



National Quality Assurance Frameworks and Autonomy of Higher Education Institutions in UAE: Balancing Regulation and Innovation

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Abstract

The relationship between the National Quality Assurance Frameworks (NQAF) and autonomy of higher education institutions (HEIs) in the UAE is investigated in the study and their impact on the innovation of the institution is discussed. A quantitative, cross-sectional design was applied to gather data on 537 academic and administrative leaders in both the public and private universities in the UAE using a structured questionnaire. The researchers quantified four main constructs, including NQAF effectiveness, institutional autonomy, strategic leadership and innovation capacity. Descriptive statistics showed that NQAF is perceived to be as moderately effective (Mean = 3.62) and the institutional autonomy is limited (Mean = 2.95), whereas the strategic leadership and the innovation capacity are evaluated positively (Mean = 3.48 and 3.27, respectively). The correlation analysis demonstrated that there was a strong positive relationship between the aspects of autonomy and innovation ($r = 0.525$) and moderate association between aspects of leadership and innovation ($r = 0.448$) although the relationship between NQAF and innovation was weak ($r = 0.098$). The findings of multiple regression affirmed that institutional autonomy is the most predictive factor of innovation and strategic leadership has a significant moderating effect in the predictive relationship. NQAF offers an indirect but supportive role in the promotion of innovation. These results suggest that regulation should be complemented with autonomy, but also that it is of paramount importance to integrate visionary leadership so that the freedom of institutions could be turned into innovative results. Policy implications imply that UAE HEIs can be prepared to become more innovative, in terms of differentiated autonomy, quality assurance through outcome-based and leadership development programs.

Keywords: National Quality Assurance Framework, Institutional Autonomy, Strategic Leadership, Innovation Capacity, Higher Education, UAE



Introduction

Higher education sector has experienced massive growth within the last 20 years in the United Arab Emirates (UAE) and it has made massive investments in infrastructure, curriculum building and international relations (Nichols & Kohn, 2020). With the expansion of the sector, the question of how quality of the academic work could be maintained and at the same time encourage innovation turns into a more complicated one. National Quality Assurance Frameworks (NQAFs) have come into play as a crucial tool to make certain that the universities maintain the academic quality, respond to their stakeholders, and can be more competitive globally (Mustapha et al., 2023).

Simultaneously, institutional autonomy which can be defined as the level of liberty that universities have in regards to academic, financial, administrative and staffing decisions is generally understood to be a main stimulator of innovation and attentiveness to societal demands (Manogaran, 2021). Nevertheless, balancing between strict regulatory checks and balances in the form of NQAFs and giving the HEIs freedom to innovate is a pivotal issue of governance in the UAE. Excessive control may kill creativity whereas too much freedom can undermine quality and uniformity (Abu-Gharbieh et al., 2018).

This paper examines the ways in which the UAE higher education institutions strike this balance, studying the views of academic and administrative leadership regarding NQAF effectiveness, institutional autonomy and the innovating conditions (Halaweh, 2019). The study is expected to offer evidence-based recommendations to policy makers and university administration in such a way that it will be able to create structures that can both guarantee quality and allow innovation to take place at the same time.

The present paper investigates the NQAF, in the UAE, for the higher education, about the governance and innovation. The said paper will provide the guidelines, to the higher education of the UAE.

Literature Review

The concept of quality assurance in higher education has been changing toward the input-based monitoring (concentrating on faculty qualifications, infrastructure, and processes) to the outcomes-centered frameworks where student learning, employability, and research impacts are measured. The Commission for Academic Accreditation (CAA) establishes national quality standards in the UAE, which focuses on accountability, transparency, and constant improvement (Kayyali, 2024).

It was demonstrated that properly implemented NQAFs have a positive effect on the credibility of institutions, the confidence of stakeholders, and the international esteem (Manogaran, 2021). But excessive bureaucracy within the QA systems may block innovations, and institutions are concentrated not on creativity, but on compliance. Therefore, appreciation of regulation and innovation balance is very essential in UAE HEIs in which global competitiveness is the strategic aim (Kar et al., 2025).



The autonomy that is found in institutions can help universities to allow flexibility in responding to market needs, launching new programs and entering into strategic alliances (Rabah, 2014). The concept of autonomy is generally viewed in four dimensions: academic, financial, administrative, and staffing. In UAE, privatized and semi-privatized universities tend to score higher on their independence of design and partner formation, unlike the public institutions that receive much closer regulations through central authorities (Rayevnyeva et al., 2018). It has been shown that the effectiveness of autonomy has a positive correlation with innovation, although it begins to work only upon the condition of institutional leadership, culture, and governance structures (Nichols & Kohn, 2020).

University innovation refers to effort in pedagogy, research, curriculum, adoption of technology and community involvement. Innovation is already regarded as the key to global competitiveness, relevance in society, and knowledge-based economy growth. According to the literature, innovation flourishes in an environment that allows institutions to have adequate autonomy, strategic leadership and a favorable regulatory environment (Alketbi, 2023). Very strict QA systems can limit experimentation and lack of control can be a threat to quality. The UAE scenario is considered to be a unique one, in which the development of high regulatory standards and institutional growth can be observed to create a favorable environment to research the interaction of QA frameworks with autonomy (Ahmed et al., 2024).

An increasing range of studies point out that an approach to regulation must remain balanced: accountability and quality must not be compromised by institutional independence. Autonomy has a central role in terms of strategic leadership to impose dynamic strategies that will induce innovation in the aspect of mediating between compliance and creativity (Gallagher, 2019).

The policy focus on quality in the UAE, as well as the expedited growth and collaboration with other countries, requires the investigation of the interaction between QA systems and independence to influence the development of innovation outcomes. Studying these dynamics may turn into a valuable input to policy decisions, enabling the institutions to maintain high standards and at the same time remain dynamic and innovative (Ahmed et al., 2024).

Although, global studies emphasize QA, autonomy, and innovations, there is paucity of empirical research that involves the UAE environment. There are limited research works on the effects of national quality assurance systems on institutional autonomy and consequently innovation in higher education. This research paper will fill this gap by conducting a survey on the academic and administrative head of UAE HEIs to examine such associations (Ahmed et al., 2024).

Purpose of the Study

This study aims at exploring the linkage between the National Quality Assurance Framework (NQAF) and autonomy of institutions of higher learning (HEIs) in the UAE and how the two factors affect institutional innovation (Umar et al., 2020). This study will specifically attempt to:

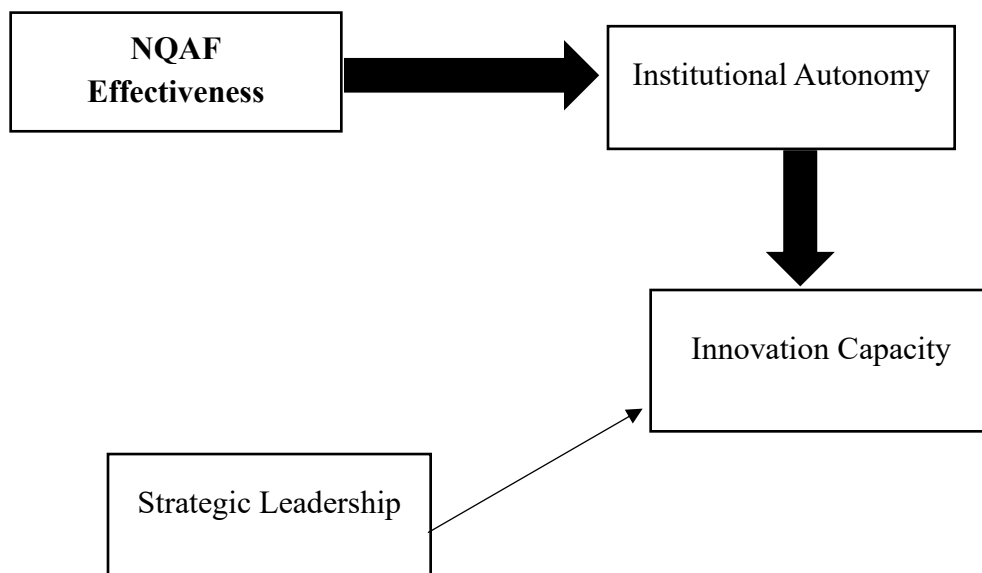
1. Determine the perceived effectiveness of NQAF to maintain both the quality standards and institutional flexibility.
2. Determine the degree of autonomy in UAE HEIs on academic, financial, administrative domains as well as staffing.
3. Explore how institutional autonomy affects innovation capacity, such as program development, research programs and teaching practices.
4. Accept the moderating effect of strategic leadership on intensifying the impact of the autonomy on innovation.
5. Give policy and managerial advice to achieve a peaceful coexistence between regulation and institutional freedom, which promotes quality and innovation.

The purpose of the study is to provide knowledge that can be used by policy makers, university administrations and regulating institutions to establish models that would enhance high standards without limiting the institutions to be creative and adaptable(Mazumder, 2016).

Conceptual framework

Figure 1

National Quality Assurance Frameworks and The Autonomy of Higher Education Institutions In UAE



Research Methodology

The type of research design used in this study was a quantitative, cross-sectional research design to investigate the relationship between The National Quality Assurance Framework (NQAF), institutional autonomy and innovation capacity in the higher education institutions (HEIs) in the UAE. The cross-sectional method will enable gathering data on several respondents at one point and, therefore, analyzing perceptions and relations between major constructs(Taherdoost, 2016).



This study sample was based on academic and administrative leaders of the UAE public and private universities, who worked at universities as vice chancellors, deans, department heads, program coordinators, and senior faculty members making decisions and ensuring the quality of their services(Narayan et al., 2023).

In order to have a representative coverage, the stratified random sampling was applied and the population was divided into three major strata: leaders of the public universities, leaders of the private universities, senior academic heads/faculty. The respondent group consisted of 537 individuals which is adequate to make a statistical analysis(Ali & Bhaskar, 2016).

Table 1
 Sampling Framework for the study (N=537).

Population Category	Population Size	Sample Size	Percentage (%)
Public University Leaders	220	210	39.1
Private University Leaders	180	175	32.6
Heads of Academic Faculties / Principals.	137	152	28.3
Total	537	537	100

The sampling structure helped create a balance in representation in terms of the type of institution and position in leadership which accounts to different views in regard to NQAF effectiveness, institutional autonomy and innovation potential. This would increase the generalizability and validity of the study results.

Data Collection Method

Furthermore, the data was collected through a structured questionnaire that was created on the basis of the literature review and validated scales was used to gather graphs. There are four constructs included in the questionnaire:

1. NQAF Effectiveness: It is a measure of clarity, effectiveness, and supportiveness of national quality assurance regulations.
2. Institutional Autonomy: Refers to the level of operational, academic, financial and staffing freedom in HEIs.
3. Strategic Leadership: Assesses the vision of the leadership, flexibility and innovation focus of the leadership.
4. Innovation Capacity: The capacity of the institution to introduce new programs, research programs and pedagogical innovations.
5. Scaling: The items were all rated on a 5-point liker scale (1 = Strongly Disagree; 5 = Strongly Agree).
6. Administration: The questionnaire was sent by e-mail to cover a large number of emirates and institutions.

Data Analysis Approach. The data obtained was compared with SPSS in both descriptive and inferential statistics. Furthermore, the mean, median and standard deviation was done to



summarize the perceptions that the respondents had. However, to measure the internal consistency of scales, Cronbach’s Alpha was adopted. The Pearson correlation coefficients were used to test the relationships that exist between NQAF effectiveness, institutional autonomy, strategic leadership and capacity to innovate. However, the multiple regression analysis is applied. Evaluated the predictive impact of NQAF effectiveness, institutional autonomy, and strategic leadership that predict innovation capacity, in the presence of the modulation of the impact of leadership. Ethical Considerations as the Anonymity to identity of the respondents was held confidential, and the information was presented in a descriptive manner. Moreover, the voluntary participation was voluntary and the respondents were free to withdraw anytime without any result. Ethical Approval was taken from ethics committee of the respective institute research in the UAE approved the study.

Results

Descriptive statistics were computed for the main constructs: NQAF Effectiveness, Institutional Autonomy, Strategic Leadership, and Innovation Capacity.

Table 2
 Descriptive Statistics for Key Study Variables (N = 537)

Variable	M	SD	Median
NQAF Effectiveness	3.62	0.84	3.70
Institutional Autonomy	2.95	1.12	3.00
Strategic Leadership	3.48	0.79	3.50
Innovation Capacity	3.27	0.85	3.30

The mean scores indicate that respondents generally perceive NQAF as moderately effective. Institutional autonomy is near neutral, suggesting limited freedom in some HEIs. Strategic leadership and innovation capacity are rated positively, indicating that leadership may enhance innovation even under regulatory constraints. These are also supported by the study findings conducted (Kayyali, 2024).

Reliability Analysis

Cronbach’s Alpha was computed to assess the internal consistency of the scales used.

Table 3
 Reliability Analysis of Study Constructs (N = 537)

Construct	No. of Items	Cronbach’s α
NQAF Effectiveness	6	.892
Institutional Autonomy	5	.821
Strategic Leadership	7	.927
Innovation Capacity	8	.905
Overall Instrument	26	.936



Interpretation: All scales demonstrate in the above mention table high internal consistency ($\alpha > .80$), confirming that the measurement instruments reliably capture the intended constructs.

Correlation Analysis.

Pearson correlation coefficients were calculated to examine relationships among variables.

Table 4
Pearson Correlations Among Study Variables (N = 537)

Variable	1	2	3	4
NQAF Effectiveness	1			
Institutional Autonomy	.241*	1		
Strategic Leadership	.115*	.389*	1	
Innovation Capacity	.098*	.525*	.448*	1

*Note. $p < .05$.

The positive correlation between institutional autonomy and innovation capacity is well-grounded ($r = .525$) showing that the higher the institutional autonomy, the more innovation. Innovation also maintains a moderate positive relationship with strategic leadership ($r = .448$) indicating its supportiveness. The effectiveness of NQAF has low correlations with autonomy and innovation, with all possibilities of not affecting innovation directly but rather through other factors. These result are also supported by the (Manogaran, 2021).

Multi-step Regression Analysis.

There was a multimodal regression where NQAF effectiveness, institutional autonomy and strategic leadership were used to predict innovation capacity with or without leadership and autonomy interaction effect.

Table 5
Regression Predicting Innovation Capacity (N = 537)

Predictor Variable	B	SE B	β	t	p	95% CI
Constant	0.751	0.154	-	4.88	.000	[0.447, 1.055]
NQAF Effectiveness (X_1)	0.073	0.034	0.085	2.15	.032	[0.006, 0.140]
Institutional Autonomy (X_2)	0.342	0.038	0.389	9.00	.000	[0.267, 0.417]
Strategic Leadership (X_3)	0.298	0.039	0.303	7.64	.000	[0.222, 0.374]
Autonomy \times Leadership (X_2X_3)	0.087	0.030	0.118	2.90	.004	[0.028, 0.146]

Model Summary: $R^2 = .401$, Adjusted $R^2 = .396$, $F(4, 532) = 88.2$, $p < .001$

Interpretation:

1. Institutional autonomy ($\beta = .389$) has the greatest predictors to an innovation and this indicates that higher freedom is associated with more innovation capacity.



2. Leadership greatly predicts innovation ($\beta = .303$) and mediates the relationship between autonomy and innovation ($\beta = .118$), suggesting that leadership produces more positive influence on the positive impact of autonomy.

NQAF effectiveness ($\beta = .085$) is also a small but significant direct influence on innovation, which indicates that it supports innovation indirectly. The model explains 40% of innovation capacity variance meaning that the effect size is large. These are also supported by the (Wilson & Sy, 2021).

The results indicate that institutional autonomy encourages innovation in UAE HEIs that are augmented through strategic leadership. Although NQAF is a structural support, it does not have much direct impact of innovation. These findings are vital in the role of regulation in balance of autonomy and good leadership in promoting innovation within higher education institutions (Alshamsi et al., 2019).

Findings

The review of the research indicated that the connection between the National Quality Assurance Framework (NQAF), institutional autonomy, strategic leadership, and innovation capacity are respectively linked in higher education institutions (HEIs) in the UAE. The descriptive statistics demonstrated that the respondents tend to rate the NQAF as moderately effective, with the mean value of 3.62 on a 5-point scale. This implies that education and governance officers recognize the existence of a regulatory framework that guarantees quality assurance in HEIs through its direct effect on innovation seems to be minimal. The findings are also mapped with the (Elhakim & Alhosani, 2022).

Institutional autonomy is rated as neutral with the mean of 2.95 where the respondents rated moderate freedom in making decisions, academic programming, financially, and staffing. This construct has a relatively high standard deviation, which indicates that some institutions vary on different fronts, i.e., between the public and the private universities and between the various leadership positions. This discovery denotes that some HEIs are flexible in their operations whereas others are prone to limitations imposed by their regulatory authorities and this could potentially impede their innovation ability. These findings are also equal with the (Tipu & Sarker, 2020).

In the study, strategic leadership has become a crucial characteristic of leadership with a mean of 3.48. The respondents perceived their institutional leadership to be forward-thinking, generally flexible, and accommodating to innovation activities. The correlation test also established that strategic leadership has a positive relationship with the innovation capability ($r = .448$) which suggests that leadership orientation is also significant in determining the degree to which prompt institutions can exploit autonomy. These findings are also mapped with the (Mahendru et al., 2025).

The greatest result variable, that is, innovation capacity, was reported as moderate ($M = 3.27$) which indicates that HEIs in UAE exhibit certain capability of implementing new programs, research activities, and pedagogical strategies, yet have an opportunity to improve it. A marketing survey conducted a multiple regression analysis with the strongest predictor of innovation capacity



being established as institutional autonomy ($\beta = .389$) whereby it was made apparent that the liberty to make academic and operational choices is critical towards the establishment of innovation capacity. Strategic leadership also had direct effect on innovation ($\beta = .303$), where the view between autonomy and innovation was mediated by strategic oriented leadership ($\beta = .118$), showing the effectiveness of autonomy is improved through proactive and strategic oriented leadership. NQAF had a weak yet significant direct impact on innovation ($\beta = .085$) and this could indicate that quality assurance frameworks offer support mechanisms, but have minimal direct influence, mainly indirect through institutional autonomy and leadership. These results are also supported by the (El Saadi, 2017).

The overall implications of the results are that NQAF, autonomy, and leadership have a triadic association in the initiative of innovation. The study shows that although quality control guarantees standards, innovation in the UAE HEIs is largely achieved through the provision of autonomy to the institutions and the development of strategic innovative leadership. These results highlight the significance of regulation and institutional flexibility and visionary leadership to improve higher education performance and outcomes. These are also supported by the (Weldon et al., 2024).

Discussion and Conclusion

Discussion

The results of the current research give valuable information on the interaction of the National Quality Assurance Framework (NQAF), institutional freedom, strategic leadership, and innovation ability within the UAE institutions of higher education (HEIs). The findings indicate that although NQAF is a way to establish a structured approach to keeping the quality standards, it has limited effect on institutional innovation. This agrees with the previous studies that reveal regulatory frameworks are major mechanisms of standardization and compliance, and not mechanisms of creative and innovative practices in higher education (Zanqar et al., 2019).

Institutional autonomy became the largest predictor of the innovation capacity emphasizing the use of giving the HEIs the freedom to make choices concerning curricula, research, finances, and human resource management. The discovery confirms the earlier research findings an approach of letting university to adjust in response to emerging educational and market needs that promotes experimentation and innovation (Hou et al., 2024). This is heightened in the UAE context, which ensures that despite the strong regulatory terrain, operational and academic flexibility in the HEIs is necessary in order to be competitive and innovative.

The strategic leadership was another important determinant of innovation, either directly and moderately between autonomy and innovation. This emphasizes the fact that autonomy does not suffice but its advantages are maximized when instituted under visionary, adaptable, and progressive leadership. Those leaders whose main focus is innovation, collaboration, and strategic planning can use the institutional freedom to introduce new programs, research projects and teaching methods. The result is consistent with literature that pointed out that leadership orientation



plays a critical role in transforming policy and autonomy into actual innovation outputs (Magalhães et al., 2013).

The low direct relationship between effectiveness of NQAF and innovation suggests that although standards of quality assurance mechanisms have minimum levels, they do not necessarily generate innovativeness or new programs. This brings into focus the secondary role of NQAF, through the formation of definite quality standards and accountability measures, it opens a safe space within which the unique institutions under the leadership of strategic figures can become innovative. Such interaction implies a symbiosis between regulation and autonomy which implies the necessity of the co-existence of these two qualities to cause the best results (Rayevnyeva et al., 2018).

On the whole, the paper focuses on how contentious regulation and institutional liberty are in relation to promoting innovation in higher education. A differentiated strategy can be utilized in promoting UAE HEIs, in which the quality of the services is guaranteed by conforming to the code of NQAF, and the ability to be innovative and responsive is promoted by the autonomy of institutions that have effective leadership. The results are relevant to the higher education governance in the UAE from which the recommendation is that contexts have to ensure a blend of effective quality assurance framework and personalized autonomy and leadership building to enhance institutional innovativeness (Ültanır, 2025).

Conclusions and Recommendations

It is concluded that innovation within the institutions of higher learning (HEIs) of the UAE is conditioned by a dynamic interrelation among the regulatory frameworks, institutional autonomy, and strategic leadership. Although the National Quality Assurance Framework (NQAF) is known as an efficient system of assuring quality standards, it has a minor impact on innovation. The results highlight the fact that HEIs need the functional, educational, and financial freedom to apply new courses, teaching methods, and research projects. Nonetheless, autonomy does not suffice on its own but its effects are best enhanced when the institutions are led by visionary and strategically oriented leadership. A leader, who value flexibility, future orientation, and innovation, would be able to utilize the institutional freedom to achieve better performance and responsiveness of a HEI (Belgaroui & Hamad, 2021).

It has also been noted in the study that a universalistic method of regulation might not be the best. The differences in the perceptions of autonomy of institutions reveal that differentiated governance, which depends on institutional capacity, quality of leaders, and strategic orientation, is vital towards the achievement of innovation without undermining quality. Also, the low direct relationship between NQAF and innovation indicates that the quality assurance structures act more as enablers in terms of offering a safe environment in which an innovation would occur, but do not directly provoke it (Rabah, 2014).

Resting on these findings, it is possible to make the following recommendations to the policy-makers and leaders of higher education in the UAE:



1. Outcome-Based Regulation: Change to more outcome-based quality assurance that disorders input oriented requirements into something that evaluates learning yields, research effects and innovativeness. This is to ensure accountability as well as promote creativity.
2. Differentiated Autonomy: Provide more operational and academic autonomy to institutions, which have excellent governance and leadership practices, and be more vigilanta over less developed HEIs. This generates a customized equilibrium between regulating and being innovative.
3. Leadership Development: Spend on professional development courses of university leaders such as university managers, departmental heads and deans, to strategic thinking skills, decision making skills that are innovative, and development of adaptable leadership qualities.
4. Integrated Policy Frameworks: Favor collaboration between regulatory bodies and HEIs to come up with policy frameworks that promote compliance as well as innovation to ensure that quality assurance systems do not override institutional freedom.
5. Constant Monitoring and Review: Have systems in place to regularly review whether NQAF and autonomy policies are working based on evidence-based techniques and improve governance practices and nurture innovation programs.

To sum up, innovation in UAE HEIs can be promoted through a harmonious strategy involving regulation, institutional flexibility, and leadership. With these suggestions, the policymakers and leaders can establish the environment that is of high standards and at the same time enable institutions to move, adjust, and achieve excellence within a fast-changing higher education environment.

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