

Total Quality Management & Business Excellence: The moderating role of service quality evidence from Palestinian service companies.

Yamin Abu Alrub¹, Abdalqader Darawish², *Ahmad Abu Alrub

¹Department of quality management, Arab American University, Ramallah, Palestine.

²Department of Business Administration, Al-Quds Open University, Hebron, Palestine.

*Department of Accounting and Finance, Palestine Polytechnic University, Hebron,

*Correspondence author: Ahmad Abu Alrub

ABSTRACT The dynamic and competitive today's business environment has made most of organizations to be striving towards devising a method that will be deployed by their firm to remain in the business by enhancing their performance. Total quality management (TQM) has been an approach deployed by some firms to reduce their shortcomings and enhance their efficiency, reliability and quality achievement. Meanwhile, the method has been partially deployed and that have been making its implementation difficult. This study examines the implementation of TQM in Palestine service companies. Structured questionnaire was used to collect the data, using AMOS software was employed for the analysis. Findings from this study show that recognition and reward; and, education and training were found to be significant determinants of employees' satisfaction. Moreover, vision and plan, employees' evaluation, improvement of management control, employees' satisfaction, and enhancement of quality system were found to be significant to the determination of service quality. In addition, employees' satisfaction, customer focus is found to be determinants of customers' satisfaction; and lastly, service quality and customers' satisfaction were found to contribute significantly to the general business performance of service companies in Palestine. It is suggested in this study and argued that deployment of TQM is practicable to achieve overall business performance in Palestine service companies, if the management can endeavor to deploy the full integration of total quality management approach.

KEYWORDS: Business environment, TQM, Palestine, SEM

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I. INTRODUCTION

The quality of services is crucial in the service sector, as it is the main factor determining competitiveness. Service companies that pay special attention to the quality of services will stand out from others, thus achieve a "competitive advantage". Though it was stated that the price is a significant factor considered by customers in choosing companies, and most companies prefer to compete with each other than "Quality of Service". Lack of quality management means, however, a lack of addition and provision of value for companies (Peters, 1999). Goh & Ridgway (1994) employed a strategic approach to assess company "quality management competitiveness". This approach ensures that supported companies remain customer oriented. TQM allows innovating, allowing employees to make decisions that affect their work. For companies to be innovative in their proposals, a flexible structure is needed to enable collaboration between different units. The implementation of TQM includes the acquisition of various actors involved in the process provision of services in the field of ideology and quality management practice (Sader et al 2021). This means that key service actions must also be supported, to instill quality in their work.

Consequently, the job-based management philosophy process that involves people that cares for customer satisfaction, which will in turn contribute to the performance improvement, can be regarded as "Total Quality Management" (TQM). This includes proper coordination of work processes that allow continued improving all business units to meet or exceed the expectations of customer (Veselovská, 2021). This emphasizes the full quality of all aspects of the organization for waste reduction and modifications to have costs reduction and increase efficiency in the production. TQM applies to all forms of organization, irrespective of its size, objective and mission, with the public sector inclusive (Ažman, & Gomišček, 2015). Organization quickly adopts ideology to make them effective in the meeting applications. However, adopting the ideology of TQM was difficult for most organizations, as a result of their non-compliance with procedures and rules for implementing TQM (Bartková, 2019). For instance, an organization deployed TQM as a program with the expectation that it will work and do everything magically, while others took a partial approach, using some parts of the rules.

This was the reason for the failure of most organizations to achieve the expected goal. The implementation of this ideology further consolidates the accrued benefits that are required of organizations to implement TQM, especially in developing countries such as Palestine. In a situation where the adoption of this ideology seems impracticable for the organization, this will reflect in the weaknesses of the organizations in their quest for profit in this area of quality (Kotler, 2011). With current trend of changes experiencing which is as a result of government reforms, it has given way to form of competition which seems to be different from the status quo. Due to competitive changes, the environment, economic globalization and technology, competition between companies has increased (Závadský et al 2020). Various sectors of the economy created strong competition and it is expected of the organizations to look at their operating procedures so that it can strategically change them to fit with problems. This makes companies more interested in looking for quality management concepts to meet competitive challenges and improve their results. There are many quality managements concepts, such as “Total Quality Management”, “Lean Production”, “business process redesign”, “Six Sigma” and others to ensure high quality competition. This study focuses on “Total Quality Management” (TQM), which was developed by Deming, Juran and Feigenbaum (1991). Therefore, the consumer behavior changes have caused most manufacturers to ensure the productions of goods and services products that will meet the requirements of potential buyers. This is why most organizations strive to find ways to satisfy customers with improved services designed to satisfy or meet customer expectations. Even if organizations strive to meet customer expectations, some procedural shortcomings associated with the provision of services will still persist (Závadský et al 2020). The significance importance of the whole process can be seen in the benefits it brings in terms of increasing sponsorship over time. If service companies do not take quality approaches seriously, this can cause loss of customers, which could ultimately get them out of business (Xiong, & Feng, 2021). Therefore, changes in organization are necessary; culture and structural changes give rise to a new approach to the provision of services. Implementation of TQM may be useful for service companies after successful adoption of the rules.

The introduction of TQM will increase customer satisfaction with the services offered. Improving quality of services can lead to the enhancement of their profitability and shares in the market. Implementation of TQM in an organization can also ensure that organizations change working methods to eliminate inefficiency, increasing customer satisfaction, and implementing best practices (Závadský et al 2020). However, Porter & Tanner (1996) observed that continuous improvement in operational efficiency is necessary but not enough for the organization profitability. According to Závadský et al (2020) TQM helps improve quality. It also reduces waste, reinforcement and buffer stock by installing one manufacturing process. It was argued in the study that TQM would decrease production costs and production time. Many other TQM practices, such as training, IT systems management and relationships suppliers, etc., were argued to have a positive effect on work efficiency (Sader et al 2021).

This study is aimed at examining the current implementation of TQM in Palestinian service companies, and the following objectives will be pursued to achieve the study aim: Examining the impact of the TQM implementation on the general performance of Palestinian service companies; That will contribute to the literature on the TQM integration with the specificity of Palestinian service companies. It is evident from the literature that the empirical literature on evaluation of TQM implementation influence on service companies in Palestinian is scant, thus, this identified gap will be filled by this study by building a TQM implementation model that could be applied by Palestinian service companies.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The essential element of production for either goods/services required by any organization to meet the customer’s expectation is “Quality”. The definitions and opinions on what constitute a quality have been varied among practitioners. Mann and Kehoe (1994) highlighted ten elements of TQM which are as follows; “*Process control and improvement; customer orientation; measurement and reporting; leadership; quality systems; participation, recognition, education and training as well as external customer concentration*”. While some opined that product/service quality is relative to perception, others are of the view that it has to do with the extent at which a product/service meets the customers’ expectations. In the word of Crosby (1979), it was defined compliance with requirements or specifications, and proposed the quality is right; must be measurable. Meanwhile, ISO 9000 (2000) as cited in the work of Vorley and Tickle (2001) sees it as the extent at which an inherent trait of a product/service fulfill certain requirements. However, the American Society for Quality (ASQ) considers quality to be subjective; quality can be seen as has two meanings - product or service characteristics, ability to meet a specific need or a product/service without disability. Porter & Tanner (1996) described quality as the “magic ball” that offers value, better customer service, better products and higher profits. The study further explained that the quality of eyes of the beholder “means that the client is right for

what he says. In addition, Kondo (1997) argued that quality is a source of employee empowerment, in which the main goal the company must be to attract its employees and clients, generating profit for its shareholders.

Though lots of studies have been undertaken on the implementation of TQM, currently TQM definitions or elements are widely varied. In fact, scientists still hold different views on TQM concepts and elements. However, many agree that TQM is one approach to vision or continuous improvement, focus management concentration, management of planned processes, partnership with suppliers and teamwork to implementing this management philosophy requires a set of exercises. A comprehensive review of the TQM literature indicates that TQM covers a wide range of categories. Ahire et al. (1996) suggested in their study three basic principles that should be adopted in future TQM studies. In line with the suggestion of Ahire et al., (1996), this study included 11 TQM elements. Process control and cleaning and the organization, were relatively similar the study adopted "monitoring and process improvement". Two others were included in this study. Elements, "Quality System Improvements" and "Vision and Planning Plans" that do not do this framework, were found in this study. As such, this TQM concept includes comprehensive TQM support compare with other studies. In this study, 11 constructs were developed to examine link between TQM and business performance.

2.1 Relationship among Overall Business Performance Constructs

This view was supported by Vorley and Tickle (2001) who opined that the perception of the employees' attitude positively influences satisfaction of customers. Similar research by Anderson et al., (1995) established similar result and concluded that the satisfaction of the employees has a positive influence on the customers' satisfaction. As a matter of fact, in an organization, the production of quality products lies solely on the employees, and producing quality product/service will translate to the satisfaction of customers. The above described scenario makes it apparent that when employees are satisfied, they will put in their best and this will improve the quality of the company product/service and thus achieve the satisfaction of the customers. When employees are satisfied with their firm, they can go extra mile to ensure that the company achieve success which will be as a result of their commitment by producing good product/service. Hence, the following hypotheses are proposed:

H1: There is a direct and positive influence of employee satisfaction on service quality.

H2: There is a direct and positive influence of Employee satisfaction on customer satisfaction.

However, this implies that even if the product price is a bit high, it will still attract customers because of its quality and in return will contribute to the "strategic business performance" of such company. Some author found its influence on growth of sales and market share (DuBrin, 1995); some considered it as a factor for customers retention (Simga-Mugan & Erel 2000) while some opined its significance to the long-term survival of a company (Hackman & Wageman, 1995). Simga-Mugan & Erel argued that keeping a customer for a long has an economic reward for such company. This view was shared by Anderson et al., (1995) who concluded in their study that customers gets satisfied from the improvement in the quality of the product/service of a company. In summary, it is evident from the literature that producing a quality product/service by a company will influence the satisfaction of the customer, enable the company to make profit and control substantial share of the market, and possibility of achieving a "competitive advantages" in the market where it operates. Finally, the organization's competitive central focuses on the business focus will be redesigned. Thusly, two hypotheses were proposed:

Hypothesis H3: There is a direct and positive influence of service quality on customer satisfaction.

Hypothesis H4: There is a direct and positive influence of service quality on strategic business performance.

Anderson et al. (1994) itemized that higher shopper dedication ought to extend customer faithfulness, shield current bit of the pie from contenders; lower trade costs, and reduce disillusionment expenditure and the expenses of pulling in the new customers, which will contribute to the continuous existence of the company. The successful experiences in Haier Group14 suggested that shopper unwaveringness can incite extended bit of the general business, advantage, arrangements, and charges. Thusly, the following hypothesis is formulated as follow:

H5: There is a direct and positive influence of Customer satisfaction on strategic business Performance.

Dijkstra & Henseler (2015) communicated that suppliers can add to quality performance in different ways. For example, assurance of suppliers should be established on thing quality instead of an expense, and suppliers can add to the thing setup process through thought in the organization's thing arrangement gatherings, where the suppliers give commitment about the limits of arranged materials and parts. Dijkstra & Henseler (2015) uncovered that purchased materials and parts are an overarching wellspring of strategy variance. Along

these lines, improving supplier quality management will add to the improvement of the organization's thing quality. Thusly, this study proposed the hypothesis as follows:

Hypothesis H6: Supplier quality management positively influences service quality.

Obviously a concentrated-on quality goal can empower a firm to keep up an unfaltering voyage for extending quality levels (Aravindan et al., 1996). Target concept that will be able to predict that the employee will get motivated when they have a clear idea of what they are working towards and its certainty. Clearly, a quality improvement plan, at whatever point executed reasonably, can add to improving thing quality. Along these lines, the study hypothesis is formulated as follows:

Hypothesis H7: Vision and plan statement positively influences service quality.

the accessibility of quality information can effectively influence the quality of product/services (Motwani et al., 1994). Meanwhile, Dijkstra & Henseler, (2015) proposed that utilizing present-day data strategies for gathering, putting away, preparing, and assessing different snippets of data can extraordinarily influence item quality. The new, improving techniques for information handling have made accessible to management unmistakably progressively helpful, exact, convenient, and prescient data whereupon to base the choices that guide the company's future business. Clearly pertinent quality data accessible can be utilized for quality enhancement. Therefore, the proposed hypothesis is as follows:

H8: Employees assessment positively influences service quality.

According to Simga-Mugan & Erel (2000) which was supported by Anderson et al. (1994a), obvious system management, when satisfactorily executed and exercised, accomplishes procedure overhauls; first by getting out stand-apart explanations behind accumulation and, second, by lessening regular purposes behind mix. Much research has shown that incomprehensible methodology the board and using appropriate quality instruments unequivocally positively influences the quality of the product (Adam, 1994; Mann & Kehoe, 1994). In this way, the hypothesis is suggested as follows:

H9: Process control positively influences service quality.

Using determined quality masterminding can make a thing's mistake confinement and hindrance of disappointments (Kanji & Asher, 1996). Another study opined that synchronous orchestrating can add to shrewd and splendid thing affirmation (Gatenby et al., 1994). Undeniably, the quality of the design of a product/service can be improved with the tacit knowledge of the designer. An efficient design of a product has potential of influencing the quality of the product and makes the company to have advantage over the competitors, which will enhance the achievement of the "competitive advantage" by the company within the market where it operates. Thusly, hypothesis is formulated as:

H10: Service design positively influences service quality.

observational appraisal shows that companies with ISO 9000 certification produces quality product/service compared to those without certification (Voss and Blackmon, 1995). Motwani et al., (1996) argued that the certification of a company by the certification body has the potential of contributing to the improvement in the quality of product/service being produced by such organization Thus, the accompanying hypothesis is formulated as follows:

H11: Quality system improvement positively influences service quality.

Dijkstra & Henseler (2015) it is obvious from the literature that when employee participates in the process of the business, it gladdens their heart, most especially when their suggestion is considered and implemented. Hence, the employee level of satisfaction will increase. Therefore, the accompanying hypothesis is formulated as follows:

H12: Employee participation positively influences employee satisfaction.

Gómez, et al. (2017) imparted that calling improvement can give stretched out fulfillment to delegates. Along these lines, position progress can affect impact worker fulfillment. Confirmation and reward exercises are respected by workers, and subsequently give inspiration or partners. Commonsense confirmation and reward

exercises can make workers revolve around their employments and make their occupations dynamically exquisite. Accordingly, a hypothesis is formulated as follows:

H13: Employees' reward positively influences employee satisfaction.

Gómez, et al. (2017) in his study opined that, most learning conditions are normally bracing an immediate consequence of the satisfaction related to getting new data or aptitudes. Truth be told, giving a guarantee on the product sold out by the company is perceived by the customers as commitment of the company on the quality of their product. These acts will improve the satisfaction of the customers (Simga-Mugan & Erel 2000). It is no uncertainty that the point prioritizing the customers by a firm is to ensure that the company customers are satisfied. Along these lines, the two following hypothesis is thus formulated:

H14: Education and training positively influences the satisfaction of employees

H15: Prioritizing customers positively influences customer satisfaction.

III. RESEARCH PHILOSOPHY AND METHODOLOGY

It is expected that the research philosophy of a study should first be examined before going into the research design. According to Saunders, Dijkstra & Henseler (2015) it is expected of the researcher to understand the development and nature of the knowledge in the study, which is why posited that the world perception by the research determine the way the social science researchers conducts their research. Research philosophy is about the way and manner data are collected, analyzed, and the result implemented. It also involves the strategy employed in carrying out the study and the instrument employed (Nissen, Klein & Hirschheim, 1991). This study combines both epistemology and ontology, which according to Nissen, Klein & Hirschheim, (1991) are refers to as what the researcher believe to be true and what has been established to be true.

The rationale behind this study is to examine the influence of total quality management as it influences the general business performance using the service companies in Palestine as a case study. In doing these, hypotheses were developed in line with the existing theories and previous researches on the subject matter (Sekaran & Bougie, 2010). In accordance with the objectives of this study, structured questionnaire was developed to elicit information on the constructs included in the study model. This will enable the study to offer an empirical examination for the relationships of the constructs in the study model. This study could be quantitative in nature, which is in agreement with the study of Zu et al., (2010). This is because the study was conducted to formulate and test the hypothesis for model development. In this study, quantitative approach was adopted to provide answers to the research questions and test the hypotheses, which is in line with some previous studies (Mann 1992). The idea of this study is basically on the measuring of behavior and attitudes which makes quantitative approach suitable for the study (Vorley and Tickle 2001). In the word of Beer (2003), quantitative approach is more suitable when the rationale of the study is to examine relationship between variables, and the findings from the approach can be generalized (Samuel & Chipunza, 2009).

In this study, the use of items used by previous studies is to ensure reliability of the instrument and also guide against the issue of external validity (Black, 2009). According to Black, 2009; and Samuel & Chipunza, 2009, research instrument must be devoid of biasness, must be generalizable, and have external validity (Vorley and Tickle 2001). The choice of questionnaire as the research instrument is as a result of its easy applicability, less costly, less time consuming, and easy to understand by the respondents. In order to ensure the accuracy of our findings, Partial structural equation modeling (PLS-SEM) was employed for the analysis of this study model. Variance-based structure PLS-SEM was selected because the non-parametric techniques PLS-SEM can only be employed when the study is violates the normality assumption of the model (Petter, 2018). Furthermore, PLS-SEM was deployed as a result of its high statistical power to identify the significant relationship that present in the model (Hair et al., 2019; Sarstedt, et al.,2020). Therefore, the psychometric properties of the model constructs and structural model testing were done by PLS-SEM using ADANCO software (Schuberth et al., 2018)

3.1 Research Instrument

The questionnaire was adopted in this study for the research instrument. It was adopted as a result of its many advantages over other instruments. The questionnaire has the advantage of wider coverage, easy to administer by researcher and easy to understand by the respondents, less costly, and, less time consuming. The questionnaire for this study comprises of two sections, the first part consists of demographic characteristics of respondents which were to elicit information on age, gender, years of employment, income and qualification of respondents; and, the last part comprises of the items for each of the construct in this study model. These items were ranked on 5-point liker scale ranges from 1 (strongly disagree) to 5 (strongly agree). The respondents were

asked to select the appropriate level that corresponds to their agreement with the statement in the questionnaire. The statements are related to this study model constructs which are: customer focus, continuous improvement, process management, quality data and reporting, training, project design, supplier management, employee relations and management leader ship, in enhance the overall service companies in Palestine.

3.2 Study population, Sample size and Sampling Methods

In Palestine, 136 branches of service companies were enumerated, and that serve as the study population for this study. However, as a result of the size of the study population, the whole size was considered for this study. Moreover, the techniques of selecting the representative of the units must be carefully selected to avoid any bias. This biasness must be avoided so that the results emanated from this study will be free from error. According to Brewerton & Millward (2001), picking of representative must involve adoption of sampling strategy. In quantitative research, the significance of the results encourages the researcher to ensure that the sample is chosen without bias (Rollsjö, 2009). This view was in agreement with DeCoster (2006) which argued that in selecting the sample from a population, the researcher should ensure that all units in the population has equal chance of being represented. And this individual picked will give a fair representation for the entire population (Abubakar & ilkan, 2016). Thus, in this study, having enumerated 136 branch offices of service companies in Palestine, 210 questionnaires were administered to the randomly selected branch managers and administrative staff. Out of the 210 questionnaires administered, 172 (81.91%) questionnaires were recovered, while 38 (18.09%) could not be retrieved. However, out of the 172-questionnaire retrieved, 10 (4.76%) were found to be incomplete. Therefore, 162 (77.14%) questionnaire were finally processed and utilized for the analysis.

IV. FINDINGS AND DISCUSSIONS

The demographic characteristics of the respondents as depicts in Table 1 reveals that 121 (74.7%) of the respondents are male, while 41 (25.3%) are female. The statistics on the years of employment of the respondents shows that the larger percentages of the respondents have worked with the company for more than 5 years which is quite impressive because the respondents would have adequate information about the company. The statistic as presented in Table 5.1 depicts that 36.4%, 27.8%, 22.8%, 9.3%, and 3.7% have been working with their respective companies for less than 5 years, 6-10, 11-15, 16-20, and above 21 years respectively. The level of income of the respondents as presented in Table 5.1 shows that 34% of the respondents earn less than US\$3000, 14.8% earns between US\$3001-4000, 35.8% between US\$4001-5000, 13.6% between US\$5001-600, and about 1.9% of the respondents earn above US\$6000 per month. This statistic of income is an indication that the employee’s remuneration is considerable and could be a source of motivation for the employee in given their best for the business performance. Lastly, the statistic in Table 5.1 shows that the larger percentages (45.1%) of the respondents are Master degree holders, while 34.6% and 20.4% of the respondents are Bachelors and Doctoral degree holders respectively. This is an indication that the respondents are educated which we believe will influence their understanding of our subject matter and in turn plays a significant role in their response to the questionnaire items.

Table 1. Demographic Statistics

	Frequency	Percent
Gender		
Male	121	74.7
Female	41	25.3
Years of current job		
Less Than 5	59	36.4
6-10	45	27.8
11-15	37	22.8
16-20	15	9.3
21 And More	6	3.7
Income		
Less Than 3000	55	34
3001-4000	24	14.8
4001-5000	58	35.8
5001-6000	22	13.6
More than 6000	3	1.9
Qualification		
PHP	33	20.4
MA	73	45.1
BA	56	34.6

Furthermore, Table 2 presents the descriptive analysis of the variables included in the study model. As presented in Table 2, the result shows that the mean value for all the constructs ranges between 3.18 – 3.70. This

is an indication that in a scale of 5, a mean value ranges between 3-18 – 3.70 shows that most of the responses of respondents to the items for the constructs are either neutral (3) or agree (4). Looking at the standard deviation value as presented in Table 5.2, the variation from the mean value is moderate with only employee satisfaction has the highest standard deviation value (1.23). The skewness and kurtosis which measures the data symmetric or lack of symmetric and the tail heaviness of the distribution respectively, shows from the results presented in Table 2 that evaluation (EV), service design (SD), quality system improvement (QSI), employee participation (EP), education and training (ET), and strategic business performance (SPB) are fairly symmetric in distribution; supplier quality management (SQM), vision and plan (VP), customer focus (CF), employee satisfaction (ES), service quality (SQ), and customers satisfaction are moderately skewed; and, leadership (LS), price control and improvement (PCI), and recognition and reward (RR) are highly skewed. As for kurtosis, the result shows that only employee satisfaction (ES) and customers satisfaction (CS) has a light tail because their statistics are less than 0, which make them to have wide distribution, while other constructs has heavier tail because they all have values that is greater than 0 and that makes them to have leptokurtic distribution.

Table 2: Descriptive Analysis

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	statistic	Std. Error	Statistic	Std. Error
LS	3.4689	.56059	-1.120	.191	3.044	.380
SQM	3.5556	.56466	-.795	.191	3.097	.379
VP	3.5910	.56678	-.843	.191	2.080	.379
EV	3.5137	.53904	-.282	.191	.577	.380
PCI	3.6412	.55328	-1.027	.191	2.792	.379
SD	3.4568	.57160	.394	.191	.402	.379
QSI	3.1963	.71139	.038	.191	.124	.379
EP	3.1813	.60585	.224	.191	.729	.379
RR	3.4321	.77142	-1.018	.191	1.654	.379
ET	3.4292	.74008	-.497	.191	.473	.381
CF	3.4866	.67079	-.544	.191	2.674	.379
ES	3.7019	1.23412	-.686	.191	-.596	.380
SQ	3.5079	.53948	-.920	.191	3.433	.379
CS	3.4753	1.03480	-.512	.191	-.388	.379
SBP	3.4753	.60516	-.468	.191	1.464	.379

The correlation analysis for the variables was carried out, this was aimed at ensuring that the problem of multicollinearity among the variables did not arise, and the results are presented in Table 3. As shown in the table, only few of the variables has correlation values that is greater than 0.60. This is an indication that the variables are not highly correlated with each other which could give room for multicollinearity. In order words, the study variables are free from multicollinearity problem.

Table 3: Correlation among the variables

	LS	SQM	VP	EV	PCI	SD	QSI	EP	RR	ET	CF	ED	SQ	CS	SBP
LS	1														
SQM	.614	1													
VP	.647	.569	1												
EV	.629	.587	.658	1											
PCI	.521	.515	.564	.554	1										
SD	.464	.455	.506	.579	.426	1									
QSI	.436	.382	.478	.590	.424	.584	1								
EP	.555	.318	.505	.492	.315	.602	.616	1							
RR	.584	.319	.661	.505	.544	.316	.366	.506	1						
ET	.521	.456	.608	.477	.502	.303	.388	.445	.600	1					
CF	.533	.394	.542	.534	.448	.441	.562	.555	.534	.453	1				
ED	.293	.077	.335	.255	.340	.074	.085	.257	.586	.141	.393	1			
SQ	.602	.418	.597	.570	.591	.386	.437	.509	.624	.493	.625	.513	1		
CS	.316	.123	.303	.354	.233	.350	.328	.410	.348	.105	.407	.375	.356	1	
CS	.459	.328	.475	.573	.336	.404	.514	.569	.529	.409	.706	.387	.558	.407	1

Reliability and validity of constructs

The properties of the constructs included in the study model are examined using Cronbach Alpha, variance inflation factor (VIF), factor loading of the items, determinants of the correlation matrix, KMO test and its significance. The results as presented in Table 4 show that the Cronbach Alpha for all the constructs is above the 0.70 threshold according to Cronbach (2004). Cronbach suggested that the closer the alpha value to 1, the

greater the internal consistency of the items in the scale. Also, the rule of thumb provides that value greater than 0.9 is excellent, > 0.8 is good, > 0.7 is acceptable, > 0.6 is questionable, > 0.5 is considered to be poor, while < 0.5 is unacceptable. In view of these, the Cronbach alpha of our variables indicates that there is internal consistency because none of the value is less than 0.7 which is acceptable. Moreover, the variance inflation factor (VIF) that measure the amount of collinearity among the items shows that the VIF statistics for this study ranges between 1.175 and 1.923. The result is considered to be in order in accordance with Henseler, Hubona & Ray (2016) who suggested that the values should not less than 1 and not greater than 5. This implies that there is absence of multicollinearity among the items that measures the individual construct in this study model.

Table 4. Constructs Reliability value

Items	Cronbach's Alpha	VIF
Supplier Quality Management (SQM)	0.725	1.211
Vision and Plan Statement(VP)	0.789	1.923
Evaluation(EV)	0.777	1.707
Process Control and Improvement(PCI)	0.796	1.175
Service Design(SD)	0.775	1.274
Quality System Improvement(QSI)	0.760	1.343
Employee Participation(EP)	0.759	1.666
Recognition and Reward(RR)	0.754	1.345
Education and Training(ET)	0.837	1.307
Customer Focus(CF)	0.779	1.234
Employee Satisfaction(ES)	0.824	1.187
Service Quality(SQ)	0.778	1.648
Strategic Business Performance	0.750	--
Leadership	0.781	1.700
Customers Satisfaction (CS)	0.837	1.473
All Variables	0.780	

As for the factor loadings for each of the items, the result as presented in Table 5 reveals that most of the items loadings values ranges between 0.6 and 0.9. Though Dijkstra & Henseler (2015) suggested that above 0.7 factor loading is considered to be good, but above 0.5 loadings could be accepted and sustained. Therefore, our items factor loading are accepted and sustained for further analysis. Meanwhile, the determinant of the correlation matrix which is expected to be greater than 0.00001 to show that multicollinearity is not a problem between the items in the construct confirms the absence of multicollinearity problem in the data. This is as a result of the determinant value that is presented in Table 5 that shows all the value to be greater than 0.00001. In addition, the result of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy according to Kassicieh and Yourstone (1998) posited that the value ranges between 0 and 1, but recommend that value > 0.5 is acceptable, while 0.5 – 0.7, 0.8 -0.9, and above 0.9 could be considered to be mediocre, great, and superb respectively. In view of these, the KMO value for these constructs are found to be good and great respectively, and the significant values for the constructs is an indication that the correlation matrix among the items of the constructs is not an identity matrix which shows that there exists relationship between the items in the construct.

Table 5 Factor Analysis Result

Variables	Items	Factor Loading	Determinant	KMO	Sig.
Leadership	LS1	.935	.182	0.731	.000
	LS2	.656			
	LS3	.614			
	LS4	.627			
	LS5	.719			
	LS6	.581			

	LS7	.653			
	LS8	.698			
Supplier Quality Management	SQM1	.635	.310	.797	.000
	SQM2	.731			
	SQM3	.694			
	SQM4	.638			
	SQM5	.662			
	SQM6	.664			
Vision and Plan Statement	VP1	.669	.055	.757	.000
	VP2	.650			
	VP3	.640			
	VP4	.708			
	VP5	.758			
	VP6	.671			
	VP7	.694			
	VP8	.639			
Evaluation	EV1	.608	.069	.765	.000
	EV2	.752			
	EV3	.755			
	EV4	.649			
	EV5	.609			
	EV6	.614			
	EV7	.689			
	EV8	.696			
	EV9	.797			
	EV10	.697			
Process Control and Improvement	PCI1	.682	.035	.780	.000
	PCI2	.665			
	PCI3	.686			
	PCI4	.655			
	PCI5	.731			
	PCI6	.647			
	PCI7	.660			
	PCI8	.798			
Service Design	SD1	.696	.082	.762	.000
	SD2	.643			
	SD3	.662			
	SD4	.632			
	SD5	.668			
	SD6	.689			
	SD7	.641			
	SD8	.621			
Quality System Improvement	QSI1	.690	.620	.818	.000
	QSI2	.650			
	QSI3	.672			
	QSI4	.761			

	QSI5	.690			
Employee Participation	EP1	.736	.010	.866	.000
	EP2	.609			
	EP3	.688			
	EP4	.649			
	EP5	.660			
	EP6	.754			
	EP7	.954			
	EP8	.957			
Recognition and Reward	RR1	.639	.061	.779	.000
	RR2	.853			
	RR3	.803			
	RR4	.888			
	RR5	.682			
	RR6	.793			
Education and Training	ET1	.775	.165	.792	.000
	ET2	.613			
	ET3	.766			
	ET4	.709			
	ET5	.621			
	ET6	.654			
Customer Focus	VP1	.671	.147	.796	.000
	VP2	.686			
	VP3	.672			
	VP4	.611			
	VP5	.708			
	VP6	.606			
Service Quality	SQ1	.667	.199	.752	.000
	SQ2	.637			
	SQ3	.639			
	SQ4	.649			
	SQ5	.852			
	SQ6	.718			
	SQ7	.693			
Strategic Business Performance	SBP1	.683	.397	.743	.000
	SBP2	.697			
	SBP3	.830			
	SBP4	.837			
	SBP5	.630			

Structural Model Testing

The results from the structural model testing as reveals in Figure 1 and Table 5.7 shows the hypotheses testing results and their significance values. As presented in the table, the H1 of this study was formulated to determine the relationship between employee's satisfaction and service quality, the result shows that employee's satisfaction has a direct and positive influence on service quality ($\beta = .142, t = 7.107$). As a result of the significance of the relationship, the alternative hypothesis is accepted and concludes that employees' satisfaction positively influences service quality. The hypothesis two is also accepted ($\beta = .196, t = 3.436$), and conclude that employee's satisfaction positively influences customers satisfaction. However, we failed to reject the null

hypothesis for H3 ($\beta = .124, t = .698$), this is a result of the non-significance of the coefficient, thus this study concludes that service quality does not positively influence customers satisfaction. Therefore, H3 is not supported. The result of H4 ($\beta = .431, t = 5.068$), and, H5 ($\beta = .128, t = 3.367$) shows that both hypotheses are accepted due to the significance of their coefficients. This implies that service quality and customers' satisfaction positively influence strategic business performance. Therefore, both hypotheses are supported.

The positive influence of supplier quality management on service quality that was formulated for H6 was found not to be true ($\beta = .039, t = .784$), therefore, H6 is not supported and conclude that supplier quality management does not positively influence service quality. As for H7 ($\beta = .175, t = 3.523$), H8 ($\beta = .147, t = 2.809$), and H9 ($\beta = .217, t = 4.263$), the three hypotheses were accepted. The result implies that value and plan, evaluation, and process control and improvement positively influence service quality. H10 stated that service design positively influences service quality, however, the result as presented in the table shows otherwise ($\beta = -.003, t = -.067$). This implies that service design does not positively influence service quality, therefore, H10 is rejected. Moreover, H11 ($\beta = .096, t = 2.436$), H13 ($\beta = 1.241, t = 12.887$), and, H15 ($\beta = .425, t = 3.962$) were all accepted as a result of the significance of their coefficients. The result implies that quality systems improvement positively influences service quality; recognition and reward positively influence employee satisfaction; and, customers' satisfaction positively influences strategic business performance respectively. Therefore, the three hypotheses were supported. Meanwhile, this study failed to reject the null hypothesis of H12 ($\beta = .014, t = .116$), and conclude that employees' participation does not positively influence employee's satisfaction. Meanwhile, H14 ($\beta = -.557, t = -5.531$) could not be supported even though it is found to be significance because the hypothesis stated that education and training positively influence the employees' satisfaction. Therefore, the null hypothesis is failed to be rejected.

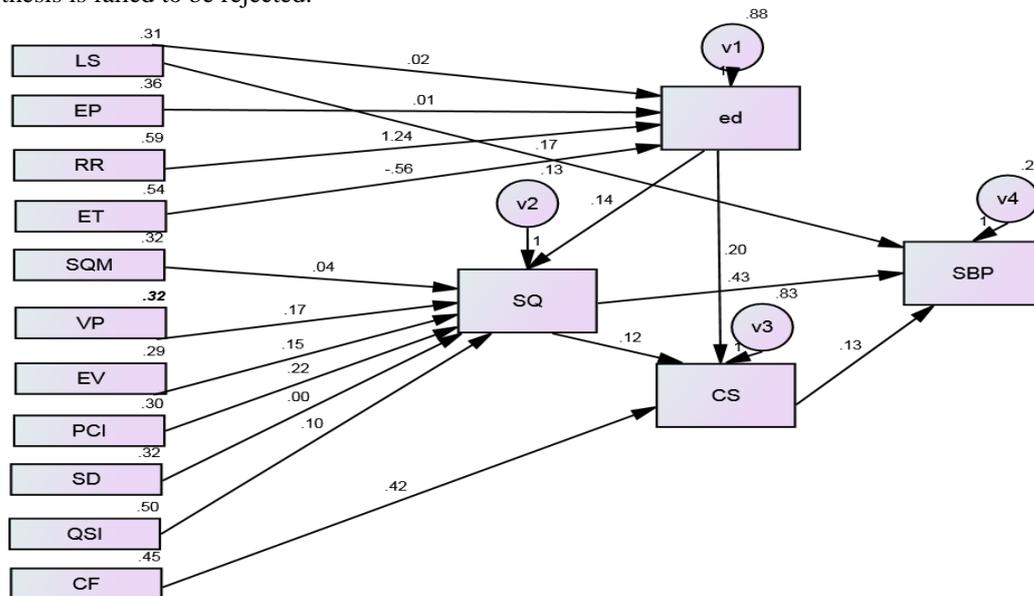


Figure 1 Structural Model

Table 6 Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P	Label
ed	<--- LS	.019	.133	.145	.885	par_1
ed	<--- EP	.014	.123	.116	.908	par_3
ed	<--- RR	1.241	.096	12.887	***	par_4
ed	<--- ET	-.557	.101	-5.531	***	par_5
SQ	<--- SQM	.039	.050	.784	.433	par_6
SQ	<--- VP	.175	.050	3.523	***	par_7
SQ	<--- EV	.147	.052	2.809	.005	par_8
SQ	<--- PCI	.217	.051	4.263	***	par_9
SQ	<--- SD	-.003	.049	-.067	.947	par_10
SQ	<--- QSI	.096	.040	2.436	.015	par_11
SQ	<--- ed	.142	.020	7.107	***	par_13
CS	<--- CF	.425	.107	3.962	***	par_12

			Estimate	S.E.	C.R.	P	Label
CS	<---	SQ	.124	.178	.698	.485	par_14
CS	<---	ed	.196	.057	3.436	***	par_15
SBP	<---	LS	.172	.067	2.553	.011	par_2
SBP	<---	SQ	.431	.085	5.068	***	par_16
SBP	<---	CS	.128	.038	3.367	***	par_17

In addition to the regression weights of the relationship, the effects of the variables were examined and the results are presented in Table 6. The results as presented reveals that CF, QSI, SD, PCI, EV, VP, SQM, ES, SQ, and CS has no effect on the ES, while ET, RR, EP, and LS were found to have effect on the ES. Even though RR was found to have high effect on ES, follows by ET, while EP and LS shows a very weak effect. As for SQ, CF and CF were found not to have effect on it. The total effects value as presented in Table 5.8 shows that PCI, EV, VP, and RR has a moderate effect on SQ, while QSI, SD, ET, EP, LS, and ES were found to have weak effect on SQ. Moreover, CF was found to have strong effect on CS, RR and ES were found to have moderate effect, SD was found to have no effect, while QSI, PCI, EV, VP, SQ, ET, EP, LS and SQ were found to have weak effect on CS. Lastly, the result as presented in Table 7 reveals that SQ has strong effect on SPB, while the remaining constructs has weak effect on SPB.

Table 7 Total Effects

	CF	QSI	SD	PCI	EV	VP	SQM	ET	RR	EP	LS	ES	SQ	CS
ES	.000	.000	.000	.000	.000	.000	.000	-.557	1.241	.014	.019	.000	.000	.000
SQ	.000	.096	-.003	.217	.147	.175	.039	-.079	.177	.002	.003	.142	.000	.000
CS	.425	.012	.000	.027	.018	.022	.005	-.119	.265	.003	.004	.214	.124	.000
SBP	.055	.043	-.001	.097	.065	.078	.017	-.049	.110	.001	.173	.089	.446	.128

The direct effect results as presented in table 8 shows that, only ET, RR, EP and LS has direct effect on ES, while other variables has no direct effect. For SQ, CF, ET, RR, EP, LS, and CS were shown not to have direct effect on SQ; while, CF, ES, and SQ were shown in the table to have direct effect on CS. Lastly, only LS, SQ, and CS were found to have direct effect on SPB, while other variables do not have direct effects.

Similarly, the indirect effect was examined and presented in Table 9. The results as presented in the table reveals that None of the variables in the model has indirect effect on ES, meanwhile, RR, EP, LS, and ET has indirect effect on SQ. However, the indirect effect of ET on SQ was found to be negative. Furthermore, QSI, PCI, EV, VP, RR, ET, EP, LS, and ES were found to have indirect effect on CS, even though the indirect effect of ET on CS was shown to be negative. And lastly, all the variables were found to have indirect effects on SPB except CS that was found to have no indirect effect. But SD and ET were found to have negative indirect effects on SPB.

Table 8 Direct Effects

	CF	QSI	SD	PCI	EV	VP	SQM	ET	RR	EP	LS	ed	SQ	CS
ed	.000	.000	.000	.000	.000	.000	.000	-.557	1.241	.014	.019	.000	.000	.000
SQ	.000	.096	-.003	.217	.147	.175	.039	.000	.000	.000	.000	.142	.000	.000
CS	.425	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.196	.124	.000
SBP	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.172	.000	.431	.128

Table 9 Indirect Effects

	CF	QSI	SD	PCI	EV	VP	SQM	ET	RR	EP	LS	ES	SQ	CS
ES	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SQ	.000	.000	.000	.000	.000	.000	.000	-.079	.177	.002	.003	.000	.000	.000
CS	.000	.012	.000	.027	.018	.022	.005	-.119	.265	.003	.004	.018	.000	.000
SBP	.055	.043	-.001	.097	.065	.078	.017	-.049	.110	.001	.002	.089	.016	.000

V. DISCUSSION

The business world of today has been dynamic and competitive which was as a result of technological advancement and globalization. This has made every organization to give more attentions to how their firm can remain in the business and achieve competitive advantages. The total quality management (TQM) has been among the method deployed by different organization to reduce shortcomings in the production or delivery of their service so as to enhance the efficiency of their firm. Though much attention has been given to TQM, however, the consensus on the TQM implementation have been elusive. It is in view of these that this study aimed at examining the implementation of TQM in Palestine service companies. The Palestine service companies are not immune from the dynamic and competitive business environment that we are witnessing

today, but the empirical study to get a deep understanding on how the TQM can be implemented in the sector in Palestine have not been sufficient.

In order to achieve the aim of this study, examination of the impact of the TQM implementation in the general performance of Palestine service companies; and, formulating a TQM implementation model for the service companies were pursued as the objectives of the study. Five questions were put forward to be answer in the study, while 15 hypotheses were formulated to test the theories on the TQM implementation as it's applicable to Palestine service companies. It was proposed in the study model that strategic business performance (SPB) of the service companies in Palestine will be influenced by service quality (SQ) and customers' satisfaction (CS). It was also proposed in the study framework that employees' satisfaction (ES) will be influenced by employee participation (EP), recognition and reward (RR), and education and training (ET). Service quality (SQ) is proposed in the model to be determined by service quality management (SQM), vision and plan (VP), evaluation (EV), process control and improvement (PCI), service design (SD), employees' satisfaction (ES), and quality system improvement (QSI). As for the customers' satisfaction, it was proposed in the framework to be determined by customer focus (CF), service quality (SQ), and employees' satisfaction (ES).

Structured questionnaire on a 5-point likert scale was utilized for the data collection. 210 questionnaires were administered to the branch managers and administrative staff of the 136 enumerated branches of service companies in Palestine, out of which 162 were retrieved and utilized for the analysis. The properties examination of the items and construct shows that the items are reliable and internally consistent, factor loadings of the items are acceptable, and also free from multicollinearity problem.

The finding from the analysis reveals that employees' satisfaction is found to have positive influence on the service quality, thus, H1 was supported. The finding is in line with the previous studies of (Jaafreh & Al-Abedallat 2013; Simga-Mugan & Erel 2000) who posited in their studies that in an organization where the employees are passionate and feel satisfied with the working environment and condition, it will reflect in the way they will discharge their services in a quality way. The implication of this finding is that companies should set its employees' satisfaction as priority, which will contribute significantly to the quality of services delivery by the company. Hypothesis two of this study was also supported and concludes that employees' satisfaction positively influences customers' satisfaction. The result is in agreement with the studies of Vorley and Tickle (2001); and, Anderson et al., (1995). These studies argued that when employees are satisfied with their firm, they will be more dedicated and committed to the organization by paying attention to the customers' complaints at all time so as to serve them better. In other word, service companies in Palestine should sustain the working environment and condition so that the customers' satisfaction could as well be sustained. Similarly, hypotheses 4, 5, 7, 8, 9, 11, 13, and 15 were found to have significant coefficients and accepted, while, hypotheses 3, 6, 10, 12, and, 14 were rejected based on the non-significant of their coefficients. The recognition and reward, and education and training were found to be the determinant of employees' satisfaction, while employees' participation was found not to be significant. The significance of recognition and reward as a determinant of employees' satisfaction is in line with the studies of Kassiech & Yourstone, 1998. Previous study like Anderson et al., (1995) found education and training to be a determinant of employees' satisfaction. Though, Mann and Kehoe (1994) found employees' participation to be among the determinant of employees' satisfaction, this is in contrast to this study finding which failed to established the significance of employees' participation as a determinant of employees' satisfaction. The implication of this result is that the service companies in Palestine should adopt more open approach like management by objective that will enable the employees to partake and get more involved in the company decision.

Out of the seven variables that was included in the model to determine service quality, while vision and plan, evaluation, process control improvement, employees' satisfaction, and quality system improvement were found to be a significant determinant of service quality, supplier quality management and service design were found not to be a significant determinant. The significance of those variables found is in consistent with some previous studies (Fegenbaun, 1991; Ishikawa 1985; Kano, 1993; Motwani et al., 1994; Motwani et al., 1994; Voss et al., 1995). Meanwhile, the non-significant result found for supplier quality management and service design are in contrast to the studies of (Dijkstra & Henseler 2015; Zhang 2000; Gatenby et al., 1994), but the negative influence of service design found on service quality is in agreement with the study of Kanji & Asher (1996). The implication of the negative result is that the service companies in Palestine should be more attention to the service design so as to enhance the quality of their services.

Moreover, employees' satisfaction and customers' focus were found to a determinant factor for customers' satisfaction, while service quality was found not to be a contributor. The non-significance of service quality as a determinant of customers' satisfaction is in contradiction to some previous who did similar studies (Primrose & Leonard, 1988; Longenecker & Scazzero, 1993) though not in the service companies established it as a significant factor. In addition, the influence of both service quality and customers' satisfaction was examined on the strategic business performance. The result shows the significance of both variables. This is an indication that the quality of services delivered by a firm and how its customers are satisfied with the service

plays a significant role in determining the general business performance of a service company. The implication of these findings is that the management of the service companies in Palestine should make customers' satisfaction their priority; this will enhance their performance and achieve sustainable competitive advantage in the market where they operate.

VI. CONCLUSION AND RECOMMENDATION

Summarily, this study has shown that total quality management is very vital to the improvement in the business performance an organization. The study further shows the linkages of TQM to the enhancement of business performance by expanding the theory and incorporated customers' satisfaction with the TQM empirically understand the influence on the general business performance of service companies. In addition, it was reveals from the study that the service companies in Palestine are still lacking on the service quality as it shows that though determines the business performance, but not a significant determinant in the customers' satisfaction. Lastly, this study findings shows that the implementation of TQM is practicable, only if the service companies in Palestine can place priority of the employees' participation, supplier quality management and service design because TQM implementation requires that full approach that will integrate control on all the stakeholders need to be deployed and not partial approach which has been the reason why TQM have not been working for most companies. This study is limited in scope by covering only the service companies in Palestine. Future research can consider a comparative study of public and private sector.

This study contributes to both the theory and practical implementation of an all-encompassing quality management that will propel the enhancement of business performance in the service companies in Palestine. The influence of employees' satisfaction on both service quality and customers' satisfaction were examined and the subsequent influence of both service quality and customers' satisfaction on strategic business performance. Meanwhile, Employees' participation was found not to be a significant determinant of employees' satisfaction, while supplier quality management and service design were found not to be a significant determinant for service quality; and lastly, service quality was found not to be a significant determinant of customers' satisfaction. Though, education and training were found to have significant influence on employees' satisfaction, but the sign was negative which led to the failure to accept the hypothesis.

In view of the above, this study makes the following suggestions that could assist the managers and the management team of the service companies in Palestine in ensuring the implementation of total quality management as follows:

i. The employee should be allowed to be more involved in the activities and management of the service companies in Palestine. The participation of the employee will give them a sense of belonging, make them proud and have the feelings that they are part and parcel of the organization. This in turn will boost their morale and enhance their satisfaction about the company, which will consequently translate to the enhancement of the company business performance.

ii. The education and training are expected to contribute to the employee satisfaction, in the sense that, there is need to the organization to ensure continuous development of the employee skill through consistent training. However, the result turned out to be negative and significant. This implies that the service companies are lacking in the area of training their employee, and as such it becomes expedient for the service companies in Palestine to ensure continuous training and re-training of their employee. This will boost their confidence, skills, knowledge and will translate to their satisfaction.

iii. The efficient relationship and adequate flow of information between the supplier and organization is very significant in achieving service quality. However, the result for Palestine service companies shows the management team needs to take a proactive measure in correcting the lapses. To achieve total quality management, all the stakeholders have to be involved and put the control mechanism in place, this will contribute to the improvement on the service quality and overall effect on the business performance.

iv. It is essential to have a good service design as part of the process of achieving service quality. Therefore, it is recommended that the management team of the service companies in Palestine should endeavor to determine the purpose of their service. This will enable them to have a check and control if it's not fulfilling the purpose.

Lastly, this study recommends that the management of service companies in Palestine should improve on their service quality, so as to contribute significantly to the customers' satisfaction and the eventual effect on the business performance.

Conclusively, the management of those service companies should improve and maintain the contribution of service quality and customers' satisfaction to their strategic business performance, because it takes the sustainability of their improved performance to compete favorably in today's competitive business market.

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