



THE INVERSE EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON SERVICE QUALITY: EVIDENCE FROM A PRIVATE EDUCATIONAL INSTITUTION IN THE PHILIPPINES

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Abstract:

The role of Total Quality Management (TQM) practices in improving organizations' output or key results area has been widely documented. However, the focus of evaluation such in the service industry specifically in tertiary education is still much to be desired. In addition, there seem to be a growing number of followings on the downside of TQM practices resulting in poorer service quality provision. This study will shed light on the matter by providing evidence from a private educational institution in the Philippines. The study utilized a descriptive research design and an adopted research questionnaire. The study was participated by 15 faculty members and 75 students under the former. The results of the study showed that the level of implementation of TQM practice does significantly influence service quality ($F=4.965$, $p=0.0441$) at 0.05. However, the influence was found to be inverted as a higher level of practice leads to lower service quality as evidenced by the negative coefficient value of -0.181. These findings support those studies that suggest that the increasing practice of TQM, especially for educators, significantly increases work intensity and stress at the expense of employee motivation resulting to conflicting interest and thus sacrificing service quality for the sake of compliance of expected quality evidences.

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1. Introduction

The importance of total quality management (TQM) as a source of competitive advantage has been considered as the most advanced and widely accepted approach in the area of quality management (Escrig-Tena, 2004). This is because TQM is grounded on the objective of installing, not just systems to meet organizational objectives, but more importantly creating a corporate culture that ensures continuous improvement that leads to quality products and services. This concept of achieving quality can never be overemphasized in labor-intensive sectors such as the service industry. Such industry still considers meeting customer needs as a highly competitive advantage despite some adoptions of automated processes. The quality service enshrined in the actual and face to face encounter between service employees and the customers is the staple of this sector.

Nevertheless, a careful review of the literature will show that despite the fact that the principles and fundamentals of TQM are highly relevant to service organizations, very few studies have been done in this areas (Huq, 2005). In the education sector in particular, the parameters of quality are mainly attributed to documents and systems in place and less on how the customers (in this case the students) are satisfied with their interactions with the main service provider, the teachers. As Satar and colleagues (2017) noted, assessing the delivery of quality in higher education in the perspective of the students is a crucial factor in assuring service quality in educational sectors.

On the other hand, in most educational institutions in the Philippines, teachers are usually expected to participate in both sides of the operation – providing documents for quality assurance and face to face interaction with the students. This set up usually results to conflict of time and interest among educators in the private educational institutors and a serious trade-off between quality through documentation and quality through actual interaction.

With this idea in mind, this study is conducted to investigate the effect of TQM practices to service quality in a private educational institution. This study will emphasize on service quality as perceived by the students and the degree of implementation of TQM practices as assessed by the teachers. The results of the study will shed light on the seemingly paradoxical role of TQM practices in the provision of quality service in private educational institutions.

1.1 Theoretical Framework

This study is anchored on the Service Quality Model developed by Parasuraman and colleagues (1988) and the Quality Management Model developed by Alvarez, Rama, and Alonso (2014). TQM as a management approach was usually developed on the environment of manufacturing companies which focuses on overall efficiency of production and other operations. Despite the similarities, service industries, like educational institutions highly rely on human interaction and less on machine operations. It is argued that the actual experience or perception of the customers which

are usually heterogeneous, make up most of the customers experience of quality. Deviance from the expected and the actual experience will result to disconfirmation leading to lower perceived quality of service. Thus, Quality of Service is evaluated not by tangible characteristics but by whether or not pre-consumption expectation meets actual perception of the experienced service (Parasuraman, et al., 1988).

This is the concept of service quality model (SERVQUAL). As noted by Zeithaml, Parasuraman and Berry (1985), there are five dimensions of service quality. These are empathy, security, tangibility, reliability and responsibility. Empathy refers to the extent to which a service provider meets the expectation of the customer to be provided with caring and personalized service. Security (sometimes termed as assurance) refers to the extent to which the employees can convey trust and confidence to their customers. In addition, tangibility associates to the physical requisites that allow the organizations and its members to convey proper appearance and proper communication. Reliability on the other hand refers to the extent that the organization can accurately and dependably deliver the promised service. Finally, responsibility refers to the extent to which the organization commits to help customers in the promptest way possible.

On the other hand, TQM practices have received wide attention in the management literature. Alvarez, Rama, and Alonso (2014) noted that TQM practices are relevantly grouped into seven (7) constructs, namely, leadership, alliances and resources, quality policy and planning, employees' management, learning, processes management, and key results.

Leadership is considered the most important aspect of managing Total Quality Management (Curkovic, Vickery, and Droge, 2000). The authors explained that leadership provides planning that creates a structure of values, systems and objectives that meet the demands of the customers.

On the other hand, Kaynak (2003) observed that the manner to which organizations manages their relationship with both internal and external partners in support of the company's policies and objectives is a vital role in Total Quality Management. In fact, such efficient management allows organizations to improve quality planning, human resource practices and eventually customer satisfaction.

Tarí, Molina, and Castejón (2007) noted that quality policies and planning greatly affect how management imposes quality and the desire for continues improvement. This is primarily because of the fact that any strategy for quality management should involve the creation of plans that contain key policies in the areas of human resource and other key operating areas.

Moreover, Eskildsen, Kristensen and Juhl (2002) observed that employees and improvement in any process are interrelated. In fact, it was noted in the same study that organizations that make substantial investment in motivating employees are successful in including the later in process improvements like TQM practices. This is done not only through the active participation of the employees in problem solving but also in the process of transferring knowledge.

This transfer of knowledge or learning is very critical (Tarí, Molina and Castejón, 2007). Knowledge transfer or learning is considered to be directly connected to process improvement and management. This is mostly because of the direct involvement of individuals in the entire process. Systems have to be in place to assure that policies in quality management will be transferred from top management to be applied by the concerned employees.

Finally, continuous improvement and key results areas in quality improvement are highly interrelated. Nabitz and others (2001) highlighted that excellence in continuous quality is not only about the execution of the policies but more importantly the results it generate such as satisfaction of both internal and external customers.

1.2 Objectives of the Study

The main objective of the study is to investigate the effect of quality management practices to service quality in a private educational institution. Specifically, it attempts achieve the following;

- 1) Assess the level of Total Quality Management Practices among the faculty members.
- 2) Asses the Level of Service Quality provided by the faculty members as perceived by the students.
- 3) Determine the effect of Total Quality Management practices and Service Quality.

2. Methodology

The study utilized a descriptive research design. Two groups of respondents were considered in the study. One group included 15 purposively sampled faculty of instruction from the College of Business while the other group consist of 75 students from the same college under the 15 selected faculties. The survey questionnaire adopted from the work of Alvarez, Rama, and Alonso (2014) was used as data gathering tools. Two sets of questionnaire were used. One was set for the students who will assess the service quality provided by the teachers. The second set was designed for the teachers to assess the degree to which the organization is implementing TQM practices. All items are expressed in a four point Likert scale.

Prior to the conduct of the study, a pilot study involving 30 students and faculty who were not part of the final sample was conducted to test the reliability of the questionnaire. A Chronbach's Alpha value of 0.9218 was derived from the method suggesting that the utilized questionnaire exhibit high internal consistency and thus is reliable. The data was tabulated and processed using MS Excel. The profile of the respondents was treated using simple percentage. On the other hand, the levels of TQM Practices and Service quality were treated using weighted mean. Finally, the influence of TQM Practices on Service Quality was assessed using Simple Linear Regression.

3. Results and Discussion

3.1 Profile of the Respondents - Faculty

Majority of the respondents are aged below 25 years old at 60% (n=9) while 5 respondents (33.3%) are aged 25 to 30 years. In terms of sex, 12 of the respondents are female while only 3 are male corresponding to 80% and 20% respectively. Finally, all of the respondents have rendered more than 5 years of service in the institution.

3.2 Profile of the Respondents - Students

Majority of the student-respondents are aged under 18 years old at 66.7% (n=47) while 26.7% (n=20) are aged 18 to 25. Only 3 respondents (4%) are aged above 25 years old. In terms of Sex 77.33% of the respondents are Female (n=58) while 22.7% (n=17) male.

3.3 Total Quality Management Practices Implementation

Table 1: Descriptive Statistics of the Level of TQM Practices Implementation

Indicator	X	SD	Qualitative Description
Leadership			
1. My managers and supervisors motivate me as an employee to help perform a high level of work.	3.20	0.65	Implemented
2. Management recognizes the efforts and improvements contributed the employees.	3.20	0.65	Implemented
Overall Leadership	3.20	0.63	Implemented
Quality Policy/Planning			
3. Our management communicates its strategy and objectives to all the members of the organization	3.07	0.44	Implemented
4. We are involved in defining objectives and plans.	3.13	0.62	Implemented
Overall Policy/Planning	3.10	0.49	Implemented
Alliance And Resources			
5. My organization plans and manages its external collaborators and internal resources to support its quality policy and strategy.	3.00	0.63	Implemented
6. Management in my organization assures that the alliances are in accordance with the resource required in the organizational strategy.	3.33	0.47	Highly Implemented
Overall Alliance and Resources	3.17	0.51	Implemented
Employees Management			
7. Management assures that employees are qualified to do their job.	3.47	0.50	Highly Implemented
8. Employees in my organization are provided	3.47	0.50	Highly Implemented

with enough motivation to do their job.			
Overall Employees Management	3.47	0.46	Highly Implemented
Learning			
9. My organization provides proper training to allow members to learn new operations and policies.	3.13	0.81	Implemented
10. In my organization, senior employees make regular effort to train younger employees.	3.60	0.49	Highly Implemented
Overall Learning	3.37	0.50	Highly Implemented
Process Management			
11. My organization has clear systems in place to allow the provision of quality services	3.47	0.50	Highly Implemented
12. My organization assures infrastructures are in place to assist in allowing members to provide quality service.	3.47	0.50	Highly Implemented
Overall Process Management	3.47	0.50	Highly Implemented
Continuous Management			
13. Management assures that evaluation is properly used for improvement of current systems.	3.27	0.77	Implemented
14. In my organization, feedbacks from customers are considered in annual planning.	3.20	0.91	Implemented
Overall Continuous Management	3.23	0.77	Implemented
Overall TQM Practice Implementation	3.29	0.55	Highly Implemented

Table 1 shows the assessment of the respondents of the total quality management practices of the department. The computed over-all weighted mean yielded a value of 3.29 which suggest that the total quality management practices of the institution is highly implemented. The low standard deviation of 0.55 suggests that the respondents highly agree on this assessed level.

In fact, the managers and supervisors in the organization are employee to perform a high level of work (Indicator 1) and that that their management is appreciating their efforts especially the improvements caused by its employees (Indicator 2). Also management communicates to everyone any changes in strategies and objectives of the organization and asks members to participate (Indicator 3 & 4). In addition, the results show that the organization provided proper infrastructure to allow members not only to learn new systems but also share knowledge across organizations. Pfeffer (2010) noted the importance of TQM practices to the over-all health of the organization. The effects of TQM practices encompass not only the outputs but also the employees who deliver the output. This in turn creates a lasting effect as employees will eventually create a culture of quality that they are willing to pass on to future employees. By this structure, organizations position themselves in a state where improvement is done on a regular and continuous basis.

3.4 Level of Service Quality

Table 2: Descriptive Statistics of the Level of Service Quality

Indicator	X	SD	Qualitative Description
Reliability			
1. My institutions of Higher education promise to do so something in a certain time, it does so.	3.25	0.52	Good
2. If I have a problem, my institution of Higher education demonstrates sincere interest in solving it.	2.99	0.67	Good
Overall Reliability	3.12	0.51	Good
Tangibility			
3. My school has modern equipment, such as laboratories	3.03	0.61	Good
4. My school makes sure that proper support service is provided.	3.12	0.66	Good
Overall Tangibility	3.07	0.56	Good
Responsibility			
5. Employees and professors in my Higher education promise me the service with the deadlines they were able to meet.	3.16	0.62	Good
6. The employees and teachers in my Higher education are willing and available during service providing.	3.25	0.50	Good
Overall Responsibility	3.21	0.47	Good
Security			
7. The behavior of employees and teachers in my Higher education inspire confidence.	3.36	0.67	Very Good
8. I feel safe in my transaction with my institutions of higher education.	3.33	0.66	Very Good
Overall Security	3.35	0.63	Very Good
Empathy			
9. My institutions of Higher education have convenient business hours for all students.	3.04	0.56	Good
10. The institutions of my Higher education have employees and teachers who provide individual attention to each student.	3.17	0.64	Good
Overall Empathy	3.11	0.53	Good
Overall SERVQUAL	3.17	0.75	Good

Table 2 shows the assessment of the respondents in terms of the level of Service Quality provided by the organization. As the table shows, the computed over-all weighted mean value is 3.17 which suggest that the organization has a good level of service

quality. The standard deviation ($SD=0.75$) proposes that the respondents agree on such evaluation.

Looking further, the results of the study shows that the institutions is good in making sure that the students problems are solved (Indicator 2) and that the employees and teachers are willing and available during service provision (Indicator 6). In addition, it was also observed that the behaviour of employees and teachers in school inspires confidence (Indicator 7) and assures that students feel safe in any dealings or transaction with the school (Indicator 8).

The desire for service quality has mostly been linked to organisational performance (Sadeghloo Maryam et al, 2014). Market orientation or the conscious effort to consider customers actual consumption and feedback of such consumption is a proven mechanism for the achievement or organizational goal. Service quality therefore is the primary theme that separates successful organizations from those who struggle to deliver quality service both in the service and manufacturing sector.

Table 3: Effect of Total Quality Management Practices on Service Quality

Regression Statistics on the Effect of TQM Practices on Service Quality

Multiple R	0.525702
R ²	0.276363
Adjusted R ²	0.220699
Standard Error	0.114006
<u>Observations</u>	<u>15</u>

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.064529	0.06452	4.96480	0.04414*
Residual	13	0.168964	0.01299		
Total	14	0.233493			

	Coefficients	St. Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	3.771	0.2712	13.905	3.5E-09**	3.18549	4.357333
TQM Practices	-0.181	0.0815	-2.228	0.04414	-0.35809	-0.00553

**significant at 0.01

*significant at 0.05

Table 3 shows the regression statistics on the assessment of the effect of TQM Practices on service quality. As what can be gleaned from the table, the computed F value is significant at 0.05 ($F=4.96480$, $p=0.04414$). This would suggest that TQM Practices has a significant effect on Service Quality. In fact, the computed are squared suggest that 22% of the variations in Service Quality can be explained by the Level of TQM Practice.

However, the coefficient value of TQM Practices, -0.181, implies that the observed effect is inversed. Put differently, an increased level of TQM practice implementation results to lower Service Quality. This observed inverse effect is similar to the findings of Canibano (2012) and Tarafdar and colleagues (2007), explaining that an increased practice in TQM increases work intensity and stress which, though increases organizational performance, does so at the expense of employee motivation and thus lower provision of service quality by the front liners. In the case of academic

institutions, the phenomena may be explained by the same construct. The increased level of workload as a result of the pressure in complying with documents and other administrative work may, at significant level affect, the provision of better service quality to the students in the form of classroom management and teaching.

4. Conclusion

This study aimed at investigating the effect of TQM practice on service quality with specific emphasis on the academic setting. The results of the study supported the idea that TQM practices have an inverse effect on service quality. This may be largely explained by the possible trade-off between administrative tasks which are required in complying TQM documents and procedure and teaching duties which are the direct manifestation of service quality in the perception of the students who are the ultimate customer.

This finding has tremendous implication on TQM practices and policies in academic institutions. Careful planning has to be done in order to make sure that quality procedures will not affect the ability of teachers to perform their jobs. Systems have to be place to support the practice of TQM activities in a manner that does not sacrifice quality of education.

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