ISSN 1816-6075 (Print), 1818-0523 (Online)
Journal of System and Management Sciences
Vol. 14 (2024) No. 5, pp. 183-197
DOI:10.33168/JSMS.2024.0511

The Influence of Integrated TQM-CSR Practices on Organizational Performance in Higher Education Institutions: The Mediating Role of Employee Performance

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Abstract: This study investigates the relationship between integrated total quality management-corporate social responsibility (TQM-CSR) practices, employee performance, and organizational performance in private higher education institutions in the United Arab Emirates. A survey was conducted with 359 managers and heads to assess the impact of specific TQM-CSR practices on organizational performance measures. The results of the PLS-SEM analysis revealed four TQM-CSR practices that influence organizational performance directly - stakeholder focus, governance, human resources, and environmental protection. Furthermore, employee performance partially or fully mediated the relationships between leadership, stakeholder focus, social concerns, environment protection, and organizational performance. The findings provide valuable insights into how private universities can enhance performance outcomes through targeted TQMCSR practices and improving employee performance. This research makes significant theoretical contributions through its integration of TQM and CSR and examination of mediating mechanisms.

Keywords: Total quality management; corporate social responsibility; TQM-CSR practices; higher education institutions; organizational performance; employee performance.

1. Introduction

The United Arab Emirates (UAE) has emerged as a global hub for higher education in recent years, experiencing a remarkable transformation in the field of academia. This rapid evolution is driven by the government's strategic commitment to diversify its economy, reduce dependency on oil revenues, and promote knowledge-based industries as part of its Vision 2021 and Vision 2071 initiatives. Consequently, the UAE has become a prime destination for students seeking high-quality education, both regionally and internationally (Erfurth, 2022).

In today's global business environment, companies face the challenge of delivering top-notch products and services to customers while meeting stakeholder expectations for quality (Frolova & Lapina, 2015) and addressing environmental and social concerns (Korschun, Bhattacharya, & Swain, 2016). The use of Total Quality Management (TQM) and Corporate Social Responsibility (CSR) has become imperative for organizations aiming to attain a lasting competitive edge in the international business arena (Benavides-Velasco, Quintana-García, & Marchante-Lara, 2014). Total Quality Management (TQM) is a managerial philosophy that prioritizes continuous improvement in organizational processes with the objective of augmenting value, efficiency, and customer contentment (Wang, Chen, & Chen, 2012). Corporate social responsibility (CSR) entails the deliberate integration of social and environmental considerations into the operational and relational aspects of organizations (Commission, 2001). Both TQM (Total Quality Management) and CSR (Corporate Social Responsibility) acknowledge the significance of internal and external stakeholders in enhancing the advantages obtained by stakeholders (Benavides-Velasco et al., 2014; Ghobadian, Gallear, & Hopkins, 2007). Examining the integration of TQM and CSR is significant for theory and practice, as it aligns with stakeholders' theory by emphasizing the mutual benefit for organizations and their stakeholders. It ensures improved organizational performance and societal well-being, thereby contributing to a more sustainable and ethical approach to management (Almuntfjy & Kowang, 2021).

In this context, this study aims to address key research questions: How do integrated Total Quality Management (TQM) and Corporate Social Responsibility (CSR) practices impact organizational performance in private higher education institutions in the UAE? To what extent does employee performance mediate the relationships between specific TQM-CSR practices and organizational performance?

This study aimed to evaluate a framework known as TQM-CSR, which combines principles from TQM (Total Quality Management) and CSR (Corporate Social Responsibility), in order to examine its potential impact on the organisational performance of higher education institutions. Furthermore, the incorporation of workers' performance as a mediating factor is encompassed within this conceptual framework in order to enhance comprehension of the association between TQM (Total Quality Management) and CSR (Corporate Social Responsibility) practices and the overall performance of the organization.

2. Literature Review and Hypotheses

2.1. Total Quality Management

Total Quality Management (TQM) has garnered significant interest and application in the education sector. Oakland, Oakland, and Turner (2020) defined TQM as an approach that aims to enhance the effectiveness and flexibility of organizations by organizing and involving every department, activity, and individual at all levels. The relevance of TQM theories and principles in education has led to numerous theoretical and empirical studies (Psomas & Antony, 2017; Sahney, Banwet, & Karunes, 2004; Soria-García, Martínez-Lorente, & Excellence, 2014). TQM has been widely adopted by international colleges and universities, particularly in developed countries like the US (Dumond & Johnson, 2013) and the UK (Chung Sea Law, 2010), Malaysia, Turkey, and Sweden (Grant, Mergen, & Widrick, 2005). In the dynamic higher education environment, TQM emerges as a potent practice

capable of addressing market challenges and engaging stakeholders effectively (Mehta, Verma, & Seth, 2014).

2.2. Corporate Social Responsibility

The concept of corporate social responsibility (CSR) has been the subject of continuing debate and definition within the academic community (Moratis & Management, 2016). ISO defines Corporate Social Responsibility (CSR) as the accountability of an organisation for its effects on both society and the natural environment. Corporate social responsibility (CSR) entails the adoption of transparent and ethical conduct that supports the long-term viability of an organisation, takes into account the expectations of many stakeholders, adheres to relevant legal frameworks and global standards, and is ingrained within the entire organizational structure (Hemphill, 2013).

Firms use CSR to enhance relations with customers, promote positive perceptions, increase brand value, and improve performance by meeting customer expectations (Hur, Moon, Kim, & Management, 2020). Hopkins (2005) outlined three distinct tiers of corporate social responsibility (CSR), namely the principles of social responsibility, the procedures of social responsiveness, and the outcomes of social responsibility. The broad scope and significance of CSR are reflected in decisions made by the private and public sectors (Sheehy, 2015).

2.3. Organizational Performance

Organizational performance pertains to the effective allocation and utilization of resources within an organization in order to accomplish its objectives and aims, taking into account the interests and concerns of stakeholders. According to the definition provided by Wade and Recardo (2001), organizational performance refers to the capacity of an organization to achieve its objectives. According to Peterson, Gijsbers, and Wilks (2003), performance can be understood in terms of three key factors: economy, efficiency, and effectiveness. Within the framework of this study, the concept of "organizational performance" incorporates a multitude of dimensions. The viewpoints above encompass financial, customer, internal business operations, and learning and growth aspects.

2.4. Employee Performance

Employee performance refers to how well an individual fulfills their job responsibilities and completes tasks. It plays a crucial role in a business's success or failure. Three key aspects to consider are the quality of work, speed and efficiency, and trust and consistency (Kazan, Gumus, & Research, 2013). Employee performance directly impacts organizational performance and success, both financially and non-financially (Elnaga, Imran, & Management, 2013). It is essential to assess and improve employee performance to ensure long-term business success.

2.5. TQM-CSR practices and organizational performance

The implementation of TQM (Total Quality Management) and CSR (Corporate Social Responsibility) practices have been found to have a positive impact on organizational performance. The study conducted by Ngambi and Nkemkiafu (2015) revealed a substantial correlation between TQM and performance within the construction industry. According to Busu (2019), there is evidence suggesting that the implementation of Total Quality Management (TQM) practices has a beneficial effect on the performance of the renewable energy business. V. Singh, Kumar, and Singh (2018) emphasized the correlation between TQM practices and organizational performance within the manufacturing and service sectors in India. Several studies, like those conducted by Benavides-Velasco et al. (2014), Anitha (2014), Mehralian, Nazari, Zarei, and Rasekh (2016), have provided empirical evidence supporting the notion that TQM (Total Quality Management) and CSR (Corporate Social Responsibility) have a significant positive impact on organizational performance. The study conducted by Parast and Adams (2012) examined the influence of corporate social responsibility (CSR) on performance within the petroleum industry. González-Rodríguez, Martín-Samper, Köseoglu, and Okumus (2019)

conducted a study in which they discovered empirical data that supports a positive correlation between the implementation of corporate social responsibility (CSR) practises and the overall company success in the hotel industry. In a study undertaken by Alrowwad, Obeidat, Tarhini, and Aqqad (2017), empirical data was presented to support a positive link between the implementation of corporate social responsibility (CSR) initiatives and operational performance within the specific context of Ghana.

The integration of Total Quality Management (TQM) and Corporate Social Responsibility (CSR) practices to enhance organizational performance is supported by several studies. Almuntfjy and Kowang (2021) demonstrated a positive correlation between TQM, CSR, and financial performance in UAE higher education. Yu-Hong, Huang, Su-Chuan, Manh-Hoang, and Business (2021) highlighted the influence of TQM and CSR on firm performance. Islam (2022) found similar effects in the ready-made garment industry in Bangladesh, and Azam, Songjiang, Jamil, Naseem, and Mohsin (2023) underscored the significance of TQM and CSR integration in improving performance. These studies collectively validate the potential of this integration in diverse contexts, including higher education. While these studies have individually reinforced the significance of TQM and CSR, there exists a noticeable gap in research concerning the integration of these practices and their impact on Private Higher Education Institutions (PHEIs). This integration, which combines the principles of TQM and the ethical and societal dimensions of CSR, remains an underexplored area. The current body of literature highlights the need for research that specifically investigates the relationship between integrated TQM-CSR practices and the performance of PHEIs, offering a fresh perspective on the unique dynamics of educational institutions in the UAE.

Hence, the initial proposition suggests a potential association between the implementation of Total Quality Management (TQM) and Corporate Social Responsibility (CSR) initiatives and the overall performance of Private Higher Education Institutions (PHEIs).

H1: There is a relationship between TQM-CSR practices and the organizational performance of PHEIs.

2.6. The employees' performance, TQM-CSR practices and organizational performance

The application of TQM (Total Quality Management) and CSR (Corporate Social Responsibility) practices has been found to have a positive impact on staff productivity and performance, leading to enhanced organizational outcomes. This implies that the performance of employees acts as an intermediary factor between the implementation of Total Quality Management (TQM) and Corporate Social Responsibility (CSR) practices and the overall performance of the organization. Multiple empirical researches have shown evidence for the mediating function of employee performance in the association between managerial procedures and firm performance (Qadariah & Idris, 2019; Wahjoedi & Sari, 2021; Zufri, Ibrahim, & Vol, 2018).

Employee performance is proposed as a mediator in the conceptual framework because it serves as the bridge that explains how the integration of Total Quality Management (TQM) and Corporate Social Responsibility (CSR) practices directly impacts organizational performance. TQM and CSR practices influence employee behaviour, motivation, and engagement, which, in turn, affect their performance. By examining the mediating role of employee performance, the study seeks to uncover the specific mechanisms through which TQM-CSR integration leads to improved organizational performance, providing a deeper understanding of this relationship and potential insights for enhancing performance outcomes in private higher education institutions. Hence, it is postulated that the performance of employees functions as a mediator in the present study, thereby giving rise to the second hypothesis:

H2: There is a mediation role for the employees' performance in the relationship between TQM-CSR practices and the organizational performance of PHEIs.

The existing body of literature presents enough evidence supporting the combination of TQM (Total Quality Management) and CSR (Corporate Social Responsibility) as strategies to improve

organizational performance. The implementation of this integration enables organizations to attain elevated levels of quality, sustainability, and stakeholder satisfaction. Nevertheless, it is necessary to conduct empirical studies in order to evaluate the impact of the integration of TQM (Total Quality Management) and CSR (Corporate Social Responsibility) practices on the performance of organizations.

3. Methodology and Data

3.1. Sample and data collection

A survey was administered online to a sample of 400 managers, heads, and deans of private universities in the UAE, obtained through Stratified Random Sampling, where the sample size was distributed into 6 Emirates and 79 Private Higher Education Institutions. The final sample size collected was 359 (response rate 89%).

The survey utilized a five-point Likert scale for responses. In terms of demographics, 70.2% of the respondents represented universities, and 60.4% were affiliated with PHEIs in Dubai. Regarding the field of the respondents, 63.5% were from the management field, followed by 10% from the social sciences. The majority of the PHEIs in the sample had been established for approximately 11-20 years.

3.2. Measures

TQM-CSR practices. The questionnaire measurement items are constructed based on the literature. The items of the nine TQM-CSR practices selected for this study are highlighted as Practice 1: Continuous improvement (Ni & Sun, 2009) with 0.72 Cronbach's alpha; Practice 2: Strategy and planning (Khurshid, Alhidari, & Tabassum, 2021) with 0.910 Cronbach's alpha; Practice 3: Leadership and commitment (Khurshid et al., 2021) with 0.910 Cronbach's alpha; Practice 4: Stakeholders focus and satisfaction (Fonseca et al., 2016) with 0.881 Cronbach's alpha; Practice 5: Educational services improvement (Asif, Awan, Khan, Ahmad, & Quantity, 2013) with 0.79 Cronbach's alpha; Practice 6: Social and legal concerns (Khurshid et al., 2021) with 0.926 Cronbach's alpha; Practice 7: Organizational governance and process management (Khurshid et al., 2021) with 0.911 Cronbach's alpha; Practice 8: Ethics and human resources (Demo, Neiva, Nunes, & Rozzett, 2012) with 0.84 Cronbach's alpha; and Practice 9: Environmental protection (S. K. Singh, Chen, Del Giudice, El-Kassar, & Change, 2019) with 0.849 Cronbach's alpha. These selected practices collectively cover a comprehensive spectrum of TQM and CSR aspects that are particularly relevant to the context of private higher education institutions in the United Arab Emirates. Their inclusion ensures a holistic examination of TQM-CSR integration and its impact on organizational performance. The choice of these practices is well-founded in the literature and aligns with the study's research objectives.

Organizational performance. Second measurement items are the four BSC measures of organizational performance which are highlighted as 1) Financial perspective (Hoque & James, 2000; Jin, Deng, Li, & Skitmore, 2013); 2) Customer perspective (Oliveira, Oliveira, Fijałkowska, & Silva, 2021); 3) Internal business process (Binden, Mziu, Suhaimi, & Research, 2014); and 4) Learning and growth perspective (Andjelkovic Pesic & Dahlgaard, 2013) with Cronbach's alpha values of 0.738, 0.921, 0.911, and 0.96, respectively.

Employees' performance. The employees' performance measurement items were adopted from a prior study by Turnley, Bolino, Lester, and Bloodgood (2003), and Cronbach's Alpha were 0.93.

4. Result and Discussion

4.1. Measurement model assessment

The validity and reliability of the scales were evaluated by employing Smart PLS 3.3.3 to examine the measurement model. The assessment of convergent validity, construct reliability, and discriminant validity was conducted in accordance with the principles outlined by Hair, Ringle, and Sarstedt (2013). According to Henseler, Ringle, and Sarstedt (2015), all the items in the TQM-CSR model exhibited loadings that exceeded the threshold of 0.5, hence satisfying the acceptance criterion. The internal consistency of the measures was found to be high, as evidenced by Cronbach's alpha coefficients ranging from 0.842 to 0.956 (Barclay, Higgins, & Thompson, 1995). The composite reliability values

exhibited a range of 0.889 to 0.986, indicating a high level of reliability across the sub-constructs. Additionally, the average variance extracted (AVE) for each sub-construct surpassed the threshold of 0.50, signifying a significant capture of variance and reliability (Fornell & Larcker, 1981).

Table 1: Summary of Construct Reliability and Validity.

Construct/Items	**Loading**	**Cronbach's Alpha**	**Composite Reliability**	**AVE**
Continuous improvement (CIP)		0.842	0.850	0.616
CIP1	0.775			
CIP2	0.803			
CIP3	0.829			
CIP4	0.845			
CIP5	0.661			
Strategy and planning (SPP)		0.902	0.909	0.719
SPP1	0.835			
SPP2	0.781			
SPP3	0.877			
SPP4	0.899			
SPP5	0.843			
Leadership and commitment (LCP)		0.931	0.932	0.784
LCP1	0.884			
LCP2	0.895			
LCP3	0.877			
LCP4	0.906			
LCP5	0.865			
Stakeholders focus and satisfaction (SFS)		0.925	0.928	0.769
SFS1	0.896			
SFS2	0.910			
SFS3	0.850			
SFS4	0.874			
SFS5	0.853			
Educational services improvement (ESI)		0.893	0.900	0.700
ESI1	0.830			
ESI2	0.870			
ESI3	0.823			
ESI4	0.819			
ESI5	0.842			
Social and legal concerns (SLC)		0.938	0.951	0.800
SLC1	0.875			
SLC2	0.881			
SLC3	0.888			
SLC4	0.902			
SLC5	0.924			
Organizational governance and Process management (OGP)		0.896	0.908	0.707
OGP1	0.854			
OGP2	0.723			
OGP3	0.861			
OGP4	0.891			
OGP5	0.866			

Ethics and human resources (EHR)		0.879	0.887	0.674
EHR1	0.813			
EHR2	0.866			
EHR3	0.873			
EHR4	0.757			
EHR5	0.790			
Environmental protection (EPP)		0.910	0.913	0.737
EPP1	0.863			
EPP2	0.870			
EPP3	0.887			
EPP4	0.799			
EPP5	0.872			
Organizational Performance		0.956	0.958	0.545
OPF1	0.692			
OPF2	0.722			
OPF3	0.766			
OPF4	0.757			
OPF5	0.748			
OPC1	0.732			
OPC2	0.681			
OPC3	0.701			
OPC4	0.683			
OPC5	0.662			
OPI1	0.710			
OPI2	0.716			
OPI3	0.716			
OPI4	0.754			
OPI5	0.763			
OPL1	0.799			
OPL2	0.788			
OPL3	0.808			
OPL4	0.752			
OPL5	0.788			
Employees Performance (EP)		0.932	0.939	0.710
EP1	0.823			
EP2	0.802			
EP3	0.862			
EP4	0.815			
EP5	0.867			
EP6	0.873			
EP7	0.853			

4.2. Descriptive statistics, correlations and reliabilities

To assess potential multicollinearity issues, the researcher conducted a variance inflation factor (VIF) analysis using SPSS 27.0. Multicollinearity becomes a concern when the correlation coefficient between two variables exceeds 0.9 (De Vaus, 2002). The results from Table 2 indicate that all correlation coefficients between independent variables were significant, ranging from 0.478 to 0.743. This suggests that the constructs did not exhibit strong correlations with each other, and the square root of the average variance extracted (AVE) for each construct (bold values) exceeded the inter-construct correlations. Hence, this study had minimal multicollinearity issues. Furthermore, all constructs received high responses (mean > 4.0).

Table 2: Descriptive statistics, correlations and reliabilities

	Mean	SD	CIP	EHR	EP	EPP	ESI	LCP	OGP	OP	SFS	SLC	SPP
CIP	4.00	.522	**0.785**										
EHR	4.01	.526	0.634	**0.821**									
EP	4.61	.443	0.197	0.307	**0.843**								
EPP	4.11	.459	0.628	0.765	0.331	**0.859**							
ESI	4.21	.416	0.556	0.590	0.214	0.585	**0.837**						
LCP	4.37	.497	0.571	0.488	0.271	0.486	0.508	**0.886**					
OGP	4.23	.415	0.560	0.647	0.244	0.638	0.672	0.521	**0.841**				
OP	4.21	.414	0.532	0.642	0.455	0.640	0.558	0.466	0.601	**0.738**			
SFS	4.08	.561	0.563	0.587	0.300	0.535	0.625	0.492	0.553	0.587	**0.877**		
SLC	4.44	.481	0.408	0.489	0.277	0.468	0.522	0.485	0.503	0.446	0.416	**0.894**	
SPP	4.08	.519	0.751	0.632	0.208	0.551	0.579	0.624	0.544	0.523	0.562	0.404	**0.848**

4.3. Structural model assessment

Figure 1 illustrates the path coefficients with corresponding P-values, indicating the relationships and their significance. The results suggest that out of the TQM-CSR practices examined, only four practices (SFS, OGP, EHR, and EPP) demonstrate a direct and significant influence on organizational performance. The assessment of the model's predictive power included the use of bootstrap R square and Stone-Geiser Q square statistics. The bootstrapped R square values for organizational performance and employee performance were 0.583 and 0.164, respectively, indicating a goodness-of-fit. The Q square values for both constructs were above 0, demonstrating predictive relevance. However, there was no difference in the R square and Q square values of organizational performance between the original and mediated models.

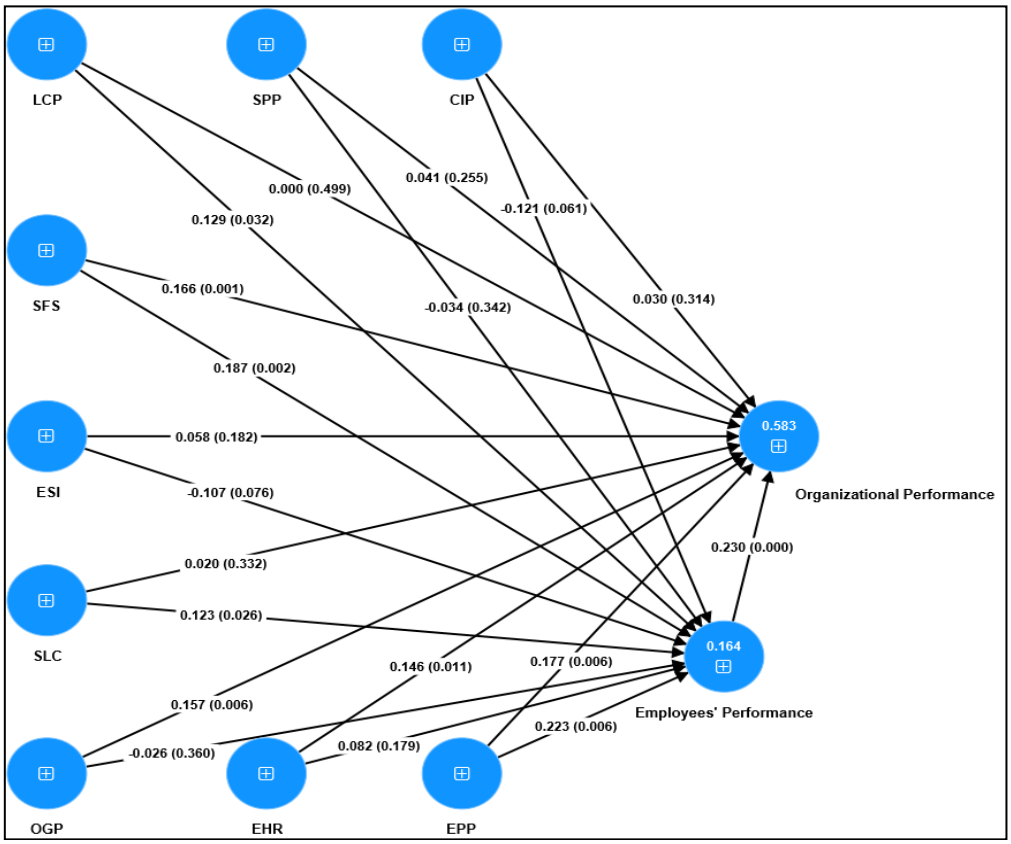

Fig. 1: Results of PLS Algorithm for Structural Model Assessment.

4.3.1. Model Assessment without Mediator

Table 3: Structural model assessment of LOC model without mediator.

Hypothesis	Relation	Path coefficient	P-value
H1a	CIP → OP	0.029	0.320
H1b	SPP → OP	0.043	0.248
H1c	LCP → OP	-0.000	0.498
H1d	SFS → OP	0.165	0.001
H1e	ESI → OP	0.058	0.182
H1f	SLC → OP	0.021	0.324
H1g	OGP → OP	0.156	0.007
H1h	EHR → OP	0.148	0.010
H1i	EPP → OP	0.177	0.006

The evaluation of the PLS structural equation model involves assessing the path coefficients, which serve as indicators of the strength of relationships between variables. Based on the findings of Barclay et al. (1995), it is recommended that the value should be equal to or greater than 0.05. In addition, Hair et al. (2013) suggested that in order to evaluate the statistical significance of each path coefficient, it is necessary to employ a bootstrap re-sampling technique consisting of 5000 sub-samples. The outcomes of the bootstrapping procedure are presented in Table 3.

The p-value is a statistical measure that represents the estimated likelihood of either rejecting or accepting the hypothesis. The null hypothesis is said to be rejected when the p-value is found to be smaller than the predetermined level of significance. The selection of the significance level for validating the study hypothesis is discretionary. Traditionally, this study has employed a significance level of 5% (P-value < 0.05). According to the findings presented in Table 3 and Figure 1, the LOC model encompasses ten distinct routes, each of which represents a hypothesis. Four out of nine hypotheses were supported, demonstrating significant positive relationships between specific TQM-CSR practices and organizational performance. For instance, the accepted TQM-CSR practices are those related to the Stakeholders' focus and satisfaction (SFS), Organizational governance and Process management (OGP), Ethics and human resources (EHR), and Environmental protection (EPP) with (Path Coefficients of 0.165, 0.156, 0.148 and 0.177; and P-values of 0.001, 0.007, 0.010 and 0.006, respectively.

4.3.2. Mediation testing

Table 4: The assessment of the relationship between TQMCSR practices and organizational performance by the mediating effect of employee performance.

H2	Relation	Direct effect	Indirect effect (P-value)	Total effect	VAF	Interpretation
H2a	CIP → EP → OP	0.030	-0.028 (0.072)	0.058	-	No mediation
H2b	SPP → EP → OP	0.041	-0.008 (0.345)	0.049	-	No mediation
H2c	LCP → EP → OP	0.000	0.030 (0.043)	0.030	100%	Full mediation
H2d	SFS → EP → OP	0.166	0.043 (0.006)	0.209	20.57%	Partial Mediation
H2e	ESI → EP → OP	0.058	-0.025 (0.081)	0.083	-	No mediation
H2f	SLC → EP → OP	0.020	0.028 (0.033)	0.048	58.33%	Partial Mediation
H2g	OGP → EP → OP	0.157	-0.006 (0.361)	0.163	-	No mediation
H2h	EHR → EP → OP	0.146	0.019 (0.196)	0.165	-	No mediation
H2i	EPP → EP → OP	0.177	0.051 (0.009)	0.228	22.37%	Partial Mediation

Introducing employee performance as a mediator in the model yielded valuable insights into the

relationships as shown. Table 4 reveals Variance Accounted For (VAF) values, indicating the extent of mediation, which were 100% for leadership and commitment (LCP), 20.57% for stakeholders focus and satisfaction (SFS), 58.33% for social and legal concern (SLC), and 22.37% for environmental protection (EPP) practices. These VAF values represent the proportion of mediation, shedding light on the relationships between organizational performance and specific TQM-CSR practices. The absence of mediation by employee performance in some relationships can be attributed to the complexity and multifaceted nature of the TQM-CSR practices and their interactions with organizational performance. These findings highlight that the influence of TQM-CSR practices on organizational performance can be both direct and indirect, depending on the specific dynamics and contextual factors at play.

5. Contribution

5.1. Theoretical contributions

This research makes a significant theoretical contribution through its novel integration and empirical examination of TQM-CSR practices in higher education institutions. While prior research has predominantly treated TQM and CSR as separate constructs (Amin, Aldakhil, Wu, Rezaei, & Cobanoglu, 2017; Katsaros, Tsirikas, Kosta, & Journal, 2020; Naqvi & Khan, 2013; Nayak & Sahoo, 2015; Van Esch, Wei, & Chiang, 2018; Yoon et al., 2013), this research recognizes the conceptual and practical alignment between these practices, culminating in the development of an integrated framework.

The integration of TQM-CSR practices not only advances the understanding of educational institutions but also contributes to organizational management as a whole. The exploration of their combined effects within an educational context enriches the existing literature on TQM and CSR. By considering this integration, the study paves the way for a more comprehensive perspective on how these practices influence organizational performance.

Furthermore, the research delves into the mediating role of employee performance, enhancing its theoretical significance. The examination of how employee performance mediates the relationship between TQM-CSR practices and organizational performance offers valuable insights into the underlying mechanisms and dynamics of this relationship. It sheds light on the intricate interplay between these practices and employee contributions.

5.2. Practical implications

In practical terms, this study provides actionable insights for private Higher Education Institutions (HEIs) in the United Arab Emirates and organizations aiming to enhance their performance through the implementation of TQM-CSR practices. The findings underscore the pivotal role of employee performance as a mediator in the relationship between these practices and organizational performance.

Specifically, for private HEIs, the study's implications are significant. It emphasizes the importance of integrating TQM-CSR practices and focusing on enhancing employee performance to optimize organizational outcomes. By recognizing the value of this integration and its mediating role, private HEIs can develop targeted strategies that align with the unique needs and dynamics of the education sector. This research offers empirical, evidence-based guidance that can inform decisions and practices within these institutions, ultimately facilitating improvements in organizational performance and the delivery of quality education.

5.3. Limitations and future research

While this study provides valuable insights, it is essential to acknowledge its limitations. The data collection was limited to private higher education institutions in the United Arab Emirates, which restricts generalizability. Future research should include a broader range of educational institutions to enhance external validity. The study relied on self-reported survey data, and future research could employ multiple data sources and methods to overcome response biases. The cross-sectional nature of the data prevents causal inferences, and longitudinal or experimental designs could provide more

substantial evidence. Other potential mediators or moderators, such as organizational culture (González-Rodríguez et al., 2019) or employee engagement (Ali et al., 2020), could be explored. Additionally, investigating the mechanisms through which TQM-CSR practices influence organizational performance, such as corporate learning or employee engagement, would contribute to a deeper understanding. By addressing these limitations and pursuing future research avenues, scholars can further advance knowledge in this field and develop effective strategies for improving organizational outcomes.

6. Conclusion

This study makes significant theoretical and practical contributions by investigating the performance effects of integrated TQM-CSR practices in private higher education using employee performance as a mediator. The results demonstrate that practices related to stakeholder focus, governance, human resources, and environmental protection are most impactful for improving universities' organizational performance. Employee performance plays a crucial role in transmitting these TQM-CSR benefits. These findings advance research on integrated TQM-CSR frameworks and their performance effects. For practitioners, the study guides private higher education institutions to prioritize specific TQM-CSR initiatives and focus on enhancing employee performance as a pathway to superior organizational outcomes. Further research can build on this work by testing these relationships over time, examining other potential mediators, and expanding the context.

References

Ali, H. Y., Asrar-ul-Haq, M., Amin, S., Noor, S., Haris-ul-Mahasbi, M., Aslam, M. K. J. C. S. R., & Management, E. (2020). Corporate social responsibility and employee performance: The mediating role of employee engagement in the manufacturing sector of Pakistan. *27*(6), 2908-2919.

Almuntfjy, L. A., & Kowang, T. O. (2021). The Impact of Total Quality Management and Corporate Social Responsibility on the Financial Performance of Higher Education Institutions: A Review with a Focus on Institutions in the United Arab Emirates.

Alrowwad, A. a., Obeidat, B. Y., Tarhini, A., & Aqqad, N. J. I. B. R. (2017). The impact of transformational leadership on organizational performance via the mediating role of corporate social responsibility: A structural equation modeling approach. *10*(1), 199-221.

Amin, M., Aldakhil, A. M., Wu, C., Rezaei, S., & Cobanoglu, C. J. I. J. o. C. H. M. (2017). The structural relationship between TQM, employee satisfaction and hotel performance.

Andjelkovic Pesic, M., & Dahlgaard, J. (2013). Using the Balanced Scorecard and the European Foundation for Quality Management Excellence model as a combined roadmap for diagnosing and attaining excellence. *24*(5-6), 652-663.

Anitha. (2014). Determinants of employee engagement and their impact on employee performance. *International journal of productivity and performance management*.

Asif, M., Awan, M. U., Khan, M. K., Ahmad, N. J. Q., & Quantity. (2013). A model for total quality management in higher education. *47*(4), 1883-1904.

Azam, T., Songjiang, W., Jamil, K., Naseem, S., & Mohsin, M. J. T. T. J. (2023). Measuring green innovation through total quality management and corporate social responsibility within SMEs: green theory under the lens. *35*(7), 1935-1959.

Barclay, D., Higgins, C., & Thompson, R. (1995). *The partial least squares (PLS) approach to casual modeling: personal computer adoption ans use as an Illustration*.

Benavides-Velasco, C. A., Quintana-García, C., & Marchante-Lara, M. J. I. J. o. H. M. (2014). Total quality management, corporate social responsibility and performance in the hotel industry. *41*, 77-87.

Binden, W., Mziu, H., Suhaimi, M. A. J. I. J. o. I., & Research, C. T. (2014). Employing the Balanced Scorecard (BSC) to measure performance in higher education–Malaysia. *4*(1).

Busu, M. J. P. (2019). Applications of TQM processes to increase the management performance of enterprises in the Romanian renewable energy sector. *7*(10), 685.

Chung Sea Law, D. (2010). Quality assurance in post-secondary education: the student experience. *Quality Assurance in Education, 18*(4), 250-270.

Commission, E. (2001). *Promoting a European Framework for Corporate Social Responsibility*: Office for Official Publications of the European Communities.

De Vaus, D. (2002). *Analyzing social science data: 50 key problems in data analysis*: sage.

Demo, G., Neiva, E. R., Nunes, I., & Rozzett, K. J. B.-B. A. R. (2012). Human resources management policies and practices scale (HRMPPS): Exploratory and confirmatory factor analysis. *9*, 395-420.

Dumond, E. J., & Johnson, T. W. (2013). Managing university business educational quality: ISO or AACSB? *Quality Assurance in Education, 21*(2), 127-144.

Elnaga, A., Imran, A. J. E. j. o. B., & Management. (2013). The effect of training on employee performance. *5*(4), 137-147.

Erfurth, M. (2022). Education hubs as a development approach. A phenomenon with geopolitical implications in Singapore and the United Arab Emirates. In *Geopolitical transformations in higher education: Imagining, fabricating and contesting innovation* (pp. 199-214): Springer.

Fonseca, L., Ramos, A., Rosa, Á. l., Braga, A. C., Sampaio, P. J. I. J. o. I., & Engineering, S. (2016). Stakeholders satisfaction and sustainable success. *24*(2), 144-157.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. In: Sage Publications Sage CA: Los Angeles, CA.

Frolova, I., & Lapina, I. (2015). Integration of CSR principles in quality management. *International Journal of Quality Service Sciences*.

Ghobadian, A., Gallear, D., & Hopkins, M. (2007). TQM and CSR nexus. *International Journal of Quality Reliability Management*.

González-Rodríguez, M. R., Martín-Samper, R. C., Köseoglu, M. A., & Okumus, F. J. J. o. s. t. (2019). Hotels' corporate social responsibility practices, organizational culture, firm reputation, and performance. *27*(3), 398-419.

Grant, D., Mergen, E., & Widrick, S. (2005). A comparative analysis of quality management in US and international universities. *Quality control and applied statistics, 50*(1), 59-62.

Hair, J. F., Ringle, C. M., & Sarstedt, M. J. L. r. p. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *46*(1-2), 1-12.

Hemphill, T. J. C. G. T. i. j. o. b. i. s. (2013). The ISO 26000 guidance on social responsibility international standard: what are the business governance implications? *, 13*(3), 305-317.

Henseler, J., Ringle, C. M., & Sarstedt, M. J. J. o. t. a. o. m. s. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *43*, 115-135.

Hopkins, M. (2005). Measurement of corporate social responsibility. *6*(3-4), 213-231.

Hoque, Z., & James, W. J. J. o. m. a. r. (2000). Linking balanced scorecard measures to size and market factors: impact on organizational performance. *12*(1), 1-17.

Hur, W. M., Moon, T. W., Kim, H. J. C. S. R., & Management, E. (2020). When and how does customer engagement in CSR initiatives lead to greater CSR participation? The role of CSR credibility and customer–company identification. *27*(4), 1878-1891.

Islam, S. (2022). *Assessing the impact of corporate social responsibility and total quality management on the firm's performance: a case of the ready-made garment industry in the emerging economy of Bangladesh.* Abertay University,

Jin, Z., Deng, F., Li, H., & Skitmore, M. (2013). Practical framework for measuring performance of international construction firms. *Journal of Construction Engineering Management, 139*(9), 1154-1167.

Katsaros, K. K., Tsirikas, A. N., Kosta, G. C. J. L., & Journal, O. D. (2020). The impact of leadership on firm financial performance: the mediating role of employees' readiness to change. *41*(3), 333-347.

Kazan, H., Gumus, S. J. I. R. o. M., & Research, B. (2013). Measurement of employees' performance: A state bank application. *2*(2).

Khurshid, M. A., Alhidari, A. M., & Tabassum, S. J. S. R. J. (2021). Scale development and validation of total quality and socially responsible management (TQSR-M) framework: dual competitive strategy for management.

Korschun, D., Bhattacharya, C., & Swain, S. D. J. N. M. I. R. (2016). CSR and the frontline context: How social programs improve customer service. *8*(1), 24.

Mehralian, G., Nazari, J. A., Zarei, L., & Rasekh, H. R. J. J. o. c. p. (2016). The effects of corporate social responsibility on organizational performance in the Iranian pharmaceutical industry: The mediating role of TQM. *135*, 689-698.

Mehta, N., Verma, P., & Seth, N. (2014). Total quality management implementation in engineering education in India: an interpretive structural modelling approach. *Total Quality Management & Business Excellence, 25*(1-2), 124-140.

Moratis, L. J. I. J. o. L., & Management. (2016). Out of the ordinary? Appraising ISO 26000's CSR definition. *58*(1), 26-47.

Naqvi, S. M. H., & Khan, M. A. J. I. o. I. B. R. (2013). Employees training and organizational performance: Mediation by employees performance. *5*(4), 490-503.

Nayak, T., & Sahoo, C. K. J. J. o. H. m. (2015). Quality of work life and organizational performance: The mediating role of employee commitment. *17*(3), 263-273.

Ngambi, M. T., & Nkemkiafu, A. G. J. A. J. o. M. (2015). The impact of total quality management on firm's organizational performance. *15*(4), 69.

Ni, W., & Sun, H. J. T. Q. M. (2009). The relationship among organisational learning, continuous improvement and performance improvement: An evolutionary perspective. *20*(10), 1041-1054.

Oakland, J. S., Oakland, R. J., & Turner, M. A. (2020). *Total quality management and operational excellence: text with cases*: Routledge.

Oliveira, C., Oliveira, A., Fijałkowska, J., & Silva, R. J. M. J. o. C. M. I. (2021). Implementation of balanced scorecard: Case study of a portuguese higher education institution. *26*(1), 169-188.

Parast, M. M., & Adams, S. G. J. I. J. o. P. E. (2012). Corporate social responsibility, benchmarking, and organizational performance in the petroleum industry: A quality management perspective. *139*(2), 447-458.

Peterson, W., Gijsbers, G., & Wilks, M. (2003). *An organizational performance assessment system for agricultural research organizations: concepts, methods, and procedures*. Retrieved from

Psomas, E., & Antony, J. J. Q. A. i. E. (2017). Total quality management elements and results in higher education institutions: The Greek case.

Qadariah, M. J. I. J. o. B., & Idris. (2019). MSA, & Idris, S.(2019). Mediating effect of employee performance on the influences of job embeddedness, self-efficacy, and organizational commitment on the public organizational performance. *21*(2), 55-62.

Sahney, S., Banwet, D. K., & Karunes, S. J. T. T. m. (2004). Conceptualizing total quality management in higher education. *16*(2), 145-159.

Sheehy, B. J. J. o. b. e. (2015). Defining CSR: Problems and solutions. *131*, 625-648.

Singh, S. K., Chen, J., Del Giudice, M., El-Kassar, A.-N. J. T. F., & Change, S. (2019). Environmental ethics, environmental performance, and competitive advantage: Role of environmental training. *146*, 203-211.

Singh, V., Kumar, A., & Singh, T. J. O. R. P. (2018). Impact of TQM on organisational performance: The case of Indian manufacturing and service industry. *5*, 199-217.

Soria-García, J., Martínez-Lorente, Á. R. J. T. Q. M., & Excellence, B. (2014). Development and validation of a measure of the quality management practices in education. *25*(1-2), 57-79.

Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. J. J. o. m. (2003). The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviors. *29*(2), 187-206.

Van Esch, E., Wei, L. Q., & Chiang, F. F. J. T. I. J. o. H. R. M. (2018). High-performance human resource practices and firm performance: The mediating role of employees' competencies and the moderating role of climate for creativity. *29*(10), 1683-1708.

Wade, D., & Recardo, R. J. (2001). *Corporate performance management: how to build a better organization through measurement-driven strategic alignment*: Routledge.

Wahjoedi, T., & Sari, A. K. (2021). The Influence Of Job Training And Career Development On Job Performance Through Employee Performance As Mediator. *16*(1), 6049-6058.

Wang, C.-H., Chen, K.-Y., & Chen, S.-C. J. I. j. o. h. m. (2012). Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. *31*(1), 119-129.

Yoon, S. J., Lin, H. K., Chen, G., Yi, S., Choi, J., Rui, Z. J. S., & work, h. a. (2013). Effect of occupational health and safety management system on work-related accident rate and differences of occupational health and safety management system awareness between managers in South Korea's construction industry. *4*(4), 201-209.

Yu-Hong, T., Huang, Y.-F., Su-Chuan, L., Manh-Hoang, D. J. T. J. o. A. F., Economics, & Business. (2021). The effects of total quality management and corporate social responsibility on firm performance: A future research agenda. *8*(4), 277-287.

Zufri, M. Y., Ibrahim, M. J. E. J. o. R., & Vol, R. i. M. S. (2018). The role of employee performance as a mediation variable in the effect of compensation, motivation, and the environment of the workplace on organizational performance. *6*(4).