

# Influence of Service Tangibility on Student Satisfaction in Schools of Business of Chartered Universities in Kenya

<sup>1</sup>Jane Naitore Kimaita, <sup>2</sup>Hellen Kabue, <sup>3</sup>Phares Ochola, <sup>4</sup>Stephen Ntuara Kiriinya

<sup>1,2,4</sup>Department of Business Administration and Management, The Technical University of Kenya, Kenya

<sup>3</sup>Department of Management Science, The Technical University of Kenya, Kenya

DOI: <https://dx.doi.org/10.47772/IJRISS.2023.70953>

Received: 11 August 2023; Revised: 24 August 2023; Accepted: 30 August 2023; Published: 29 September 2023

## ABSTRACT

The aim of the study was to establish the influence of service tangibility on student satisfaction in chartered Universities in Kenya and in particular students in the School of Business. Service Tangibility was measured using four constructs namely; physical facilities, equipment, personnel and communication materials. The study adopted stratified sampling and primary data was collected from 400 respondents. Questionnaires were self-administered to students during common unit classes. Statistical Package for Social Sciences (SPSS) (2020) version 27 was used for data analysis. The study used the Multinomial Logistic Regression Model. The study found out that service tangibility was significant across the three evaluation categories (Strongly agree, Agree and Disagree).

**Keywords:** Influence, Service, Tangibility, Satisfaction, Chartered Universities

## BACKGROUND

Studies have reported excessive complaints by customers who are not satisfied with or delighted by the quality of services offered by some organizations (Kealesitse et al., 2014). This is as a result of poor service quality that institutions are offering to customers. Service quality comprises of tangibility, responsiveness, reliability, empathy and assurance (Parasuraman, Zeithaml and Berry 1988). According to Kanori, Kimani and Kalai (2020) student satisfaction is a function of a perceived service quality that results from evaluations of experiences with lecturers, examinations, courses offered, library, support staff, hostels, lecture rooms, and laboratories among others. As such, most services are intangible hence students mainly depend on tangibles cues to evaluate service quality. Consequently, relationship between service tangibility and student satisfaction is essential for the continuity of universities.

## LITERATURE REVIEW

### Service Tangibility

Tangibility comprises of the appearance of physical facilities, location, equipment, personnel and communication materials (Paul et al., 2016). Besides, Sharmin, Tasnim, and Shimul (2016); Saliba and Zora (2018) consider tangibles as a distinct element showing consistency across cultures. In a university's framework, tangibility may include the classroom environment, furniture and buildings, well printed material, the appearance of the institution and teaching equipment (Mwiya, et al., 2017). Appearance of universities can be enhanced by making the environment serene and attractive, instil professionalism and ethical practices among staff members (Raphael, 2014). According to Alhkami and Alarussi (2016) well-maintained physical facilities, availability of teaching materials that are visually appealing and modern equipment may lead to a high score in the tangibles dimension for universities.

A study by Magnusson & Sundin (2014) revealed there is significant relationship between tangibility of service and customer satisfaction. Similarly, a study by Twaussi and A-Kilani, (2015) established that

tangibility dimension has strong influence on student satisfaction in higher education industry. Further, a study on the relationship between service quality and students' satisfaction revealed that program quality has strong significant effect on student satisfaction (Osman & Saputra, 2019). According to a study by Saghier and Nathan (2013), there is a positive relationship between tangibility and customer satisfaction but no significant effect. Conversely, a study by (Anantha et al., 2014) established that there is no relationship between tangibility and customer satisfaction in retail banking sector in Malaysia.

In higher education sector, a study by Yousapronpaiboon (2014) on service quality and students' satisfaction in Thailand revealed low scores in all the five dimensions of service quality. This indicated that students had a poor perception of the service quality efforts of the education institutions. However, of all the five dimensions, the tangibles dimension was awarded the lowest scores. On the contrary, a study by Wei (2019) found that tangibility had a greater score than other dimensions of service quality while empathy had the lowest score.

A study by Ogendi (2017) on impact of quality services on customer satisfaction in higher education sector recommended that universities need to improve quality of physical facilities such as buildings which gives first impression of a university's outlook and being competitive in terms of the courses offered to students. Additionally, a study by Kara et. al., (2016) concluded that service quality dimensions had significant effect on student satisfaction. The results though revealed some degree of inconsistencies as far as perceptions of the tangibility dimension in service quality equation and how service quality might relate to satisfaction.

### **Student Satisfaction**

Satisfaction is either an outcome or a process. As an outcome, satisfaction is an end-state resulting from consumption of an experience and as a process, the perceptual, evaluative, and psychological processes that contribute to satisfaction are emphasised (Kanori et al. 2020). Student satisfaction is therefore a key factor for the survival of universities (Asma et al., 2018). Pedro, Mendes and Lourenco (2018) stated that students' satisfaction leads to loyalty, retention as well as support an institution to increase its customer base through referrals and word of mouth. Furthermore, attracting and retaining students are arguably important factor as how students perceive university will shape potential students' attitude towards the institution (Ngoma & Ntale, 2019). Student retention is imperative as it supports universities to boost a long-term relationship through pursuance of further studies by students in the university (Nazi et al., 2016). Additionally, retention of students has strong effect on education institution's profitability and growth (Lee & Moghavvemi, 2015). For universities to achieve students' satisfaction, they need to understand students' expectations, possess problem-solving skills, show courtesy and give individual attention (Gong & Yi, 2018).

Universities that offer students satisfaction will certainly gain a competitive advantage as a result of loyalty, retention, positive word of mouth and future referrals by current students (Mangini, Urdan, & Santos, 2017). Positive word of mouth is the advertising done by a satisfied customer who consciously and sometimes unconsciously becomes a crusader and a firm's advocate, influencing the views and opinions of potential customers concerning the firm's offering (Ahmad, Vveinardt, & Ahmed, 2014). Moreover, word of mouth communication is important as it hastens the process of decision making on the most preferred university by the potential students (Ozdemira, Senc, & Atesoglu, 2016). The outcome for students' satisfaction is willingness to recommend the course or institution to others, maintain contact with the faculty, select the institution again for future study or join the alumni (Faizan et al., 2016).

Students are more inclined to universities that provide service quality with conviction that their needs would be completely satisfied (Chen, 2016). Influential factors such as good service quality and high student satisfaction will boost students' trust and increase motivation leading to improved image of a university (Annamdevula & Bellamkonda, 2016). Findings of a study by Kundi et al., (2014) showed significant and positive impact of service quality dimensions on customer satisfaction.

## STUDY POPULATION, SAMPLING AND SAMPLING PROCEDURE

Population under study is the whole group that the research focuses on (Kothari, 2014). Population comprises of all events or objects that have common characteristics and from which the researcher wants to generalize results (Cooper & Schindler, 2014). The population under the study was students of Business Schools of chartered public and private universities in Kenya. The target population was second, third and fourth-years students from Schools of Business of the chartered universities in Kenya. The choice of the schools was that business courses cut across all universities and also control the majority of student population in Kenya.

Sampling frame is the complete list of individuals or entities in the population, from which a probability sample is drawn and to which study findings are to be generalized (Saunders, Lewis, & Thornhill, 2016). Sampling was done in two stages: stage one was sampling of the universities while stage two was sampling of students from the sampled universities. Yamane (1974) formula was used to arrive at 10 universities out of 52 chartered universities as the unit of analysis of the study. The universities were further clustered into public and private where proportions were used to determine the number of universities in each cluster. Selection of specific universities was scientifically done using the random number tables. Using Yamane's formula, target student population that was derived from the sampled universities was 13,062 and distribution of sample size across the sampled universities was 400. Second, third and fourth-year students were chosen to form the sample unit for the study.

### Research Instruments and Data Collection and Analysis

Primary data was collected using semi structured questionnaire which was self-administered to students during the common units' classes. According to Christesen, Johnson & Turner (2014) questionnaires are widely used method of data collection because they enable a researcher to save time since it is possible to collect a large amount of information from a large population.

Prior to the actual collection of data, a pilot test was done on two universities with a sample of twenty respondents. This was meant to assess the question's validity and the likely reliability. Before the actual data analysis, data were cleaned, edited and then coded. After which analysis of data was undertaken using the proposed model in Statistical Package for Social Sciences (SPSS) 2020 version 27. The study used multinomial logistic regression model to determine the relationship between service tangibility and student satisfaction.

## RESULTS AND DISCUSSION

According to the study, 9% of respondents strongly agreed, 75% agreed that lecture halls and rooms had enough sitting space while 19% of respondents strongly agreed and 80% of respondents agreed that cleanliness was maintained in the lecture halls and classrooms at all times. The study also found out that 9% of respondents strongly agreed while 85% of respondents agreed that university's library had adequate sitting space for all students while 12% strongly agreed, 86% agreed that their university had a well-stocked library facility. Results also indicated that 13% of respondents strongly agreed while 85% agreed that university provided adequate reference and reading materials. Further, the study shows that 12% and 75% of respondents strongly agreed and agreed respectively that their university provided visually appealing teaching/learning materials which is an indication that students are able to assimilate what they are taught easily. In line with this, a study by Kanori et al revealed that appearance and adequacy of physical facilities, equipment as well as teaching and learning services enhance students' satisfaction. This also corresponds with a study by Alhkami and Alarussi which found that well-maintained physical facilities, teaching materials that are visually appealing and modern equipment leads to a high score in the tangibility dimension for a university.

Additionally, the study revealed that 11% of respondents strongly agreed that staff in their university were passionate about their work and 85% agreed on the same. Moreover, the study established that 12% of respondents strongly agreed and 86% agreed that staff treated them with respect when delivering services. From the study, majority of respondents agreed that staff treated them with respect when delivering services and this motivated and gave students confidence to seek for services from the staff. This concurs with a study by Douglas et al. (2015) which established that students' satisfaction entails receiving value for money whenever there is promptness of feedback, availability of staff to attend to student's needs, adequate textbook and teaching materials, responsiveness of faculty on individual academic needs.

Further, results revealed that 8% of respondents strongly agreed while 88% agreed that up to date computers allowed students to study and do their assignments effectively without disruptions.

The study established that 8% of respondents strongly agreed while 86% agreed that universities had adequate and well-equipped laboratories while 9% of the respondents strongly agreed on the same. Additionally, 87% of the respondents agreed that laboratory equipment were in good working condition at all times. This was an indicator that universities provided machines and equipment that were in good working condition. This contradicts a study by Kanori et al., that revealed university laboratories did not have adequate and up-to-date equipment for students use. A study by Ogendi recommended that universities should improve quality of physical facilities such as buildings, which give first impression of university facilities and also being competitive in terms of the courses offered to students.

## **DISCUSSION OF FINDINGS ON THE RELATIONSHIP BETWEEN SERVICE TANGIBILITY AND STUDENT SATISFACTION**

Results revealed that service tangibility was significant across the three evaluation levels which were strongly agree the p-value = 0.026 agree p-value = 0.038 and disagree p-value = 0.046. The Exp (B) results and in each case holding the other variable constant a one unit increase in service tangibility will be accompanied by 37.016 on the 'strongly agree' category, it is expected that there will be 37.016 increase in the log-odds holding the other independent variables constant. Results also indicated that a unit increase in service tangibility rating on the 'agree' evaluation category is expected to be accompanied by 4.970 increase in the log-odds holding the other independent variables. As in the 'disagree' evaluation category can be stated that a unit decrease in service tangibility rating expected to lead to 1.022 increase in the log -odds of the response variable respectively. Consequently, the null hypothesis was rejected and it was concluded that there is a statistically significant relationship between service tangibility and student satisfaction. This is in line with a study by Magnusso and Sundin that established significant relationship between service tangibility and customer satisfaction. Equally, a study by Twaussi and A-Kilani established that tangibility dimension has strong influence on student satisfaction in higher education industry.

Further, findings of the study indicated that universities had adequate facilities and conducive environment for learning as well as equipped libraries with adequate space for the students. However, results also reported that some classrooms were small and at times there was inadequate chairs and computers in the laboratory. This has been as a result of growth in the number of students admitted in the universities yet there has not been expansion of facilities to commensurate the growth.

From the study findings, it was concluded that adequate and maintained physical facilities as well as conducive environment in the universities contribute to student satisfaction. Provision of infrastructure such as computers and library facilities, campus security and accommodation are also major elements that could guarantee retention of existing students to continue with their courses to completion in a university.

## **AREAS OF FURTHER RESEARCH**

The study targeted schools of business students who expressed their opinions and views on the extent to which service tangibility influence student satisfaction in chartered universities in Kenya. A similar study



can be carried out in future research but the target population could be other schools, for example school of engineering in order to establish whether the findings would correspond or differ with results of this study.

## REFERENCE

1. Alhkami, A. A., & Alarussi, A. S. (2016). Service quality dimensions and customer satisfaction in telecommunication companies. *Asian Journal of Business Management*, 4, 117-126.
2. Ahmad, N., Vveinardt, J., & Ahmed, R. (2014). Impact of Word of Mouth on Consumer Buying Decision. *European Journal of Business and Management*, 6(31), 2222-2839.
3. Anantha, R., Arokiasamy, A., & Huam, H. T. (2014). Assessing the relationship between service quality and customer satisfaction in the Malaysian Automotive Insurance Industry. *Middle East Journal of Scientific Research*, 20(9), 1023-1030.
4. Annamdevula, S., & Bellamkonda, R. S. (2016). The effects of service quality on student loyalty: the mediating role of students satisfaction. *Journal of Modelling in Management*, 1(2), 446-462.
5. Asma, S., Dine, M. B., Wafaa, B., & Redouan, A. (2018). The Effect of Perception Quality/Price of Service on Satisfaction and Loyalty Algerians Customers Evidence Study Turkish Airlines. *International Journal of Economics and Management Sciences*, 7(1).
6. Chen, Y. (2016). An Empirical Study on the Student Experience of Higher Education Service Quality in Taiwan. *International Journal of Management Science*, 6(12), 582-594.
7. Christesen, L. B., Johnson, R. B., & Turner, L. A. (2014). *Research Methods, Design and Analysis (11th ed.)*. Harlow: Pearson Education Limited.
8. Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods (7th ed.)*. USA: McGraw-Hill International.
9. Douglas, J. A., Douglas, A., McClellanda, J., & Davies, J. (2015). Understanding Student Satisfaction and Dissatisfaction: An interpretive Study in the UK Higher Education context. doi:10.1080/03075078.
10. Faizan, A., & al., e. (2016). Does higher education service quality effect student satisfaction, image and loyalty? *A study of international students in Malaysian public universities. Quality Assurance in Education*, 24(1), 70-94.
11. Gong, T., & Yi, Y. (2018). The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries. *Psychology & Marketing*, 35(6), 427-442
12. Kanori, E. N., Kimani, G. N., & Kalai, J. M. (2020). Service tangibility, teaching and learning and student' satisfaction at the University of Nairobi. *Journal of Pedogogy, Andragogy, and Heutagogy in Academic Practice (JPHAP) ISSN:2708-261X*, 1(2), 16-28. Retrieved from <http://uonjournals.uonbi.ac.ke>
13. Kara, A. M., Tanui, E., & Kalai, J. M. (2016). Educational service quality and students' satisfaction in public universities in Kenya. *International Journal for Educational Social Sciences* 10, 37-48.
14. Kealesitse, B., O'Mahony, B., Lloyd-Walker, B., & Jay-Polonsky, M. (2014). Developing Customer Focused Public Sector Reward Schemes. *International Journal of Public Sector Management*, 1(26), 33-35.
15. Kothari, C. R. (2014). *Research Methodology: Methods and Techniques (2nd ed.)*. Nairobi, Kenya: New Age International Publishers.
16. Kundi, G. M., Khan, S. M., Qureshi, Q. A., Khan, Y., & Akhar, R. (2014). Impact of Service Quality on Customer Satisfaction in Higher Education (A Case Study of Gomal University, DI Khan, Khyber Pakhtunkhwa Pakistan). *Higher Education*, 4, 23-28.
17. Lee, S. P., & Moghavvemi, S. (2015). The dimension of service quality and its impact on customer satisfaction, trust and loyalty: Case of Malaysian Banks. *Asian Journal of Business and Accounting*, 8(2), 91-121.
18. Magnusson, & Sundin. (2014). The relationship service tangibility and customer satisfaction. *Journal of business and marketing*, 12(7).
19. Mangini, E. R., Urdan, A. T., & Santos, A. (2017). Da qualidade em servicos a lealdade: perspectiva teorica do comportamento do consumidor. *Revista Brasileira de Marketing*, 16(2), 207-217.

20. Mwiya, B., Bwalya, J., Siachinji, B., Sikombe, S., Chanda, H., & Chwala, M. (2017). Higher education quality and student satisfaction nexus: Evidence from Zambia *Creat. Educ.* 8, 1044-1068.
21. Nazir, S., Shafi, A., Qun, W., Nazir, N., & Tran, O. D. (2016). Influence of organization regards on organizational commitment and turnover intentions. *Employee Relations*, 38(4), 596-619.
22. Ngoma, M., & Ntale, D. (2019). Word of mouth communication: A mediator of relationship marketing and customer loyalty. In *Cogent Business & Management* (Vol. 6, pp. 1-20). Abingdon: Taylor & Francis. doi:10.1080/23311975.2019.1580123
23. Ogendi, M. R. (2017). The Impace of Quality Services on Customer Satisfaction in Higher Education Sector: A case of Private Universities in Kenya. *Unpublished Master Thesis ; United States International University – Africa*.
24. Osman, A., & Saputra, R. S. (2019). A pragmatic model of student satisfaction: A viewpoint of private higher education. *Journal of Quality Assurance in Education*, 27(2), 142-165.
25. Ozdemira, E. T., Senc, E., & Atesoglu, H. (2016). Analyses of word-of-mouth communication and its effect on students' university preferences. *12th International Strategic Management Conference, Antalya, Turkey Procedia – Social and Behavioral Sciences* 235, (pp. 22-35). Antalya.
26. Parasuraman, A., Zeithaml, A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 1(64), 12-40.
27. Paul, J., Mittal, A., & Srivastav, G. (2016). Impact of service quality on customer satisfaction in private and public sector banks. *International Journal of Bank Marketing*. 34(5), 606-622.
28. Pedro, E., Mendes, L., & Lourenco, L. (2018). Perceived Service Quality and Student's Satisfaction in Higher Education: The Influence of Teaching Methods. *International Journal for Quality Research*, 12(1).
29. Raphael, M. (2014). *An analysis of service quality measurements in tertiary colleges in Kenya: a case study of Zetech College*. Nairobi: Kenyatta University.
30. Saghier, N., & Nathan, D. (2013). Service quality dimension and customer satisfaction of Bank in Egypt. *Proceedings of 20th International Business Research Conference*, (pp. 1-13).
31. Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students* (7th ed.). Harlow: Pearson.
32. Sharmin, S., Tasnim, I., & Shimul, D. (2016). Measuring Customer Satisfaction through SERVQUAL Model: A Study on Beauty Parlors in Chittagong. *Eur. J. Bus. Manag.*, 8, 97-108.
33. Twaussi, N. M., & A-Kilani, M. H. (2015). The impact of perceived service quality on students' intentions in higher education in a Jordanian government university. *Journal of International Business Research*, 8, 81-92.
34. Wei, Y. K. (2019). Impact of service quality on customer satisfaction of Hotel at Johor Bahru, Malaysia. *Journal of Arts and Social Sciences*, 34-36.
35. Yousapronpaiboon, K. (2014). SERVQUAL: Measuring higher education service quality in Thailand. *Procedia – Social and Behavioural Sciences*, 116, 1088-1095.