Service Quality and Student Satisfaction: The Mediating Role of Service Culture in Higher Educational Institutions in Pakistan

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Abstract

This paper aims to extend knowledge and the concept between service quality and service satisfaction in higher education through a mediating role of service culture. The researchers have theoretically conceptualized and tested for statistical analysis. Questionnaires were distributed among the target population, and 233 respondents returned the questionnaire. A closed-ended questionnaire was used for data collection, and a non-probability convenience sampling technique was used. Moreover, collected data was refined using screening tests, and the theoretical model was statistically tested through Structural Equation Model (SEM). The results revealed the mediated relationship between service quality and service satisfaction. This study supports service culture as a potent mediator in service satisfaction in higher educational contexts. Hence, service culture bridges quality and satisfaction in the service domain. Besides academicians, this study focuses on not only the service quality but also gives close attention to service culture so that customers can be satisfied widely. Additionally, this research fulfils the theoretical gap by introducing the service culture as a mediator that may lead to a new perspective in service marketing. Other researchers may contribute to this theory by employing other research methods and techniques in different service industry fields.

Keywords: *Service culture, student satisfaction, service quality, and Structural Equation Model.*

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INTRODUCTION

Service quality and its dimensions have remained a considerable area for academicians and scholars to investigate the antecedents of quality in an educational context (Saxena, Chawla, & Tähtinen, 2022). Service quality is the perception of customers about products (Akhmedova, Manresa, Escobar, and Bikfalvi, 2021). Students are viewed as prime customers in education (Gupta, Singh, Mathiyazhagan, Suri, and Dwivedi 2022). Quality works as a tool in attracting and retaining students and helps in greater academic performance in higher educational institutions (Park & Kim, 2022). Ahmed et al. (2010) found that service quality generates a positive attitude and directly correlates with satisfaction. Akhmedova et al. (2021) describe service quality might be applied in the educational sector. Educational institutions are competing on the ground of quality where students are key players to be considered (Chikazhe, Makanyeza, & Kakava, 2022). Alridge and Rowley (2001) explored that one of the reasons for student withdrawal from education is dissatisfaction with imperfection in their studies (Mosadeghard, 2006). Dean and Gibbs (2015) identified that one of the serious concerns of universities is managing education quality and student satisfaction to enhance resources for students' effective learning and enrichment. Hence, education and quality are associated, which determines student satisfaction. Similarly, service culture is the most important construct that helps catalyse the interaction of quality and satisfaction (Gronroos, 2007). Therefore, this study is an empirical investigation of service quality, service culture, and student satisfaction in higher educational institutions. Education through creating, communicating, and delivering superior quality is a severe concern to all educational institutions. Similarly, service quality in education is viewed as a bloodstream in the deliverance of student satisfaction because it floats in institutions and students. Service quality requires a significant frame where quality can satisfy students. Past researchers have conceptualized the association between service quality and service culture and service culture with customer satisfaction, but the relationship between service quality and customer satisfaction with a mediating contribution of service culture has not been tested empirically. This research also aimed to assess the service culture as mediating variable on service quality and student satisfaction in higher educational institutions.

LITERATURE REVIEW

Service Quality

Service quality is customers' perception, and satisfaction is the immediate response to consumption or avail of a service (Bitner and Hubbert, 1994; Culiberg, 2010). Therefore, service quality is the judgement of a customer's expectations and perception. If services are as per expectations, the outcome is satisfaction, and if exceed expectations the consumers will be delighted and will perceive service quality as excellent and vice versa (Parasuraman et al., 1985; Jalal, Hanaysha, Haim, Abdullah and Warokka, 2011; Petruzzellis, Uggento, & Romanazzi, 2006). Therefore, improving service quality depends on the institution's ability to meet the student's needs and desires consistently. Educational institutions can generate a smooth edge over the competition by creating, maintaining, and delivering superior quality services to students, leading to higher satisfaction. It will grant various benefits to educational institutions. For instance: providing attention to the students and proper communication, active involvement in student's perception and expectations of service quality, and providing facilities

can help a student to get services in better understanding, delivering a flexible and interactive being student-centric rather than teaching-oriented environment (Nadiri, Kandampully, & Hussain, 2009; Kuo & Ye, 2009; Martı´nez-Caro, 2011).

Service Quality Dimensions

Service quality evaluation is assessed through SERVQUAL dimensions, tangibility, reliability, responsiveness, empathy, and assurance (Parasuraman et al., 1985). The operational definition of these constructs is as follows: Reliability is the ability to provide promised services in a dependable, continuous, and corrective manner without negligence and failure (Li, Lu, Hou, Cui, & Darbandi, 2021; Zekiri, 2011; An and Noh, 2009). It refers to the skill of executing and assuring that offers are precisely and consistently delivered (Parasuraman et al., 1990). Reliability is operationalized using four items: teaching efficiency, class punctuality, staff's sincere interest in solving students' problems, and providing services within the promised time. Responsiveness is the willingness to help students and deliver prompt service with immediate response in case of requests (Nguyen & Malik, (2021). Therefore, the eagerness and readiness of personnel to supply speedy services are essential as costumes are extremely sensitive about personnel in a service environment (Brown and Mitchell, 1993).

Institutional fastness in solving student problems, queries, or complaints is a crucial indicator of service quality (Malik, Danish, and Usman, 2010). Responsiveness has been measured using four items: willingness to help students, attention to student needs, keeping students informed about services, and keeping students updated regarding schedules. Assurance involves the knowledge and kindness of employees and the ability to convey faith and confidence (Nelson and Chan 2005; Buttle, 1995; Parasurman et al., 1990).

Assurance has been operationalized using four items, i.e. employee's skilfulness in delivering service, kindness towards the student, ability to convey confidence in students, and employee's expertise in dealing with student queries. Tangibility is the appearance of physical facilities, equipment, staff members, and other communication materials (Lundstrom and Dixit, 2008), i.e. class layout, cafeteria, and furniture decoration. Tangibility is measured using eight items: Overall cleanliness, the appearance of employees, classrooms and study rooms comfort, parking availability, up-to-date technology & adequacy, variety and quality of campus food, Decoration and atmosphere, and the number of courses offered. Empathy refers to individual attention and cares for personals (Parasuraman et al., 1990). Therefore, in the education; context, employees should care about the needs and expectations of students (Malik, Danish, and Usman, 2010). Empathy has been measured using four items: accommodating students at convenience, employee customized attention, employee unbiased treatment, and extra consultation hours. As discussed above, educational service quality is a multi-dimensional composite of SERVQUAL reliability, responsiveness, assurance, tangibility, and assurance.

H1: service quality positively increases satisfaction among student

Service Culture

Service culture is a broader concept of organizational culture that is based on beliefs and values and comprises mutual benefits and interests of customers, owners, employees, and stockholders for a long-term profitable enterprise (Bartley et al. 2007). Gronroos (2007)

describe a culture where appreciation of goods and services exist, along with delivering internal services and external customer is considered by everyone a natural way of life and one of the most important value' (Gronroos, 2007). Lauren et al. (2011) found that service culture is a unidimensional construct and positively influences customer quality and organizational performance. Similarly, service culture has remained the centre of marketing strategy (Skalen and Strandvik, 2005). In the case of service settings, it is one of the most substantial elements that cause customer satisfaction, employee motivation, and organizational performance (Nuutinen and Lappalainen, 2012). Klidas et al., (2007) claimed that it is the shared perception of customers about service quality and customer satisfaction offered by service providers.

**H2:** Service quality positively influences service culture

Service Satisfaction

Service satisfaction is the difference between a customer's perceived service performance and consumption benefits. In an educational context, satisfaction refers to the students' perception during and after consumption during college and university life (Hasan et al., 2008). Therefore, it is concluded that service satisfaction is a systematic conclusion of educational consumption for students (Zeithaml, Berry, and Parasuraman, 1988). Hence, service satisfaction in an educational context is referred to as student satisfaction which refers to student opinion about the institution where they are learning (national student survey, 2005).

Similarly, consumers with complete satisfaction also create attraction and positive word of mouth for other people, associates, and friends to pursue their studies in such educational institutions (Gruber et al., 2010; Helgesen band Nesset, 2007). Student learning, inspiration, motivation, loyalty, and satisfaction highly depend on teaching staff and employee skills and brilliance in higher education institutions (Rodie and Kleine, 2000; Edstrom, 2008; Sproule, 2000).

H3: Service culture increase satisfaction among students

H4: Service culture mediates the relationship between service quality and student satisfaction
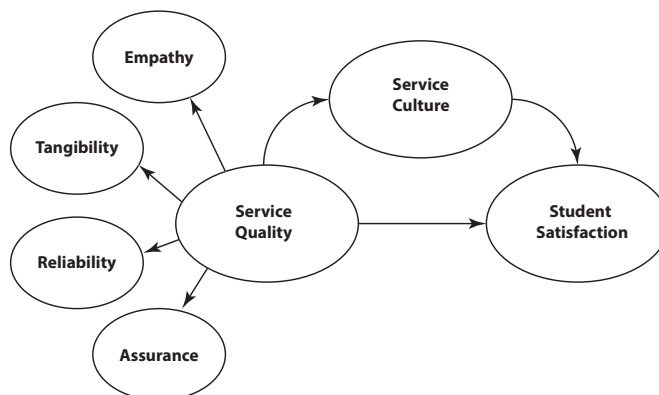
METHODOLOGY

Sampling and data collection

The target population is the enrolled students of higher educational institutions in Sindh. Therefore researcher requested universities to share the list of students as the total population and the list of the elements of the population are the prerequisite for the probability sampling method. Unfortunately, the universities administration denied sharing such data due to the student secrecy act of universities and letting the researcher only option to select the non-probability sampling method. Accordingly, the non-probability convenience sampling technique is used for this study. Bryman and Bell (2013, p.1050) endorse that convenience sampling is the accessibility for a researcher to collect the responses easily. Moreover, regarding sample size, Barclay et al. (1995) recommend that the expected standard for rigorous analysis technique just like Structural Equation Model-SEM should be big or more significant than at least 10 cases per predictor. Thus, 233 respondents were selected for to survey with close-ended questionnaires. The respondents were familiar with the English language, and therefore, a five-point Likert scale was administered in English by using google forms and distributed among the contacts and groups for data collection. The service quality was measured with 15 items, service satisfaction was measured with nine items, and service culture was measured with 15 items. In this case total of 30 items scale was borrowed from Parasuraman et al. (1990) for service quality, Atheeyaman (1997) for service satisfaction, and Lauren, Glenn Richey, Reynolds (2011) for service culture to complete the study. Data were collected from the students of different universities in four major regions of Sindh including Karachi, Hyderabad Sukkur, and Larkana. The higher education institutes in these cities are working under the same Standard Operating Procedure of the Higher Education Commission of Pakistan.

ANALYSIS AND RESULTS

Demographic profile of Respondents

In this study, the administered scale was composed of two sections. The first part was to know about respondents including their gender, age, and discipline. The second part was to collect their responses against the conceptual model by rating their most relevant answer. Concussively, a total of 233 responses were collected. The analysis indicates that most participants were male with a 73.3% ratio and only 26.6% were females, concluding that male contribution in this study is greater than female respondents. Moreover, 50.2% of respondents were between the ages of 18 to 24, the highest ratio, and 37.3% of students were of 25 to 29 ages whereas only 12.4% of individuals were 30 and above. It concludes that youngsters have contributed more than other age category individuals. In addition, respondents were enrolled in various education levels including 46.3% graduates, 34.3% postgraduates, and only 10.3% of students were Ms/Ph.D. graduates as shown in table no. 01.

Table 1. *Profile of Respondents*

Variables	Category	Frequency	Percentage
Gender	Male	161	73.3%
	Female	52	26.6%

Age	18-23	117	50.2%
	24-29	87	37.3%
	30 and above	29	12.4%
Discipline	Graduate	121	51.9%
	Post Graduate	88	37.7%
	Ms/Ph.D.	24	10.3%

RELIABILITY AND VALIDITY ANALYSIS

The collected data were screened and refined before the analysis through SPSS. Reliability and validity statistics were checked for the purpose of internal consistency of items used in the scale. Therefore, Cronbach's alpha, composed reliability, and average variance were extracted and all items should be greater than 0.7. Bagozzi and Yi (1988) recommend that composite reliability be greater than 0.6 and that the average variance extracted shud not be less than 0.4. In this study, the reliability and validity of the scale are qualified and shown in table no. 02. It indicates that all items for service quality at (α) =0.81, (CR) =0.91, (AVE) =0.69, service culture at (α) =0.87, (CR) =0.85, (AVE) =0.67 and student satisfaction at (α) =0.72, (CR) =0.78, (AVE) =75 are consistent and qualified the convergent validity tests for further analysis.

Table 2: *Reliability and validity Analysis*

Variables	(α)	(CR)	(AVE)
Thresholds	≥ 0.7	≥ 0.6	≥ 0.4
Service Quality	0.81	0.91	0.69
Service Culture	0.87	0.85	0.67
Student Satisfaction	0.72	0.78	0.75

Moreover, a discriminant validity test was conducted to identify the extent of the difference between one variable over another statistically (Fornell and Larcker 1981). Discriminate validity is an essential part of scale validation after convergent validity for any study. In this study, variables were tested and statistically qualified for the discriminant validity test as shown in table no. 03.

Table 3: *Fornell and Larcker (1981) Criterion Test*

Variables	Service Quality	Service Culture	Student Satisfaction
Service Quality	0.731		
Service Culture	0.865	0.671	
Student Satisfaction	0.673	0.812	0.728

Structural Equation Modelling Results

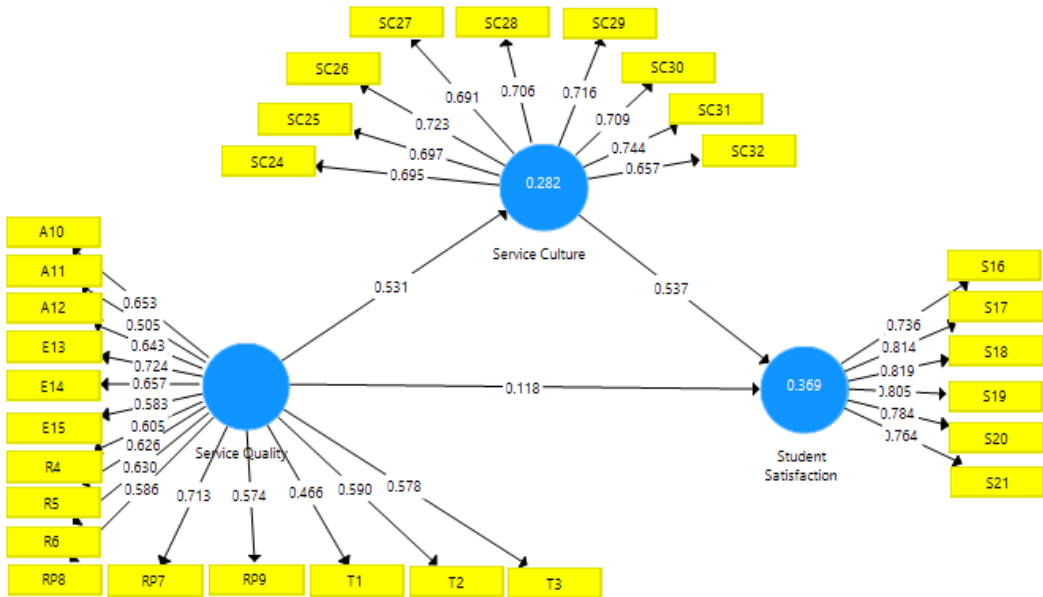Structural Equation Modelling (SEM) was employed to measure the conceptual model statistically.

Figure 1: *Shows a graphical representation of the conceptual model with a mediating effect.*

Moreover, table no. 04 represents statistics of the structural model. It indicates that the relationship between service quality and service culture with a path coefficient is 0.531 with a standard deviation of 0.049, t values=9.215, p=0.001, service culture to student satisfaction path coefficient is 0.537 with a standard deviation of 0.597, t values=12.215, p=0.000 and finally service quality to student satisfaction path coefficient is 0.118 with standard deviation 0.515, t value=7.125, p=0.000. The results of the hypothesized model are significant.

Table 4: *Path Co-efficient*

Path	Original Sample	Sample Mean	Std. Deviation	T Statistics	P
SQ→SC	0.531	0.525	0.049	9.215	0.001
SC→ SS	0.537	0.539	0.597	12.215	0.000
SQ→SS	0.118	0.119	0.515	7.125	0.000

Mediation Analysis

The mediating relationship of service culture between service quality and student satisfaction was statistically tested in Smart PLS for the proposed model as shown in figure no.01. The specific indirect effect of the mediation revealed that service culture (SC) is the significant and robust mediator between service quality (SQ) and student satisfaction (SS) at 0.492, standard deviation 0.041, t values= 12.215 and p=0.000.

Table 6: *Mediation Analysis*

Indirect Effect	Original Sample	Sample Mean	Std. Deviation	T Statistics	P
SQ→SC→SS	0.492	0.489	0.041	12.215	0.000

Hypothesis Testing

Hypothesis H1 of this study was that service quality positively increases student satisfaction, which is supported statistically at β=0.118 with t-value = 7.125, p = 0.000. The second hypothesis H2 of this study was that service quality positively influences service culture which is also supported at β = 0.531 with t-value = 9.215, p = 0.001. The third hypothesis, H3 was that service culture increases student satisfaction, which is supported at β = 0.537 with t-value = 12.215, p = 0.000. The fourth hypothesis H4 of this study was that service culture mediates the relationship between service quality and student satisfaction which is supported by β = 0.492, t-value = 12.215, and p = 0.000.

Model Fit Indices

Model fit indices including Chi-square, Square Root Mean Residuals, and Normative Fit Indices (NFI) were extracted for the saturated model. Many researchers rely on fit indices to quantify the degree of data–model fit. The results of fit indices conclude that the model is statistically fit at SRMR = 0.089, Chi-Square = 4089.458, and NFI= 0.984 as shown in table no. 06.

Table 6: *Mode Fit Indices*

Indices	Saturated Model
Chi-Square	4089.458
SRMR	0.089
NFI	0.984

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

Conclusion

The purpose of this study is to explore the relationship between service quality and student satisfaction with mediating effect of service culture. The results of this study have broadened the theory about student satisfaction on an empirical basis with a mediating role of service culture. The experimental relationship of used variables service quality with student satisfaction positively increase satisfaction among students is supported. Similarly, all hypotheses are supported and statistically proved. This study has implications for the general concept of how customers can be delighted. Although quality is considered one of the main contributors to satisfaction, service culture plays a vital role. Therefore it can be concluded that service culture is a crucial factor for service organizations. This study suggests that managers and service sector personnel must focus on service culture to fulfil student satisfaction in education. Similarly, organizations in the academic context must apply service culture as a connecting element in satisfying their students. Higher education institutions need to develop a service culture in education settings to increase student satisfaction.

Limitations

There are always limitations to every research including this study. The first limitation of this study is the context-specificness. Hence, the results of the study should be interpreted

accordingly. This study extends the theoretical knowledge of the conceptual model in an education context. However, service culture implementation in other contexts is the second limitation of this study. Moreover, only regular students of higher education institutions were the target sample in this study. Therefore pass out, or dropout students are omitted.

Future Directions

Future researchers can implement this research model in other service domains such as tourism and hospitality, health and medical, retail and baking, etc. by increasing sample size or using other statistical analyses. Future scholars can also add more variables to predict student satisfaction. The role of moderating variables such as supervisor support and university type can be explored in the same context. Future researchers can further elaborate on the concept by conducting cross-cultural and longitudinal studies by adding other demographical variables.

REFERENCES

Abdullah, F, 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.

Agresti, A & Finlay, B 2009, *Statistical Methods for the Social Sciences*. 4th edition.

Ahmed, I, Nawaz, M, M, Ahmad, Z, Ahmad, Z, Shaukat, M, Z., Usman, A, Wasim-ul-Rehman & Ahmed, N, 2010, 'Does Service Quality Affect Students' Performance: Evidence from Institutes of Higher Learning', *African Journal of Business Management, 4*(12), 2527 2533.

Alridge, S. & Rowley, J. (2001). Conducting a Withdrawal Survey. *Quality in Higher Education, 7*(1), 55-63.

Akhmedova, A., Manresa, A., Escobar Rivera, D., & Bikfalvi, A. (2021). Service quality in the sharing economy: A review and research agenda. *International Journal of Consumer Studies, 45*(4), 889-910.

Akhmedova, A., Manresa, A., Escobar Rivera, D., & Bikfalvi, A. (2021). Service quality in the sharing economy: A review and research agenda. *International Journal of Consumer Studies, 45*(4), 889-910.

Akhmedova, A., Manresa, A., Escobar Rivera, D., & Bikfalvi, A. (2021). Service quality in the sharing economy: A review and research agenda. *International Journal of Consumer Studies, 45*(4), 889-910.

Aldridge, S, & Rowley, J, 2001, 'conducting a withdrawal survey: *Quality in Higher Education, 7*(1), 55-63.

An, M., Noh, Y., 2009. Airline customers' satisfaction and loyalty: impact of in-flight service quality. *Serv. Bus., 3*(3), 293e307

Atheeyaman, A. (1997). Linking student satisfaction and service quality perceptions: the case of university education. *European Journal of Marketing, 31*(7), 528-540.

Bartley, B., Gomibuchi, S. & Mann, R. (2007). Best practices in achieving customer-focused culture, Benchmarking: *An International Journal, 14*(4), 482–496.

Barclay, D., Higgins, C., & Thompson, R. (1995). The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration. *Technology Studies, 2*, 285-309.

Bagozzi, R. P. (1980). Causal Models in Marketing. *The Journal of Marketing, 44*(4), 126–128. Retrieved from http://library.wur.nl/WebQuery/clc/131045

Bebko, C.P., 2000. Service intangibility and its impact on consumer expectations of service quality. *J. Serv. Mark. 14*(1), 9e26.

Bitner, M.J., Hubbert, A.R., 1994. Encounter satisfaction vs. overall satisfaction and quality. In: Rust, R.T., Oliver, R.L. (Eds.), Service Quality: New Directions in Theory and Practice. Sage Publications, New York, pp. 72e94

Bolton, Ruth N, 1998, 'A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction', *Marketing Science, vol. 17*, no. 1, pp. 45-65.

Booms, B, H, and Bitner, M,J, 1981, 'Marketing strategies and organization structures for services firms', in J, Donnelly and W, George (eds.), *Marketing of Services*, American Marketing, Chicago, pp. 47-51.

Brausberger, K., Wybenga, H. and Gates, R. (2007), "A comparison of reliability between the telephone and web-based surveys", *Journal of Business Research, Vol. 60* No. 7, pp. 758-64.

Brown KA, Mitchell TR, 1993, 'Organizational obstacles: links with financial performance: *customer satisfaction and job satisfaction in a service environment', vol. 46*, no. 3, pp. 725-727.

Bryman, A, & Bell, E, 2003, *Business research method*, New York: Oxford University Press.

Buttle, F., 1995. SERVQUAL: review, critique, and research agenda. *Eur. J. Mark. 30* (1), 8e32.

Cheng, Y, C, 1990, 'Conception of school effectiveness and models of school evaluation: a dynamic perspective', *Education Journal, vol. 18*, no.1, pp. 47–62.

Chikazhe, L., Makanyeza, C., & Kakava, N. Z. (2022). The effect of perceived service quality, satisfaction and loyalty on perceived job performance: perceptions of university graduates. *Journal of Marketing for Higher Education, 32*(1), 1-18.

Clewes, D, 2003, 'A student-centered conceptual model of service quality in higher education', *Quality in Higher Education, Vol. 9*, No. 1, pp. 69-85.

Culiberg, B., 2010. Identifying service quality dimensions as antecedents to customer satisfaction in retail banking. *Econ. Bus. Rev. 12* (3), 151e166

Dean, A., & Gibbs, P. (2015). Student satisfaction or happiness? A preliminary rethink of what is important in the student experience. *Quality Assurance in Education, 23*(1), 5-19.

Deming, wed, 2000, The New Economics for Industry, Government; Education-2ndEdition, MIT Press.

Dennis, J.M. (2001), "Are internet panels creating professional respondents?", *Marketing Research, Vol. 13* No. 2, pp. 34-8.

Duque, L. C. (2014). A framework for analysing higher education performance: students' satisfaction, perceived learning outcomes, and dropout intentions. *Total Quality Management & Business Excellence, 25*(1-2), 1-21

Edstrom, K, 2008, 'Doing course evaluations as if learning matters most', *Higher Education Research and Development, vol. 27*, pp. 95-106.

Fornell, C., & Larcker, D. F. (1981a). Evaluating structural equation models with unobservable variables and measurements error. *Journal of Marketing Research, 18*(4), 39–50.

Galloway L, Ho S, 1996, 'The model of service quality for training, *Training for Quality, vol.4* no.1, pp. 20-26.

Goran Svensson, Greg Wood, 2007, 'Are university students really customers? When illusion may lead to delusion for all?', *International Journal of Educational Management, Vol. 21*, no.1, pp.17 – 28.

Gronroos, C, 1982, 'A service quality model and its marketing implications', *European Journal of Marketing, vol. 18,* no. 4, pp. 36-44.

Gronroos, C, 1983, *Strategic management and marketing in the service Sector*, Marketing Science Institute, Boston, MA.

Gronroos, C, 1990, 'Relationship approach to marketing in service context: The marketing and organizational behavior interface', *Journal of Business Research, vol. 20*, no. 3, pp. 11.

Grönroos, C., 1990. Service Management and Marketing, Managing the Moments of Truth in Service Competition: Lexington, MA: Lexington Books

Gronroos, Christian, 1983, 'Strategic Marketing and Management in the Service Sector', Cambridge, MA: Marketing Science Institute (MSI), Report no. 83-104.

Gruber, T, Fub, S, Voss, R, & Glaser-Zikuda, M, 2010, 'Examining Student Satisfaction with Higher Education Services Using a New Measurement Tool', *International Journal of Public Sector Management, vol. 23*, no. 2, pp.105-123.

Grönroos, C. (2007) Service Management and Marketing: Customer Management in Service Competition. John Wiley &Sons, Hoboken, New Jersey.

Guolla, M, 1999, 'assessing the teaching quality to student satisfaction relationship: applied customer satisfaction research in the classroom', *Journal of Marketing Theory and Practice, vol. 7*, no. 3, pp. 87-97.

Gupta, A., Singh, R. K., Mathiyazhagan, K., Suri, P. K., & Dwivedi, Y. K. (2022). Exploring relationships between service quality dimensions and customers satisfaction: empirical study in context to Indian logistics service providers. *The International Journal of Logistics Management*, (ahead-of-print).

Ham, C, L, 2003, 'Analyzing the value of service quality management: Gaining competitive advantage', *International Journal of Value-based Management, vol. 16*, no. 2, pp.131-152.

Harvey, L, Green, D, 1993, 'Assessing quality in higher education: a trans-binary research project', *Assessment and Evaluation in Higher Education, Vol. 18*, No. 2, pp. 143-9.

Hasan, H, F, A, Ilias, A, Rahman, R,A,& Razak, M, Z,A, 2008, 'Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions', *International Business Research, vol.1*, no. 3, pp.163-175.

Heck, R, H, & Johnsrud, L,K, 2000, 'Administrative effectiveness in higher education: improving assessment procedures', *Research in Higher Education, vol.41*, no. 6, pp. 663–85.

Helgesen, O, & Nesset, E, 2007, 'What Accounts for Students' Loyalty?', Some Field

Hill, F, M, 1995, 'Managing service quality in higher education: the role of the student as primary consumer', *Quality Assurance in Education, vol.3*, no.3, pp. 10.

Hoffman KD, Bateson JE, 2002, 'Essentials of Services Marketing: Concepts, Strategies, and Cases, 2nd ed. Harcourt College Publishers.

Jalal R, M, Hanaysha, Haim Hilman Abdullah and Ari Warokka, 2011, 'Service Quality and Students' Satisfaction at Higher Learning Institutions: The Competing Dimensions of Malaysian Universities' College of Business', University Utara Malaysia, Malaysia.

Joseph, M, 1998, 'Determinants of service quality in education: A New Zealand perspective', *Journal of Professional Services Marketing, vol.16,* no.1, pp. 43-71.

Joseph, M, Yakhou, M, Stone, G 2005), 'an educational institutions quest for service quality: customers" perspective', *Quality Assurance in Education, Vol. 13*, No. 1, pp. 66-82.

Kettinger W, J, & Lee, C, C, 1994, 'Perceived service quality and user satisfaction with information services function', *Decision Sciences, vol. 25*, no. 6, pp.737-766.

Klidas, A., van den Berg, P.T. &Wilderom, C.P.M., (2007).Managing employee empowerment in luxury hotels in Europe. *International Journal of Service Industry Management, 18* (1), 70-88.

Kothari, V, 1988, 'Strategic dimensions of global marketing of services', *Journal of Professional Services Marketing, vol.3*, no. 4, pp. 209-229.

Krejcie, R, V, & Morgan, D, W, 1970, 'Determining sample size for research activities', *Educational and Psychological Measurement, vol. 30*, pp. 607-610.

Kuo, Y., & Ye, K. (2009). The casual relationship between service quality, corporate image and adults' learning satisfaction and loyalty: A study of professional training programmes in a Taiwanese vocational institute. *Total Quality Management & Business Excellence, 20*(7), 749–762.

Lauren Skinner Beitelspacher R. Glenn Richey Kristy E. Reynolds, (2011),"Exploring a new perspective on service efficiency: service culture in retail organizations", *Journal of Services Marketing, Vol. 25* Iss 3 pp. 215 – 228

Lee, H., Lee, Y., Yoo, D., 2000. The determinants of perceived service quality and its relationship with satisfaction. *J. Serv. Mark. 14* (3), 217e231.

Lethinen, U, J, Lethinen, 1982, 'Service Quality: A Study of Quality Dimensions', Unpublished working paper, Service Management Institute.

Li, F., Lu, H., Hou, M., Cui, K., & Darbandi, M. (2021). Customer satisfaction with bank services: The role of cloud services, security, e-learning and service quality. *Technology in Society, 64*, 101487.

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), 1-11.

Lundstrom, W., & Dixit, A. (2008). Is trust "Trustworthy" in customer relationship management. *Journal of Academy of Business and Economics, 8*(2), 140–144

Martı́nez-Caro, E. (2011). Factors affecting effectiveness in e-learning: An analysis in production management courses. Computer Applications in Engineering Education, 19, n/a. doi:10.1002/cae.20337

Marzo-Navarro, M, Pedraja-Iglesias, M, and Rivera-Torres, M, P, 2005, 'Measuring customer satisfaction in summer courses', *Quality Assurance in Education, Vol. 13*, No. 1, pp. 53-65.

McCollough, M, A, & Gremler, D, D, 1999, 'Guaranteeing Student Satisfaction: An Exercise in treating Students as Customers', *Journal of Marketing Education, vol. 21*, no. 2, pp. 118-130.

Mosadeghard A, M, (2006), 'Impact of organizational culture on successful implementation of TQM', *The TQM Magazine, Vol. 18*, No. 6, pp. 606-25.

Nadiri, H., Kandampully, J., & Hussain, K. (2009). Students'perceptions of service quality in higher education. *Total Quality Management, 20*(5), 523–535.

Navarro, M, M, Iglesias, M, P, & Torres, P, R, 2005, 'A New Management Element of

Nelson Oly Ndubisi, Chan Kok Wah, 2005, 'Factorial and discriminant analyses of the underpinnings of relationship marketing and customer satisfaction', *International Journal of Bank Marketing, Vol. 23,* no. 7, pp.542 – 55.

New Jersey, Pearson Education, Inc.

Nguyen, T. M., & Malik, A. (2021). Impact of knowledge sharing on employees' service quality: the moderating role of artificial intelligence. *International Marketing Review.*

Nitecki, D, 1996, 'Changing the concept and measure of service quality in academic libraries', *Journal of Academic Librarianship, vol. 2*, no. 3, pp.181-190.

Nuutinen, M., & Lappalainen, I. (2012). Towards service-oriented organisational culture in manufacturing companies. *International Journal of Quality and Service Sciences.*

O'Neill, M, A, and Palmer, A, 2004, 'Importance-performance analysis: a useful tool for directing continuous quality improvement in higher education', *Quality Assurance in Education, Vol. 1*, No. 1, pp. 39-52.

Oldfield, B, M, and Baron, S, 2000, 'student perceptions of service quality in a UK university business and management faculty', *Quality Assurance in Education, vol. 8*, no. 2, pp. 85-95.

Parasuraman, A, Zeithaml, V, A, & Berry, L, L, 1988, 'SERVQUAL: a multi-item scale for measuring consumer perceptions of service quality', *Journal of Retailing, vol. 64*, no.1, pp. 12-40.

Parasuraman, A, Zeithaml, V, A, Berry, L, 1985, 'A conceptual model of service quality and its implications for future research', *Journal of Marketing, vol.49*, no. 2, pp. 35-48.

Park, J., & Kim, R. B. (2022). Importance of offline service quality in building loyalty of OC service brand. *Journal of Retailing and Consumer Services, 65*, 102493.

Petruzzellis, L, D'Uggento, A, M, & Romanazzi, S, 2006, Student Satisfaction and Quality of Service in Italian Universities, *Managing Service Quality, vol.16*, no. 4, pp. 349-364.

Philip Kotler, 1991, *Marketing management-7th* Edition, prentice-Hall, Englewood cliffs, N.J.

Pollard, W.E. (2002), "Use of consumer panel survey data for public health communication planning: an evaluation of survey results", American Statistical Association 2002 Proceedings of the Section on Health Policy Statistics, pp. 2720-4.

Rajat Gera, 2011, 'Modeling the service antecedents of favorable and unfavorable behavior intentions in life insurance services in India: An SEM study', *International Journal of Quality and Service Sciences, Vol. 3* Iss: 2, pp.225 - 242

Restaurant: the Implications to China Foodservice Marketing', *International Journal of China Marketing, vol. 1*, no. 1, 62-72.

Rodie, A,R, and Kleine, S,S, 2000, 'Customer participation in service production and delivery', in Schwartz, T,A, Iacobucci, D, (Eds), *Handbook of Services Marketing and Management,* Sage Publications, Thousand Oaks, CA, pp. 205-13.

Rowley, J, E, 1996, 'Customer compatibility management: an alternative perspective on Student-to-student support in higher education', International Journal of Educational Management, vol.10, no. 4, pp.15-20.

Sander, P, Stevenson, K, King, M, and Coates, D, 2000, 'University students expectations of teaching; Studies in Higher Education', Vol. 25 No. 3, pp. 309-23.

Sander, P, Stevenson, K, King, M, and Coates, D, 2000, 'University students expectations of teaching', Studies in Higher Education, Vol. 25 No. 3, pp. 309-23.

Saravanan, R., Rao, K.S.P., 2007. Measurement of service quality from the customer's perspective e an empirical study. Total Qual. Manag. 18 (4), 435e449.

Sasser, W, Earl, Jr, R, Paul Olsen, and D, Daryl Wyckoff, 1978, Management of Service Operations: Text and Cases, Boston: Allyn & Bacon.

Saxena, S., Chawla, V., & Tähtinen, J. (2022). Dimensions of e-return service quality: conceptual refinement and directions for measurement. Journal of Service Theory and Practice, (ahead-of-print).

Scott, S, V, 1999, 'The academic as service provider: is the customer 'always right?', Journal of Higher Education Policy and Management vol.21, pp.193-202.

Sines, R, G, and Duckworth, E, A, 1994, 'Customer service in higher education', Journal of Marketing for Higher Education, vol.5, no. 29, pp.1 – 1.

Sivadass, E, & Baker-Prewitt, J, L, 2000, 'An Examination of the Relationship between Service Quality, Customer Satisfaction, and Store Loyalty', International Journal of Retail & Distribution Management, vol. 28, no. 2, pp. 73-82.

Skalen, P. and Strandvik, T. (2005) 'From prescription to description: a critique and reorientation of service culture', Managing Service Quality, Vol. 15, No. 3, pp.230–244

Spreng, R,A, Mackenzie, S,B, and Olshavsky, R,W, 1996, 'A re-examination of the determinant of customer satisfaction', journal of Marketing, vol. 60, no. 3, pp. 15-32

Sproule, R, 2000, 'Student evaluations of teaching: A methodological critique of conventional practices', Education Policy Analysis Archives, vol.8, no. 50, pp. 125-142.

Staddon, E. and Standish, P. (2012) 'Improving the Student Experience'. Journal of Philosophy of Education, 46 (4), 631–48.

Study Evidence', International Journal of Educational Management, vol.1, no. 2, pp.126-43.

Sureshchanndra, G, S, Rajendran, C, & Anantharaman, R, N, 2002, 'the relationship between service quality and customer satisfaction: a factor specific approach', Journal of Service Marketing, vol.16, no. 4, pp. 363-379.

Swartz, T, A, and S, W, Brown, 1989, 'Consumer and Provider Expectations and Experience in Evaluating professional Service Quality', Journal of Health Care Marketing, Vol. 10, No. 4.

Telford, R, and Masson, R, 2005, 'the congruence of quality values in higher education', Quality Assurance in Education, vol. 13, no. 2, pp. 107-19.

Tian, R, G, & Wang, C, H 2010, 'Cross- Cultural Customer Satisfaction at a Chinese

Universities: satisfaction with the courses offered', International Journal of Education Management, vol.19, no.6, pp. 505- 526.

Wachtel, H, K, 1998, 'Student evaluation of college teaching effectiveness: A brief review Assessment and Evaluation in Higher Education', vol. 23, no. 2, pp. 191-212.

Walker, D, 1990, Customer First: A Strategy for Quality Service, Gower, Alders hot.

Xi Liang & Shuai Zhang, 2009, 'Investigation of customer satisfaction in student food service: An example of student cafeteria in NHH, International', Journal of Quality and service Sciences, vol. 1, no. 1, pp.113-124.

Zeithaml, V, A, Berry, L, L and Parasuraman, A, 1988, 'Communication and control processes in the delivery of service quality', Journal of Marketing, Vol. 52.

Zeithaml, V,A, 1987, 'Defining and relating price, perceived quality, and perceived value', Report No. 87-101, Marketing Science Institute, Cambridge, MA.

. Zeithaml, V., Bitner, M., Gremler, D., 2009. Services marketing: integrating customer focusacross the firm (5th ed.): McGraw-Hill, Boston

Zekiri, J, 2011, 'Applying SERVQUAL Model and Factor Analysis in Assessing Customer Satisfaction with Service Quality: The Case of Mobile Telecommunications in Macedonia', euro journals