The Effect of Total Quality Management in Organizational Performance- A Case Study of National Institute of Cardiovascular Diseases (NICVD)

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Abstract

Pakistan has been one of the fastest-growing economies in developing countries. Therefore, it is not surprising that the healthcare industry is also expanding rapidly. In the past two decades, Pakistan's healthcare industry has risen astoundingly. This study seeks to determine the extent to which TQM has been implemented in Pakistan's healthcare sector, as well as how it influences and is influenced by organizational effectiveness. Numerous TQM characteristics and organizational performances were analyzed to achieve this objective, and the results were analyzed to determine how well they were utilized. To achieve this objective, research was conducted on several facets of TQM, including organizational leadership, customer satisfaction, and customer relationships, emphasizing human resources. Also, structural equation modeling was utilized to examine the relationships between TQM elements and an organization's performance (SEM). The primary objective of this study is to investigate how Total Quality Management (TQM) influences the performance of healthcare institute. The research was conducted with the assistance of National Institute of Cardiovascular Diseases (NICVD). This research utilized both primary and secondary data to determine the extent to which pharmaceutical businesses had implemented TQM.

Keywords: TQM, Healthcare institute, Organizational performance

Introduction

The effect of total quality management on productivity and customer happiness is only one way in which aiming for perfection can give a business a competitive advantage. Effectiveness in creating objects and interacting with clients. Companies are continuously looking for innovative ways to conduct business that will allow them to provide more value to customers, accelerate internal processes, reduce expenses, earn more money, retain more customers, and attract new ones. Lean Management, DMAIC, and Six Sigma are incorporated into their business operations and product manufacturing. Six Sigma's objective is to use various statistical techniques to keep operations under control and minimize variation.

On the other hand, Lean Management attempts to eliminate waste by employing approaches that are as basic and aesthetically beautiful as feasible. We identified the most significant issues, their root causes, and the approaches that helped us resolve them. The model also enabled systematic consideration of the measures and adjustments required to maintain and enhance the organization's project management practices over time. Organizational systems must always be updated and improved. The objectives of proactive management, increased effectiveness and efficiency, and decreased expenses are identical. When designing and implementing new organizational structures, the value derived by customers from a system's products and services should be the primary consideration.

Significance of the Problem

Total quality management could assist Healthcare institutes in the areas of organizational leadership, customer satisfaction, human resource concentration, strategic planning and development, organizational performance, and overall effectiveness. This research will demonstrate how these occurrences occur.

Objectives

This study examines the impact of various management styles on the bottom line in the healthcare sector. The study's second objective is to identify the greatest obstacles the healthcare sector experience when attempting to implement quality management systems.

Hypothesis

The hypotheses and conceptual framework were designed following the research context. The structural model test supports the proposed hypotheses that total quality management is positively related to manufacturing performance, services, leadership, on-time provision, and strategic management with sound decision-making.

H1.“Organizational leadership for TQM practices positively correlates with organizational performance in Hospitals in Karachi."

H2. "Customer satisfaction and relationship for TQM practices positively correlate with organizational performance in hospitals in Karachi."

H3. "Human resource focus for TQM practices positively correlates with organizational performance in hospitals in Karachi."

H4. "Strategic planning and development for TQM practices positively correlate with organizational performance in hospitals in Karachi."

Review of Literature

TQM stands out from its competition because it prioritizes the wants and needs of its clients and is always adapting to satisfy those desires. TQM, is a method of conducting business that focuses on continuously improving the quality of products to boost output and make a company more competitive in both domestic and international markets. Even if the business is already managed in a particular way, it can benefit from TQM's ideas and techniques (e.g., size, technology, culture, and external environment). When the TQM approach fails, it is typically due to organizational culture, reluctance to change, a lack of resources, or uncommitted leadership. The entire quality management system is based on ISO 9000 standards and associated certifications and laws. TQM is responsible for all standards, including the six sigma, lean management, ISO standards family, safety management system, and DMAIC process improvement model.

According to Sinha et al. (2016), TQM is a business method that examines problems from multiple perspectives. TQM is always more effective than other customer satisfaction strategies. Organizational process improvement is the initial step toward TQM. This motivates employees to work harder, be more productive, and take greater pride in their work. A consistent structure makes it simple to keep track of and organize jobs. This makes it possible to standardize and automate the organization's most efficient procedures. Panuwatwanich and Nguyen (2017), have discussed Influence of total quality management on performance of construction firms.

There has never been so much market competition, and as a result, consumers are more particular than ever about the quality of the products they purchase. Therefore, the product needs an additional hour of labor to be better and more appealing overall. Numerous examples, such as Just-in-Time (JIT) production, Six Sigma, and Lean Manufacturing, can be found in the related literature. Additionally, programs such as Advanced Manufacturing (AM), Total Preventive Management (TPM) and TQM. Each of these original concepts has its proposal, focusing on TQM and an inquiry into how it might increase the organization's productivity. Shafiq et al. (2019), have contributed significantly to the textile sector of developing countries

using SEM. Total Quality Management & Business Excellence. In the 1950s, numerous Japanese colleges utilized Juran's statistical approach to quality management and his views on changing an institution's culture by emphasizing what students learned. Saragih et al. (2020), have contributed in the research of impact of total quality management, supply chain management practices and operations capability on firm performance. Jiménez et al. (2015) have also contributed significantly in the effectiveness of TQM in Organization's performance. Parvadavardini et al. (2016), signified the Impact of quality management practices on quality performance and financial performance in any organization. Parshuram (2015) has revealed the total quality management as application to service sector.

TQM has recently gained popularity due to its ability to enhance the quality of products and organizations. However, implementation requires time. TQM is a method for enhancing quality that can be implemented slowly. According to Spencer, (1994), TQM is an influential management philosophy that has evolved into a practical methodology. Yong and Wilkinson (2001) advise TQM as a means for organizations to distinguish themselves in the marketplace, strengthen their relationships with their target consumers, enhance their human resources, and increase their overall profits. TQM can benefit your organization in various ways. TQM can be a great tool for helping individuals pay closer attention to consumers, maintain open lines of communication, and collaborate more efficiently. TQM can reduce costs and boost production by encouraging collaboration and providing individuals with the tools to address challenges independently. When these two factors are considered, it is easier to discover a solution (Witcher, 1994). The implementation of TQM research has mostly focused on how TQM can help firms perform better, while the disparate findings of the empirical investigations cannot be combined in any way. Several studies have demonstrated that comprehensive quality management is one of the best methods for a firm to improve its overall performance, According to Sahoo and Yadav (2018), In developing economies, SMEs play an important role as they represent a major source of employment and generate significant revenue and export earnings (Sahoo &Yadav, 2018). According to Psomas and Jaca (2016), The impact of total quality management on service company performance is significant. Mehralian et al. (2017) discussed TQM and organizational performance using the balanced scorecard approach. Lin and Chang (2006), explored the TQM's impact on the causal linkage between manufacturing objective and organizational performance. Herzallah et al. (2014) signified the total quality management practices, competitive strategies and financial performance. Farish et al. (2014). Discussed the Effect of TQM practices on financial performance through innovation performance-in Indian manufacturing context. Ebrahimi et al. (2017), demonstrated the

relationship between TQM practices and role stressors. Delić et al. (2014), Examined the relationships between quality management and organisational performance in transitional economies. Del Alonso et al. (2015), demonstrated the adoption of quality management practices and their impact on business performance in small service companies. Cetindere et al. (2015), examined the effects of total quality management on the business performance. Basu and Bhola (2016) examined the Impact of quality management practices on performance stimulating growth. Aquilani et al. (2017) provided A systematic literature review on total quality management critical success factors and the identification of new avenues of research. Augusto et al. (2014) Organisational performance and innovation in the context of a total quality management philosophy. Anil and Satish (2014) Investigated the relationship between TQM practices and firm's performance. Almahamid and Qasrawi (2017), discussed the impact of TQM practices and KM processes on organisational performance. Al-Dhaafri et al. (2014), signified the mediating role of total quality management between entrepreneurial orientation and the organizational performance. Akgun et al. (2014), discussed the mediator role of learning capability and business innovativeness between total quality management and financial performance.

Based on these findings, many researchers have concluded that there is either no connection or a tenuous connection between TQM methods and an organization's financial success. Several studies have determined that a country's social norms, cultural expectations, and economic considerations might influence how a firm approaches quality management. Kull and Wacker (2010) discovered that companies in China, Taiwan, South Korea, and other East Asian nations implement quality management systems in various ways. For instance, Flynn and Saladin (2006) assert that most nations' approaches to quality management are inadequate. They cite the United States as an illustration. This group includes the United States, Japan, Germany, Italy, and the United Kingdom. Sila and Ebrahimpour (2005) suggest the relationship between TQM and organizational performance as a means for a corporation to improve its performance in a particular nation. The authors of the paper mentioned above advocated for this move. This is a legal requirement for the company. In recent years, both total quality management (TQM) and organizational performance have been asked for additional research. Both Forza and Filippini (1998) and Flynn and Saladin (2001) encouraged global research for the implementation of and effective TQM in organizational performance. Few studies have examined the impact of quality management practices on enterprises in developing nations. The relationship between total quality management practices and the success of organizations in developing nations has been examined. In light of this, the study's presentation of facts

regarding the topic would be a welcome addition to the ongoing dialogue. If respondents to this survey know about Total Quality Management, the results will be far more likely to be accurate. Different methods of measuring performance, each with its own set of criteria, are supported by the outcomes. Several studies have examined the success of various sorts of initiatives by analyzing market share, ROI, and profit. When the statistics were computed, no consideration was given to how satisfied consumers would be, how productive employees would be, or how the study's outcomes would impact society. The research findings of Kaplan and Norton imply that various financial accounting measurements, such as a company's return on investment and profit per share, could be misinterpreted as indicators of profitability. Academics from a variety of disciplines should continue to investigate this subject and develop hypotheses to explain why some businesses succeed while others fail. This study was conducted to determine if there was a correlation between employing TQM technologies and increased workplace productivity. The researchers achieved their objective by analyzing a company's financial and non-financial characteristics. Leadership inside a Company

Organizational Leadership

Empirical studies demonstrate that the organization's leadership significantly affects TQM. Senior management and other corporate leaders collaborate to establish and communicate company-wide objectives. As a result of the management and leadership, several resources are available to enhance and maintain quality. In addition, the senior management believes it is their responsibility to maintain good quality, which they value more than the quantity of work completed. They believe that quality should always take precedence over quantity. In addition, management can collaborate with affected departments to plan and prepare for forthcoming changes. Studies indicate that the level of dedication exhibited by a company's senior leaders is directly proportional to the company's success. Therefore, TQM incorporates measures to ensure customer satisfaction, which helps organizations develop and prosper. So, the hypothesis of the study is:

H1: "Organizational leadership for TQM practices positively correlates with organizational performance in Hospitals in Karachi."

Customer satisfaction and relationship

According to TQM, customer satisfaction and loyalty are the two most significant components in a company's overall success. This is because the success of any organization needs to establish and maintain good customer relationships. Using this TQM practices framework, we can determine what our consumers value most and then design, implement, and evaluate tactics to determine where we can make enhancements. We conduct monthly customer surveys to

ensure that we are continuously meeting their demands. Existing relationships and how well they are maintained and enhanced are equally important to forming new relationships. Compensation plans and other incentives for broken or malfunctioning equipment and parts exist. Therefore, the following section of the hypothesis emphasizes the significance of HR to an organization's performance. Consequently, the following theory is proposed:

H2: "Customer satisfaction and relationship for TQM practices positively correlate with organizational performance in hospitals in Karachi."

Human Resource Focus

Human resources significantly impact a company's product quality and bottom line. This makes people a company's most valuable asset. The employees play a vital role in the TQM system. Strategies for organizational growth include hands-on training, recruiting procedures, health and safety protocols, employee participation, employee empowerment, employee appreciation, and teamwork. Investing in a well-educated, pleasant, and dedicated crew can improve a company's bottom line. Several studies, including those conducted by Rahman and Bullock (2004), Molina et al. (2009), Tari et al., Zakuan et al. (2013), Talib et al., Farish et al. (2017), Mehralian et al. (2017), Pradhan (2017) have discovered a strong and positive correlation between human resource focus and organizational performance. This gets us to the second section of the hypothesis, where we discuss the significance of people in enhancing company performance. So, here is a hypothesis to consider:

H3: "Human resource focus for TQM practices positively correlates with organizational performance in hospitals in Karachi."

Strategic planning and development

Multiple studies have demonstrated that strategic planning and development are essential for achieving high-quality standards and optimizing resources. The quality management system consists of a quality policy and mission, a method for enhancing quality, a strategy for controlling quality, and other management tools. For a company's strategy and policy to be more effective, it must examine its formulation, implementation, and modification. The strategic planning and development processes should include this step. Several investigations, such as those conducted by Zakuan et al., (2013) Phan et al (2011) , Talib et al., (2011) Sabella et al (2014)., and Talib et al., (2011) as well as Sadikoglu and Olcay (2014) support this conclusion. and it has been suggested that the following is the cause for this feature:

H4: "Strategic planning and development for TQM practices positively correlate with organizational performance in hospitals in Karachi."

Conceptual Framework

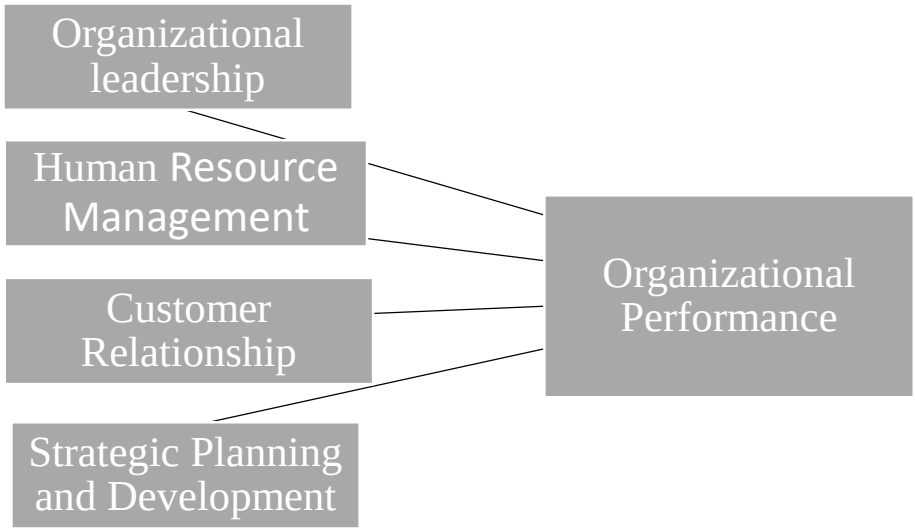

Figure 1TQM and OP

Independent Variables

- ✓ Organizational leadership
- ✓ Human Resource Management
- ✓ Customer Relationship
- ✓ Strategic Planning and Development

Dependent Variable

- ✓ Organizational performance

Research Methodology

It was simple to devise a strategy for conducting our investigation after reviewing the findings of past studies. The first step was to determine how the research would be conducted. Multiple methodologies were employed to construct the research's foundation and findings were examined, and some of their recommendations were implemented by Rahman et al., (2004) and Claver (2009) teams are featured. From the works of Kannan and Tan (2005) Brah and Lim (2006), Sila (2005), Zakuan et al. (2013), Talib et al., (2011) and Patyal et al., (2017) we were able to acquire the information necessary to construct the survey questionnaire and obtain the raw data. In order to obtain raw data, we had to conduct a survey of individuals, and Brah and Lim provided us with the necessary information to create the questionnaire. The SPSS-AMOS program was then utilized to analyze the data and determine its significance. The information acquired from NICVD; a healthcare institute was analyzed using quantitative

methodologies. We considered Karachi as we formulated the research topics and theoretical foundations. NICVD generously provided the 236 valid samples used in this research.

This research employed three methodologies: data screening (commonly known as descriptive statistics), factor analysis, and structural equation modeling. Singh et al. (2017), have previously conducted research. Likewise, Singh and Sharma (2016) were each engaged in their studies. This work has established a solid foundation upon which the present investigation can expand.

Between January and June of 2022, investigations were conducted at NICVD, a Karachi-based cardiovascular Healthcare institute. The response rate for the survey was 57%, meaning that of those invited to participate, only 57% did so. Utilizing self-administered surveys and internet polls, 256 samples of the workforce were gathered. When it came time to fill out the questionnaire, respondents may do so in either English or Urdu. 236 of the total 256 tests yielded meaningful findings. This study demonstrates that there are just two tiers in an organization's hierarchical structure: employees and upper management. Three tiers of management have always existed: the top, the middle, and the bottom. However, technicians have always been at the bottom of the occupational hierarchy. Random stratified sampling was utilized to enhance the quality of the TQM and OP investigations and decrease discrepancies and outliers.

Techniques for Obtaining Samples Utilizing the greatest possible Varimax rotation an exploratory factor analysis was conducted to examine the variables' validity and dependability and determine whether or not they are related. Principal component analysis, or PCA, is an effective method for assessing the validity of the factor goodness-of-fit test results. The principal component analysis (PCA) is an alternative method for determining the relationships between items based on their differences.

In the Table, we can see how our sample was selected using a variety of factors and how these criteria manifested themselves in the sample's characteristics. People who participated in the poll were asked about their industry, job title, tenure with the company, degree of education, the firm's financial soundness, and their interest in implementing a quality management system. The trials were conducted between January and June of 2022 at NICVD

Managers and Workers from Different departments of the Healthcare institutes were included in this study. Bartlett's sphericity test and Kaiser, Mead, and Olkin's sample adequacy test are two methods for determining whether or not a questionnaire is useful (KMO). Both of these milestones were established independently. For successful factor analysis, KMO values must always be greater than 0.60. Those survey questions that were asked fewer than 0.400 times

were eliminated. If a factor's loading is greater than 0.50, it reveals much about the research. In the third column of the third Table, the Chi-square values for each variable are displayed.

Table 1

Constructs	Factor Loadings	Eigen Values	% of Variance	KMO	Chronbach's Alpha
TQM Constructs	Empty Cell	Empty Cell	Empty Cell	Empty Cell	Empty Cell
1. Organizational Leadership (OL) OL-11 OL-1 OL-2 OL-3 OL-4 OL-5 OL-6 Approx. Chi-Square-1071.376, df- 21, p- 0.000	0.739 .873 .799 .822 .841 .863 .733	4.612	65.881	.893	.913
2. Customer Satisfaction & Relationship (CSR) CSR-1 CSR-2 CSR-3 CSR-4 CSR-5 CSR-6 CSR-7 Approx. Chi-Square-1393.132, df- 21, p- 0.000	.801 .889 .853 .879 .869 .854 .876	5.185	74.074	.924	.926
3. Human Resource Focus HRF-1 HRF-2 HRF-3 HRF-4 Approx. Chi-Square-296.298, df- 6, p- 0.000	.796 .833 .798 .761	2.544	63.601	.787	.808
4. Strategic Planning & Development SPD-1 SPD-2 SPD-3 SPD-4 Approx. Chi-Square-646.044, df- 6, p- 0.000	.852 .907 .913 .883	3.160	79.002	.838	.909

Result

We employed EFA, CFA, and SEM analyses to examine the relationship between TQM practices and OP. Data and statistics will be utilized in the following sections to elaborate on these concepts.

As stated, the research included data from two healthcare institutes in Karachi. Five and a half months after sending the survey to all employees at two healthcare institutes, 57 percent had completed it. Each of these locations received 500 questionnaires, but only 256 were returned. Overall, 51.2% of the population participated in the survey. Because our initial data set did not contain all the responses, we had to discard a portion. With 236 responses, we had sufficient data for structural equation modeling research (SEM).

In the Table 1, we can see how our sample was selected using a variety of factors and how these criteria manifested themselves in the sample's characteristics. People who participated in the poll were asked about their industry, job title, tenure with the company, degree of education, the firm's financial soundness, and their interest in implementing a quality management system. Exploratory factor analysis and the maximum probability of the Varimax rotation were utilized to examine the variables' validity and dependability and determine whether or not they are related. Principal component analysis, or PCA, is an effective method for assessing the validity of the factor goodness-of-fit test results. The principal component analysis (PCA) is an alternative method for determining the relationships between items based on their differences. Bartlett's sphericity test and Kaiser, Mead, and Olkin's sample adequacy test are two methods for determining whether or not a questionnaire is useful (KMO). Both of these milestones were established independently. For successful factor analysis, KMO values must always be greater than 0.60. Those survey questions that were asked fewer than 0.400 times were eliminated. Generally, if a factor's loading is greater than 0.50, its effect on the study is considered substantial. In the third column of the third Table, the Chi-square values for each variable are displayed.

The research must examine the TQM and OP structural equation model and test our hypotheses following this investigation. The Table 2 displays the outcomes of the hypotheses' tests. H1 predicted that OL for TQM processes and OP would be positively connected, and the results support this interpretation of the hypothesis's validity. The path coefficient is 0.77, and the significance threshold is $p = 0.001$. The findings are identical to those of Lam et al. and Vijande & Gonzalez. This indicates that the results strongly support the idea. In Hypothesis 2, we stated that OP would improve if CSR and TQM practices were implemented. Both the path coefficient (0.70) and the t-value (4.88O) are very significant. Hence the hypothesis is correct (p0.001).

This corroborates the findings of Zakuan et al. (2013) and Sadikoglu and Olcay (2014). Therefore, CSR is an integral component of total quality management strategies that aim to enhance the overall performance of a firm.

Table 2

Hypothesis Testing Note; ***p < 0.001, * p < 0.05

Hypothesis	**Path coefficient**	**t –value**	**P-value**	**Result**
TQM→OL	.77	5.079	***	Supported
TQM→CSR	.71	4.880	***	Supported
TQM→HRF	.47	4.278	***	Supported
TQM→SPD	.48	4.319	***	Supported

This supports Hypothesis 3's premise that a strong relationship exists between HRF for TQM approaches and OP. The analysis values support the theory, which lends further credibility to the study's findings. When p is smaller than 0.001, the path coefficient is 0.47, indicating a strong relationship. Both Zaku et al. and Sila conducted studies that led to comparable findings. The fourth hypothesis (H4) states that OP and SPD strategies for TQM worked well together. With a p-value less than 0.001, a route coefficient of 0.48 provides substantial support for the null hypothesis. In their respective investigations, both Zakuan et al. and Talib et al. came to the same conclusions. Therefore, it is legitimate to assert that TQM and strategic planning go hand-in-hand and that strategic planning is a crucial component of TQM.

For multigroup moderation research, the entire system was utilized. The influence of TQM on OP was analyzed to compare the job duties of managers and normal employees. Using the CR test (> 1.96, p 0.05), the CR statistics for the differences between the regression weights of managers and employees were determined. This was done to determine whether there were disparities between the different responders. We utilized the ratio of the confidence levels of the two estimates to test the hypothesis that the two values are identical. After discussion, both sets of respondents agreed that all TQM practice components have strong ties to OP. In contrast to the model of managers, however, the model of employees did not demonstrate a statistically significant relationship between the OP and BR (p > 0.05). This demonstrates that employees are less knowledgeable about sales, exports, profitability, and other financial and operational issues than management. Knowing what people do for a living is essential, as differing job titles might lead to vastly different outcomes. However, it is essential to consider a potential source of bias when respondents are divided into several groups based on their degree of status.

People in positions of greater responsibility are more likely to understand TQM and OP. This exacerbates discrimination. As a result, there are a few subtle distinctions between how managers and employees are interviewed.

Table 3

Goodness of fit statistics in CFA

Path	Overall model	Respondent's type			
Empty Cell	Empty Cell	Manager's	CR (Managers)	Worker's	CR (Worker)
TQM→OL	.77	.78	3.568	.78	3.768
TQM→CSR	.71	.77	3.524	.81	3.413
TQM→HRF	.47	.46	3.047	.56	3.221
TQM→SPD	.48	.52	3.051	.45	3.233

Conclusion and Recommendations

SEM comparisons provided the majority of the data for this study, which contrasted managers and employees from two distinct groups. There were numerous parallels in terms of the study's key ratios and route coefficients and the overall performance of the models. It was discovered that these commonalities were quite evident. Employees appreciated health and safety benefits, opportunities for advancement, and training and development the most. The correlation between TQM and HRF was weaker and less significant when discussing management but stronger when discussing personnel. The management was more concerned with how satisfied consumers and employees were with the product's quality and manufacturing process than the workers themselves. Exempli gratia, exempli gratia, exempli gratia. Managers viewed the OP and SR connection as less favorable and significant than ordinary employees. In contrast, a study examined the same relationship among workers and reached the same conclusion. This reinforces the notion that how a company organizes its people can significantly impact the effectiveness of TQM and OP. This viewpoint is supported by substantial evidence. In addition, managers have a greater comprehension of TQM methodologies and the OP link than the average person. If employees realized how much money the company made through sales, exports, and profits, they would work considerably harder. By participating in and learning from this empirical effort, scholars from Pakistan and other countries could gain a deeper understanding of the current acceptance of TQM.

Each TQM practice is essential to a firm's success since TQM and other organizational performance measurements complement one another. Using the proposed approach and periodic assessments, managers can determine how far their organization has progressed in quality management. These evaluations can determine how far along an organization's path to quality management is. To determine the efficacy of TQM programs, businesses can examine their impact on key performance metrics such as financial outcomes and customer satisfaction surveys. Organizations can use this analysis to determine the efficacy of their TQM initiatives. Suppose there is a positive correlation between TQM practices and organisation performance on healthcare-related measures. In that case, company leaders may be encouraged to participate in strategically planning their organization's goals and to invest time, effort, and money in implementing TQM practices to improve the quality and performance of employees and the business as a whole. Studies have demonstrated a correlation between TQM practices and the success of healthcare-related KPIs for organizations. This is because TQM practices positively affect an organization's overall performance on healthcare-related measures. If this occurred, it would benefit the company as a whole. When organizations put in the same amount of effort to ensure that their suppliers are good as they do to ensure that their customers are satisfied, to plan strategically, and manage their human resources, these KPIs begin to improve. Companies made significant improvements, for instance, when they paid as much attention to consumer satisfaction as they did to the quality of their suppliers. Suppose you want to meet the demands and expectations of consumers, which will improve the performance of the business. In that case, you must have regular discussions regarding survey approaches such as customer feedback and complaint analysis. Because of this, corporate operations will improve.

In conclusion, this study's findings provide information that may be valuable for those interested in the TQM practices utilized by healthcare organizations. To improve the quality of its products and remain competitive in the global market, the healthcare industry will need to invest significantly more in quality management. Researchers, politicians, managers, and enterprises in Pakistan who wish to promote Total Quality Management could utilize the findings of this study.

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