Received: June 22, 2026
Revised: July 9, 2026
Accepted: July 14, 2026
Published: August 27, 2026

Elicit Journal of Economics and Management Studies
eISSN: 3121-634X
pISSN: 3093-0529

https://elicitpublisher.com

EMPIRICAL PAPER

The Role of Quality Culture in Enhancing the Institutional Performance of The Private Higher Education Institutions in Oman Based on The Resource-Based View Theory

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10.65820/ejems-1vol2-issue2-2026

Abstract

Purpose: This study assesses the extent to which quality culture is embedded in private higher education institutions (HEIs) in Oman and examines its effect on institutional performance through the Resource-Based View (RBV) theory.

Methodology: A quantitative survey design was employed. Data were collected through an online questionnaire from 351 valid responses obtained from personnel in private HEIs in Oman using stratified random sampling. Ordinary Least Squares (OLS) regression analysis was conducted using Python.

Results: The findings indicate that respondents perceive a strong quality-oriented culture within private HEIs. Regression results show that quality culture has a significant positive effect on institutional performance ($\beta = 0.7979$, $R^2 = 0.705$), confirming it as a strong predictor of institutional performance.

Novelty and contribution: This study provides empirical evidence supporting the RBV theory by demonstrating that quality culture functions as a valuable internal resource that enhances institutional performance. It also contributes original insights to the limited body of research on quality culture in private HEIs in Oman.

Social and Practical Implication: The findings offer practical guidance for institutional leaders and policymakers by highlighting the importance of embedding quality culture to strengthen organisational performance, competitiveness, and long-term sustainability in higher education institutions.

Keywords: Institutional Performance, Quality Culture, Governance, Management, Higher Education

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How to cite this article:

Alkindi, B. & Salleh, M. I. B. (2026). The Role of Quality Culture in Enhancing the Institutional Performance of The Private Higher Education Institutions in Oman Based on The Resource-Based View Theory. *Elicit Journal of Economics and Management Studies, 1*(1), 1-25. https://doi.org/10.65820/ejems-1vol2-issue2-2026

1 Introduction

In recent years, competition among higher education institutions has increased due to the expansion of higher education providers (Camacho et al., 2025; Hart & Rodgers, 2024; Tesema & Fathoni, 2023; Oliso, 2023). These institutions compete to increase students' enrollment and retention, secure more funds, and sustain a healthy growth rate (Shadiyev, 2025; De Schepper et al., 2023; Yusuf, 2023) as "today's global competitive environment poses numerous challenges to the survival of higher education institutions" (Iqbal et al., 2024, p. 572). Thus, HEIs strive to acquire competitive advantages that can boost their chances to win larger student shares and funds than their competitors (Qudratova, 2025; Phiri et al., 2024; AlQatiti et al., 2023). In Oman, most private HEIs are relatively new, but their number has increased rapidly in the last 40 years (Almamari et al., 2025; AlGhunaimi & AlGhenaimi, 2024; Al Balushi & Supian, 2022). The government provided a generous subsidy package which encouraged the private sector to establish numerous private HEIs that are currently accommodating many students (AlQatiti et al., 2023; Trevor-Roper, 2023; Mishra & Gupta, 2021).

Various studies argue that institutional performance of HEIs in governance and management plays an important role in the quality, success, and sustainability of the institutions (Fuadi et al., 2025; Azimov et al., 2025; Hadiwidjaja & Riana, 2024; Gasser, 2024). Well-structured governance and management systems enhance the quality of education and enable institutions to achieve their strategic and operational goals (Sain et al., 2025; Hadiwidjaja & Riana, 2024; Abdelaziz, 2022; Huisman & Stensaker, 2022; Ochara, 2021). According to Abdelaziz (2022), implementing good governance in HEIs increases efficiency, effectiveness, the rule of law, and accountability. On the other side, poor governance and management lead to failure to meet institutional objectives and stakeholders' expectations (Yusuf, 2023), and encourage negative conduct such as fraud and corruption (Tagbo, 2024; Abdelaziz, 2022; Nur-Ullah & Rahman, 2021).

One crucial factor to enhance the institutional performance of HEIs is fostering a quality-oriented culture (Ghislandi & Raffaghelli, 2025; Albaroudi & Iqbal, 2024; Iqbal et al., 2023). A culture of quality refers to the internal system, processes, practices, attitudes, and values that prioritise maintaining and continuously improving quality (Wiśniewska & Grudowski, 2024; Iqbal et al., 2023; Legemaate et al., 2022; Herminingsih & Rizki, 2021). It also represents the customs, procedures and systems that drive an institution to enhance the quality of services and functions (Al-Zoubi et al., 2023; Kartini et al., 2023). Fostering a quality culture promotes accountability and transparency within governance and management (Sam et al., 2025; Pell & Amigud, 2023; Rahnuma, 2020), enhances service quality, and supports efficient utilisation of financial resources (Baharun & Khomairotusshiyamah, 2025; Mohammed, 2020; Ismail, 2020). Thus, HEIs increase their competitive advantages.

External accreditation bodies play an important role in spreading a culture of quality among HEIs (Ghislandi & Raffaghelli, 2025; Ahmed, 2025; Dagar & Kumar, 2024). Besides assessing the quality of HEIs, one of the fundamental objectives of establishing accrediting agencies is to promote a quality culture within the institutions (Al Jardani & Ibra, 2023; Al Balushi & Supian, 2022). Accreditation entities help institutions sustain a culture of quality through implementing performance enhancement mechanisms and continuous quality checks (Mulimani & Naikar, 2024; Mitchell et al., 2020) as well as through meeting quality standards (Iqbal et al., 2023). Thus, the government of Oman established an accreditation entity named the Omani Authority for Academic Accreditation and Quality Assurance of Education (OAAAQA) to promote a culture of quality among the local HEIs (MOJLA, 2020; Al Jardani & Ibra, 2023).

That being said, numerous studies in the literature explore the effect of quality culture on the performance of HEIs (Nygren-Landgärds et al., 2024; Albaroudi & Iqbal, 2024; Stalmeijer et al., 2023; Musah et al., 2023). According to Iqbal et al. (2023), quality culture in HEIs is an internal driver for excellence, success, and better performance. Similarly, Al-Amri et al (2020) and Aburizaizah (2022) state that when HEIs cultivate a quality culture, it enhances their overall performance and enables them to better prepare for external quality assurance evaluation. Furthermore, Alzeaideen (2019) supports the same argument, where he states in his study that quality culture significantly and positively impacts the financial and operational performance of public and private universities in Jordan. Additionally, Iqbal et al. (2023) prove in their study that quality culture positively affects the quality of public and private universities in Pakistan in terms of services, teaching, and community services.

Nonetheless, only a few studies investigate the role of quality culture in higher education in the context of Oman (Ali & AlSalami, 2025; Shahzad & Shaukat, 2021). Additionally, the effect of quality culture on institutional performance in the international context is rarely assessed in terms of governance and management roles and practices, but in

education, research, and services (Iqbal et al., 2024) and financial and operational performance (Alzeaideen, 2019). Therefore, based on the identified gaps in the local and international contexts regarding the interrelationship between quality culture and HEIs' performance in governance and management, this study aims to find answers to (1) what is the perception of quality culture among staff members of the private higher education institutions in Oman? and (2): how does quality culture affect the institutional performance of the private higher education institutions in Oman?

2 Literature Review

2.1 Institutional Performance

Institutional performance is one of the areas that are extensively researched in the literature, primarily in studies that explore the success and failure of organisations (Iqbal et al., 2023). There is no one specific definition for institutional performance, but it is mostly referred to as systems and structures that organise daily work and lead to achieving objectives (Salim et al., 2025; Aguilera et al., 2024; Febrian et al., 2023; Akinade & Obiekwe, 2023). Nonetheless, institutional performance is a broad concept, within which various aspects have been studied, such as innovation (AlMalki & Durugbo, 2023), financial and environmental performance (Guang-Wen & Siddik, 2023), corporate performance (ALGhaswyneh, 2025; Velte, 2023), and adaptability to changes (Ul Hassan et al., 2025). In HE, Institutional performance is equally important and is commonly studied (Iqbal et al., 2023). Researchers have investigated institutional performance of HEIs in academia (Paudel et al., 2023), education and community services (Iqbal et al., 2024), social responsibility (Salim et al., 2025) and research (Alshaikhmubarak et al., 2020). In this study, institutional performance is operationalised in terms of governance and management.

Governance and management primarily refer to the structures and procedures pertinent to decision-making and achieving objectives (Nguyen et al., 2024; Abdelaziz, 2022; Filho et al., 2021). However, while governance is more about the overall strategic planning, management tends to deal with day-to-day activities, yet those roles mostly intersect (Yasser, 2019). Governance and management play a significant role in guiding institutions to achieve their objectives and stakeholders' expectations (Fuadi et al., 2025; Hadiwidjaja & Riana, 2024; Heaton et al., 2023; Saavedra, 2020) and have a direct effect on their quality (Sain et al., 2025). Institutions strive to build and maintain governance and management structures and practices that prioritise ethics, transparency, accountability, flexibility, inclusion, and stakeholder orientation (Wiśniewska & Grudowski, 2024; Ofor-Douglas, 2022; Saavedra, 2020). Thus, for HEIs to sustain growth and competitiveness, they need robust governance and management, whereas poor structures and practices can lead to failure and can compromise quality (Nguyen et al., 2024; Abdelaziz, 2022; Nur-Ullah & Rahman, 2021; Huisman & Stensaker, 2022; Rathod, 2020). Deficiencies in governance and management in HEIs lead to poor academic quality and integrity, and the prevalence of fraud and plagiarism (Eugster et al., 2024; Rosser, 2023; Afriansyah et al., 2022).

To support institutional performance and quality of the private HEIs in Oman, the government introduced an academic affiliation policy which compels the local institutions to be affiliated with internationally well-established HEIs that can help them enhance their quality (Albusaidi & Albusaidi, 2025; Trevor-Roper, 2023; Cheng & Al Shukaili, 2022; Al-Issa, 2020). The international affiliates must regularly conduct site visits to the local private institutions to evaluate their quality and performance in various areas such as program delivery, services, and academic affairs (MoHERI, 2023). Thus, with international affiliates coming from diverse educational systems such as the UK, Malaysia, India, and Jordan (Trevor-Roper, 2023), the local private HEIs have an opportunity to benchmark their structures and practices with good practices of more experienced partners (Al-Issa, 2020).

2.2 Quality Culture

Quality as a concept encompasses various perspectives, but has been chiefly associated with the satisfaction of customers (Martin & Gremyr, 2025). In education, quality refers to its worth (input, process, output/outcome) and the mechanisms of constant growth and improvement to achieve objectives and stakeholders' satisfaction (Aljarallah & Dutta, 2022; Madani, 2019). Wani et al. (2025) state that "by quality, we understand and define it as fitness to serve" (p. 124). According to Khoa et al. (2025), the definition of quality includes: "(1) quality is excellence; (2) quality is perfection; (3) quality is fit for purpose; (4) quality is value for money; and (5) quality is transformational" (p. 490). Thus, quality is a critical concept, and it has important implications for the performance of the HEIs (Huisman, 2025;

Musah et al., 2023). HEIs are expected by stakeholders to maintain a culture of quality to achieve educational goals and aspirations (Iqbal et al., 2023; Musah et al., 2023; Kooli, 2019). With increasing autonomy, HEIs have become more accountable for maintaining quality internally (Weenink, 2025). Thus, HEIs tend to incorporate performance indicators and quality measurements in their day-to-day processes to instil a culture of quality (Iqbal et al., 2023; Abdelaziz, 2022; Kooli, 2019).

Quality culture is a dynamic concept that is continuously evolving; therefore, it can be defined in various ways (Khoa et al., 2025; Martin & Gremyr, 2025; Verschueren et al., 2023). Institutions may have different meanings for their quality culture depending on their requirements and environment (Iqbal et al., 2023; Nygren-Landgärds et al., 2024). The internal quality culture mostly refers to values, attitudes, customs, systems, practices, and processes that establish and continuously improve the quality of services and products (Saarikallio & Tyrväinen, 2023; Herminingsih & Rizki, 2021). It reflects the overall conduct, attitudes, and values (Iqbal et al., 2024; Pell & Amigud, 2023). According to the European University Association, quality culture has two main components: the organisational culture of an institution and the structure and management processes. The first component represents the values, beliefs, and stakeholders' expectations that formulate norms and shape behaviours within the institution, while the second part coordinates activities to improve the institution's quality of functions (Iqbal et al., 2023).

Over the years, establishing a culture of quality within HEIs has received more attention (Huisman, 2025; Weenink, 2025) and has been studied widely in the literature (Iqbal et al., 2024; Saarikallio & Tyrväinen, 2023). Several studies indicate that it is very important for HEIs to cultivate a culture of quality because it helps them maintain sustainable development and meet stakeholders' expectations (Ghislandi & Raffaghelli, 2025; Al-Zoubi et al., 2023; Kartini et al., 2023; Legemaate et al., 2022; Hashim, 2021). It also directly enhances the quality of education (Baharun & Khomairotusshiyamah, 2025). Thus, HEIs' leaders strive to foster a quality culture among staff members to enhance the quality of services and the outcomes (Musah et al., 2023; Saarikallio & Tyrväinen, 2023). According to Camilleri (2021), quality culture is represented by the institution's values, attitudes, and norms of conduct that employees are expected to absorb and practice, especially when dealing with students and other stakeholders to reflect a positive image of the institution. Nygren-Landgärds et al. (2024) state that quality culture in Nordic HEIs shares common features; thus, a model is introduced to be used as an enabler for collaboration between HEIs and to help other HEIs build their own concept and system of quality culture.

2.3 Quality Culture and Institutional Performance

Quality is a crucial concept in the sector of higher education, and it has important implications for the success and sustainability of HEIs (Martin & Gremyr, 2025; Stalmeijer et al., 2023; Musah et al., 2023). Various studies identify quality culture as values, attitudes, customs, norms, behaviours, systems, practices, and processes that establish and continuously improve the quality of services and products of institutions (Ghislandi & Raffaghelli, 2025; Herminingsih & Rizki, 2021). According to Sam et al. (2025), building a quality culture helps universities instil quality and accountability within their staff members. Baharun and Khomairotusshiyamah (2025) state that fostering a quality culture is crucial for the success of HEIs, and "the implementation of a quality culture is reflected in continuous efforts to improve the quality of education, with continuous evaluation of the curriculum, facilities and services" (p. 146).

Alzeaideen (2019) states that quality culture is a major player in the success of public and private universities in Jordan. He adds that, according to perceptions of top management of universities, quality culture significantly and positively impacts various aspects in universities such as financial performance, operational performance, management practices, and universities' reputation. Additionally, Iqbal et al. (2023) further assess the role of quality culture in the higher education system in Pakistan. They reveal that quality culture is perceived by public and private universities as an important aspect for success. They also state that quality culture significantly affects service quality in both public and private Pakistani universities. These findings represent an indication of the crucial role of quality culture in enhancing the quality of services of HEIs, which eventually enhances the overall performance of the institutions. According to Sciarelli et al. (2020), both soft and hard aspects of quality culture play a major role in enhancing the institutional performance of HEIs. His study reveals that soft and hard quality culture positively affects innovation and organisational performance of public universities in Naples (Italy).

The effect of quality culture on universities is further supported by Do and Dang (2021), who state that quality culture is a real driver for university quality and performance. It serves as a foundation for continuous improvements in various

areas that cover teaching, human capital, and sustainability. Moreover, Damanik et al. (2023) argue that quality culture can also positively influence the retention of employees, which may contribute to the performance of the institutions. Their study, which took place at Universitas Negeri Medan, reveals that along with leadership, quality culture has a positive effect on job satisfaction and commitment to implementing quality assurance policies. Thus, cultivating a quality culture enables the leadership to enhance the university's performance. Additionally, quality culture can also be instrumental for universities pursuing an entrepreneurial approach. According to Kanan et al. (2023), possessing a quality culture lays the ground for a successful entrepreneurial university through fostering a culture of continuous improvement and robust administrative processes. This culture enables the university to properly address the needs of students and industry and incorporate them into the university curricula and services.

The studies discussed in this section have consistent conclusions, that is, quality culture is a crucial factor for enhancing the institutional performance of institutions in various sectors. Nonetheless, quality culture still requires more attention and further studies, especially in the context of higher education performance in governance and management. According to Tutko (2019), reviewing the current literature in quality culture indicates that there is still more to explore, especially on the factors that promote or prevent the development of quality culture. Malmir et al. (2023) also support this argument, where they state that quality culture has multiple dimensions and thus requires further studies. Additionally, there is limited evidence of studies that assess the effect of quality culture on the performance of HEIs in terms of their governance and management, especially in the context of Oman. Therefore, based on the discussion, the literature review, and the identified gaps, this study proposes the following hypothesis (H): Quality culture has a significant effect on the institutional performance of the private higher education institutions in Oman.

2.4 Study Framework

This study utilises the Resource-Based View (RBV) as an underpinning theory for the proposed conceptual framework shown in Figure 1. RBV theory posits that institutions can enhance their competitive advantages over their peers through utilizing their unique resources and capabilities (Hart & Rodgers, 2024; Ferreira & Ferreira, 2024). Developing unique internal resources and assets can become a leverage for institutions striving to enhance their performance (Malhotra et al., 2024; Nayak et al., 2023). According to Agrawal et al. (2024) and Sanabria-Z et al. (2024), the internal advantages of institutions can either be their physical capabilities such as advanced technologies and skilled human capital, or intangible aspects such as culture, knowledge, and values. Based on this theory, HEIs can leverage their internal resources derived from their quality culture to develop competitive advantages. Considering that the quality culture of an institution refers to the shared and prevailing values, beliefs and practices that prioritise quality and continuous improvement (Iqbal et al., 2024; Saarikallio & Tyrväinen, 2023), this culture, based on RBV, can become a key determinant for institutions' competitive advantage (Iqbal et al., 2023). Through fostering quality-oriented practices and principles, HEIs can enhance the quality of their overall performance, including their governance and management systems (Yusuf, 2023; Abdelaziz, 2022; Sciarelli et al., 2020).

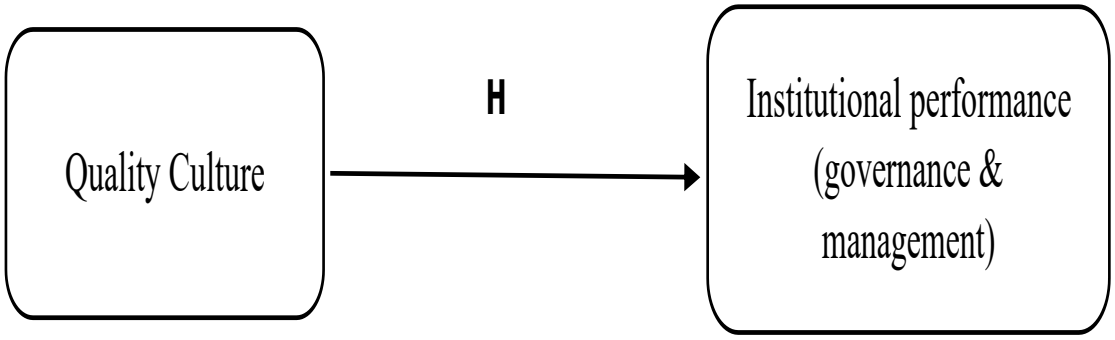

Figure 1 Conceptual Framework

Source: Author

3 Methodology

3.1 Population and Sampling

This study is based on a survey design. The population of the study includes 3922 staff members of the private HEIs in Oman. The population comprises diverse individuals in terms of age, gender, qualifications, work position, and years of experience. Using Cochran's formula and table, the sample size is calculated as 386 persons. The questionnaire was distributed online among the identified sample using a stratified random sampling technique to ensure proper representation of every single institution. After numerous follow-ups, a total of 351 responses were successfully received, accounting for a high response rate of 90.9%.

3.2 Measurement

A 5-point Likert scale online questionnaire was used in this study to collect data. The scale provided respondents with five answering options (strongly disagree, disagree, neutral, agree, strongly agree). The questionnaire included two main parts: a demographic information section and a survey statement section. The demographic section asked respondents to provide information pertinent to gender, age, educational qualification, job position, and years of experience. The items in the demographic variable were all adopted from other scales in previous studies (Iqbal et al., 2023; Kumar et al., 2020). The survey statements section comprised 29 items measuring two variables: quality culture and institutional performance. Quality culture was measured using 12 items adopted from established scales in previous studies (Iqbal et al., 2023; Wu, 2015; Sattler & Sonntag, 2018). The items measuring institutional performance comprised 11 statements on governance roles and structures and 8 statements on management roles and structures. All 19 items were adapted from criterion (1.2) and criterion (1.3) of the first institutional standard in Oman's accreditation manual (OAAAQA's ISA manual). The questionnaire was validated by 12 experts to enhance clarity and consistency. Half of the experts are from the private HEIs in Oman, whereas the other six are quality assurance experts. Moreover, the questionnaire was pilot tested with 4o participants and Cronbach's Alpha was obtained (overall result: 0.979). Additionally, the questionnaire was subjected to factor analysis and reliability and validity analysis using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test.

4 Preliminary Analysis and Results

Data were analysed in this study using Python. Python is a versatile and multipurpose programming language used for data analysis and visualisation, web development, and machine learning (Hill et al., 2024; Salgotra et al., 2024). It provides several built-in tools and functions that are widely used in research for data cleaning and addressing crucial data issues, such as data normality, outliers, and duplicate and missing values (Ramesh & Rajabiyazdi, 2024; Maikano, 2024; Côté et al., 2024; Srivastava & Kaur, 2023).

4.1 Demographic Profile

Table 1 presents the demographic profile of the respondents. Participation from males and females in the survey is nearly the same (51.0% males and 49.0% females). In terms of age, 30.2% of respondents belong to the age group 31–40, followed by the 41–50 age group (48.7%) and the 51 years and above age group (16.0%), whereas respondents aged 30 years and below (5.1%) constitute the smallest population. In addition, most respondents hold higher academic qualifications, with Doctorate holders representing 49% (175 individuals) and Master's degree holders accounting for 30.8% (108 individuals). A further 17.1% (60 participants) hold Bachelor's degrees, while only 2.3% (8 individuals) hold Diplomas. Moreover, the demographic profile reveals a diverse distribution of respondents across work roles. The largest groups are Lecturers (29.1% / 102 participants) and Administrators (24.2% / 85 participants). Other designations in the sample also include Directors (13.7% / 48 participants), Deans (13.4% / 47 participants), and HoDs (10.5% / 37 participants). Top positions in HEIs like Vice Chancellors comprise 4.3% of participants, while people identified with (Others) make up 4.8% (17 participants), covering a variety of roles within the institutions. Furthermore, 117 participants have 20 or more years of experience, accounting for 33.3%, while 28.8% of participants have a range of 15-19 years of experience, followed by 61 participants (17.4%) with 10-14 years of experience. A smaller portion,

54 participants (15.4%), report 5–9 years of experience, while 5.1% (18 participants) have less than 5 years of work experience.

Table 1 Characteristics of Demographic Profile

Demographic Information	Category	Frequency	Percentage
Gender	Female	172	49.0%
	Male	179	51.0%
Age	30 and below	18	5.1%
	31 – 40	106	30.2%
	41 – 50	171	48.7%
	51 and above	56	16.0%
Educational Qualification	Diploma	8	2.3%
	Bachelor	60	17.1%
	Master	108	30.8%
	Doctorate	175	49.9%
Work Position	Administrator	85	24.2%
	Dean	47	13.4%
	Director	48	13.7%
	HoD	37	10.5%
	Lecturer	102	29.1%
	VC	15	4.3%
	Other	17	4.8%
Years of Experience	Less than 5 years	18	5.1%
	5 – 9	54	15.4%
	10 – 14	61	17.4%
	15 – 19	101	28.8%
	20 and above	117	33.3%

4.2 Missing Data

In research, missing data means the loss of some significant data in a survey for specific observations or variables under investigation (Little et al., 2024; Emmanuel et al., 2021), which can occur due to human fault, such as skipping items in a survey (Saunders et al., 2023; Flores et al., 2023). In other cases, machine faults can also lead to missing significant data (Emmanuel et al., 2021). Thus, the online Google Forms survey used in this study was designed to require responses to all items before submission, thereby preventing missing data resulting from incomplete participant responses. Additionally, 12 experts reviewed and validated the survey to enhance clarity and minimise ambiguity, which could also lead to missing significant data due to a misunderstanding of items. The survey was pre-tested with 40 respondents.

4.3 Measurement

Outliers refer to values or data points with different characteristics and look significantly different from the general pattern of a data set (Alves et al., 2024; Dash et al., 2023; Alghushairy et al., 2020). Outliers can distort the interpretation of conclusions due to extreme values (Saunders et al., 2023; Sullivan, Warkentin & Wallace, 2021). This study utilises the Interquartile Range (IQR) method to identify potential outliers, which is a measure of statistical

dispersion and is a standard approach for detecting outliers in a dataset (Magar et al., 2024; Muslikh et al., 2023). It is done by computing the interquartile range (IQR) as the difference between the third quartile (Q3) in the 75th percentile of the dataset, and the first quartile (Q1), which is the 25th percentile of the dataset, while setting the lower and upper bounds using a multiplier of 1.5 (Adil & Irshad, 2024).

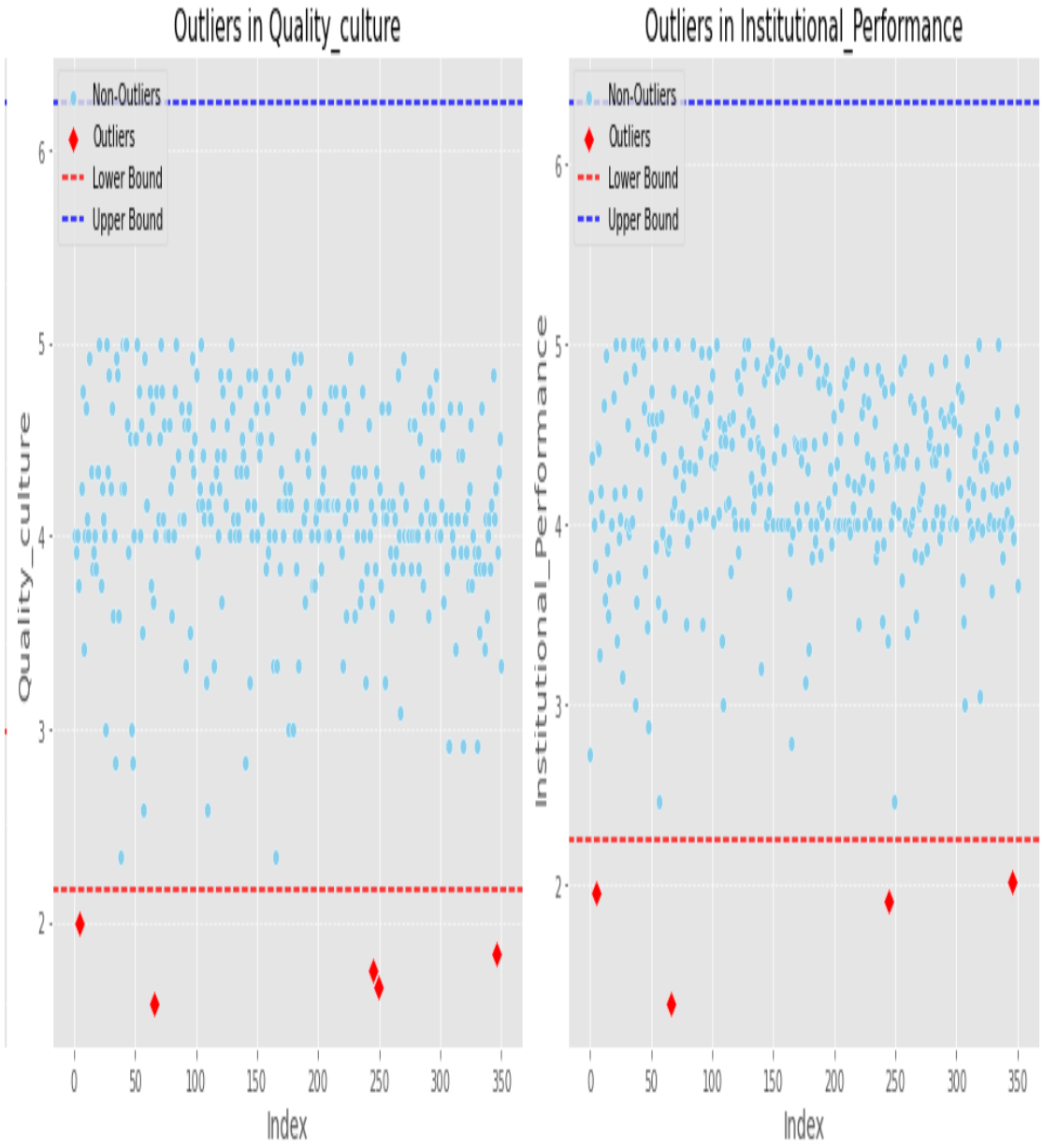

Figure 2 Outliers' assessment for quality culture and institutional performance

The scatter plots for quality culture and institutional performance (Figure 2) show few data points below the lower bound (marked in red), suggesting occasional lower ratings for these variables, potentially indicating divergent views on quality culture and institutional performance among respondents. Given that the two variables operate on a 1–5 scale, the detected outliers do not significantly affect the model. Since the scale is bounded, the influence of these outliers on statistical analysis or regression modelling is minimal. The values flagged as outliers represent valid responses within the scale, and their effect is limited due to the relatively constrained range of data (1 to 5). According to Zou and Djokic (2020), an outlier may not always occur due to data errors or wrong measurement, but sometimes as a result of respondents' genuine opinions. Thus, these outliers are unlikely to distort the model's outcomes and, therefore, are retained in the analysis as they reflect genuine responses.

4.4 Perceptions of quality culture

The survey collected data pertinent to perceptions of quality culture within Oman's private HEIs as reflected in the shared values, practices, and attitudes toward continuous improvement, student-centeredness, and the effectiveness of governance and management in fostering an environment committed to quality. Twelve statements (Q1–Q12) are rated by respondents (Table 2 below), who express their level of agreement on a scale from "Strongly Disagree" to "Strongly Agree." The analysis provides insights into how institutions prioritise quality through proactive initiatives, teamwork, and leadership involvement.

The data reveal that 60.11% of respondents agree and 15.95% strongly agree that their institutions are proactive in addressing students' needs, yielding a mean score of 3.78. However, 13.11% disagree or strongly disagree, resulting in a relatively higher standard deviation of 0.88, indicating some variability in perceptions. This high level of agreement suggests that most respondents view their institutions as responsive to student requirements, a key component of quality culture. Additionally, there is strong consensus on the importance of student satisfaction, with 67.81% strongly agreeing and 27.92% agreeing that it is critical to institutional survival. The low disagreement (0.28%) and mean score of 4.62 reinforce the emphasis on student-centred values within HEIs. This finding highlights that institutions recognise the vital role of student satisfaction in their ongoing success and competitiveness.

Respondents largely support the belief that continuous improvement is necessary, with 53.56% strongly agreeing and 42.17% agreeing. Only 0.57% disagree with this statement, leading to a very high mean score of 4.47 and a low standard deviation of 0.65. This strong alignment suggests that continuous improvement is ingrained as a core value, reinforcing the institution's commitment to quality. Yet, the response to using cross-functional teams is moderately positive, with 61.25% agreeing and 8.55% strongly agreeing. However, 7.98% disagree, and a notable 20.51% remain neutral, resulting in a mean score of 3.67 and a standard deviation of 0.81. This indicates that while teamwork is present, there may be room for improvement in integrating collaborative practices across departments.

There is a high level of agreement that quality values are actively practised, with 66.10% agreeing and 27.07% strongly agreeing. The low disagreement rate (0.57%) and a mean of 4.17 suggest that institutions are dedicated to translating quality principles into actionable practices, reinforcing the institutional commitment to quality culture. Moreover, a majority (59.54%) agree, and 18.52% strongly agree that quality improvement ideas are openly discussed, with a mean score of 3.83. However, 10.54% disagree, which, along with a standard deviation of 0.90, suggests some divergence in opinions. This reflects a generally positive view of openness but indicates that some institutions may not be fully inclusive in quality-related dialogues.

Most respondents believe their institutions promote a quality culture in education, as reflected by 60.97% agreement and 33.62% strong agreement. The low disagreement (0.28%) and high mean of 4.26 indicate a very high level of consensus, underscoring that quality in education is a shared priority among HEIs. Additionally, there is strong agreement that institutions maintain a positive attitude toward quality, with 58.97% agreeing and 35.04% strongly agreeing. The mean score of 4.26 and standard deviation of 0.68 confirm a very high level of positive sentiment toward quality culture, reinforcing its importance within institutional practices.

Respondents largely agree that their institution's leadership fosters a quality culture, with 62.68% agreeing and 30.77% strongly agreeing. The mean of 4.21 and low disagreement rate (0.85%) highlight the critical role of governance in promoting quality values, suggesting that institutional leaders are active proponents of quality-focused initiatives. Similarly, a strong consensus exists regarding leadership involvement in quality-related initiatives, with 66.38% agreeing and 24.79% strongly agreeing. The mean score of 4.12 and standard deviation of 0.67 reflect a high level of institutional support for leadership-driven quality initiatives, furthering the engagement of governance bodies in maintaining standards.

Respondents generally agree that adequate quality assurance mechanisms are in place, with 67.24% agreeing and 12.82% strongly agreeing. However, 9.12% disagree, resulting in a mean score of 3.82 and a standard deviation of 0.80. This indicates that while most respondents are confident in their institution's quality systems, there are areas that could benefit from enhancement. There is also a high level of agreement regarding investment in professional development, with 58.12% agreeing and 32.19% strongly agreeing. The mean score of 4.17 and a moderate standard deviation of 0.76 suggest that institutions recognise the importance of supporting faculty and staff in quality-related growth, though some variability in responses suggests potential differences in investment levels across institutions.

In summary, the overall perception of quality culture across these twelve statements is favourable, with 57.62% agreement and an average mean score of 4.11, reflecting a "High" level of consensus among respondents as visualised in Figure 3 below. The standard deviation of 0.57 indicates a consistent belief that quality culture is well-embedded within Oman's HEIs. The findings answer the first question of this study (SQ1) by revealing that HEIs are largely committed to fostering quality through proactive practices, leadership involvement, and continuous improvement, although some areas - such as teamwork and quality assurance - may benefit from further development to fully support a comprehensive culture of quality across all levels of the institution.

Table 2 Perceptions of quality culture.

	Feature	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean	Std Dev	Level
Q1	Our institution is proactive in anticipating students' needs.	0.28	13.11	10.54	60.11	15.95	3.78	0.88	High
Q2	Our institution believes that student satisfaction is critical for the institution's survival.	0.28	1.42	2.56	27.92	67.81	4.62	0.64	Very high
Q3	Our institution believes that continuous improvement is critical for the institution's survival.	0.57	0.85	2.85	42.17	53.56	4.47	0.65	Very high
Q4	Our institution uses cross-functional teams to find better solutions.	1.71	7.98	20.51	61.25	8.55	3.67	0.81	High
Q5	Quality values of our institution are actually put into practice.	0.57	1.71	4.56	66.10	27.07	4.17	0.64	High
Q6	Ideas concerning quality improvement are openly discussed in our institution.	1.42	10.54	9.97	59.54	18.52	3.83	0.90	High
Q7	Our institution believes that it promotes a culture of quality in education.	0.28	1.99	3.13	60.97	33.62	4.26	0.64	Very high
Q8	There is a positive attitude towards quality within our institution.	0.57	2.28	3.13	58.97	35.04	4.26	0.68	Very high
Q9	leadership and governance in our institution foster a culture of quality.	0.85	1.99	3.70	62.68	30.77	4.21	0.68	Very high
Q10	leadership and governance bodies in our institution are involved in quality-related initiatives.	0.57	2.85	5.41	66.38	24.79	4.12	0.67	High
Q11	In our institution, there are adequate quality assurance mechanisms in place.	0.85	9.12	9.97	67.24	12.82	3.82	0.80	High
Q12	Our institution invests in the quality-related professional development of faculty and staff.	1.42	2.28	5.98	58.12	32.19	4.17	0.76	High
	Quality culture	0.78	4.68	6.86	57.62	30.06	4.11	0.57	High

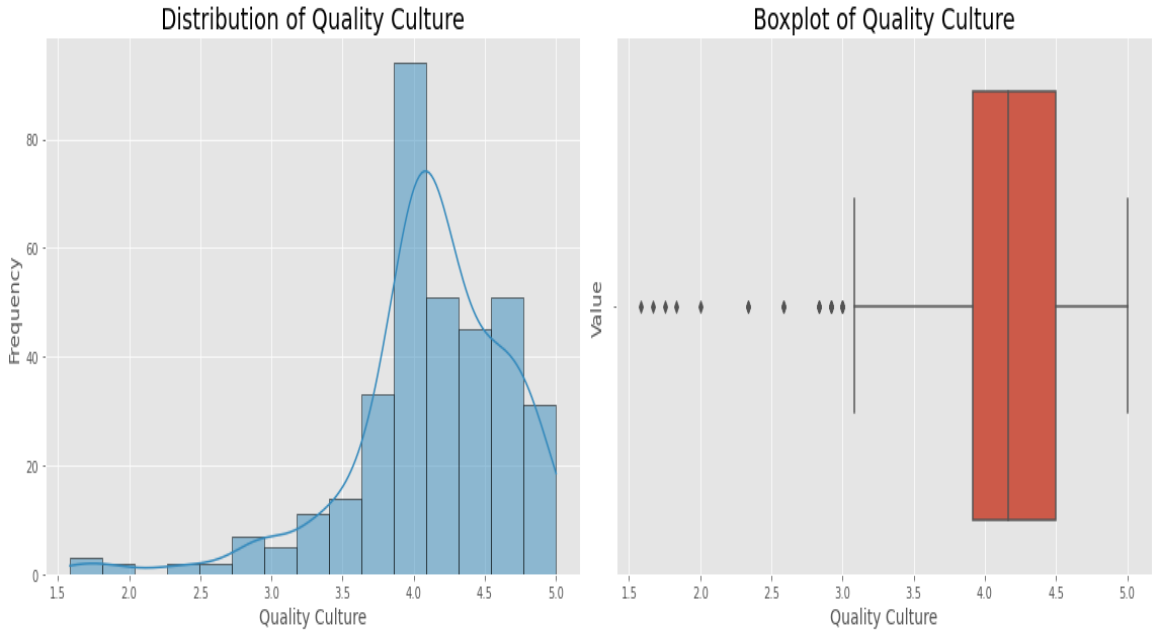

Figure 3 Distribution and boxplot of quality culture.

4.5 Quality culture vs institutional performance

An ordinary least squares regression analysis was conducted to assess the effect of quality culture on the institutional performance of the private HEIs in Oman. Standard performance metrics such as R-squared, adjusted R-squared, and coefficient values were used to check if the model is fit and robust. These metrics provide a clear picture of how significantly quality culture affects institutional performance. According to Gao (2024), in OLS regression models, the value of the R-squared indicates the proportion of the variance in the dependent variable that is explained by the independent variable, which normally falls between 0 and1. The model shown in Table 3 has an R-squared value of 0.705. This high value indicates that 70.5% of the variability in institutional performance is explained by quality culture, suggesting a strong effect between these two variables. The adjusted R-squared, which indicates the number of predictors, is 0.705. This value is consistent with the R-squared, confirming a robust model fit.

Moreover, the F-statistic in OLS regression assesses the overall significance of the model. The null hypothesis, typically, is that all coefficients, excluding the intercept, are equal to zero, suggesting that the model does not explain any variance in the dependent variable (Blanca et al., 2023). The p-value that is associated with the F-statistic in the model reflects the probability of observing the F-statistic if the null hypothesis were true. As shown in Table 3, the F-statistic is 835.8 with a p-value of 1.19e-94. The extremely high F-statistic and low p-value indicate that the model is statistically significant, with quality culture having a substantial effect on institutional performance.

The regression analysis also reveals that the intercept value is 0.9303 ($p < 0.001$), indicating that when quality culture is zero, the baseline level of institutional performance is 0.9303. The coefficient for quality culture is 0.7979 ($p < 0.001$), which means that for each one-unit increase in quality culture, institutional performance increases by 0.7979 units, holding other variables constant. This positive coefficient value is highly significant, with a t-value of 28.911, demonstrating a strong positive effect of quality culture on institutional performance.

Table 3 Regression analysis of the effect of quality culture on institutional performance

Dep. Variable:	Institutional_Performance	R-squared:	0.705
Model:	OLS	Adj. R-squared:	0.705
Method:	Least Squares	F-statistic:	835.8
Date:	Sat, 09 Nov 2024	Prob (F-statistic):	1.19e-94
Time:	10:37:14	Log-Likelihood:	-66.020
No. Observations:	351	AIC:	136.0
Df Residuals:	349	BIC:	143.8
Df Model:	1		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
Intercept	0.9303	0.115	8.116	0.000	0.705	1.156
Quality_culture	0.7979	0.028	28.911	0.000	0.744	0.852

Furthermore, the scatter plot in Figure 4 further substantiates this analysis by visually demonstrating the strong positive effect of quality culture on institutional performance. The upward trend observed in the plot indicates that higher quality culture scores are associated with higher performance values, suggesting a direct and positive association between the presence of a strong quality culture and higher institutional performance outcomes. This visual consistency reinforces the idea that prioritising quality culture is closely tied to achieving superior institutional performance outcomes. Thus, institutions with well-developed quality cultures are likely to report better performance metrics, which may include governance effectiveness, accountability, resource management, and strategic alignment (Sam et al., 2025; Iqbal et al., 2024). Conversely, institutions with weaker quality culture practices might experience lower performance outcomes, highlighting the importance of focusing on quality-driven initiatives (Riaz et al., 2023; Yusuf, 2023). The OLS regression model, along with the scatter plot, provides an answer for the second question in this study (SQ2), showing that quality culture demonstrates a significant positive effect on the institutional performance of the private HEIs in Oman. Thus, the hypothesis of the study is supported.

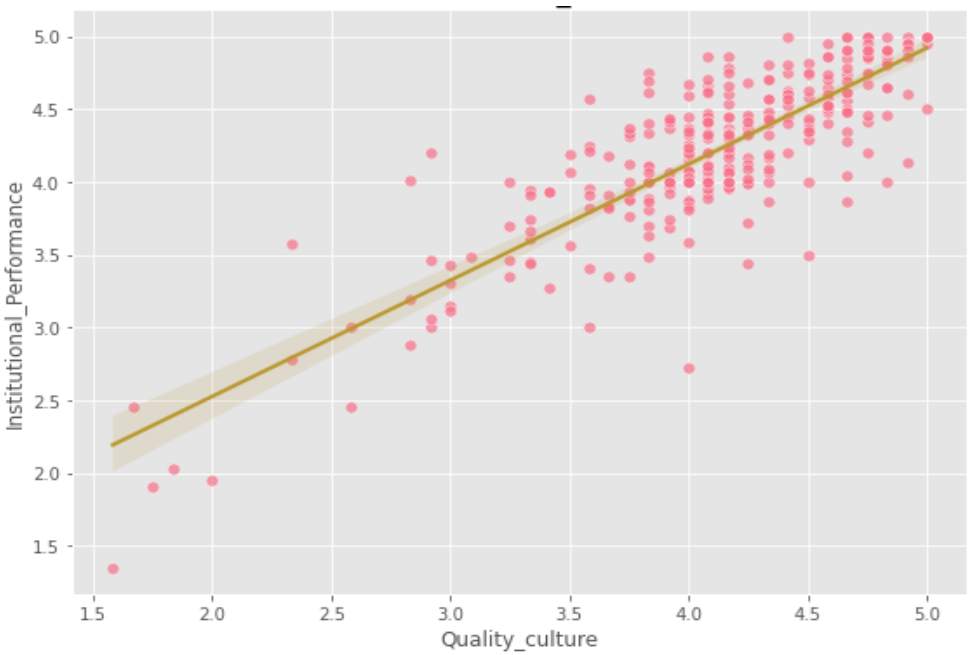

Figure 4 Scatter plot of the relationship between quality culture and institutional performance.

5 Discussion

Analysis of the survey outcomes shows that a quality culture is adequately fostered in private HEIs in Oman, which is crucial for understanding how embedding quality practices affects the institutions' overall performance. The survey reveals a high level of agreement among respondents that quality values are actively practised in their institutions, with 66.10% agreeing and 27.07% strongly agreeing. Most respondents also believe that their institutions promote a quality culture in education, as reflected by 60.97% agreement and 33.62% strong agreement. Additionally, respondents largely agree that their institution's leadership fosters a quality culture, with 62.68% agreeing and 30.77% strongly agreeing. These high levels of consensus indicate that the private HEIs have a well-embedded and positively perceived quality culture with practised values, which reflects positively on their institutional performance and signals to their stakeholders a commitment to excellence.

Furthermore, the ordinary least squares regression analysis of quality culture and institutional performance reveals that the coefficient for quality culture is 0.7979, with a highly significant p-value ($p < 0.001$). This outcome means that a one-unit increase in quality culture leads to a 0.7979 unit increase in institutional performance. The strong positive coefficient value reflects the significant effect of fostering a quality-driven environment, making it a critical factor for improving institutional performance within HEIs. Thus, the findings of the OLS regression and the survey reflect an overall quality-oriented atmosphere within the private HE sectors where quality is prioritised and practised. This outcome supports the study's hypothesis that quality culture has a significant effect on the institutional performance of the private HEIs in Oman. It also provides more evidence for the argument that quality culture leads to better institutional performance among HEIs as presented by other scholars (Martin & Gremyr, 2025; Ghislandi & Raffaghelli, 2025; Stalmeijer et al., 2023; Iqbal et al., 2023).

The positive relationship between cultivating a quality culture and achieving better institutional performance is consistent with other previous studies in the literature. For example, Alkhawaldeh (2025) reports that quality culture exerts a significant positive effect on team-building excellence in engineering companies. Similarly, Khalfan et al. (2022) show that quality culture plays an essential role in improving the performance and success of organisations through the implementation of quality management practices. Additionally, Haris et al. (2023) state in their study that the success and sustainability of SMEs are positively supported by cultivating a robust quality culture because it enhances employees' performance. Furthermore, Riaz et al. (2023) argue that the quality culture of private firms contributes positively to their success through enhancing performance and improving competitive attributes. In higher education, Iqbal et al. (2023) conclude that quality culture significantly affects the quality and performance of public and private universities in Pakistan. The same outcome is further supported in a study by Sciarelli et al. (2020), where quality culture plays a positive role in enhancing innovation and organisational performance of public universities in Naples (Italy).

Conversely, the positive effect of quality culture on institutional performance implies that institutions with weaker quality culture practices might experience lower performance outcomes, highlighting the importance of focusing on quality-driven initiatives. This is consistent with what Riaz et al. (2023) argue in their study: universities with poor quality culture often face numerous institutional challenges that hinder their success. Kooli (2019) also states that weak quality culture results in the absence of strategic planning, poor financial management, and ineffective governing boards. Failing to foster an adequate quality culture leads to failure to meet objectives and stakeholders' expectations (Yusuf, 2023) as well as encourages negative conduct such as fraud and corruption (Abdelaziz, 2022).

Moreover, survey outcomes show that respondents highly value the commitment of institutions' leadership to cultivating a quality culture, signalling its importance to enhancing the overall performance. Respondents largely agree that the institution's leadership fosters a quality culture, with 93.45% agreeing, and provides adequate quality assurance mechanisms, with 80.06% agreeing. There is also a strong consensus on leadership involvement in quality-related initiatives (91.17% agree) and in investing in quality professional development (90.31% agree). This commitment to quality sends positive feedback to the government of Oman that leaders of private HEIs are supportive of a quality culture, which is crucial for enhancing the institutions. These results contribute to the literature in which the role of leadership is considered essential to successfully integrate and sustain a quality culture that improves performance (Khan et al., 2022; Silva et al., 2021; Alessa, 2021). The results also enrich the literature where a robust quality culture involves not just adhering to standards, but embedding practices that promote ongoing improvement, capacity building, and stakeholder satisfaction (Saarikallio & Tyrväinen, 2023; Musah et al., 2023).

Additionally, the significant effect of quality culture on the institutional performance of HEIs aligns with the Resource-Based View (RBV) theory. RBV posits that institutions can enhance their performance and competitive advantage through utilising their internal resources and capabilities (Ferreira & Ferreira, 2024). The internal advantages can either be physical capabilities such as advanced technologies and human capital, or intangible aspects such as culture and values (Agrawal et al., 2024; Sanabria-Z et al., 2024). In the context of higher education, the quality culture of HEIs can be seen as a valuable resource that contributes to institutional performance in terms of governance and management. RBV facilitates understanding how quality culture is a key determinant and valuable source for institutions' competitive advantages and better performance (Iqbal et al., 2023). A strong quality culture in HEIs enhances governance and management practices through promoting transparency, accountability, and ethics-based behaviours and processes (Efunniyi et al., 2024; Thelen & Formanchuk, 2022). Drawing on the RBV principles, a well-embedded quality culture enhances collaborations and supports communication between various stakeholders within HEIs, thus facilitating knowledge sharing and informing decision-making. This can result in the development of new programs and initiatives that better accommodate the changing needs of students and other crucial stakeholders, which enhances the overall performance of the institution.

The overall analysis of the study proves that quality culture is a significant predictor of the institutional performance of the private HEIs in Oman. Thus, quality culture plays an essential role in the development of the private higher education sector in the country. The findings indicate that the leadership in the private HEIs are well committed to fostering a culture of quality and is investing in quality-related initiatives in their institutions. This commitment to quality is positively affecting the institutional performance of the institutions. It also signals to the government that the top leaders of the private institutions are committed to achieving the national objectives of Oman Vision 2040 side by side with the government entities. Therefore, HEIs should ensure that quality assurance mechanisms are implemented across all levels of management, faculties, and programs to maintain consistent delivery of quality education and services. Continuity of capacity-building initiatives and stakeholder communication can play a major role in maximising HEIs' benefit from their culture of quality.

6 Study implications

This study contributes to the existing literature by expanding knowledge on the importance of quality culture for HEIs. It provides evidence that fostering a quality culture significantly and positively affects institutional performance. Various studies in international contexts have investigated the effect of quality culture on institutional performance (Iqbal et al., 2023; Damanik et al., 2023; Malmir et al., 2023; Tutko, 2019) but rarely in the context of Oman. Therefore, this study makes a novel contribution to the literature, especially to the local context of Oman.

Additionally, the study provides evidence that the Resource-Based View (RBV) theory is instrumental in explaining how HEIs can leverage their internal quality culture to gain competitive advantages. According to RBV, institutions can gain competitive advantages through utilising their unique internal resources (Ferreira & Ferreira, 2024); thus, quality culture represents a unique internal resource for HEIs. Quality-oriented values, attitudes, behaviours, and services increase students' satisfaction and public trust. Quality culture also enhances governance and management through promoting accountability, transparency, stakeholders' engagement, and cross-sectional collaborations. Therefore, this study provides evidence that RBV theory provides a context in which the dynamic interaction between quality culture and institutional performance can be better understood.

Moreover, the study provides an important practical implication for policymakers through a better understanding of the crucial role of quality culture in improving the quality and institutional performance of HEIs. The study provides empirical evidence that quality culture substantially enhances the performance of HEIs. Thus, policymakers may consider providing more support for HEIs through funding or capacity-building initiatives to enable them to cultivate and sustain a quality culture. This can be done through the provision of special training programs for institutions' leaders on strategic planning and sustainable growth to create skilful leaders capable of handling challenges and enforcing a quality-oriented culture. Training can also target administrative staff on total quality management and the application of performance KPIs. Government support can also be in the form of monetary grants dedicated to enhancing infrastructure, systems, research, and innovation capacities to help the institutions build a quality-driven environment.

7 Study limitations

This study has several limitations. Firstly, this study focuses exclusively on the private HEIs in Oman and excludes the public HEIs. Generalising the outcomes of this study to the public HEIs may pose a challenge, considering that public and private HEIs differ in various aspects such as finance (Wu, 2021), autonomy (Hoque & Islam, 2020), government regulations (Iqbal et al., 2023), organisational culture (Jamali et al., 2022), and profit-orientation (Trevor-Roper, 2023). Secondly, this study is based on a cross-sectional design, i.e., it investigates a particular topic at a certain point in time (Saunders et al., 2023). Unlike longitudinal studies, it does not account for long-term trends and is susceptible to potential bias in the data or the measurement during the limited time frame of data collection and analysis (Maier et al., 2023). Thus, other confounding variables might interfere with the study but are not accounted for. Third, the study was conducted in a particular geographical area, Oman, which may limit the generalizability of the findings to other international contexts with different higher education systems and landscapes. Finally, the data in this study are derived from a self-report survey. Using self-reported data provides ease and access to a larger population, but also increases potential biases from participants due to several factors such as social desirability and indifference, which can undermine the generalizability of the findings (Akbulut, 2025).

8 Conclusion and recommendations

This study provides empirical evidence that quality culture is a key predictor of the institutional performance of the private HEIs in Oman. This finding underscores the importance of fostering a quality-oriented culture within the institutions to enhance their performance, especially in governance and management. The study also demonstrates that the Resource-Based View (RBV) theory provides valuable context to enhance understanding of the benefits that HEIs can gain from leveraging their quality culture. RBV theory provides a basis to understand how HEIs can develop competitive attributes and enhance their institutional performance by utilising their internal unique resources derived from their quality culture. Thus, investing in quality assurance mechanisms and training programs should be prioritised in HEIs to ensure continuous delivery of quality education and services.

Additionally, the study acknowledges numerous limitations: the use of a cross-sectional design, limiting the scope of the study to the private HEIs only and to the specific context of Oman's higher education system, and the use of self-report data. Therefore, it is recommended that future studies consider adopting a longitudinal design to account for long-term trends, which can explore whether the perceptions of quality culture among staff members of the HEIs change over time or otherwise. Scholars are also encouraged to use a mixed-method approach to combine self-report data with other external sources to increase objectivity. It is also recommended to do a similar study in the public HEIs or conduct a comparative study between public and private HEIs to explore similarities and differences in perceptions and the effect of quality culture, which might prove to be significant. Future studies may also investigate other contexts of higher education or consider other potential predictors of institutional performance, such as accreditation (Iqbal et al., 2023), to enrich the literature in this field.

In conclusion, this study calls upon HEIs to prioritise maintaining a quality-driven culture that fosters continuous improvement and a collaborative environment where staff and students are engaged in quality initiatives supported by the leadership. HEIs should leverage modern technology to streamline processes related to quality improvement. Digital platforms can facilitate data collection, analysis, and reporting, making it easier for HEIs to implement and evaluate continuous quality improvement initiatives. The study also invites policymakers in Oman to support the private HEIs with resources to ensure continuous capacity-building programs and proper adoption of quality initiatives, so that the institutions can enhance their sustainability and competitiveness in the broader higher education landscape and contribute to meeting the objectives of Oman Vision 2040.

Acknowledgement

The authors wish to express their sincere appreciation to the reviewer and the editorial team for their valuable comments and constructive suggestions, which have significantly enhanced the quality and clarity of this work.

Funding

The authors affirm that this study, its writing, and subsequent publication were conducted without any form of financial aid or sponsorship.

Conflict of Interest

The authors declare no conflicts of interest.

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