

# Service Quality Variables for Assessing Students' Satisfaction in Higher Learning Institutions: Evidence from Empirical Literature Review

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**Abstract:** *The relationship between service quality and students' satisfaction is an important aspect to be observed by Higher learning institutions in order to promote students' enrolment. Service quality influences the students' satisfaction and it is a prerequisite for increased number of graduates and hence educated people in any country. Parasuraman et al. (1988) argued that the assessment of the customers' overall superiority of service offered is based on service quality. This paper discusses the relationship between service quality and university students' satisfaction from empirical literature review. The objective of this paper was to assess the influence of service quality on students' satisfaction basing on studies conducted in various countries in the world. The findings are, to the authors' best knowledge that few studies have been done to assess the influence of service quality on students' satisfaction in Tanzania. The study recommends that there is a need to conduct more studies in higher learning institutions in Tanzania.*

**Keywords** – Service Quality, Students' Satisfaction, Higher Learning Institutions, Tanzania

## Background and Introduction

Service quality affects customer satisfaction and loyalty (Munusamy *et al.*, 2010). A number of studies have adopted the Parasuraman's (1985) Service Quality (SERVQUAL) dimensions when assessing service quality and customer satisfaction (Hasan *et al.*, 2008). These dimensions are Tangibility, Assurance, Reliability, Empathy and Responsiveness. More studies have been conducted in various countries to assess the level of satisfaction of service quality to university students. These include studies conducted in Malaysia (Arokiasamy & Abdullah, 2012; and Farahmandian *et al.*, 2013). Other studies were done in other countries in Asia and developed countries. In USA similar studies were conducted (Letcher and Neves, (n.d); Hermans *et al.*, (n.d); and Tessema *et al.*, (2012). Other studies on the same area were conducted in Croatia

(Legčević and Strossmayer, 2009); Italy (Eboli and Mazzulla, 2007) and Sweden (Petruzzellis *et al.*, 2006), to mention just a few. The empirical literature review indicates that few studies have

been done to assess the role of service quality on students' satisfaction in Africa and specifically in Tanzania.

The history of service quality measurement models can be traced back to 1984 where Grönroos established his qualitative service quality assessment model which concentrated on service Expectation, Outcome and Image. Parasuman *et al.*, (1985) composed the SERVQUAL model with 22 dimensions which evaluate the service quality gaps by comparing Expectation with Perception. Parasuraman *et al.*, (1988) developed a multiple-item SERVQUAL scale model for measuring consumer perceptions of service quality in service and retail organizations while and Bolton and Drew (1991) developed the SERVQUAL model with 16 dimensions to be used in telephone service quality assessment. Some scholars use Service Performance (SERVPERF) model which was founded by Cronin and Taylor (1992) for measuring service quality basing on service performance than the service quality gap as measured by SERVQUAL model.

Adil *et al.*, (2013) argued that SERVQUAL and SERVPERF are the two mostly commonly used methods for assessing service quality. However, some studies use SERVPERF instead of SERVQUAL model. For example Karami and Olfati (2012) assessed the perception of Masters Students on service quality in business schools in Iran where they modified the six dimensions of SERVPERF model (Tangibles, Reliability, Empathy, Employee, Professor and Career guidance).

### **Main Objective of the paper**

The main objective of this paper was to explore from the empirical literature review, the studies done on service quality and students' satisfaction in higher learning institutions. The ultimate goal was to come up with service quality variables mostly used to assess university students' satisfaction. The analysis from the empirical literature review provided the justification for conducting the study. The empirical literature review also helped to recommend the variables to be used in assessing students' satisfaction in higher learning institutions in Tanzania.

### **Specific Objectives**

This paper was guided by the following specific objectives:

- To review published studies on service quality and students' satisfaction in higher learning institutions
- To identify the service quality models used for assessing students' satisfaction in higher learning institutions
- To identify the variables used for assessing university students' satisfaction
- To recommend service quality variables for assessing university students' satisfaction

### **Methodology**

This is a conceptual paper based on empirical literature review and the findings of relevant published articles found online. The search for articles was done in all data bases including

Emerald with the following words alone or in different combinations: Students satisfaction, Higher learning institutions, Students satisfaction in Universities, Students satisfaction in Higher learning institutions, Determinants of students' satisfaction, Service quality, Service quality in higher learning institutions, Determinants of service quality, SERVIQUAL model, SERVPERF model, Service quality and students' satisfaction and Service quality and students' satisfaction in Tanzania. Moreover, the words "and journal" were added with key search words in order to access only online published papers from journals, conferences or any reliable information with these required variables. When going through the literature, emphasis was placed on examining the methodology used and findings in order to recommend the proper methodology and service quality variables for assessing students' satisfaction in higher learning institutions in Tanzania. A summary of empirical literature review was then prepared to reveal the research gap. Discussion of the findings was based on published studies on university students' satisfaction and service quality together with models used for assessment. Conclusions and recommendations were also based on the same published studies.

## **Empirical Literature Review**

Review of empirical literature revealed that most studies on service quality and students' satisfaction were done in Malaysia and some in USA and Europe. Arokiasamy and Abdullah (2012) measured the level of service satisfaction for Malaysian university college students by using SERVQUAL and multiple regression analysis. The findings show that students were satisfied with teaching, administrative support, library, laboratories, accommodation, medical and sports. However, some students were not satisfied with transportation, class room and prayer facilities. The findings further revealed that there was no significant difference in satisfaction between male and female students. Hanaysha *et al.*, (2011) in Malaysia used the SERVQUAL model dimensions (Tangibility, Reliability, Responsiveness, Assurance and Empathy) together with correlation and regression analysis to measure the university students' level of satisfaction on services provided in Malaysia. The findings indicated that the majority of students were satisfied with the facilities provided by universities.

Hasan *et al.*, (2008) analyzed the service quality and student satisfaction in private higher learning institutions in Malaysia by using SERVQUAL and regression models. The results indicated that Empathy and Assurance consistently influenced students' satisfaction than Age, Tangibility, Responsiveness and Reliability. Farahmandian *et al.*, (2013) analyzed the levels of students' satisfaction at the International Business School in Malaysia by using descriptive, correlation and regression model. The results indicated that university facilities, advisory services, curriculum, financial assistance and tuition costs positively and significantly influenced students' satisfaction. Wei and Sri Ramalu (2010) assessed the relationship between service quality and the level of student's satisfaction of undergraduate students in Malaysia by using SERVQUAL, regression and correlation analysis. The findings indicated that Responsiveness; Assurance and Empathy were significantly related to students' satisfaction.

Wang and Shieh (2006) assessed the impact of service quality on customer satisfaction in Taiwanese Library by using SERVQUAL model, correlation and regression analysis. The study revealed that overall service quality has significant positive impact on students' satisfaction. Karami and Olfati (2012) assessed the Postgraduate (Masters) students' perception of service quality in business schools in Iran using modified six dimensions of SERVPERF model (Tangibles, Reliability, Empathy, Employee, Professor and Career guidance) with 42 attributes. The findings revealed that the scores in each dimension for each school among the five business school was different, whereby each school was satisfied with one dimension compared to the other. Moreover, Confirmatory Factor Analysis indicated that Empathy was important service quality dimension for Iranian students.

Letcher and Neves (n.d) assessed the New Jersey College students' satisfaction on a number of variables including: curriculum, instruction and classes, quality of teaching of subject matter, extra-curricular activities and career opportunities. This assessment also covered students' advisory services, instructors' teaching quality, computing facilities, and students' quality of interaction. The study was done in USA and the data were analysed using descriptive statistics chi-square, factor analysis and regression analysis. The findings revealed that advising and quality of teaching have little or no effect on overall student satisfaction while self-confidence, extra-curricular activities, career opportunities and quality of teaching had greater impact on satisfaction. Similarly, Hermans *et al.*, (n.d) examined how attitudinal variables contribute to student satisfaction in web-enhanced courses at a state university, USA. The SERVQUAL, structural modeling, regression and correlation were used for data analysis. The study revealed that satisfaction with the instructor, perceived ease of use of the course technology, and satisfaction with the course influenced students' satisfaction. However, the study revealed that flexibility of web-enhanced courses, students' commitment in studies, students' satisfaction with classes and school do not influence the students satisfaction.

Likewise, Tessema *et al.* (2012) assessed the academic related factors affecting the overall students' satisfaction with major curriculum at a mid-sized public university in USA by using the ranking, descriptive, correlation, T-test and Cohen's d effect size. The findings of the study revealed that students' satisfaction was influenced by a number of factors including quality of instructions, capstone experience, academic advising, overall college experience and preparation for career or graduate school.

Legčević and Strossmayer (2009) assessed the educational services quality gap by using a SERVQUAL instrument model for students in Faculty of Law Osijek, in Croatia. The results revealed service gaps in Reliability and Empathy. Similarly, Eboli and Mazzulla (2007) assessed the Calabria's university students' satisfaction with public transport service in urban area of Cosenza (Southern Italy) by using American Satisfaction Index and Structural Equation Modeling (SEM). The study revealed that bus stop maintenance, route characteristics, information availability, promotion, costs, personnel, bus stop furniture, less overcrowding and bus stop maintenance had an impact on the transport services comfort. Likewise, Petruzzellis *et al.* (2006) examined the Bari universities students' services perceived quality in Italy by using

Multidimensional Scaling (MDS), correlation and a chi square analysis. The findings indicated that students were not satisfied with the service offered. This problem was reflected in the high drop rate of students and the delay in completing the curriculum. Agbor (2011) assessed the relationship between customer satisfaction and service quality at Umea school of Business in Sweden by using SERVQUAL model, Chi square test and American Customer Satisfaction Index. The study indicated that Reliability and Empathy were significantly related to students' satisfaction.

Few studies have been conducted to assess the university students' satisfaction in Africa.

Olufunke (2015) analysed the impact of the faculty of study on students' satisfaction with academic facilities in four private universities in Nigeria by using descriptive statistics and Kruskal Wallis Test. The findings revealed that students' satisfaction were significantly influenced by the faculty of study. Akpoiroro and Okon (2015) investigated the level of students' satisfaction with service delivery in federal universities in South-south geopolitical zone of Nigeria by using descriptive statistics and a single-mean population t-test. The study revealed that students were highly satisfied with educational, security, and medical services while they were not highly satisfied with library, hostel, transport, and ICT services.

Omwando and Ken (2014) examined module II students' satisfaction from five public universities in Mombasa Kenya by using descriptive analysis. The study findings indicated that students' satisfaction with service for the five universities was highly influenced by three variables, namely: convenient hours of library, library welcoming staff and competence of lecturers. The same study revealed the students' dissatisfaction caused by lectures delivery mode and limited library resources. Similarly, Owino *et al.*, (2014) by using descriptive, SERVQUAL and factor analysis examined the perception of service quality between public and private university students in Kenya where the dimensions for analysis were human elements reliability, human elements responsiveness, non-human elements and service blue print. The study found that there was a significant difference between public and private university in the service quality perception dimensions. According to the study, students in private universities were more satisfied compared to those in public universities. Moreover, Chepchieng *et al.* (2006) revealed that students in private universities have close contact with lecturers compared to those in public universities in Kenya and this increases the level of the university students' satisfaction.

Few studies have been done to assess the university students' satisfaction in Tanzania. Mbise and Tuninga (2013) used SERVQUAL model to assess students' perceptions of the managers and employees of business schools on the perceived quality of services they deliver on two Colleges of Business Education (CBE) in Tanzania. The findings indicated that students' expectations were higher than the perceived quality of services delivered by the business schools. The findings further revealed that all employees from various levels indicated a negative gap. The study recommended the public colleges to improve their services. Josephat *et al.* (2014) used factor analysis to assess the University of Dodoma (UDOM) students' satisfaction in Tanzania. The findings revealed that students' satisfaction level with the service was 55.2% and the factors influencing students' satisfaction positively were the academic staff, learning environment,

learning material, non-academic staff and learning facilities while the study revealed that only learning materials influenced the students' satisfaction negatively.

Rwejuna (2013) used qualitative and descriptive data analysis to assess the reasons for a drop rate in enrolment and low completion rate of students at The Open University of Tanzania (OUT). The study revealed that OUT students failed to complete studies on time because of poor examination feedback, low commitment to studies, students' low income, and shortage of study materials and library materials, and supervision problems. Apart from low commitment to studies on the part of the students, some students were unable to pay fees. The study further revealed that other dimensions affecting the dropout rate were related to general students' dissatisfaction on various issues. However, this study focused only on the reasons for students' drop out which was explained by several factors and not necessarily students' satisfaction. The summary of empirical literature review is presented in Table 1.

**Table 1: A Summary of Empirical Literature Review**

Author (s) and countries where study was conducted	Methodology/model (s)	Major findings – Students' satisfaction was based on the following listed service quality variables
Farahmandian et al., (2013), Arokiasamy and Abdullah (2012), Hanaysha et al., (2011) in Malaysia	SERVQUAL model, descriptive statistics, correlation and multiple regression analysis	Teaching, administrative support, library, laboratories, advising, curriculum, financial assistance, medical services, sports, tuition costs and facilities
Wang and Shieh (2006), Karami and Olfati (2012) in Taiwan and Iran	SERVQUAL, SERVPERF model, correlation and regression analysis	Tangibles, Reliability, Empathy, Employee, Professor and Career guidance
Letcher and Neves (n.d), Hermans et al (n.d), Tessema et al (2012) in USA	Descriptive, ranking, descriptive, correlation, T-test and Cohen's d effect size chi-square, factor and regression analysis	Advising and counseling, self-confidence, extra-curricular activities, career opportunities and quality of teaching
Legčević and Strossmayer (2009), Eboli and Mazzulla (2007), Petruzzellis et al (2006), Agbor (2011) in Croatia and Italy	SERVQUAL, descriptive, Chi square test, American Customer Satisfaction Index	Curriculum, Reliability, Empathy, Information availability, promotion, costs and personnel
Olufunke (2015), Akpoiroro and Okon (2015), Omwando and Ken (2014), Owino et al (2014) in Nigeria and Kenya	Descriptive, Kruskal Wallis Test, SERVQUAL and factor analysis	Educational security, medical services ICT services, Operational hours of library services, library welcoming staff and competence of lecturers. Dissatisfaction was reported on the library itself as a facility,

		hostel and transport.
Tuninga (2013), Josephat et al (2014), Rwejuna (2013) in Tanzania	Factor analysis, SERVQUAL	Academic staff, learning environment, learning materials, non- academic staff, learning facilities. Dissatisfaction was reported in the area of poor examination feedback, shortage of study materials, library materials, and supervision problems

(Source: Empirical Literature Review, 2016)

## **Discussion of the Findings**

### **Published studies on university students' satisfaction**

The findings from the empirical literature review show that most studies on students' satisfaction and service quality were done in Asia particularly in Malaysia, followed by other countries such as America and Europe. The findings from the analysis indicate that there are few published studies on service quality and students' satisfaction in higher learning institutions in Africa and specifically in Tanzania. The findings indicate that more studies on students' satisfaction need to be conducted in Tanzania to assess the level of university students' satisfaction because the analysis indicates that only two published studies were done in Tanzania to assess the university students' satisfaction.

It is therefore important to conduct a study on students' satisfaction and service quality in Tanzania because the two studies done in Tanzania were addressing situations of service quality and students' satisfaction in the conventional universities. Hence more studies need to be conducted in other universities with the same or different modes of delivery. For example some universities in Tanzania offer studies in Open and Distance Learning, hence the study on the level of students satisfaction to service quality may reveal different results from those of conventional universities. Also the variables from the conventional universities may differ from those of Open and Distance Learning (ODL) institution. Tanzania has 28 universities and 33 university colleges making a total of 61 higher learning institutions (COSTECH, 2016). This signifies that there is a high competition among higher learning institutions and the enrolment of students and completion rates may have direct relationship with students' satisfaction on services provided. Since payment of operation costs for universities in Tanzania depends on fees collected from the students; students' satisfaction is of paramount importance because it is one of advertising strategy which will increase the enrollment rate.

### **Variables used to assess the university students' satisfaction**

The findings also shows that more studies on students satisfaction have examined different research variables including teaching quality, administrative support, management support,

transportation, libraries, computer labs & general labs, accommodation, medical, sports, prayer, religious facilities, classroom facilities, computing facilities, e-technology, advisory services, curriculum, tuition costs and quality of instructors (Agbor, 2011; Shahin and Janatyan, 2011; Farahmandian *et al.*, 2013; Tessema *et al.*, 2012; Hermans *et al.*, n.d; Letcher and Neves, n.d). The findings indicate that scholars who assess the university students' satisfaction focus on the quality of teaching, quality of materials and other facilities which make the students to study comfortably in order to achieve their ambitions after completing their studies.

### **Models used to assess the university students' satisfaction**

Many scholars use the traditional SERVQUAL and SERVPERF model while some modify them. Some of scholars who used SERVQUAL model to assess the university students' satisfaction include Wang and Shieh 2006; Hasan *et al.*, 2008; Legčević and Strossmayer, 2009; Wei and Sri Ramalu 2010; Hanaysha *et al.*, 2011; Arokiasamy and Abdullah 2012).

According to Adil *et al.*, (2013), SERVQUAL model which has three measures of service Expectations, Perception and Gap, consists of 22 items of the Likert scale with five dimensions which are Tangibles, Reliability, Responsiveness, Assurance and Empathy. To mention few, Landrum *et al.*, (2009) examined the relationship between the relative importance allocated by users of the library information system by using the traditional dimension of SERVPERF of Tangibility, Reliability, Responsiveness, Assurance, Empathy and they concluded that SERVPERF provided better measurement than SERVQUAL.

Miguel *et al.*, (n.d) argued that scholars are still debating on which model to use among SERVQUAL and SERVPERF in assessment of service quality and customer satisfaction. For example, Zhou (2004) disqualified the use SERVQUAL in measuring Service quality instead recommended SERVPERF because of its high validity while Ali *et al.* (2010) recommended the use of SERVQUAL arguing that it considers the variables of customer expectation which is worth to assess. Moreover, Adil *et al.*,(2013) recommended SERVPERF arguing that SERVQUAL model cause overlap between technical and functional dimensions. Furthermore, according to Adil *et al.*, (2013), respondents who filled the SERVQUAL questionnaires preferred to fill the service Perception part than both Expectation and Perception parts. Despite many contemporary scholars recommend SERVPERF because of its high validity compared to SERVQUAL, many scholars still use SERVQUAL when assessing customer satisfaction (Ali *et al.*, 2010; Adil *et al.*, 2013; Hanaysha *et al.*, 2011; Arokiasamy and Abdullah 2012). There seems to be little consensus on which model is more appropriate in a general sense.

The empirical literature review shows that some scholars have modified the SERVQUAL and SERPERF to fit their environment and study purposes. For example, Fogarty *et al.*, (2000) modified the SERVPERF questions according to Australian consumers' environment where SERVPERF contained only 15 instead of 22 variables. Theerthaana (2015) proposed a SERVPERF model comprising of 31 variables including the original 22 variables in the model where the five additional variables to the original SERVPER model were availability of spares,



accessibility, transparency, after service complaints and waiting time. The variables were considered to be essential in the sector of mobile services. Some scholars who modified SERVQUAL and SERVPERF include Hasan *et al.*, (2008), Agbor (2011), Shahin and Janatyan (2011), Farahmandian *et al.*, (2013), Hermans *et al.*, (n.d) and Karami and Olfati, (2012), to mention few.

Some scholars used other models that were appropriate to their services quality assessment. For example, Rust and Oliver (1994) composed the three components of a service product model which are technical quality, service delivery, functional quality and service environment.

Other methods/models for assessing the university students service satisfaction apart from SERVQUAL and SERVPERF include qualitative data analysis, five point Likert-type scales, reliability analysis, Exploratory Factor Analysis, multiple regression analysis, a single-mean population t-test, descriptive analysis, Structural Equation Modeling and Kruskal Wallis Test (Rwejuna, 2013; Rahman and Zarim, 2014; Omwando and Ken, 2014; Olufunke, 2015; Akpoiroro and Okon, 2015).

In the competitive business environment service providers have to be innovative and decide on which service quality variables suits their circumstances. The number of higher learning institutions in Tanzania has continued to increase yearly and there is free flow of information among students from one institution to another. Students are able to communicate with each other on a number of issues which boil down to service quality and satisfaction. Some courses on quality management have been introduced in the curriculum which also creates more awareness on the part of students as far as quality service is concerned. Hence more studies on students' satisfaction in higher learning institution are needed in order to determine the appropriate service quality variables that influence students' satisfaction in Tanzania.

## **Conclusion and Recommendations**

The literature review indicates that very few studies have been done to assess the role of service quality on students' satisfaction of services provided by higher learning institutions in Tanzania. Academic institutions are a source of human resource required in any country. The output of higher learning institutions in terms of the number of graduates is dependent on the ability of the institutions to enroll and manage the students successfully. The literature review indicates that published studies on the role of service quality on students' satisfaction in higher learning institutions in Tanzania are limited in number and hence more research need to be conducted in this area. Another implication from the empirical literature review is that service quality is important for any academic institution. Therefore, the policy makers in the relevant ministry dealing with academic institutions should strive to ensure adherence to the guidelines for quality assurance and self assessment at an institutional level.

Moreover, basing on the empirical literature review, this paper recommends the use of variables in the SERVQUAL and SERVPERF depending on the situation in question. At a very basic level

all high learning institutions need to pay particular attention to some service quality variables that are critical to academic institutions in developing countries like Tanzania. These include good learning environment conducive for optimum performance, proper management of students' records and affairs, good customer care to students, competent teaching staff and reliable system for responding to students' queries.

## References

- Adil, M., Al Ghaswyneh, O. F. M. and Albkour, A.M. (2013). SERVQUAL and SERVPERF: A Review of Measures in Services Marketing Research. *International Research Journal*, 13(6), 65-76.
- Ali, M.H., Ali, N. A. and Radam, A. (2010). Validating SERVPERF Model in Government Agencies. *The Journal of Human Resource and Adult Learning*, 6(1), 84-92.
- Agbor, J.M. (2011). The Relationship between customer satisfaction and service quality. MSc Thesis, Umea school of Business. Sweden. Retrieved from: <http://umu.diva-portal.org/smash/get/diva2:448657/FULLTEXT02.pdf>, on 29/02/2016.
- Akpoiroro, R. M. and Okon, J. E. (2015). Students' satisfaction with service delivery in federal universities in South-south geo-political Zone, Nigeria 7(5), 110-113.
- Arokiasamy, A. R.A. and Abdullah, A. G. (2012). Service Quality and Students' Satisfaction at Higher Learning Institutions: A Case Study of Malaysian University Competitiveness. *International Journal of Management and Strategy* [http://www.facultyjournal.com/\(IJMS\), 3\(5\), 1-16](http://www.facultyjournal.com/(IJMS), 3(5), 1-16).
- Bolton, R. D. and Drew, J.H. (1991). A multistage model of customers' assessment of service quality and value. *Journal of Consumer Research*, 17(4), 375-84.
- Chepcheng, M. C., Mbugua, S. N and Kariuki, M.W. (2006). University students' perception of lecturer-student relationships: a comparative study of Public and Private Universities in Kenya. *Educational Research and Reviews*, 1(3), 80-84.
- COSTECH (2016). Universities. Retrieved from: [http://www.costech.or.tz/?page\\_id=2247](http://www.costech.or.tz/?page_id=2247), on 28/04/2016.
- Cronin, J. J., and Taylor, S. A. (1992). Measuring Service Quality - A Reexamination and Extension. *Journal of Marketing*, 56(3), 55-68.
- Grönroos, C. (1984). A service Quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Eboli, L. and Mazzulla, G. (2007). University of Calabria Service Quality Attributes Affecting Customer Satisfaction for Bus Transit. *Journal of Public Transportation*, 10 (3), 22-34.
- Farahmandian, S., Minavand, H. and Afshardost, M. (2013). Perceived service quality and student satisfaction in higher education. *IOSR Journal of Business and Management*, 12(4), 65-74.
- Fogarty, G., Catts, R., and Forlin, C. (2000). Identifying shortcomings in the measurement of service quality. *Journal of Outcome Measurement*, 4(1), 425-447.
- Hanaysha, J. R. M., Abdullah, H. H. and Warokka, A. (2011). Service Quality and Students' Satisfaction at Higher Learning Institutions: The Competing Dimensions of Malaysian

- Universities' Competitiveness. *Journal of Southeast Asian Research*, Vol. 2011, Article ID 855931, 10 pages
- Hasan, H. F.A., Ilias, A., Rahman, R.A., Razak, M.A. (2008). Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. *International Business Research*, 1(3), 163-173
- Hermans, C. M. Haytko, D. L., and Mott-Stenerson, B.(n.d). Student Satisfaction in Web-enhanced Learning Environments. *Journal of Instructional Pedagogies*, 1-19.
- Josephat, P., Ismail, A. and Martin, P. (2014). Undergraduate Students' Satisfaction Survey at the University of Dodoma. *Journal of Education Research and Behavioral Sciences*, 3(2), 045-053.
- Karami, M. and Olfati, O. (2012). Measuring service quality and satisfaction of students: A case study of students' perception of service quality in high-ranking business schools in Iran. *African Journal of Business Management*, 6(2), 658-669.
- Landrum, H., Prybutok, V., Zhang, X., and Peak, D. (2009). Measuring IS System Service Quality with SERVQUAL: Users' Perceptions of Relative Importance of the Five SERVPERF Dimensions, *The International Journal of an Emerging Transdiscipline*, 12,17-33.
- Legčević, J. and J.J. Strossmayer (2009). Quality Gap of Educational Services in Viewpoints of Students, UDK / UDC: 378.14, JEL classification: I21.
- Letcher, D. W. and Neves, J. S. (n.d). Determinants of Undergraduate Business Students' Satisfaction. *Research in Higher Education Journal*, pp 1-26. Retrieved from: <http://www.aabri.com/manuscripts/09391.pdf>, on 25/03/2016.
- Mbise, E.R. and Tuninga, R.S. J. (2013). The Application of SERVQUAL to Business Schools in an Emerging Market: The Case of Tanzania. *Journal of Transnational Management*, 18, 101-124.
- Miguel, P. A. C., Silva, M T., Chiosini, E. L., and Schützer, K. (n.d). Assessment of service quality dimensions: a study in a vehicle repair service chain. Retrieved on 30/04/2016 from: <http://www.poms.org/conferences/cso2007/talks/36.pdf>
- Munusamy, J. Chelliah, S. and Mun, H. W. (2010). Service Quality Delivery and its Impact on Customer Satisfaction in the Banking Sector in Malaysia, *International Journal of Innovation Management and Technology*, 1(4), 398-404
- Olufunke, O.A. (2015). The Impact of Faculty of Study on Students' Satisfaction: A Study of Four Private Universities in Nigeria. *International Education Studies*, 8(7), 57-63.
- Omwando, B. N. and Ken, I. B. (2014). Students' Satisfaction with Module II Academic Programs Offered by Public Universities in Mombasa: A Comparative Study. *IOSR Journal of Business and Management*, 16(4), 91-108.
- Owino, E., Kibera, F., Munyoki, J. and Wainaina, G. (2014). Service Quality in Kenyan Universities: Dimensionality and Contextual Analysis. *European Journal of Business and Management*, 6(11), 180-194.
- Parasuraman, A., Zeithaml, V. A., Berry, L. L (1985). A conceptual model of service quality and its implication for future research, *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml V. A., Berry L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality, *Journal of Retailing*, 64(1), 12-40.

- Petruzzellis, L., D'Uggento, A. M. Romanazzi, S. (2006). Student satisfaction and quality of service in Italian universities. *Managing Service Quality* 16(4), 349-364.
- Rahman, M. S. and Zarim, Z.A. (2014). Service Quality and Students' Satisfaction Towards Purchasing Online Educational Resources. *Journal of Marketing Management*, 2(2), 57-64.
- Rust, R. T., and Oliver, R. L. (1994). Service Quality: Insights and managerial implications from the frontier in Service Quality: New directions in theory and practice. Sage Publication, pp. 1-19.
- Rwejuna, Z. R. (2013). Factors Affecting Completion Rates at the Open University of Tanzania. Unpublished PhD Thesis, The Open University of Tanzania.
- Shahin, A. and Janatyan, N. (2011). Estimation of Customer Dissatisfaction Based on Service Quality Gaps by Correlation and Regression: Analysis in a Travel Agency. *International Journal of Business and Management*, (6)3, 99-108.
- Theerthaana, P. (2015). Antecedents of Customer Satisfaction and Retention: Validating Metrics of Mobile Phone Services through SERVPERF, *The International Journal of Business & Management*, 3(8), 283-290.
- Tessema, M. T., Ready, K., and Yu, W. (2012). Factors Affecting College Students' Satisfaction with Major Curriculum: Evidence from Nine Years of Data. *International Journal of Humanities and Social Science*, 2(2), 34-44.
- Wang, M. and Shieh, C. (2006). The relationship Between Service Quality and Customer Satisfaction. The Example of CJCUC Library. *Journal of Information & Optimization Sciences*, 27(1), 193-209.
- Wei, C. C. and Sri Ramalu, S. (2010). Students Satisfaction towards the University: Does Service Quality Matters? *International Journal of Education*, 3(2), 1-15.
- Zhou, L. (2004). A dimension-specific analysis of performance-only measurement of service quality and satisfaction in China's retail banking. *Journal of Services Marketing*, 18, 534-46.