

The Relationship Between Total Quality Management Practices and Service Quality: The Case of Malaysian Public Institution of Higher Learning

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Abstract: In the context of higher education sector, students are the focus and they are considered as a client. Thus, it is mandatory to any public university to provide service that can fulfill their expectations, needs and wants. Hence, the institutional are required to provide the facilities to students as well as the staff commitment in order to deliver the service appropriately. Consequently, TQM practices need be applied and need to give a serious attention in order to enhance the competitive advantage to higher education to face new challenges in future. Therefore, the purpose of this study is to explore the relationship between total quality management practices on service quality among students view at public university. Three dimensions of TQM were examined; top management, employee involvement and customer focus. The respondent of this study are undergraduate students with various years of studies. The data will be analyzed through descriptive analysis, ANOVA, T-test, Pearson Correlation and Multiple Regression by using SPSS version 20. Suggestions for further direction of study and recommendation also have been proposed.

Key words: Total Quality Management • Quality Services • Top Management • Employee Involvement and Customer Focus

INTRODUCTION

The growth of interest in quality can be see whereas in 1950s and '60s US business could sell everything they made in a world hunting for manufacture goods. Hence, US and most of Western industry was on maximizing output and profit. However, in the late of 1970s, show many of the companies had lost both markets and market share to Japan. From this incident, they started asking why it was that customers preferred Japanese products then the Western companies started to take seriously in quality message [1].

In quality management practices, the consumer's role also important that need to give serious attention. The quality can be defined as that which satisfies and meet the customers' expectation, needs and wants. Thus, the quality can be assumed to be in the eyes of beholder.

Tom Peters [2] said that the perceived quality of business's product or service is the most important factor that can enhance to the performance. Furthermore, quality also can be defined by customer is more important rather than price in determining the demand for a goods or products [2].

Thus, the developing of education sector also considered the total quality management practices in order to enhance the successfulness of higher institution. Hence, several dimension of the TQM has been adapted which is it considered suited in education sector such as top management, continuous improvement, employee involvement, customer focus and so on. Thus, in this study only focusing on three dimensions which is top management, employee involvement and customer focus. Top management can be derived as the ability of management that can be lead to long-term vision for the organization, driven by requirement as opposed to an

internal management control [3]. Meanwhile, employee involvement referred to every employee that involved in achieving the common goals of the organization. Employee involvement is process for empowering the staffs to participate in managerial decision making and improvement activities that appropriate to their levels in the organization. The organization have to maintaining a close engagement with customer by fulfill their needs as well as receive feedback on the extent to which those needs are being met [4]. Hence, customer focus is a major element of the total quality management and all elements focus on total customer satisfaction both external and internal [5].

According to Siti Falindah Padlee and Azizul Yadi Yaakob [6], the interaction with people that including teaching staff, teaching methods, learning materials, communication and interaction with students may contribute to students' satisfaction as indicator to measure service quality in higher education institution. Due to competitive global market place, it is compulsory for university to ensure that students earned the highest quality education possible at a given cost. Hence, higher education institution are adopting a customer focus by promoting greater student input, increased accessibility of faculty and curriculum that properly serves the needs of students [7].

In term of business, customers are thought to be satisfied when the quality of service they had received are matches or exceeds their expectation [8-12]. Hence, in the context of education sector, student satisfactions occur when 'perceived performance meets or exceeds the student's expectations' [13].

Hence, in context of education sector, student were considered as stakeholder as well as the government and professional bodies which include their own view on quality due to particular needs. Therefore, students will acted as customer that received training from public university as mentioned by Marzo-Navarro *et al.*, [14] and Hill [8]. Furthermore, students also considered as client, producers and products [15].

Objectives: The specific aims of this study were as follows:

- To determine the relationship between total quality management practices and service quality in higher learning institution.

- To examine total quality management practices that enhance to service quality delivery among undergraduate student in public universities.

Limitation of the Study: In this study, the respondents were selected through randomly that focusing on undergraduate students that pursuing their study in public universities in Malaysia. Students who study in public university the focused on currently in year 1, 2, 3 and 4. The study only to explore the relationship between total quality management practices and service quality among under graduate students in higher learning institution in Malaysia. Students who aware about the role or importance of total quality management may enhance to their satisfaction and fulfill students' expectation.

Methodology: This study applied the quantitative approached as mentioned by Sugiyono [16] that the quantitative approach is to test theories through the independent variable and dependent variable and analyzed the data with the statistical tool. 299 questionnaires has distributed by using random sampling to undergraduate students in public university. The data was analyzed by using the Statistical Package for Social Science version 20 (SPSS). The analyses were conducted using descriptive statistics, Pearson correlation analysis and multiple regression analysis.

RESULTS AND DISCUSSIONS

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 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%.

Table 1: Demographic Characteristics of Sample

Respondent's profile	Frequency	Percentage (100%)
Gender		
Male	98	32.8
Female	201	67.2
Age		
< 20 years	112	37.5
21 – 25 years	172	57.5
26 – 30	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		
1st year	114	38.1
2nd year	52	17.4
3rd year	84	26.1
4th year	49	16.4

By analyzing the Pearson correlation analysis through the hypotheses testing, it can be generalized that all three independent variables (top management, customer focus and employee involvement) are correlated among each other.

Table 2: Hypotheses Testing

Alternate hypothesis	Correlation	p-value	Result
H1: <i>There is relationship between top management and service quality</i>	1	0.00	Significance and supported
H2: <i>There is relationship between employee involvement and service quality</i>	0.527	0.00	Significance and supported
H3: <i>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 (2-tailed)

The multiple regression analysis is utilized in order to measure the variables that explained the variance in the overall service quality. Hence, table 3 shown the multiple regression analysis result of the independent variables against dependent variable.

Table 3: Multiple Regression Analysis

	B	Beta	t	Sig.
Top management	.89	.22	4.01	0.00
Employee Involvement	.95	.26	4.26	0.00
Customer focus	.86	.25	4.46	0.00

R = .60 R² = .36 Adjusted R = .36 F = 55.89 F significant = .00

The table above displayed that correlation of the independent variables against the dependent variable is 0.60 with R square is 0.36. The F statistic is 55.89 and is significant at the .00 level. Hence, it means that 36% of the variance in service quality is significantly explained and influenced by the independent variables. Beta value is used to identify of selected three elements in independent variable is more important in explaining the variance towards service quality in higher education institution.

As proposed in the above table, employee involvements score the higher value, 0.95 which is significant at the .00 level. Furthermore, the result indicates another two elements in total quality management (customer focus and top management) also showed it significantly correlate enhancing the satisfaction among students in public university.

The analyses result has indicated all total quality management practices which employ as independent variables: top management, customers focus and employee involvements have significant relation to service quality. Overall observation shown employee involvement was at highest significant level of $r = .95, < .01$, followed by top management role at the significant level of $r = .89, < .01$ and customer focus at the significant level of $r = .86, < .01$. Hence, in the organization all these element need to give full attention by management team in order to enhance higher service delivery to students.

The result is match with Sureshchandar *et al.* [17] and Boshoff and Allen [18] in their study has indicates that top management is a pre-requisite element towards service quality and this element also to ensure that the excellences and service recovery is must mainly for organization to achieve their goals [17,18]. As supported by Jenkins [19], lack of top management commitment may cause the failure of quality improvement in an organization. This argument was supported by Zemke [12] and Hartline and Ferrell [20].

Total quality management practices also include the customer focus as the element because they are main focus in service delivery of the organization whereas every service provided must fulfill customer need and expectation. As proposed by Filippini and Forza [21]; Muffatto and Panizzolo [22] it is necessary to an organization to meet customer expectation and needs and maintaining the relationship with customer [21,22]. By improving the attention to customer which means students in higher learning institution would enhance to the arising to satisfaction among them.

Generally, in the multiple regression analyses show that employee involvement is found statistically correlated to the service quality. In the analysis, employee involvement contributes to 36% of the service quality. The findings supported by Mitchell [23] had mentioned that the employee involvement is important and they need to be full committed on their job. Cheung and To [24], suggested that an effective employee could be involve in decision making process, planning and implementation which is focusing on the objectives that determine by organization and directly can achieve common goals through employee engagement [24].

CONCLUSION AND RECOMMENDATIONS

From the study, it is believe that the total quality management practices have an influence on service quality in higher learning institution. Based on the findings, total quality management in public university may enhance to student satisfaction whereas it meet student expectation and needs. Thus, this study try to identify the relationship of total quality management practices towards service quality from students perspectives in higher learning institution.

The finding of this study shows all the independent variables have significant correlation to service quality. Meanwhile, multiple regression analysis has indicates employee involvement or employee participation contribute high beta value as well as B value which it being most influenced in service quality. The regression analysis followed by customer focus and top management.

Finally, by focusing on the elements of total quality management practices may provide to successfulness of public university in serving the service. Besides that, it may influence to number of students who want to pursuing their study in public university. Other than that, public university must improve their management skills since it predicted that higher education institution may face challenges in future.

This study was conducted in one public university which is the respondents just focusing on undergraduate students. Hence, the finding may not generalized that the understanding of total quality management practices among undergraduate student in public university. Thus, in order to get higher degree of consistency, future direction of study should be conduct towards postgraduate students in public university or conduct the study in different university of faculties.

REFERENCES

1. Sallis., E., 2002. Total Quality Management in Education, 3rd edition. London: Kogan Page Ltd.
2. Peters, Tom, 1987. Thriving On Chaos, Pan Books, London.
3. Anderson, J.C., M. Rungtusanatham and R.G. Schroeder, 1994a. A Theory of quality management underlying the Deming management method, *Academy of Management Review*, 19(3): 472-509.
4. Zhang, Z., 2001. Implementation of TQM an empirical study of Chinese manufacturing firms. PhD Thesis. University of Groningen Netherland. Unpublished.
5. Gherbal, N., A. Shibani, M. Saidani and A. Sagoo, 2012. Critical success factors of implementing total quality management in Libyan organization. *Proceeding of the 2012 International Conference on Industrial Engineering and Operations Management Istanbul, Turkey*.
6. Siti Falindah Padlee and Azizul Yadi Yaakob, 2013. Service Quality of Malaysia Higher Eduactional Institutions: A Conceptual Framework. *International Journal of Business, Economic and Law*, 2(1).
7. Emery, C., T. Kramer and R. Tian, 2001. Customers vs. products: Adopting an effective approach to business students. *Quality Assurance in Education*, 9: 110-115.
8. Hill, F.M., 1995. Managing service quality in higher education: The role of the student as primary consumer. *Quality Assurance in Education*, 3: 10-21.
9. Kelley, S.W., J.J. Donnelly and S.J. Skinner, 1990. Customer participation in service in service production and delivery. *Journal of Retailing*, 66: 315.
10. Munteanu, C., C. Ceobanu, C. Bobalca and O. Anton, 2010. An analysis of customer satisfaction in a higher education context. *International Journal of Public Sector Management*, 23: 124-140.
11. Sirvanci, M., 1996. Are students the true customers of higher education? *Quality Progress*, 29: 99-102.
12. Zemke, R., 1991. Service Recovery: A Key to Customer Retention. *Franchising World* 23 (May-June): 32-34.
13. Elliott, K.M. and D. Shin, 2002. Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24: 197-209.

14. Marzo-Navarro, M., M. Pedraja-Iglesias and M.P. Rivera-Torres, 2005. Measuring customer satisfaction in summer courses. *Quality Assurance in Education*, 13(1): 53-65.
15. Guolla, M., 1999. Assessing the teaching quality to student satisfaction relationship: applied customer satisfaction research in the classroom. *Journal of Marketing Theory and Practice*. 7(3): 87-97.
17. Sureshchandar, G.S., Chandrasekharan Rajendran and Anantharaman, 2001. A conceptual model for total quality management in service organisations. *Total Quality Management*, 12(3): 343-63.
18. Boshoff, C. and A. Janine, 2000. The Influence of Selected Antecedents on Frontline Staff's Perceptions of Service Recovery Performance?. *International Journal of Service Industry Management*, 11(1): 63-90.
20. Hartline, Michael D. and O.C. Ferrell, 1996. The Management of Customer-Contact Service Employees: An Empirical Investigation. *Journal of Marketing* 60 (October): 52-70.
21. Filppini, R. and C. Forza, 1998. TQM Impact on Quality Conformance and Customer Satisfaction: A Causal Model. *International Journal of Production Economics*, 55(1): 1-20.
22. Muffato, M. and R. Panizzolo, 1995. A Process Based View for Customer Satisfaction. *International Journal of Quality and Reliability Management*, 12(9): 154-169.
23. Mitchell, T.R., 1979. Organizational behaviour. *Annual Review of Psychology*, 30: 243-281.
24. Cheung F.Y. Millissa and W.M. To, 2010. Management commitment to service quality and organizational outcomes. *Managing Service Quality*, 20(3): 259-272.