“Total quality management (TQM) for sustainable growth performance in the private healthcare sector”

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TOTAL QUALITY MANAGEMENT (TQM) FOR SUSTAINABLE GROWTH PERFORMANCE IN THE PRIVATE HEALTHCARE SECTOR

Abstract

This study explores the influence of total quality management (TQM) on the sustainable growth performance of companies in the private healthcare sector. A quantitative research method and a purposive sampling method were used. A questionnaire comprising 25 items was spread among 282 administrative employees in private hospitals and healthcare centers in Negeri Sembilan, Malaysia. Structural equation modeling (SEM) via Smart PLS revealed that, except for leadership, all TQM variables exhibit positive and direct interrelationships within the sector. Key findings indicate that customer focus, continuous improvement, and employee involvement positively correlate with company performance, while leadership has a negative direct impact. Collectively, these exploratory TQM factors explain 73% of the variance in healthcare company performance (R^2 Adj = 0.732, $P < 0.01$), with employee involvement identified as the most critical component for enhancing performance. These results highlight the importance of prioritizing employee engagement in hospital management to achieve optimal performance outcomes. Additionally, the study suggests a need to reevaluate traditional leadership approaches, as they may hinder performance. This investigation advances the understanding of TQM in healthcare, advocating for a strategic emphasis on employee involvement and a reassessment of leadership practices to drive organizational success.

Keywords sustainable growth, total quality management, continuous improvement, employee engagement

JEL Classification J24, M12, I11, O53

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INTRODUCTION

Effective implementation of TQM can lead to improved customer satisfaction, profitability, and a culture of continuous improvement (Kumar et al., 2018; Trehan & Kapoor, 2011; O'Donnell & Gupta, 2024; Al-Assaf, 1993). One crucial aspect of TQM is the emphasis on efficiency, where companies strive to optimize the utilization of their resources, including materials, energy, and human capital. By adopting a customer-centric approach and continuously seeking ways to improve their processes, organizations can enhance their overall operational and responsiveness to market demands (Gupta & Sharma, 2016; Kumar et al., 2018; Trehan & Kapoor, 2011).

Demonstrating a solid commitment to quality, fostering a culture of empowerment, and encouraging employee involvement are more likely to drive the organization toward sustained performance improvements (Manghani, 2011; Nutbeam, 1999; Trehan & Kapoor, 2011). Furthermore, the active engagement and participation of employees at all levels are essential for the success of TQM initiatives. By seamlessly integrating resources with the key drivers of effective leadership,

employee involvement, customer-centric, and employee involvement, organizations can harness the full potential of total quality management to enhance overall company performance and lead to a competitive edge in the market (Kumar et al., 2018; Trehan & Kapoor, 2011). Hence, the key drivers possibly become the standard for monitoring and controlling quality and also become an element in reflecting defensive competitive goals (Kumar et al., 2018).

The implementation of TQM is not a one-size-fits-all approach, and organizations may need to adapt their strategies based on their specific industry, market dynamics, and organizational culture (Jonny & Kriswanto, 2017; Ayalew & Adem, 2021; Danuri et al., 2021). Nonetheless, when applied effectively, the core principles of TQM can serve as a robust framework for driving sustained excellence and achieving superior organizational performance and sustainability.

1. LITERATURE REVIEW AND HYPOTHESES

Total quality management (TQM) has been a widely adopted strategy for improving organizational performance (Abu-Doleh, 2012; Chang, 2006; Tareke, 2020; Deming et al., 2018). The existing literature suggests that TQM implementation can lead to significant improvements in firm performance, including increased profitability and superior stock market returns. However, the extent to which these benefits are realized can depend on factors such as the level of commitment to TQM and the integration of TQM with other operational practices (Sadeli, 2021; Wael, 2020).

Firms demonstrating a long-term commitment to TQM (at least five years) experienced superior stock market performance and improved profit margins compared to other firms (Lemak et al., 1996). The benefits of TQM are not immediate, and firms need to maintain their TQM efforts over an extended period to reap the total rewards. Similarly, the impact of quality management systems on firm performance can vary based on the specific quality management practices implemented within the organizational context (Kumar et al., 2018; Harimurti & Suryani, 2019; Al-Damen, 2017).

The effectiveness of TQM may also depend on how it is integrated with other operational strategies, such as a focus on resource efficiency. By combining TQM with efforts to optimize the use of resources, companies may achieve even greater performance improvements. For example, lean manufacturing techniques can help eliminate waste and drive greater resource efficiency, while TQM can ensure that quality standards are maintained or improved in the process (Kumar et al., 2018). The evidence suggests that a commitment to TQM can yield significant benefits for company performance. However, the magnitude of these benefits may depend on factors such as the duration of TQM implementation and the integration of TQM with other operational practices or innovation, such as adapting a new tool technique to improve product quality and enhance production (Narkuniene & Ulbinaite, 2018).

The size of the company also plays an important role. Smaller firms have been found to experience more significant improvements in operating income associated with effective TQM implementation than larger counterparts (Beheshti & Lollar, 2003). Yusof and Aspinwall (1999) provided valuable insights into the unique challenges and opportunities small and medium enterprises (SMEs) face. Nevertheless, a company's performance is essentially the idea that an organization's managers accomplish duties to produce results with a mission (Huo et al., 2021). In line with that, Narkuniene and Ulbinaite (2018) highlighted that company performance is analyzed based on the correlation between effective cost and realized productivity for achieving sustainable growth and overall efficiency which results in prosperity with a positive financial result (Harimurti & Suryani, 2019; Al-Damen, 2017; Fujianti, 2018). Thus, improving the firm's performance requires engagement from every single worker in an organization and is a continuous process that encompasses technological development and commercial growth (Kuzmanovic et al., 2018). Workers' experience and competencies, technology, facilities, workplace culture, strategic setting, and the company's collaborative process (Widarti & Pramajaya, 2018)

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and teamwork (Huo et al., 2021; Rafiki et al., 2019) can satisfy the requirements of company's objective on performance reflection.

Leadership is an essential driving force for organizational success. Influential leaders with TQM understanding can create a culture of continuous improvement and quality projection throughout the organization (Kongolo, 2018; Sweis et al., 2019). They inspire and motivate employees to embrace TQM principles and practices. Systemically, leaders prioritize communication, collaboration, and empowerment to foster a sense of ownership and accountability among employees (Aggarwal, 1993; Supriyanto et al., 2020; Cabigan, 2018). Research recognizes leaders' critical role, with strong TQM attributes adept at setting clear and achievable goals, developing robust quality management systems, and establishing measures to monitor and improve performance (Goharshenasan & Shahin, 2017). It demonstrates a commitment to training and developing employees to enhance their skills and knowledge for quality management through prioritizing customer focus and exceeding customer expectations for organizational success (Pambreni et al., 2019; Sweis et al., 2019; Chang et al., 2013; Mosadeghrad, 2015). This is affirmed by various studies showing influential leaders use customer feedback to drive improvements and innovations and instill a customer-centric mindset throughout the organization (Supriyanto et al., 2020; Cabigan, 2018). Showing high commitment and encouraging a holistic approach to quality and recognizing that it goes beyond products or services to encompass processes, systems, and people fosters a culture of teamwork and collaboration. This ensures that all employees are engaged in the pursuit of quality and continuous improvement (Goharshenasan & Shahin, 2017; Supriyanto et al., 2020; Cabigan, 2018; Talib & Rahman, 2010; Chang et al., 2013).

Looking into the implicit distinction on managerial activity, meeting customer expectations with a continuous improvement structure is essential to establish transparent processes in identifying inefficiencies and implementing solutions (Sweis et al., 2019; Tareke, 2020). Specific methodologies such as Lean management, Six Sigma, and Plan-Do-Check-Act cycles to systematically analyze workflows, standardize processes, and drive efficiency gains can leverage organization performance (Yaduvanshi & Sharma, 2017; Tareke, 2020). Utilizing a structured approach empowers staff to proactively address issues and optimize workflows, leading to sustained advancements in the quality of healthcare services (Mosadeghrad, 2015; Yaduvanshi & Sharma, 2017; Dixon-Woods & Martin, 2016). Data from several sources have revealed that by encouraging administrative workers to identify areas for improvement and implementing solutions actively, healthcare centers can harness their workforce's diverse expertise and perspectives (Sweis et al., 2019; Tareke, 2020). This inclusive approach leads to more comprehensive problem-solving and innovative solutions, ultimately driving continuous patient and healthcare delivery on performance improvement.

Numerous organizations use the continuous improvement approach. Various researchers have defined continuous improvement in many different ways. Sweis et al. (2019) define continuous improvement as involvement in making seamless efforts to prevent and minimize errors and to enhance a process that transforms inputs into output. According to Al-Damen (2017), continuous improvement entails using new tools and techniques to increase output, raise product quality, gain a competitive edge, and meet and surpass consumer expectations. Similarly, Pambreni et al. (2019) describe continuous improvement as enhancing product and service features and eliminating flaws. From the managerial perspective, it can be described as an inbuilt workplace culture (Sweis et al., 2019; Tareke, 2020). This culture motivates all individuals to look for methods for operations through efficiencies, assessing current procedures, and identifying chances to cut redundant work in attaining the primary goal (Al-Damen, 2017). It is arguably the most beneficial feature in the industrial and service industries for increasing sustainable growth and long-run survival performance (Pambreni et al., 2019).

The other contributing factor in relation to TQM for company performance is enhancing the company workforce involvement (Chin & Pang, 2018). Sukdeo et al. (2001) state that employee engagement is thought to be the key to obtaining quality dedication and achievements. There are many ways to increase employee involvement, includ-

ing training and education, job collaboration, coordination, and employee engagement (Spector, 1997; Mehmood et al., 2014). Findings have shown that staff involvement in judgment, information exchange, and staff development are three ways organizations can use their resources more effectively, boosting productivity (Ul Hassan et al., 2012; Hassan et al., 2020). Studies in healthcare findings have revealed that employees who actively engage in quality management processes become valued contributors to improving patient care and organizational performance (Manghani, 2011; Chen et al., 2004; Alzoubi et al., 2019). Employee involvement fosters a culture of accountability and responsibility within healthcare centers (Chen et al., 2004; Alzoubi et al., 2019). Ultimately, it encourages a bottom-up approach to problem-solving and innovation (Manghani, 2011; Chen et al., 2004).

The influence of employee involvement on the efficacy of total quality management in healthcare is significant, as it directly affects the engagement, motivation, and effectiveness of staff in contributing to the overall quality improvement efforts (Hassan et al., 2020). From this context, employee involvement can be interpreted as a supportive attitude carried by the worker toward the company and its value (Kompaso & Sridevi, 2010; Gupta & Sharma, 2016), employee participation, management involvement, and organizational culture in hospital (Mehmood et al., 2014; Pambreni et al., 2019; Al-Damen, 2017). However, Alnuaimi and Yaakub (2020), Sweis et al. (2019) and Tareke (2020) argued that to implement TQM, a business needs formalized mechanisms for rewarding, overseeing, and encouraging its employees. According to Ansari (2022), successful TQM adoption in firms can encourage workers to be innovative and improve hospital efficiency. In line with that, Chin and Pang (2018) discovered that staff development and involvement in decision-making and communicating ideas help the organization use its assets wisely, improving company performance. The finding has shown that staff loyalty is increased through training and involvement with judgment-making, encouraging employee participation (Chang et al., 2013).

Deming's approach to total quality management in quality is at the forefront of all organizational processes, with emphasis on the importance of continuous improvement, employee involvement, and customer focus decision-making to drive organizational success (Alauddin & Shu, 2019; Mason & Kapsales, 1990; Best & Neuhauser, 2005). The Deming Cycle (Plan-Do-Study-Act), also known as the PDCA cycle, is a fundamental concept in Deming's approach to total quality management (Alauddin & Shu, 2019; Mason & Kapsales, 1990; Best & Neuhauser, 2005). It is a continuous improvement model that consists of four steps: Plan, Do, Study, and Act. In the "Plan" phase, healthcare organizations should identify areas for improvement, set goals, and develop strategies and plans to achieve those goals. Organizations implement the planned changes in the "Do" phase and collect data to monitor their effectiveness. In the "Study" phase, organizations analyze the data collected during the implementation phase to assess the impact of the changes and identify any areas for further improvement. In the "Act" phase, organizations take action based on the findings of the study phase, such as implementing revised strategies or making necessary adjustments to achieve continuous improvement (Hassan et al., 2020).

In the context of healthcare quality management, Deming's approach emphasizes the integration of quality improvement efforts into the core processes of the organization. This involves aligning the Plan-Do-Study-Act cycle with clinical and administrative workflows to systematically identify opportunities for enhancement, implement changes, monitor outcomes, and adapt strategies based on data-driven insights (Taylor et al., 2014). Central to Deming's approach is the reliance on data to inform decision-making (Best & Neuhauser, 2005). Healthcare organizations utilizing this approach collect and analyze clinical and operational data and integrate patient feedback to gain a comprehensive understanding of the quality of care being delivered. By harnessing data analytics and performance metrics, organizations can identify trends, disparities, and areas for improvement, thus driving informed decision-making and targeted interventions (Best & Neuhauser, 2005; Taylor et al., 2014).

Additionally, the other hallmark of Deming's approach is the emphasis on engaging and empowering employees at all levels of the organization (Deming et al., 2018; Mason & Kapsales, 1990; Best & Neuhauser, 2005; Hassan et al., 2020). In healthcare settings, this translates to involving frontline staff, clinicians, and administrative personnel in quality improvement

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initiatives, encouraging their participation in problem-solving and decision-making processes, and fostering a sense of ownership in driving positive change (Alauddin & Shu, 2019; Mason & Kapsales, 1990; Best & Neuhauser, 2005).

Deming's approach underscores the notion that quality is not the sole responsibility of a specific department or individual but rather a collective responsibility that permeates all facets of the organization (Alauddin & Shu, 2019; Hassan et al., 2020). In healthcare quality management, this principle underscores the need for interdisciplinary collaboration, seamless coordination across departments, and a shared commitment to delivering patient-centered care. By emphasizing the systemic nature of quality, healthcare organizations can break down silos, promote integrated care delivery, and enhance the overall patient experience. Furthermore, Deming's approach prioritizes the sustainability of quality improvements and long-term results (Taylor et al., 2014; Best & Neuhauser, 2005; Deming et al., 2018). Healthcare organizations embracing this philosophy focus on instituting changes that yield enduring benefits, fostering a culture of ongoing monitoring and evaluation, and embedding quality as a core value that transcends transient initiatives. By striving for sustained excellence, healthcare organizations can achieve a lasting impact on patient outcomes and organizational performance.

The literature review demonstrates the value of researching total quality management to develop solutions specifically catering to the meaningful effect of the company's performance requirements and sustainability. Studies have revealed that there has yet to be a thorough and meaningful investigation into the effect of TQM on company performance, particularly in the private healthcare sector. Therefore, this study endeavors to reduce the gap in the body of knowledge on total quality management by exploring the research framework of continuous improvement, employee involvement, customer focus, and leadership approach to investigate the relative importance and impact on private healthcare performance. The following hypotheses were proposed:

H1: Effective leadership positively influences the overall operational performance of a company.

H2: A strong customer-centric approach significantly enhances a company's performance leading toward customer retention.

H3: Implementing continuous improvement strategies leads to measurable gains in a company's efficiency and innovation.

H4: High levels of employee involvement correlate with significant improvements in productivity and organizational success.

2. METHODOLOGY

The methodology used in this study is quantitative, correlational, and experimental. However, the analysis is not an experiment. It employed the positivism approach, a scientific technique that can verify and validate hypotheses (Saunders et al., 2007) with the research design following the onion model (Saunders et al., 2007), where the principles described in each layer of the model facilitate the development of a successful study design in total quality management. The study was subjected to the population of current employees in hospitals in Negeri Sembilan, Malaysia, with a purposive sampling method. It is also known as judgmental, selective, or subjective sampling, which is a form of non-probability sampling in which one needs to rely on one's judgment when choosing population members (Saunders et al., 2007). This method has assisted in selecting the hospital employees to participate in the survey. The sampling was appropriate because of the respondents' industry focus and eligibility classification. The expected sampling size was 383 respondents derived from the formula Bukhari with a 95% confidence level and an error of 0.05% (Bukhari, 2020). However, the empirical findings were only analyzed with 282 administrative employees due to incomplete survey questionnaires.

Table 1 posits the number of respondents who participated in the study. Out of the total 282 participants, the highest number of respondents was 89 (31.56%) from NSCM-N*, followed by MMC-N* with 79 (28.01%) respondents. AHN-N* had the lowest number of participants, with 53 (18.79%) respondents, and CA-N* had 61 (21.64%) respondents.

Table 1. Number of respondents from each hospital

Hospital	Number of Respondents	Percentage
AHN-N*	53	18.79%
NSCM-N*	89	31.56%
MMC-N*	79	28.01%
CA-N*	61	21.64%
Total	282	100.00%

Note: * Actual company names are not revealed because of research ethics.

The data analysis was exercised with SmartPLS version 4.0 to assess the adequacy of measurement models and the predictive relevance of the inner model (Hair et al., 2014). A boot-strapping procedure using 5000 sub-samples was performed to evaluate each path coefficient's statistical significance (Chin, 1998). The survey instruments were created using the Qualtrics survey. Qualtrics provides a comprehensive suite of tools for survey design, allowing complex and customizable surveys tailored to specific research objectives. Distributing the survey to the respondents also required less time and cost. As a result, respondents find it easier to respond to the survey using an online platform. The study also emphasized the ethical points, whereby the survey questionnaire was accompanied by a cover letter outlining the study's goals, significance, and scope, along with a consent form. The purpose of the consent form is to secure consent for participation while simultaneously guaranteeing the privacy of each participant's response. The responses were collected and recorded in Qualtrics; for analysis, they were exported to SPSS in CSV format. Data cleaning, coding, and management were employed before descriptive and inferential analyses were conducted.

The survey questionnaire was used to analyze the responses to the statement about the study hypotheses. A five-point Likert scale measurement was used. The instrument was adapted from prior validated scales of Sukdeo et al. (2001), Fotopoulos and Psomas (2009), Ramseook-Munhurrun et al. (2011), and Baidoun et al. (2018).

3. RESULTS

Table 2 highlights the finding of composite factor reliability coefficients. All constructs achieved above 0.70, thus meeting the requirement suggested by Fornell and Lacker (1981) and Henseler et al. (2009). As for Cronbach's α, all constructs were above 0.80, which exceeds the recommended level of 0.70. Apart from that, the AVE values are above 0.50, suggesting convergent validity at the construct level.

Table 3 projects the level of discriminant validity; the square root of AVE is greater than the association with all other constructs (numbers below the diagonal), indicating that this study's concept has discriminant validity.

The HTMT method uses ratio analysis to determine the degree of correlation between two constructs; a threshold value of less than 0.9 is preferred (Henseler et al., 2015). According to Table 4, the HTMT values in this study met the criteria of being lower than 0.9, which means the HTMT value is significantly below the critical value of 0.9 and has established discriminant validity.

Table 2. Internal consistency

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Company Performance	0.812	0.829	0.870	0.576
Continuous Improvement	0.778	0.803	0.849	0.534
Customer Focus	0.761	0.776	0.838	0.509
Employee Involvement	0.821	0.838	0.876	0.589
Leadership	0.861	0.862	0.900	0.644

Table 3. Discriminant validity through the Fornell-Larcker criterion

Variable	ComPer	ContImp	Cust F	Emp Inv	LeaderS
Company Performance	0.767				
Continuous Improvement	0.759	0.731			
Customer Focus	0.706	0.650	0.714		
Employee Involvement	0.713	0.759	0.684	0.767	
Leadership	0.635	0.685	0.711	0.648	0.802

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Table 4. Discriminant validity through heterotrait-monotrait (HTMT)

Variable	ComPer	ContImp	CustomerF	EmpInv	LeaderS
Company Performance					
Continuous Improvement	0.842				
Customer Focus	0.875	0.854			
Employee Involvement	0.889	0.844	0.850		
Leadership	0.751	0.832	0.887	0.774	

Table 5. Structural model path coefficient

Hypothesis	Relationship	*β*-value	SD	*t*-Statistics (>1.96)	*p*-values (<0.05)	Decision
H1	Leadership → Company Performance	–0.01	0.056	0.173	0.863	Not Supported
H2	Customer Focus → Company Performance	0.215	0.057	3.779	0.000	Supported
H3	Continuous improvement → Company Performance	0.289	0.051	5.616	0.000	Supported
H4	Employee Involvement → Company Performance	0.453	0.058	7.875	0.000	Supported

Note: **p < 0.01, *p < 0.05.

Figure 1 and Table 5 highlight that H2, H3, and H4 are supported; however, H1 is rejected by the study findings.

The predictive accuracy of the model is assessed by the coefficient of determination (Table 6), known as *R* square (R^2) (Hair et al., 2014). The value ranging from 0 to 1 shows the effect of exogenous latent variables on the model's endogenous variables. This study revealed a positive correlation between a number closer to 1 and better prediction accuracy (R^2 = 0.736). The model explains 74% of the variability in company performance. R^2 values of 0.50 ,0.25, and 0.75 indicate a weak, moderate, and significant degree of predictive accuracy (Hair et al., 2022).

Table 6. Coefficient of determination (R^2 and R^2 Adj)

Construct	R Square	R Square Adjusted
Company Performance	0.736	0.732

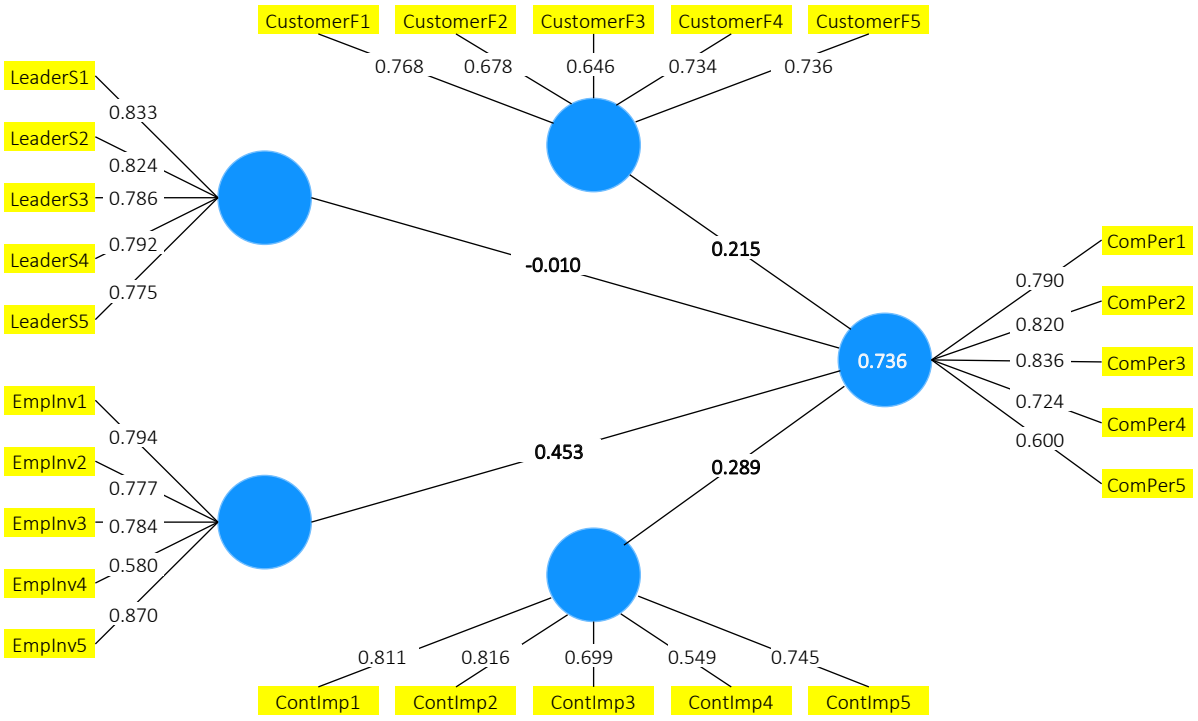

Figure 1. Structural model

4. DISCUSSION

This study investigates the impact of continuous improvement, employee involvement, customer focus, and leadership approach on private healthcare performance. The findings have produced a pathway for healthcare policymakers to interact and recognize specific missions in quality management practice. The value of 0.732 (R^2 Adj) proves the high model's power in explaining company performance; values exceeding 0.65 provide further evidence to support this assertion (Hair et al., 2022). The findings demonstrate that company performance accounted for 73.2% of the variability of the surveyed companies. These values validate the adequate explanatory power of the structural model.

Except for H1, the rest of the hypotheses have demonstrated a significant correlation. Table 5 posits that for customer focus ($\beta = 0.215$, $t = 3.779$, $p \leq 0.000$), the t-statistics value is greater than the critical value of 1.96 (Hair et al., 2022). Thus, TQM practices, such as customer focus and other connected attributes such as continuous improvement and employee involvement, can improve the quality of healthcare services in private hospitals. Policymakers can use these findings to develop policies and regulations and incorporate information for audit control practices, thereby improving the quality of healthcare services. The study also contributes to an avenue for hospital management to prioritize employee involvement. Customer focus is a significant factor in affecting company performance in the healthcare industry, suggesting that organizations should concentrate on creating a culture that values and prioritizes patient satisfaction. Features of similar studies indicated initiatives such as gathering patient feedback, implementing patient-centered care practices, and regularly communicating with patients and their families (Manghani, 2011; Alzoubi et al., 2019).

These factors contribute to the organization's operations and decision-making benefits, such as increased employee satisfaction and motivation, improved problem-solving capabilities, better communication and collaboration among staff members, and a stronger sense of ownership and accountability for quality outcomes (Manghani, 2011; Chen et al., 2004; Alzoubi et al., 2019). For instance, when frontline staff are actively engaged in quality improvement initiatives, they can take ownership of the processes and outcomes, leading to a greater sense of responsibility for maintaining high standards of care for the patients. Management could establish quality improvement audit teams from different departments and provide resources and support to drive quality initiatives by empowering employees' expertise, creativity, and practical, sustainable solutions (Alzoubi et al., 2019). With these efforts, it will lead management to foster a customer-focused culture.

Based on Table 5, continuous improvement showed $\beta = 0.289$, $t = 5.616$, $p \leq 0.000$. It aligns with similar findings from various industries (Kunz, 2021; Alaraki, 2014), which suggested that elements of creativity, continuous improvement, and processes will significantly affect the company's performance in the healthcare industry. The finding suggests that management should prioritize strategies that promote ongoing quality improvement. This might include initiatives such as regular process reviews, quality audits, and data analytics to identify opportunities for improvement. Further, management should encourage employees to identify areas for improvement and provide them with the resources and support they need to drive change (Alaraki, 2014). For example, hospitals could establish a continuous improvement program encouraging employees to submit improvement ideas and providing incentives for successful implementation (Alzoubi et al., 2019; Alaraki, 2014).

As for H4, the finding shows that employee involvement ($\beta = 0.453$, $t = 7.875$, $p \leq 0.000$), which is in line with Chen et al, (2004), will have an effect on workforce sustainability, leading to greater job engagement. This indicates that the result is statistically significant, demonstrating a positive causal relationship between the variables. Moreover, employee involvement in quality management ensures a sense of pride and commitment among staff members (Chen et al., 2004; Alzoubi et al., 2019). When healthcare professionals actively shape the quality of care they provide, it instills a sense of pride in their work (Chen et al., 2004). It strengthens their dedication to delivering the best possible outcomes for patients through dedicated performance. These will lead to hospital manage-

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ment focusing on continuous improvement as well as enhancing employee involvement. The finding reveals that employee involvement is critical in affecting company performance, suggesting that hospitals should prioritize strategies that promote employee engagement and empowerment.

Apart from the above, the management of hospitals should also emphasize the role of leadership in implementing a TQM factor. Companies can use this finding to reevaluate their leadership strategies and determine ways to improve their approach to leadership approaches in the context of TQM implementation. While leadership may play a role in setting the tone for quality improvement initiatives, it is not the only significant factor that affects company performance (Alzoubi et al., 2019; Alaraki, 2014). Organizations should recognize and understand that TQM is a collective effort that requires the involvement of all employees at all levels of the organization (Kunz, 2021; Alzoubi et al., 2019). By involving all employees in quality improvement initiatives, an organization can promote a sense of ownership and responsibility for quality outcomes, leading to productive company performance with patient-centered care, improving communication and collaboration among staff members, ensuring the use of evidence-based practices in healthcare delivery, and establishing feedback loops (Kunz, 2021; Alzoubi et al., 2019). Further, by aligning organizational values with TQM principles, engaging staff in quality initiatives, and establishing mechanisms for ongoing assessment, healthcare centers can create a culture that prioritizes excellence and continuous improvement in patient care. This supportive culture will lead to a positive work environment and will reduce employee turnover rates (Alzoubi et al., 2019; Alaraki, 2014; Kunz, 2021).

In a holistic approach, this study's finding correlates with Deming's approach, which underscores the notion that quality is not the sole responsibility of a specific department or individual but rather a collective responsibility that permeates all facets of the organization. In healthcare quality management, this principle should be the key interdisciplinary focus for the commitment to delivering patient-centered care. Furthermore, the approach will be able to prioritize the sustainability of quality improvements for long-term survival. Healthcare organizations embracing this philosophy can foster a culture of ongoing monitoring and evaluation for quality performance.

CONCLUSION AND LIMITATIONS

This study provides precious insights into the effect of TQM practices on the company's performance, particularly in the healthcare sector of Malaysia. The results show that implementing total quality management practices, particularly employee involvement, continuous improvement, and customer focus, can enhance company performance. These findings can be at the forefront in the context of healthcare hospital management to prioritize their quality improvement efforts and to allocate resources effectively. In addition, these empirical findings may also serve as an avenue for future research to enhance the understanding of the effect of company performance on total quality management practices.

Employee engagement and training are vital elements of TQM in healthcare. Research in various findings also demonstrates that individuals who undergo specialized training in TQM procedures exhibit increased empowerment and motivation to engage in quality enhancement initiatives. Educating employees on tools and techniques, including statistical quality control, Six Sigma, and lean methodologies, improves their competencies and comprehension of quality management, hence increasing their efficacy in executing TQM efforts. This empowerment is especially advantageous in healthcare environments, where clinical and administrative personnel must collaborate effectively to ensure uninterrupted patient care. A committed and informed workforce can diminish turnover, enhance employee happiness, and foster a greater corporate dedication to quality.

Alongside staff engagement, emphasizing customer focus is a fundamental component of TQM. Patient-centered care, characterized by the systematic collection of patient input for service enhancement, has

demonstrated efficacy in elevating patient happiness, enhancing outcomes, and augmenting hospital repute. With that, findings have discovered that a customer-centric strategy enables healthcare professionals to pinpoint areas for enhancement, customize care services to align with patient expectations, and foster enduring trust within the community. Through the incorporation of feedback mechanisms, including post-care surveys and patient interviews, hospitals can implement data-driven strategies that prioritize patient requirements, resulting in enhanced quality and more empathetic treatment.

Ongoing enhancement is also an essential technique that can profoundly influence healthcare performance. In this context, continual improvement entails the systematic revision of clinical protocols, the integration of novel medical technologies, and the optimization of administrative processes to elevate service delivery. Research has shown that healthcare organizations engaged in continuous improvement exhibit diminished wait times, fewer diagnostic inaccuracies, and a decrease in patient readmissions. Continuous improvement cultivates a flexible culture that enables healthcare organizations to align with medical developments, increase operational efficiency, and elevate the patient experience. The culture of continuous improvement is vital in the rapidly changing healthcare sector, as novel medicines, technologies, and regulatory modifications consistently transform care delivery.

In total, to effectively execute TQM, healthcare organizations require a comprehensive plan encompassing leadership development, resource allocation, patient-centered feedback mechanisms, and rigorous performance measures. Studies on leadership endorsement of TQM efforts also guarantees that quality objectives obtain requisite focus and resources. Leaders proficient in quality management can more effectively promote TQM principles, fostering organizational commitment. Resource allocation is a crucial element, enabling healthcare management to allocate resources to areas requiring the most significant quality enhancements. Utilizing performance data, such patient satisfaction scores and error rates, can enhance the guidance of these expenditures, thereby optimizing resource allocation for greater efficiency and impact. Moreover, cultivating a culture of continual improvement is crucial for attaining enduring success in healthcare. Hospitals can utilize patient and staff input to find areas for improvement by establishing interdisciplinary teams to frequently assess and enhance treatment methods. This method allows healthcare businesses to remain attuned to patient requirements and guarantee that their procedures conform to the highest standards of care. Comparing with leading hospitals and disseminating knowledge internally can improve the efficacy of TQM techniques. Acquiring knowledge from exemplary practices expedites the implementation of efficient techniques, facilitating continuous enhancement in patient care quality.

Besides its significance, this study has identified certain limitations. It highlights the need for further research to examine the relationship between socioeconomic, gender, and other factors of production in the healthcare sector such as technological integration, legal frameworks, and cultural impacts. Although the current study primarily focused on the private sector, future studies should include the public sector to enhance the generalizability of the results. In addition, it is possible to study sustainable competitive advantage through other dimensions, such as the value of resources and their scarcity, for a comprehensive understanding of resource efficiency. Finally, while the data collection in this study involved a survey questionnaire, other methods, such as interviews and qualitative methods, should be used to avoid any limitations of the survey method.

AUTHOR CONTRIBUTIONS

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