating responses (and their standard deviations) for the above mentioned importance and perceived service experience perceptions for each of the 22 service quality criteria questions are calculated. The differences between each mean-experience perception and mean-importance rating (referred to as the "gap" score) for each of the 22 service criteria are also calculated. This forms the crux of the IPA methodology argument: if the perceived importance (as reflected in the mean importance rating) and the experienced perception of service delivery (as reflected in the mean perception rating) on any of the 22 aspects of service quality agree, the gap score (which measures discrepancy between the two perceptions) will be small, as opposed to a larger gap score when perceptions of an aspect differs. A substantial gap will indicate a type of disparity between experience and expectation of service quality (to be elaborated on in terms of quadrants below).

IPA methodology simplifies the interpretation of the "gap" between perceived importance and experienced service delivery for all 22 service-delivery criteria by means of an IPA grid system (Figure 1). The grid system is structured in such a way that the two-axes system represents the importance component of the service quality assessment (the Y-axis) and the perceived experience of service quality (the X-axis). The origin of the grid system is positioned (the (x; y) coordinate in Euclidean space) where the x-coordinate assumes the value of the overall mean *perception rating* (also referred to as "perception of the experience of service quality rendered") of all 22 service quality criteria combined, and the y-coordinate assumes the value of the overall mean importance rating of all 22 service quality criteria. The 22 paired importance/perceived service experience service quality criteria ratings are then mapped onto the IPA grid system. If complete importance-experience agreement exists for any criterion, IPA methodology argues that the specific (x;y) coordinate will be positioned close to the origin. Any deviation (importance/perceived service experience discrepancy) will be indicated by plotted (x;y) coordinates positioned some distance from the origin in one of the four quadrants of the plot – an indication of satisfaction discrepancy.

Critical service areas that need improvement initiatives can be identified according to the quadrant that a specific (x;y) service-criteria coordinate falls in. Figure 1 below explains the quadrant interpretation of the IPA analysis technique: quadrant A (regarded as the quadrant that requires attention/Concentrate here) identifies service attributes perceived to be important, but are under-performing; quadrant C (Low priority) identifies service attributes perceived not to be that important, but that are also under-performing; quadrant B (Keep up the good work) identifies service attributes that are perceived to be important and that are performing well; and quadrant D (Possible overkill) identifies service attributes that are performing well, but are less important. Figure 1 summarises

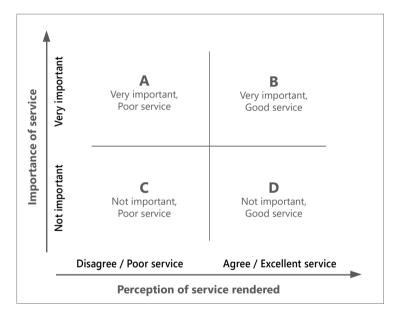


Figure 1: Interpretation of the four quadrants in the IPA technique Source: Adapted from Martilla & James (1977, p. 78)

Results and Discussion

The research context

this argument.

Frequency tables (not included in this article) of biographical properties probed in the SERVQUAL questionnaire, described the biographical profile of the respondents and indicated a young, predominantly male group of respondents: 69.5% were male and 30.5% female. In the Ethiopian higher education system, the majority of students are still male, as reflected in the sample composition. Distribution according to age indicated that almost 64% of the respondents were between the ages of 22 and 24 years, and an additional 27.5% in the 19–21 age-bracket. Only 8.2% of the sampled students fell in the 25–27 age bracket and 0.3% were older than 27 years.

Results of the Importance-Performance Analysis (IPA)

As described in the methodology section, mean perception rating-scores (and standard deviations) were calculated for service experienced and importance perceptions of service quality for the 22 aspects of the SERVQUAL questionnaire. Results are reported in Table 1.

Table 1: Perceived performance, importance and gap scores of individual IPA items for the student data set

Service dimension	Aspects of service probed	Perception of service experienced (P)		Perception of importance (I)		Gap score (P–I)	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Tangibles	1. Modern equipment	3.13	1.74	6.77	0.53	-3.64	1.21
	2. Facilities appealing	3.51	2.04	6.61	0.70	-3.1	1.34
	3. Neatly dressed	2.83	1.72	6.63	0.68	-2.58	1.14
	4. Resources appealing	4.05	1.82	6.74	0.57	-3.91	1.15
	5. Fulfil promises agreed	3.14	1.81	6.75	0.57	-3.61	1.24
Reliability	6. Intent solve problem	3.37	1.78	6.76	0.53	-3.39	1.25
	7. Satisfactory service	3.44	1.77	6.73	0.57	-3.29	1.2
	8. Timely services	3.35	1.87	6.74	0.55	-3.39	1.32
	9. Error-free records	3.25	1.73	6.72	0.63	-3.47	1.1
	10. Inform re services	3.70	1.76	6.74	0.58	-3.04	1.18
Responsiveness	11. Prompt service	3.59	1.68	6.76	0.55	-3.17	1.13
	12. Willingness to assist	3.68	1.70	6.74	0.54	-3.06	1.16
	13. Not too busy, respond	3.42	1.71	6.60	0.70	-3.18	1.01
	14. Radiate confidence	3.57	1.70	6.64	0.64	-3.07	1.06
Assurance	15. Feel safe dealing university	3.72	1.73	6.72	0.59	-3.00	1.14
	16. Courteous behaviour	3.68	1.74	6.72	0.56	-3.04	1.18
	17. Sufficient knowledge	3.81	1.74	6.76	0.56	-2.95	1.18
	18. Individual attention	3.59	1.70	6.66	0.66	-3.07	1.04
Empathy	19. Convenient hours	3.72	1.79	6.68	0.62	-2.96	1.17
	20. Personal attention	3.12	1.65	6.66	0.62	-3.54	1.03
	21. Student-interest important	3.31	1.66	6.69	0.58	-3.38	1.08
	22. Understand needs	3.33	1.64	6.75	0.58	-3.42	1.06
	Overall Mean	3.47		6.71		-3.24	
	Valid N (multiple responses)	1425				-3.17	0.63

Figure 2 below provides a graphical presentation of the paired importance—experienced perceptions of students on the 22 aspects of service quality. Deductions summarised in the discussion section below Figure 2 are based on the quadrant guidance provided in Figure 1 of the methodology section.

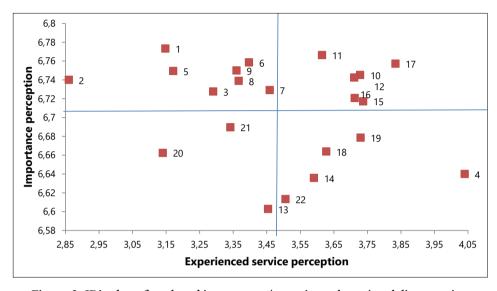


Figure 2: IPA plot of students' importance/experienced service delivery rating

Findings derived from the IPA (Table 1) and IPA plot (Figure 2)

The most crucial finding: quadrants A and C

The IPA rationale explained in the methodology section can be applied to Figure 2 and indicates that service aspects and dimensions that fall within quadrants A (Very important; poor service) and C (Not important, poor service) identify services that students perceive to be critical with respect to service quality. The labels and services that fall within these two quadrants are discussed under the next two bullet points:

Quadrant A: Important, but underperforming

The IPA plot mapped services 1–3 and 5–9 (modern equipment; appealing facilities; well-dressed staff; promises fulfilled; sincere problem-solving approach; satisfactory service; error-free records; punctuality) onto quadrant A. These services describe the tangibles and reliability dimensions of service delivery. Students regard these two dimensions as important, but they are underperforming in terms of service quality. The deduction can be made that students regard the surroundings, physical facilities and equipment used to deliver services as important, but that these are lacking (tangibles). Students also place a high premium on reliability and find that service delivery in this regard is poor.

In particular, the largest gap scores in quadrant A are identified as item 3, staff neatly dressed (tangibles dimension); item 5, fulfil promises (reliability dimension); and item 1, modern

equipment (tangibles dimension). The gap scores for these aspects are -3.91; -3.61 and -3.64 respectively. This suggests that, according to student perceptions, the appearance of the university staff and equipment, in particular, are unsatisfactory, and that service in Ethiopian higher education institutions is unreliable.

Quadrant C: Underperforming, but not critically important

The IPA map reflects that students perceive elements of the empathy and responsiveness dimensions of service delivery to be underperforming, although they do not regard these elements as being critically important for service quality. These include item 20, personal attention by staff, and item 21, an institution that has students' interests at heart, which describe the empathy dimension of service delivery. Mean gap scores of -3.54 and -3.38 respectively were reported. The magnitude of these gap scores indicates a discrepancy between expectations and experiences. Likewise, item 13, staff at an excellent university will not be too busy to respond to requests, describes an aspect of the responsiveness dimension of service quality. A mean gap score of -3.18 is reported in this instance, which again identifies a discrepancy between expectation and experience.

These listed services will also affect students' perceptions of service quality because they (the students) noted their experiences of underperforming services. Therefore, although the students did not place as high a premium on these services as on those listed in quadrant A, these services nevertheless influence their general perception of service adequacy. Universities would do well to institute improvement initiatives in these areas. It can be deduced that students view willingness to assist (responsiveness) and readiness to provide individual care (empathy) as aspects of service that are underperforming at their higher education institution.

In general, services and service dimensions falling into quadrants A and C require serious attention from university management to ensure student satisfaction.

Other findings derived from the IPA and IPA plot: quadrants B and D

The IPA rationale explained in Figure 1 indicates that services classified as falling within either quadrant B or D define services viewed as important and performing well - in other words, quality service - or services that are good performers, but not that important (once again quality service). The labels and services that fall within these two quadrants are discussed under the next two bullet points:

Quadrant B: Important and performing well

The IPA plot mapped services 10–12 and 15–17 (staff inform students of services to be performed; staff provide prompt services; staff are willing to assist; students feel safe to deal with the university; staff are courteous towards students; staff are knowledgeable regarding services) onto quadrant B. These services describe elements of the reliability; responsiveness and assurance dimensions of service quality. Students regard aspects or elements of these dimensions as important and experience these aspects as quality service. In this regard the deduction can be made that, to students, certain aspects of their institution's reliability regarding services rendered; willingness to assist students (*responsiveness*) and their institution's knowledge and ability to assure students (*assurance*) are important and that students perceive these components of service as quality services. This finding proves that universities have, to a certain extent, achieved an acceptable level of service quality – according to students – with specific components of their services. Therefore, the good work achieved in these areas should be acknowledged.

• Quadrant D: Not important, but performing well

The IPA plot mapped services 4, 14, 18–19 and 22 onto quadrant D (visual appeal of services; staff behaviour that instils confidence in students; staff pay individual attention to students; convenient lecture and office hours; staff understand special needs of students). These services describe elements of the tangibles; responsiveness; assurance and empathy dimensions of service quality. Students regard these elements of the greater dimensions as less important but appreciate the quality of services delivered in these areas. It can be deduced that students perceive specific components of their institution's willingness to assist students (responsiveness), physical appearance surrounding services (tangibles); assurance; and readiness to provide individual care (empathy) as quality service elements even though they do not perceive these elements to be that important. Management could well reflect on whether attention given to these areas could be scaled down to some extent and focus intensified on elements identified as important issues where students expressed dissatisfaction.

Conclusion and Recommendations

The study revealed that students' satisfaction with service quality was low. Most aspects of the service quality dimensions of *reliability* and *tangibles* proved to be the criteria of service quality that students considered to be very poor. The two other dimensions are of somewhat lesser importance (*responsiveness-assurance* and *empathy*). The implication is that an improvement of service quality in especially specific aspects of the dimensions of *reliability* and *tangibles* will lead to satisfaction perceptions of service quality amongst students as stakeholders of HEIs. In order to improve students' service quality satisfaction, university management should therefore design workable improvement initiatives focused on the identified aspects of especially *reliability*, *tangibles*, *empathy*, *responsiveness* and *assurance*.

References

- Alves, H., Mainardes, E.W. & Raposo, M. (2010). A relationship approach to higher education institution stakeholder management. Tertiary Education and Management, 16(3), 159–181. https://doi.org/10.108 0/13583883.2010.497314
- Angell, R.J., Heffernan, T.W. & Megicks, P. (2008). Service quality in postgraduate education. *Quality Assurance in Education*, 16(3), 236–254. https://doi.org/10.1108/09684880810886259
- Becket, N. & Brooks, M. (2008). Quality management practice in higher education What quality are we actually enhancing? *Journal of Hospitality, Leisure, Sport and Tourism Education*, 7(1), 40–54. https://doi.org/10.3794/johlste.71.174
- Brysland, A. & Curry, A. (2001). Service improvements in public services using SERVQUAL. *Managing Service Quality*, 11(6), 389–401. https://doi.org/10.1108/09604520110410601

- Chen, S., Yang, C., Lin, W. & Yeh, T. (2007). Service quality attributes determine improvement priority. The TQM Magazine, 19(2), 162–175. https://doi.org/10.1108/09544780710730005
- Cronin, J. & Taylor, S. (1992). Measuring service quality: A re-examination and extension. Journal of Marketing, 56, 55-68. https://doi.org/10.2307/1252296
- Douglas, J., Douglas, A. & Barnes, B. (2006). Measuring student satisfaction at a UK university. Quality Assurance in Education, 14(3), 251–267. https://doi.org/10.1108/09684880610678568
- Federal Democratic Republic of Ethiopia (FDRE). (2003). Proclamation no 351/2003: Higher Education Proclamation. Addis Ababa: Federal Democratic Republic of Ethiopia.
- Firdaus, A. (2006). 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. https://doi.org/ 10.1111/j.1470-6431.2005.00480.x
- Gbadamosi, G. & Jager, J. (2009). What you see is what you get: Service quality, students' perceptions and satisfaction at South African universities. South African Journal of Higher Education, 23(5), 877-893. https://doi.org/10.4314/sajhe.v23i5.48806
- Hawassa University. (2008). Business Process Re-engineering (BPR): Understanding & mapping the current process, 'As is'. Hawassa University: Unpublished document.
- Jackson, M., Helms, M. & Ahmadi, M. (2011). Quality as a gap analysis of college students' expectations. Quality Assurance in Education, 19(4), 392-412. https://doi.org/10.1108/09684881111170096
- Järvinen, R. & Suomi, K. (2011). Reputation attributes in retailing services: managerial perspective. Managing Service Quality: An International Journal, 21(4), 410–423. https://doi.org/10.1108/09604521111146270
- Jongbloed, B., Enders, J. & Salerno, C. (2008). Higher education and its communities: Interconnections, interdependencies and research agenda. Higher Education, 56(3), 303-324. https://doi.org/10.1007/ s10734-008-9128-2
- Joseph, M. & Joseph, B. (1997). Service quality in education: a student perspective. Quality Assurance in Education, 5(1), 15-21. https://doi.org/10.1108/09684889710156549
- Kassim, N. & Zain, M. (2010). Service quality: Gaps in the college of business. Services Marketing Quarterly, 31(2), 235-252. https://doi.org/10.1080/15332961003604394
- Kitchroen, K. (2004). Literature review: Service quality in educational institutions. ABAC Journal, 24(2), 14-25.
- Malik, M.E., Danish, R.Q. & Usman, A. (2010). The impact of service quality on students' satisfaction in Higher Education Institutes of Punjab. Journal of Management Research, 2(2), E10.
- Martilla, J. & James, J. (1977). Importance-Performance analysis. The Journal of Marketing, 41(1), 77–79. https://doi.org/10.2307/1250495
- Ministry of Education (MoE). (2012). Education statistics annual abstract. Addis Ababa: EMIS.
- Ministry of Education (MoE). (2016). Education statistics annual abstract. Addis Ababa: EMIS.
- Nadiri, H., Kandampully, J. & Hussain, K. (2009). Students' perceptions of service quality in higher education. Total Quality Management, 20(5), 523-535. https://doi.org/10.1080/14783360902863713
- O'Neill, M. & Palmer, A. (2004). Importance-Performance Analysis: A useful tool for directing continuous quality improvement in higher education. Quality Assurance in Education, 12(1), 39–52. https://doi. org/10.1108/09684880410517423
- Okunoye, A., Frolick, M. & Crable, E. (2008). Stakeholder influence and ERP implementation in higher education. Journal of Information Technology Case and Application Research, 10(3), 72–84. https://doi.org/ 10.1080/15228053.2008.10856139

- Parasuraman, A., Zeithaml, V. & Berry, L. (1985), A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41–50. https://doi.org/10.2307/1251430
- Parasuraman, A., Zeithaml, V. & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12-40.
- Parasuraman, A., Zeithaml, V. & Berry, L. (1991). Refinement and reassessment of the SERVQUAL scale. Journal of Retailing, 67(4), 420-450.
- Petruzzeluca, L., D'Uggento, A. & Romanazzi, S. (2006). Student satisfaction and quality service in Italian universities. Managing Service Quality, 16(4), 349-364. https://doi.org/10.1108/09604520610675694
- Shah, A. (2009). The impact of quality on satisfaction, revenue, and cost as perceived by providers of higher education. Journal of Marketing for Higher Education, 19, 125-141. https://doi.org/ 10.1080/08841240903451324
- Teas, R.K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of* Marketing, 57(4), 18–34. https://doi.org/10.2307/1252216
- Töremen, F., Karakus, M. & Yasan, T. (2009). Total quality management practices in Turkish primary schools. Quality assurance in education, 17(1), 30-44. https://doi.org/10.1108/09684880910929917
- Wang, S., Feng, C. & Hsieh, C. (2010). Stakeholder perspective on urban transport system service quality. Total Quality Management, 21(11), 1103-1119. https://doi.org/10.1080/14783363.2010.529329
- Wright, C. & O'Neill, M. (2002). Service quality evaluation in the higher education sector: An empirical investigation of students' perceptions. Higher Education Research & Development, 21(1), 23-39. https://doi.org/10.1080/07294360220124639
- Zafiropoulos, C. & Vrana, V. (2008). Service quality assessment in a Greek higher education institute. Journal of Business Economics and Management, 9(1), 33-45. https://doi.org/10.3846/1611-1699.2008.9.33-45

How to cite:

Lodesso, S.L., Van Niekerk, E.J., Jansen, C.A. & Müller, H. (2018). Student Satisfaction Regarding Service Quality at Ethiopian Public Higher Education Institutions: A Case Study. Journal of Student Affairs in Africa, 6(2), 51-64. DOI: 10.24085/jsaa.v6i2.3309