

Gordana Stankovska, Fatime Ziberi & Dimitar Dimitrovski

Service Quality and Student Satisfaction in Higher Education

Abstract

Education is a significant institution given the shift to a knowledge economy. Today students have numerous expectations that range from choosing what to learn, how to learn and how much to learn based on their individual academic needs. Student satisfaction is an important facet for higher education institutions and specifically, it is highly related to service quality. Thus, the main goal of this study was to investigate the relationship between student perceived service quality and the global satisfaction level among university students. The ServQual instrument was administered to a sample of 250 university students. The results indicated that the higher gap of the service quality is related to the responsiveness dimension, followed by the reliability, assurance, empathy and tangibles dimensions. At the same time, there was a significant positive relationship between student satisfaction and responsiveness, reliability, assurance and empathy, but negative correlation between student satisfaction and tangibles. The findings generally indicate that a majority of students are satisfied with the facilities provided by the university. Such findings should help the university make a better strategic plan as to enhance student satisfaction in particular and its overall performance in general. So, the service quality in higher education has a significant influence on student satisfaction and in view of this, higher education institutions need to be aware of the service quality dimensions that influence the satisfaction of their students and therefore that it is important to note that these dimensions should be determined by the students, because the students are the primary recipients of the services provided by the institution.

Keywords: service quality, student satisfaction, educational sector, higher education institutions, management

Introduction

The education sector is an important sector, which plays a significant role in the development of human capital and ultimately in the economic development of the country. An educational organization is one of the most important institutional organizations of a nation. Specifically, higher education plays an important role in socio-economic development of a country (Jover & Ones, 2009). Contemporary universities are changing day by day to be able to efficiently deal with the world's numerous challenges. Improving learning is still considered the primary aim of universities. The management and student bodies of academic institutions have functions to perform in the overall achievement of the university's aim (Bush, 2011).

Education is a significant institution given the shift to a knowledge economy. Today students have numerous expectations that range from choosing what to learn, how to learn and how much to learn based on their individual academic needs (Strahlman, 2012). Students' assessment of services in a university can be seen as one of the internal quality

assurance tools used for enhancement of a quality academic environment. Ofosu and Fredua-Kwarteng (2018) indicated that academic institutions acknowledge the significance of students' assessment of quality services, and in most cases would satisfy students' academic needs to a very large extent. Students' assessment of service quality is then considered an efficient tool for improving the quality of teaching and learning in higher education institutions.

Students are likely to be satisfied with their educational institutions when the service provided fits their expectations, or they will be very satisfied when the service is beyond their expectations and they receive more than they expect.

Service quality

In the higher education sector, service quality is considered a key determinant of the performance of higher education institutions and in view of this, Evans (2011, p. 11) defines service quality as "the degree to which the needs and aspirations of students receiving higher education services are fulfilled by their universities". The existing literature on the service quality construct in higher education identifies many dimensions such as competence of staff, reputation of the institution, delivery styles by tutors and lecturers, sufficiency of resources, administrative services, and attitude support among others (Onditi & Wehuli, 2017).

Castleberry and Melntyre (2011, p. 75) define perceived service quality as a belief about the excellence level of the service. Perceived service quality is an attitude that is attained by comparing the expectations with the perceived performance (Pariseau & McDaniel, 1997). The implication of this claim is that the students of a higher education institution define quality. The students determine the perceived or cognitive value of services based on their previous experience with the service delivered and therefore student's expectations, the service delivery process and the service output of higher education institutions have an impact on perceived service quality.

According to Parasuraman, Zeithami and Berry (1994), regardless of the type of service, consumers basically use the same criteria to assess quality. In marketing management, when assessing the service quality, the ServQual model of service is commonly used (Parasuraman, Zeithami & Berry, 1985). Assuming that education is an educational service provided to students, Gallifa and Batalle (2010) presented the following description of the determinants of the quality of educational services for the ServQual model:

- tangibility (the appearance of the university's physical facilities, equipment, personnel and communication materials);
- reliability (the ability of the university to perform the promised services dependably and accurately);
- responsiveness (speed and corrective feedback in the responses according to the changing needs and expectations of the students);
- assurance (the knowledge and courtesy of the academic staff/faculty and their ability to convey trust and confidence);
- empathy (the ability of the academic staff and faculty to provide a caring and individualized attention to students).

Each time students experience a service and evaluate the service quality by judging the experience based on the five dimensions.

Student satisfaction

Saif (2014) defines satisfaction as a feeling of pleasure that people have when their human desires and needs are met. According to Weerasinghe and Fernando (2017, p. 533) “student satisfaction can be defined as a short-term attitude resulting from an evaluation of students’ educational experience, services and facilities provided by the institution”. Students’ satisfaction in higher education refers to students’ feeling of contentment with the quality of educational experiences and services provided for them by their universities.

Higher education tends to care about student satisfaction in relation to its potential impact on student motivation, retention, recruitment and academic success. Ilias et al. (2008) identified that the main factors that have an impact on the level of student satisfaction were the students’ perception of learning and teaching, such as (libraries, computer and lab facilities), the learning environment (lecture rooms, laboratories, social space and university building), the support facilities (health facilities, student accommodation, student service) and the external aspect of being a student (such as finance, transportation). With all these capabilities, an institution will be able to meet students’ expectations and perform competitively. The students’ satisfaction and the whole exercise is an innovative method to obtain students’ feedback regarding their academic experience, perceptions and expectations from the higher education institution, and ultimately, to assess their satisfaction level.

Service quality and student satisfaction

Service quality and student satisfaction have emerged as twin terms in higher education literature at the global level in the last 20 years. The body of literature on the relationship between service quality and student satisfaction has significantly grown globally in the past two decades. Kajenthiran and Karunanithy (2015) found that service quality, particularly the dimensions of assurance and responsiveness, influenced students’ satisfaction. Baniya (2016) found that service quality affected students’ satisfaction with empathy and responsiveness as critical factors that contribute most to students’ satisfaction. Azam (2018) in his study revealed three aspects pertaining to academic service dimension, namely assurance, empathy and reliability had an influence on students’ satisfaction. As argued by Ali et al. (2020), service quality is one of the important factors enhancing value, and can positively influence students’ success. Hence, the main purpose of this study was to examine the possible relationship between service quality and the global satisfaction level among university students.

Research methods

Participants

The sample of students was randomly selected and all of them participated voluntarily. The participants included 250 university students aged between 21-23 years. The mean calculated age of the students was 21.55 (SD=6.56). Of all participants, 135 were female (54%) and 115 were male (46%). The study group of the research included third year students who studied medical sciences and psychology at the University of Tetova. In this study, we used a simple random sampling technique.

Data collection tools

ServQual questionnaire

The ServQual questionnaire developed by Parasuraman, Zeitham and Berry (1991) was used to measure service quality and student satisfaction. The study questionnaire consists of three parts. Part one is intended to obtain background information about the demographic characteristics of the students. In the second part, the ServQual questionnaire was used to assess undergraduate students' expectation and perception of service quality which included 21 items representing the five service quality dimensions: tangibles (5 items), reliability (5 items), responsiveness (3 items), assurance (4 items), and empathy (4 items). Finally, part three measures the students' satisfaction, which consists of only five items. 7-point Likert scales, ranging from *strongly agree* (1) to *strongly disagree* (7), were used for this study. In this questionnaire for five service quality dimensions and student satisfaction, all Cronbach alpha coefficients were higher than .7, indicating that the internal reliability of each first-level indicator of the questionnaire was high.

Data procedure and data analysis

Data collection tools were administered by the researchers during the winter semester of the academic year 2023/24. Each respondent was personally invited to complete a paper-and-pencil version of the questionnaire. The period for answering the scale was 45 minutes.

The statistical analysis of the result obtained in the research was conducted with SPSS 20.0 for the Windows package program. The ServQual questionnaire was calculated between perceived service quality and expected service quality with respect to the following measures: tangibles, reliability, responsiveness, assurance and empathy. Each dimension score was obtained by calculating the difference between the perceived (P) and the expected (E) service score (ServQual score=P-E). The positive scores mean that undergraduate students' expectations have been met and their perceptions of the services of higher education institution are good. The negative scores indicate that undergraduate students' expectations have not been met and their perceptions of the services of higher education institution are poor. The relationship between service quality and student satisfaction was investigated by using the Pearson correlation coefficient.

Results

The mean score of the service quality expectations was high and ranged from 5.06 for the item *Visual appeal of materials* to 6.42 for the item *Professors have the knowledge to answer students*. The total mean score of undergraduate students' service quality expectations was 5.29. Of the five dimensions, the highest expectation was related to the responsiveness dimension (mean score=6.01) and the lowest expectations was related to the tangibles dimension (mean score=5.25). The two items with the highest expectation score were related to the responsiveness dimension, i.e., *The staff provides prompt service to the students/The staff always helps the students* and two items were related to the empathy dimension, i.e., *Dedicated individualized attention/The staff keeps students' interest at heart*. Among the four items, the lowest expectation score was related to the tangibles dimension.

The mean score of the service quality perception ranged from 4.65 for the item *Convenient operating hours* to 6.54 for the item *Students feel safe while receiving*

services. The total mean score of undergraduate students' service quality perception was 5.52. Of the five items with the highest perception score, two items were related to reliability, i.e., *Telling when services will be performed/Providing services at appointed time*, one item was related to assurance, i.e., *Students feel safe while receiving services*, one item was related to empathy, i.e., *Understanding specific needs of students*, and one item was related to responsiveness, i.e., *The staff always helps students*. In addition, among the four items, the lowest perception score was related to the tangibles dimension.

The gap score for each dimension was computed by subtracting the expectation score from the perception score (P-E). The highest gap of the service quality was related to the responsiveness dimension (Gap mean score=0.23) and the lowest gap of the service quality was related to the tangibles dimension (Gap mean score=-.06). The total gap mean score of undergraduate students' overall service quality was 2.09, which is rated as *good*.

According to the findings of Pallant (2010, p. 150), "Correlation analysis uses to define the strength and direction of the linear relationship between two variables". In our research the Pearson correlation test illustrates the strength and direction of the linear correlation between the dimensions of service quality (tangibles, reliability, responsiveness, assurance and empathy) as independent variable and student satisfaction as dependent variable. The range of Pearson correlation coefficients (r) can be taken on only values from -1 to +1 (Cohen, 1988).

The results of the Pearson correlation indicated that there was a positive and significant relationship between student satisfaction and responsiveness ($r=.723$, $p<.01$), student satisfaction and reliability ($r=.641$, $p<.01$), student satisfaction and empathy ($r=.484$, $p<.01$) and student satisfaction and assurance ($r=.228$, $p<.01$), but negative correlation between student satisfaction and tangibles ($r=-.236$, $p>.01$).

Discussion

Based on the objectives of the research, this study aimed to measure the perceived service quality from the students' perspective. It also aimed to investigate the relationship between the dimensions of service quality (tangibles, reliability, responsiveness, assurance and empathy) and student satisfaction. Based on the findings of the mean analysis, the majority of students are satisfied with service quality. The obtained results are similar to the results obtained by other researchers (Amoako & Asamoah-Gyimah, 2020). Olmos-Gomez et al. (2021) found that students were satisfied with the tangibles, assurance, reliability and empathy, but not with parking facilities, computer labs, cafeteria service and the complaint handling system.

It was observed that the students in the first rank have differed dimensions that include reliability, responsiveness, assurance and empathy. The highest expectation score was related to the dimensions of responsiveness and empathy, while the highest perception score was related to the dimensions of reliability, responsiveness, assurance and empathy. The lowest expectations and perceptions of the score regarding the tangibles dimension is indicative of students' dissatisfaction with the university facilities and designs, and visibility of equipment.

Based on the statistical analysis, we found that the highest gap of the service quality is related to the responsiveness dimension, followed by reliability, assurance and empathy, while the lowest gap of the service quality is related to the tangibles dimension. It is also similar to the results obtained from the study by Zeshan, Afridi and Khan (2010) assessing the service quality in higher education institutions in Ghana and by Khodayari

and Khodayari (2011) with obtained results in regard to the service quality of the Islamic University in Iran. Furthermore, the findings of this study showed that four of the service quality dimensions (responsiveness, reliability, assurance and empathy) are possibly associated with student satisfaction, except the tangibles dimension, which is negatively associated with student satisfaction. In terms of the aspect of responsiveness, the faculty members enhance their willingness to help by means of providing extra assistance to their students. Regarding the empathy dimension, the university reflects a capability to fulfill students' concerns in terms of their needs, for instance, in regard to individualized attention and having students' best interest at heart. Reliability is positively related to students' satisfaction. Students were satisfied with the quality of university services such as the emphasis on the practical aspect during classes or the possibility of applying knowledge in practice during classes at the universities (El Ahamad & Kawtharani, 2021). At the same time, the students were satisfied with the assurance dimension of service quality, because the academic staff has the ability to transfer and convey knowledge. According to the empathy dimension, the students were satisfied with the quality of the research club at the university, however they were not satisfied with service quality in terms of the physical appearance (tangibles) of the university building (Truong, Pham & Vo, 2016).

Conclusion

Student satisfaction is an important facet for higher education institutions and specifically it is highly related to service quality. Service quality has been one of the most prominent research topics for the past two decades. The main purpose of this research was to examine the relationship between service quality dimensions and student satisfaction. The association between service quality and student satisfaction will assist the university management to clarify what their service quality dimensions mean to the students and to the university itself.

The results from this study indicated that among the five dimensions of ServQual, the highest gap mean score of service quality included responsiveness, reliability, assurance and empathy, while the lowest gap of service quality was related to tangibles. Thus, responsiveness, reliability, assurance and empathy, except tangibles, were important for the students. Moreover, it was found that positive perceptions of service quality have a significant influence on student satisfaction. The students can be motivated or inspired from both academic performance as well as the administrative efficiency of their institutions (Birhanu, 2018). These results may be attributed to students' belief about the importance of the role of the academic staff in enhancing their knowledge and preparing them for a job or in developing their career skills.

Therefore, this study will particularly be used for the managers and educators within the universities and other institutions by emphasizing the major elements that affect the satisfaction level among students. It would also help in bridging the gap of lack of research on higher education, in general, and on service quality and its effect on students' satisfaction in the context of Macedonian higher education. This research will provide the university administration with feedback regarding the performance of the university, service quality and student satisfaction. This feedback is crucial for guiding and implementing improvements, where needed, which would increase the competitiveness of the university in the industry of higher institutions locally, regionally and internationally, and would enhance student retention.

Based on the results and remarks of this study improvements can be planned across all dimensions of service quality. Policy makers in the services industry in general and in the higher educational sector in particular, may benefit from the findings of this study. Higher education institutions may improve their services in light of the discussion on the dimensions of ServQual as perceived and expected by the undergraduate students. Students' point of view has to be considered in the strategic plan of higher education institutions as quality is defined as achieving strategic goals and incorporated stakeholders' perspective in the strategic management of an organization.

Due to the limitations of the study, its results should not be generalized. Further research is required to consider the perspectives of other stakeholders in higher education. Finally, research is needed to extend our understanding of the importance of service quality evaluation, students' satisfaction and positive word-of-mouth what seems to be a rather important and rich area for further investigation.

Acknowledgements

The authors would like to express their gratitude to all participants who took part in this study.

References

- Ali, S. R. O., Shariff, N. A. M., Said, N. S. M. & Mat, K. A. (2020): The effects of service quality dimensions on students' satisfaction: Hedperf model adoption. *Journal Intelek*, 15(1), 69-76.
- Amoako, I. & Asamoah-Gyimah, K. (2020): Indicators of students' satisfaction of quality education services in some selected universities in Ghana. *South African Journal of Higher Education*, 34(5), 61-72.
- Azam, A. (2018): Service quality dimensions and students' satisfaction: A study of Saudi Arabian private higher education institutions. *European Online Journal of Natural and Social Sciences*, 7(2), 275-284.
- Baniya, R. (2016): Relationship between perception of service quality and students' satisfaction: A case study of a management school. *Journal of Education and Research*, 6(2), 43-64.
- Birhanu, A. I. (2018): Service quality and customer satisfaction in Ethiopian higher education institutions: The case of Oromia State University, Ethiopia. *The International Journal of Business and Management*, 6(9), 273-288.
- Bush, T. (2011): *Theories of educational leadership and management*. 4th Edition. London: SAGE Publications.
- Castleberry, S. B. & Melntyre, F. S. (2011): Consumers quality evaluation process. *Journal of Applied Business Research*, 8(3), 74-82.
- Cohen, J. (1988): *Statistical power analysis for the behavioral sciences*. New York: Routledge.
- El Ahamad, A. H. & Kawtharani, A. M. (2021): Service quality and students' satisfaction in private Lebanese higher education institutions: The case of X University. *Journal of Higher Education Policy and Leadership Studies*, 2(3), 100-118.
- Evans, J. R. (2011): *Quality and performance excellence: Management, organization, and strategy*. 6th Edition. Mason, Ohio: South-Western Cengage Learning.
- Gallifa, J. & Batalle, P. (2010): Student perception of service quality in a multi-campus higher education system in Spain. *Quality Assurance in Education*, 18(2), 156-170.
- Ilias, A., Hasan, H. F. A., Rahman, R. A. & Yaso, M. R. (2008): Student satisfaction and service quality: Any differences in demographic factors. *International Business Research*, 1(4), 131-143.

- Jover, J. N. & Ones, I. P. (2009): Higher education and socioeconomic development in Cuba: High rewards of a risky high-teach strategy. *Science and Public Policy*, 36(2), 97-101.
- Kajenthiran, K. & Karunanithy, M. (2015): Service quality and student satisfaction: A case study of private external higher education institutions in Jaffna, Sri Lanka. *Journal of Business Studies*, 1(2), 46-64.
- Khodayari, F. & Khodayari, B. (2011): Service quality in higher education. *Interdisciplinary Journal of Research in Business*, 1(9), 38-46.
- Ofori, E. & Fredua-Kwarteng, S. K. (2018): Exploring internal quality assurance practices at Ghana College of Physicians and Surgeons (GCPS). *European Journal of Educational Social Science*, 4(1), 10-27.
- Olmos-Gomez, M. C., Luque-Suarez, M., Ferrara, C. & Cuavas-Rincon, J. M. (2021): Quality in higher education and satisfaction among professors and students. *European Journal of Investigation in Health, Psychology and Education*, 11(1), 219-229.
- Onditi, E. O. & Wehuli, T. W. (2017): Service quality and student satisfaction in higher education institutions: A review of literature. *International Journal of Scientific and Research Publications*, 7(7), 328-335.
- Pallant, J. (2010): *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*. 4th Edition. Maidenhead: McGraw-Hill Education.
- Parasuraman, A., Zeithami, V. A. & Berry, L. (1985): A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithami, V. A. & Berry, L. (1991): Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(3), 420-450.
- Parasuraman, A., Zeithami, V. A. & Berry, L. (1994): Reassessment of expectation as comparison standards in measuring service quality: Implications for further research. *Journal of Marketing*, 58(3), 111-124.
- Pariseau, S. E. & McDaniel, J. (1997): Assessing service quality in schools of business. *International Journal of Quality and Reliability Management*, 14(3), 204-218.
- Saif, N. I. (2014): The effect of service quality on student satisfaction: A field study for health service administration students. *International Journal of Humanities and Social Science*, 4(8), 172-181.
- Strahlman, C. (2012): *Quest for quality for students: Going back to basics*. Brussels: European Students' Union, ESU.
- Truong, H. V., Pham, C. H. & Vo, N. H. (2016): Service quality and students level of satisfaction in private colleges in Vietnam. *International Journal of Financial Research*, 7(3), 121-128.
- Weerasinghe, I. M. S. & Fernando, R. L. (2017): Students' satisfaction in higher education: Literature review. *American Journal of Educational Research*, 5(5), 533-539.
- Zeshan, A., Afridi, T. & Khan, S. M. (2010): Assessing service quality in business schools: Implications for improvement. *The 3rd International Conference on Assessing Quality in Higher Education*, December 6-8, Lahore-Pakistan, 220-232.

Corresponding author:

Prof. Dr. Gordana Stankovska, University of Tetova, Republic of North Macedonia

Cite this publication as:

Stankovska, G., Ziberi, F. & Dimitrovski, D. (2024): Service Quality and Student Satisfaction in Higher Education. In *Education in Developing, Emerging, and Developed Countries: Different Worlds, Common Challenges* (pp. 153-160). BCES Conference Books, Vol. 22. Sofia: Bulgarian Comparative Education Society.