

Towards the Integrated Total Quality Management Practices and Service Quality in Malaysian Higher Learning Educations from Students Perspectives

*¹Abd Rahim Romle, ²Safarina Mohd Rodzi, ¹Nasarina Saberi,
¹Akmal Ahlami Md Rozai, ¹Nur Hafidzoh Asyiqin Ahmad, ¹Helmi Sheha Che Azemi*

¹School of Government, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

²School of Tourism, Hospitality and Environmental Management,
Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

Abstract: The issue of quality is frequently discussed in industrial sector as well as in service sector. Thus, quality able to influence the customer either to precede their intention to use the service or stop from using the service. Hence, in the context of higher learning institution the issue of quality is important in order to attract students and makes them feel satisfied with the service provided. Therefore, to ensure the quality improvement, a total quality management practice also plays a vital role to enhance students' satisfactions. In this study, researcher has adopted SERVQUAL model to measure satisfaction. The respondents were 299 undergraduate students and they were selected randomly. The data were analysed using descriptive analysis, Pearson Correlation Analysis and Multiple Regression Analysis by SPSS version 20. The findings of this study revealed students quite satisfied with service provided by university.

Key words: Higher Learning Institution • TQM • Service Quality • Students' Satisfaction

INTRODUCTION

Malaysian higher education was divided into two sub departments such as Department of Higher Education which is responsible for the management of both public and private institution of higher learning. Second department is Department of Polytechnic Education that are responsible for the management of community colleges. Besides that, to ensure the quality in accreditation of public university in Malaysia, Malaysian Qualification Agency (MQA) is one of statutory body that was set up to accredit academic programs provided by educational institutions post-secondary or higher education and facilitate the recognition and articulation of qualification.

Hence, higher education is a centre of spreading the knowledge through teaching, lecture, research and extension. As mentioned by [1], through higher education it develops the student to being more skilled to critique on contemporary issues. Moreover, higher education institution also rendered an opportunity for lifelong learning, allowing people to upgrade their knowledge and skills from time to time [2][3][4][5].

Furthermore, the key elements in TQM are leadership and top management as mentioned [6] [7] [8]. Subsequently, [9] express that the practices of total quality management were predominantly come from manufacturing sector rather than service sector. However, [10] stated the implementation of total quality management in manufacturing itself also has not always achieved successful results. In education sector, applying total quality management is more to customer-centred culture. According to Deming, "customer needs must be the driving force" as proposed by [11].

In public university, the customer or client was represented as students due they are the direct recipients of the service. However, even though student as customer that widely accept this concept, but there still exist considerable debate as to whether students should be involved as a customer in shaping educational output [12]. What student expect from public university may not what they need. They argue that by satisfying students, higher learning institution may risk compromising the needs of society as a whole [13] [14] [15].

In addition, [16], [17] argued that to ensure the universities become more competitive, students will need to be treated as a customer's which is involve process is the concept of co-production. This statement also supported by [18] has mentioned that "The theory of co-production is based on the notion that the person providing the service and the next-in-line customer receiving the service share the responsibility for the quality and outcome of that service".

[19] has proposed SERVQUAL model to measure satisfaction of the customer. Hence, service quality was conceptualized as "a global judgement, or attitude, relating to the superiority of the service". Thus, [19] has suggested ten dimension of service quality such as: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customers and tangibles. However, only five dimensions were considered which is: tangible, reliability, responsiveness, assurance and empathy [20][21][22].

Service in certain organisation is highlighted by the presence of stakeholders and their interest. Thus, service quality plays vital role in continuous improvement with regard to quality that would be enhance to satisfaction or dissatisfaction [23][24][25][26]. [27], mentioned that Italian university system is trying to adopt an entrepreneurial approach in order to provide better service to their customers. It is also case of mass customisation whereas universities are competing to attract students with personalised offer. Hence, the Italian university has decided to upgrade the quality of service [28].

Besides that, Italian university also conducting the evaluation by developing many initiatives in order to analyse and satisfy the needs of the stakeholders in general. Thus, it is importance of measuring quality perception based on the customer-based approach in order to increase or improve the quality of service in education [29][30][31].

Research Objectives: The objectives of this study are as follows:

- To examine the relationship of total quality management practices and service quality in higher learning institution.
- To rank most dominant factor or aspect in total quality management practices in education sector in terms of measuring students' satisfaction.

Justification of Study: This study tries to relate the importance of total quality management practices and service quality among students in terms of their experience, which is specifically related to their satisfactions of the higher learning institution. The findings of this study help to contribute towards of improvement in total quality management practices in public universities in Malaysia itself. Furthermore, this study also provides theoretical contribution to the total quality management and service quality development and may enhance to new direction from different views in the study of total quality management and service quality.

Methodology: This study has employed quantitative approached is to test theories through the independent variable and dependent variable and analysed the data with the statistical tool. 299 questionnaires has distributed by using random sampling to undergraduate students in public university. The questionnaire will employ a 5 point Likert scale format that ranging from 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree and 5 – strongly agree. After all data collected, the questionnaires will be analysed by using Statistical Package for Social Sciences (SPSS).

RESULTS AND DISCUSSION

Thus study has a total 299 respondent which consists of 98 male students that covered 32.8% and 201 female students (67.2%) responded to questionnaires. Table 1 shows that 112 respondents (37.5%) were aging 20 years old and below, 172 respondents (57.5%) were at

Table 1: Demographic Characteristics of Sample

Respondent's profiles		Frequency	Percentage (%)
Gender	Male	98	32.8
	Female	201	67.2
Age	< 20 years	112	37.5
	21 – 25 years	172	57.5
	26 – 30 years	12	4.0
	> 30 years	3	1.0
Race	Malays	190	63.5
	Chinese	64	21.4
	Indian	27	9.0
	Others	18	6.0
Year of Study	1 st year	114	38.1
	2 nd year	52	17.4
	3 rd year	84	26.1
	4 th year	49	16.4

Table 2: Hypotheses Testing

Alternate Hypothesis	Correlation Coefficient	p-value	Result
<i>H₁: There is relationship between top management and service quality</i>	1	0.00	Significance and supported
<i>H₂: There is relationship between evaluation and service quality</i>	0.474	0.00	Significance and supported
<i>H₃: There is relationship between continuous improvement and service quality</i>	0.340	0.00	Significance and supported
<i>H₄: There is relationship between employee involvement and service quality</i>	0.527	0.00	Significance and supported
<i>H₅: There is relationship between customer focus and service quality</i>	0.407	0.00	Significance and supported

Correlation is significant at the 0.01 level

Table 3: Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	28.641	4.181		6.850	.000
	Top Management	.639	.229	.160	2.795	.006
	Evaluation	.792	.266	.166	2.975	.003
	Cont. Improvement	.269	.167	.080	1.614	.108
	Employee Involvement	.715	.230	.196	3.114	.002
	Customer Focus	.779	.192	.229	4.058	.000

a. Dependent Variable: SERVQUAL

age 21-25 years old, 12 respondents (4.0%) were 26-30 years old and 3 respondents represent 1.0% were older than 30 years old. Another demographic aspect considered in this study is a race which is 190 students represented as Malays which carried 63.5%, followed by Chinese students 64 or 21.4%, Indians students 27 persons or 9.0% and others (which presents as other ethnics in Malaysia or non-citizen) 18 persons or 6.0%. 114 or 38.1% respondents were at first year study in public university, followed by 52 or 17.4% respondent were pursuing second year of study, meanwhile third year student presented 84 respondents or 26.1% and lastly fourth year presented 49 respondents or 16.4%.

Result from Pearson Correlation analysis through hypotheses testing concluded that all the five independent variables of top management, customer focus, employee involvement, evaluation and continuous improvement indicate significant relationship between those variables with service quality or SERVQUAL that represented to students' satisfactions.

Results from regression analysis assist us to see among the five independent variables, which is the most important in describing the variance in service quality that enhance to student satisfaction in public university. Thus, the result of coefficients suggest the attributes of top management and employee involvement or participation exerted the strongest influence on overall service quality in public university, followed by evaluation, customer focus and continuous improvement.

It should be concerned that continuous improvement give negative affected to students' satisfaction towards service quality.

The implementation of total quality management in the context of higher education is seen as a new perspective because this practice commonly practiced in manufacturing industry. Thus, [32] in their study demonstrate the application of TQM in higher education was enhance the benefits towards students' performance; better service provided; reduced cost and generates customer satisfaction. TQM practices have been applied during 1990s in United Kingdom and United States of America higher education. Besides that, Oakland and Rooney *in* [32] proposed that ISO 9000 as one of TQM tools not shown any case of failure in higher education. Kanji [33] again stressed that this standard would improve the quality by examining the organization's process.

Furthermore, [34] in their study has suggested that service are involved an interaction of human whereas customer and service provider are important during and after service delivered that based on "interpersonal interaction" between an organization and customer. From argument mentioned by past scholars, it can be generalized that service quality would affect both service provider and service receiver [35]. Hence, the context of this study indicates that the service providers were represented as a public university whilst students represented as recipient of services. Moreover, result showed that student expect more from their

lecturers as well as management team in order to improve their confidence during communicate either one-way communication or two-way communication. Thus, by focusing on customer, it would enhance students' satisfaction with the university as a service provider and make them feel happy while pursuing their studies in public university.

Conclusion and Recommendation for Further Research:

Focusing on quality improvement in education sector in the context of Malaysian higher learning institution is frequently being issue in order to fulfil student satisfaction due to they are referred as customer or client in education sector [36][37]. Thus, quality improvement in public university may enhance to competitive global higher education in 21st century. Past literature has exposed that the awareness of quality improvement in higher education in Malaysia showed constantly increasing because of students claims their needs and wants from the service provided for them. Thus, by applying total quality management in public university in Malaysia has showed significant impact towards service quality [38][39]. Then, SERVQUAL model is used to measure the satisfaction from students.

This study has exposed that students in public universities quite satisfied with the service provide for them. Besides that, public universities giving full attention to students and treated them as main focus of stakeholder. As the evidence, public universities as service providers not just monitor the students' issue, but also insist to help remedy service problems. Responsive handlings of complaints not only facilitate effective resolution of students' problems, but also provide opportunities to improve long-term relationship with students as client in public universities. Thus, from the finding in this study, it is reported that students were quite satisfied with implementation of total quality management practices and service quality in public universities.

Through this result, analyses and discussions, several recommendations of further study in the same context of area of the study could be highlighted. This study addressed for better understanding of the applying TQM practices in tertiary education level and service quality in Malaysian public universities. The factor analysis in this study only using several dimensions of total quality management practice that could be suitable to adapt in higher education institution as well as employed five dimension of SERVQUAL model.

Through this study, the researcher had tried to integrate these two perspectives between TQM and SERVQUAL dimensions.

These results may be in part due to a different environment of setting where the study was conducted. It is because the original dimension may not appropriate to another higher learning institutions. This result also may indicate to new direction of study for next research to obtain new finding of current study.

Besides that, it will be interesting if new researcher conduct new study by making comparison between faculty of the public university, between public and private university in Malaysia, or making comparison between local public university and international university. Thus, stratified random sampling is suggested to new researcher as proposed by [40] which this sampling technique are employ to all groups are adequately sampled comparisons among groups are possible and efficient among all probability design.

REFERENCES

1. Sundha, T., 2013. Total quality management in higher education institutions. *International Journal of Social Science and Interdisciplinary Research*, 2(6): 121-132.
2. Romle, A.R. and A.S. Shamsudin, 2006. The relationship between management practices and job satisfaction: The case of assistant registrar at public institutions of higher learning in Northern Region Malaysia, *The Journal of Human Resource and Adult Learning*, 2(2): 72-80.
3. Ishak, Y. and A.R. Romle, 2015. The mediating effect of job satisfaction on the link between leadership style and organizational commitment, *Australian Journal of Basic and Applied Sciences*, 9(4): 45-49.
3. Brower, M., 1991. The paradigm shifts required to apply TQM and teams in higher education. *Readings in Total Quality Management*, pp: 485-97.
4. Kamal, M.K.A. and A.R. Romle, 2015. Framing on leadership styles and job performance in Malaysia: A new direction, *Australian Journal of Basic and Applied Sciences*, 9(4): 69-73.
5. Saberi, N. and A.R. Romle, 2015. The implementation of TQM with service quality from students perspective in Malaysian public university, *Australian Journal of Basic and Applied Sciences*, 9(4): 50-56.
6. Horine, J., W. Hailey and L. Rubach, 1993. "Shaping America's future", *Quality Progress*, pp: 41-60.

7. Marchese, T., 1993. TQM: a time for ideas. *Change*, 25: 10-13.
8. Merron, K., 1994. Creating TQM organizations. *Quality Progress*, pp: 51-4.
9. Coate, L.E., 1990. TQM at Oregon State University. *Journal for Quality and Participation*, pp: 90-101.
10. Goodman, J., G. Bargatze and C. Grimm, 1994. The key problem with TQM. *Quality Progress*, pp: 48-54.
11. Thurmond, C., 1993. Quality strained through jargon. *School Management*.
12. Jaideep, M. and K. Ashok, 1997. The need for implementing total quality management in education", *International Journal of Educational Management*, 11(3): 131-135.
14. Cloutier, M. and J. Richards, 1994. Examining customer satisfaction in a big school. *Quality Progress*, pp: 117-19.
15. Helms, S. and C. Key, 1994. Are students more than customers in the classroom? *Quality Progress*, pp: 97-9.
16. Brigham, S., 1993. TQM lessons we can learn from industry. *Change*, pp: 42-8.
17. Rubach, L. and B. Stratton, 1994. Teaming up to improve US education. *Quality Progress*, pp: 65-8.
18. Chappell, R.T., 1994. Can TQM in public education survive with co-production?. *Quality Progress*, pp: 41-4.
19. Parasuraman, A., V.A. Zeithaml and L.L. Berry, 1988. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(Spring): 12-40.
20. Abidin A.H.Z. and A.R. Romle, 2007. Emerging technology for enhancing service quality: PDA's as your devices in mobile internet banking environment, *The Journal of Global Business Management*, 2(3): 75-82.
21. Romle, A.R. and A.S. Shamsudin, 2008. Kualiti perkhidmatan berdasarkan perspektif pelajar di institusi pengajian tinggi awam Malaysia, *Jurnal Pengurusan Awam*, 7(1): 99-108.
22. Romle, A.R. and A.S. Shamsudin, 2007. Amalan pengurusan dan kepuasan kerja: Realiti atau ilusi, *Jurnal Pengurusan Awam*, 6(1): 71-89.
23. Hassan, A.I. and A.R. Romle, 2015. Intrinsic factors of job satisfaction among lecturers of Bauchi State Univeristy Gadau, Nigeria, *International Journal of Administration and Governance*, 1(4): 87-91.
24. Husin, N.K.M., A.R. Romle and M.S.M. Yusof, 2015. Toward a greater understanding of how service quality drives students satisfaction in higher learning institutions, *International Journal of Administration and Governance*, 1(4): 9-13.
25. Ismail, S., A.R. Romle and N.A. Azmar, 2015. The Impact of organizational culture on job satisfaction in higher education institution, *International Journal of Administration and Governance*, 1(4): 14-19.
26. Ahmad, N.H.A., A.R. Romle and M.H. Mansor, 2015. Exploring service quality and customer satisfaction at library in Malaysia university, *International Journal of Administration and Governance*, 1(4): 98-105.
27. Baccarani, C., 1999. L'universita' tracambiamento e conservazione. *Sinergie*, pp: 48.
28. Romle, A.R., R.C. Razak and A.S. Shamsudin, 2015. Mapping the relationships between quality management practices, human-oriented elements and organizational performance: A proposed framework, *International Journal of Innovation, Management and Technology*, 6(3): 196-201.
29. Saberi, N., A.R. Romle and S.N.I. Hamid, 2015. Proposing the relationship between TQM and service quality in public university: A framework, *International Journal of Administration and Governance*, 1(4): 111-115.
30. Shagari, A.U., A.R. Romle and M.M. Qader, 2015. Examining the relationships between quality assurance, training need and choice of study destination: A study of Nigerian students in UUM, *International Journal of Economics and Financial Issues*, 5(1): 1-6.
31. Embi, M.S.C., M.M. Udin, A.R. Romle and P.A.N. Nasri, 2015. The impact of satisfaction on the link of motivation and job performance in public sector, *Journal of Applied Sciences Research*, 11(18): 19-23.
32. Kanji, G.K. and Abdul Malek, A. Tambi, 1999. Total quality management in UK higher education institutions. *Total Quality Management*, 10(1): 129-153.
33. Kanji, G.K., 1998a. An innovative approach to make ISO 9000 standards more effective, *Total Quality Management*, 9: 67-78.
34. Surprenant, C.F. and M.R. Solomon, 1987. "Predictability and Personalization in the Service Encounter". *Journal of Marketing*, 51: 86-96.

35. Nasarina Saberi and Abd. Rahim Romle, 2015. The implementation of TQM with service quality from students perspective in Malaysian public university. *Australian Journal of Basic and Applied Science*, 9(4): 50-56.
36. Isa, N.H.M., M.M. Udin, A.R. Romle, S.Z.M. Zahid and M.S.C. Embi, 2015. Assessing the relationship between motivation and training on job performance in public sector, *Australian Journal of Basic and Applied Sciences*, 9(34): 246-253.
37. Othman, N.A., A.R. Romle, M.M. Udin, P.A.N. Nasri and M.F. Zakaria, 2015. The effect of trust on the link of satisfaction and performance amongst public service servants: A framework, *Australian Journal of Basic and Applied Sciences*, 9(34): 222-227.
38. Saberi, N., A.R. Romle, S.A. Romli, N.K.M. Husin, Z.N.M. Husin and M.S. Abdullah, 2015. Applying TQM practices and service quality in higher education, *International Journal of Administration and Governance*, 1(14): 50-56.
39. Azidin, S.S., A.R. Romle, S. Othman, N.A. Yusof and S.M. Yusof, 2015. The implementation of performance appraisal system: Perceived fairness, employee satisfaction and organizational commitment, *International Journal of Administration and Governance*, 1(14): 115-119.
40. Sekaran, U., 2003. *Research Methods for Business: A Skill-Building Approach*. 4thed. New York: John Wiley and Sons, Inc.