

-RESEARCH ARTICLE-

THE NEXUS OF DYNAMIC CAPABILITIES, ORGANIZATIONAL LEARNING, AND HEALTHCARE MANAGEMENT QUALITY: EVIDENCE FROM THE UAE HOSPITALS

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—Abstract—

This study examines how reconfiguration capability, coordinating capability, and integrating capability relate to healthcare management quality in UAE hospitals, with organizational learning positioned as the central mechanism through which adaptive capability is converted into sustained quality improvement. Using a quantitative method, survey data were collected from middle-level managers in public and private healthcare institutions across the UAE. A total of 206 usable responses were analyzed using partial least squares structural equation modeling in SmartPLS 4. The results show that organizational learning is the strongest direct predictor of healthcare management quality ($\beta = 0.544$, $p < .001$). Reconfiguration capability is the only focal capability with a significant direct effect on healthcare management quality ($\beta = 0.225$, $p = .005$). Coordinating capability and integrating capability do not show significant direct effects on quality, but both improve quality indirectly through organizational learning. Significant indirect effects are observed for coordinating capability ($\beta = 0.149$, $p = .001$) and integrating capability ($\beta = 0.287$, $p < .001$). Overall, the findings support a selective capability structure in which execution-oriented reconfiguration contributes directly to

Citation (APA): Alghfeli, F. M. K. M., Ramalu, S. S. (2026). The Nexus of Dynamic Capabilities, Organizational Learning, and Healthcare Management Quality: Evidence from the Uae Hospitals. *International Journal of eBusiness and eGovernment Studies*, 18(1), 1-21. doi:10.34109/ijepeg. 2026180101

quality, whereas coordination and integration create value primarily by enabling knowledge diffusion, shared learning, and the institutionalization of improved practice.

Keywords: Dynamic capabilities; organizational learning; healthcare management quality; UAE hospitals; quality improvement.

INTRODUCTION

Healthcare systems are under sustained pressure to improve quality while adapting to digitalization, workforce constraints, regulatory reform, and rising service expectations (Stoumpos et al., 2023). In the UAE, those pressures are intensified by rapid sector modernization, accreditation priorities, and continuing investment in technology-enabled care delivery (Alshamsi, 2024). Yet visible modernization does not guarantee consistent quality outcomes, and recent Gulf evidence still reports uneven patient experience and variation across core dimensions of healthcare quality (Alsubahi et al., 2024). The more difficult question is whether hospitals can convert adaptation, coordination, and operational redesign into sustained healthcare management quality. Dynamic capabilities theory is useful here because it explains how organizations deliberately renew routines, resources, and managerial processes under changing conditions (Teece, 2007). In hospital settings, where interdependence, regulatory scrutiny, and service complexity are persistent rather than temporary, that adaptive logic is especially relevant (Loureiro et al., 2023).

This study argues that organizational learning is the main explanatory mechanism through which adaptive capability is converted into durable quality improvement. Hospitals do not benefit merely because capabilities exist in principle; they benefit when operational experience is interpreted, shared across units, and embedded in routines that reshape everyday work. That position is also consistent with the learning health system perspective, which treats organizational learning, quality improvement, and the translation of evidence into local operations as mutually reinforcing processes (Easterling et al., 2024). The argument further aligns with the resource-based view because internally developed knowledge routines become strategically valuable when they are repeatedly enacted and difficult to imitate (Grant, 1996). The paper therefore adopts a focused specification of dynamic capabilities. Reconfiguration capability is retained because it is closest to execution and workflow redesign, whereas coordinating capability and integrating capability are retained because they enable knowledge flow, shared routines, and system-wide alignment (Mauro et al., 2024). This narrower specification strengthens the manuscript by matching the theoretical discussion to the variables, hypotheses, and reported evidence.

Accordingly, the study tests whether reconfiguration capability, coordinating capability, and integrating capability improve healthcare management quality directly, indirectly through organizational learning, or through both routes. The manuscript makes three

contributions. First, it shows that dynamic capabilities should not be treated as uniformly beneficial because their effects depend on their proximity to execution and on whether they activate learning processes (Al-Amin et al., 2024). Second, it demonstrates that organizational learning is not a peripheral contextual factor but the central mechanism through which some adaptive capabilities are converted into repeatable quality gains (Bierbaum et al., 2025). Third, it clarifies an important empirical tension in hospital research: favorable descriptive assessments of capability strength do not automatically translate into statistically significant quality effects. That point matters in healthcare systems facing digital transformation, managerial complexity, and growing demands for safer and more reliable service delivery (Abou Hashish et al., 2025). The remainder of the paper develops the theoretical rationale, explains the method, presents the findings, and discusses the implications.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Dynamic Capabilities, Organizational Learning, and Healthcare Management Quality

Dynamic capabilities theory explains how organizations purposefully renew resources, routines, and managerial processes in response to environmental change (Teece, 2007). In hospitals, this perspective is especially relevant because quality improvement rarely occurs under stable conditions. Healthcare organizations must respond simultaneously to digital transformation, patient-safety demands, workforce constraints, and operational volatility (Endalamaw et al., 2024). However, the literature does not support the assumption that every capability dimension contributes to performance in the same way. Capability effects depend on which capability is mobilized and how closely it is tied to implementation, coordination, and operational redesign (Al-Amin et al., 2024). Organizational learning theory sharpens that logic by explaining how adaptive effort is converted into sustained organizational outcomes (Saoula et al., 2018). Learning is not simply the acquisition of information; it also involves interpretation, knowledge sharing, routine revision, and the institutionalization of lessons from practice (Crossan et al., 1999).

In hospitals, that process matters because improvement must move beyond isolated initiatives and become embedded in daily operations. The resource-based view complements this logic by suggesting that internally developed routines become strategically valuable when they are difficult to imitate and repeatedly enacted in practice (Grant, 1996). Recent research likewise shows that continuous quality improvement depends on learning structures, leadership support, and organizational mechanisms that help staff turn local improvement work into durable system capability (Ng et al., 2024). Together, these perspectives imply that selected dynamic capabilities should influence healthcare management quality either directly through operational change or indirectly by strengthening organizational learning.

Reconfiguration Capability, Organizational Learning, and Healthcare Management Quality

Reconfiguration capability refers to the organization's ability to realign structures, redeploy resources, and redesign workflows in response to emerging demands. Among the dynamic capability dimensions, it is the one most closely tied to execution because it concerns actual modification of organizational arrangements rather than opportunity recognition alone (Teece, 2007). In hospitals, improvements in healthcare management quality often require concrete changes in process architecture, role allocation, resource deployment, and service pathways. Reconfiguration capability should therefore have a direct bearing on healthcare management quality because it enables hospitals to translate adaptation into operational redesign and measurable improvement (Pellerito et al., 2023). Reconfiguration may also contribute to organizational learning because redesigning routines and reallocating resources creates opportunities to evaluate current practice, capture implementation lessons, and codify revised ways of working. That learning effect is plausible, but it should not be assumed automatically because operational redesign can improve execution without necessarily deepening organization-wide learning routines.

For that reason, the expected role of reconfiguration capability is dual but asymmetric. It should have the clearest direct path to healthcare management quality because it is the capability dimension most closely connected to implementation. Its indirect path through organizational learning is also theoretically defensible, but that effect depends on whether redesign efforts are documented, interpreted, and diffused beyond the immediate site of change. The hypotheses are therefore intentionally separated so the model can determine whether reconfiguration contributes to quality directly, indirectly, or through both routes. On that basis, the following hypotheses are proposed:

H1: *Reconfiguration capability has a positive direct effect on healthcare management quality.*

H4: *Reconfiguration capability has a positive direct effect on organizational learning.*

H8: *Organizational learning mediates the relationship between reconfiguration capability and healthcare management quality.*

Coordinating Capability, Organizational Learning, and Healthcare Management Quality

Coordinating capability reflects the organization's ability to align interdependent activities, roles, and processes across units. This capability is critical in hospitals because quality breakdowns often occur at the interfaces between departments, professional groups, and administrative functions rather than within isolated tasks. Strong coordination can improve consistency, responsiveness, and execution reliability by reducing fragmentation and strengthening information flow across interdependent work systems. Even so, the strongest theoretical case for coordinating capability is not

that it directly raises quality in every instance, but that it helps convert distributed activity into shared understanding and collective action. Cross-unit communication, aligned routines, and structured feedback allow lessons to travel across functional boundaries and become collective organizational knowledge (Ali et al., 2025). Recent reviews of hospital quality improvement also show that education, stakeholder engagement, and active leadership are recurrent facilitators of sustained improvement work (Khalil et al., 2025).

Coordinating capability therefore creates value when it supports adaptation, knowledge diffusion, and routine renewal rather than functioning as mere administrative control. A direct effect on healthcare management quality remains theoretically reasonable because better coordination can reduce fragmentation and improve service consistency. However, its more defensible role is likely to be indirect, operating through organizational learning as lessons are shared, interpreted, and embedded across units. The following hypotheses are therefore proposed:

H2: *Coordinating capability has a positive direct effect on healthcare management quality.*

H5: *Coordinating capability has a positive direct effect on organizational learning.*

H9: *Organizational learning mediates the relationship between coordinating capability and healthcare management quality.*

Integrating Capability, Organizational Learning, and Healthcare Management Quality

Integrating capability concerns the organization's ability to combine resources, technologies, knowledge domains, and routines into a coherent operating system. In hospitals, this capability is fundamental because healthcare management quality depends on alignment across clinical, administrative, and informational processes. When integration is strong, hospitals are better positioned to connect decision processes, reduce discontinuities, and support coherent managerial systems across complex service pathways. Integrating capability is also highly relevant to organizational learning because dispersed knowledge and practices must be combined before they can be interpreted and embedded across the organization. In increasingly digitalized healthcare settings, this integrative work depends on digital competence, managerial support, and the effective use of information systems across organizational levels (Longhini et al., 2022; Meddour et al., 2019). Recent evidence from nurse managers further shows that digital transformation succeeds only when leaders possess the competencies required to align systems, people, and decision processes (Abou Hashish et al., 2025). This logic supports both a direct and an indirect effect, although the indirect path through organizational learning is theoretically stronger. Integration helps institutionalize innovations and service improvements when it turns separate initiatives into

coordinated organizational practice (Mauro et al., 2024). The following hypotheses are therefore proposed:

H3: *Integrating capability has a positive direct effect on healthcare management quality.*

H6: *Integrating capability has a positive direct effect on organizational learning.*

H10: *Organizational learning mediates the relationship between integrating capability and healthcare management quality.*

Organizational Learning and Healthcare Management Quality

Organizational learning occupies a central position in the framework because it explains how adaptive capabilities are converted into repeatable quality improvement. In hospitals, learning extends beyond training or information exchange; it includes the systematic capture of operational experience, reflection on feedback, diffusion of lessons across units, and incorporation of that knowledge into procedures and managerial decision-making. A learning-oriented organization is therefore better positioned to respond to errors, standardize improvement, and sustain service reliability under uncertainty. Recent healthcare research consistently links organizational learning and continuous improvement capability with stronger innovation, better implementation, and more durable quality gains (Löfqvist, 2024). Learning health system research makes the same point more directly: quality improvement becomes durable when local problem solving is connected to wider organizational learning processes (Bierbaum et al., 2025). Because healthcare management quality depends on disciplined and institutionalized adaptation rather than episodic change, organizational learning is expected to exert a direct positive effect on healthcare management quality. This leads to the final direct hypothesis:

H7: *Organizational learning has a positive direct effect on healthcare management quality.*

Research Framework and Hypotheses Development

Figure 1 presents the conceptual structure of the study. Reconfiguration capability, coordinating capability, and integrating capability are modeled as antecedents of both organizational learning and healthcare management quality, while organizational learning is positioned as the central explanatory mechanism linking adaptive capability to sustained quality improvement. The framework deliberately separates execution-oriented effects from learning-mediated effects so that the model can determine whether capability value is immediate, mediated, or both. That distinction is analytically important because prior healthcare evidence suggests that some quality-improvement capabilities operate through direct workflow redesign, whereas others create value by strengthening learning, coordination, and institutional alignment (Endalamaw et al., 2024).

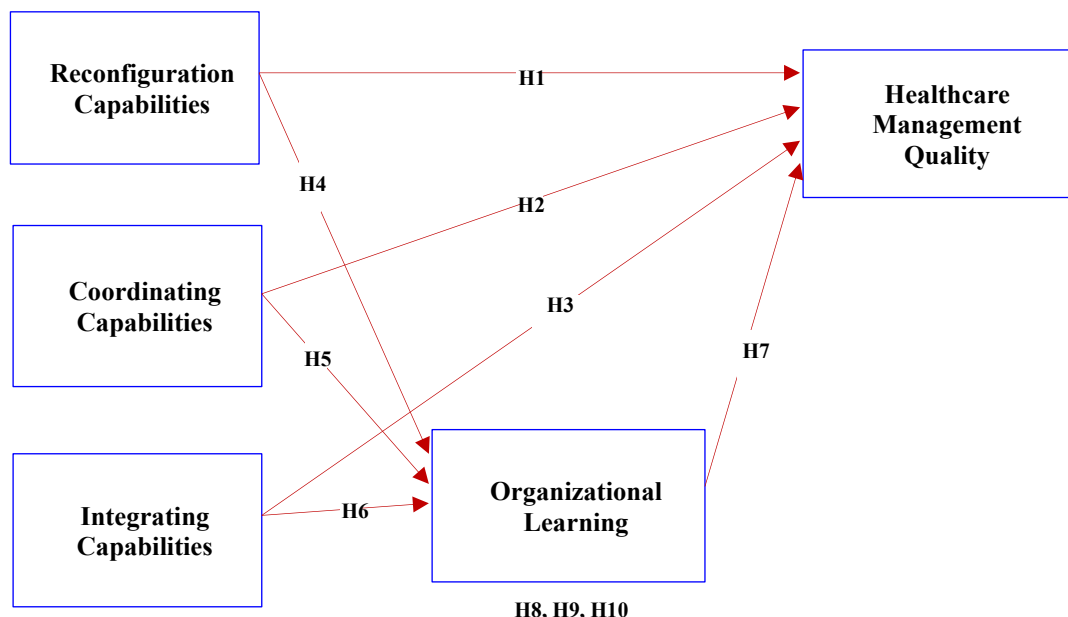


Figure 1: Conceptual Framework.

METHODOLOGY

This study employed a quantitative, cross-sectional design consistent with a positivist philosophy and a deductive approach. The research model was derived from dynamic capabilities theory, organizational learning theory, and the resource-based view, and then tested using structured survey data. As illustrated in [Figure 1](#), this design is appropriate because the study seeks to examine hypothesized direct and indirect relationships among latent constructs rather than to generate theory inductively. The target population comprised middle-level managers working in public and private healthcare institutions across the UAE. The sampling frame covered approximately 700 middle-level managers from 10 hospitals representing both ownership forms and multiple emirates. Stratified random sampling was used, with institutional ownership serving as the principal stratification criterion. Based on Krejcie and Morgan's logic, the target sample was 242 respondents. A total of 250 questionnaires were distributed, and the final analysis was based on 206 usable responses, representing an effective usable response rate of 82.4%.

Middle-level managers were appropriate respondents because they are directly involved in translating strategy into operational routines, aligning resources, coordinating across functions, and embedding learning in day-to-day work. Their position places them between senior strategic intent and frontline execution, making them analytically suitable informants for questions concerning capability deployment, organizational learning, and healthcare management quality. The focal measurement model used in this article consists of reconfiguration capability, coordinating capability, integrating

capability, organizational learning, and healthcare management quality. Reconfiguration capability, coordinating capability, and integrating capability were each measured with four reflective items adapted from Teece (2007) and Mauro et al. (2024). Organizational learning was measured with five items adapted from Crossan et al. (1999) and de Kok et al. (2023). Healthcare management quality was measured with six items adapted from Alsubahi et al. (2024) and Ng et al. (2024). All items were rated on five-point Likert scales. The measurement and structural analyses reported in this article are confined to these focal constructs so that the manuscript remains fully aligned with the current study model.

Data analysis proceeded in two stages. First, IBM SPSS was used for data screening and descriptive analysis. Second, SmartPLS 4 was used to estimate the measurement and structural models. The assessment covered factorability, indicator loadings, internal consistency, convergent validity, discriminant validity, collinearity, structural path coefficients, coefficients of determination, effect sizes, and predictive relevance. Bootstrapping with 5,000 resamples was used to test the statistical significance of the direct and indirect paths. The use of PLS-SEM is appropriate because the study is prediction oriented, models multiple latent constructs simultaneously, and includes mediation testing within a modest sample size (Sarstedt et al., 2022). The study relied on informed consent, voluntary participation, confidentiality, and anonymity. No personal identifiers were collected, and the questionnaire was administered in a manner intended to protect respondents and institutions.

FINDINGS

Respondent Demographic Profile

The respondent profile was diverse and operationally credible. The sample was balanced by gender (51.5% male; 48.5% female), distributed across all seven emirates, and composed of assistants, supervisors, and managers drawn from hospitals of varying size. The largest age group was 40–49 years (29.1%), and the largest hospital-size category was 500 beds and above (29.6%). As shown in Table 1, this distribution provides a credible empirical base for interpreting the results because the study examines organizational capabilities and learning processes that should be visible to personnel involved in operational coordination, process translation, and quality improvement. The representation of multiple managerial layers and hospital sizes therefore strengthens confidence that the findings reflect a varied and operationally relevant UAE hospital context rather than a narrow administrative subset.

Table 1: Summary of key respondent characteristics.

Variable	Category	n	%
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Gender	Male	106	51.5
	Female	100	48.5
Age	< 30	46	22.3
	30–39	51	24.8
	40–49	60	29.1
	> 49	49	23.8
Current job title	Assistant	58	28.2
	Manager	81	39.3
	Supervisor	67	32.5
Hospital size (beds)	< 100	46	22.3
	100–299	47	22.8
	300–499	52	25.2
	500 and more	61	29.6

Descriptive Statistics

Descriptive statistics show that all focal constructs were rated above the scale midpoint. Reconfiguration capability recorded the highest mean among the focal predictors ($M = 3.973$), followed by integrating capability ($M = 3.811$), organizational learning ($M = 3.773$), and coordinating capability ($M = 3.772$), while healthcare management quality was also rated favorably ($M = 3.890$). Table 2 therefore indicates generally positive managerial perceptions of the focal capabilities and outcome. At the same time, these descriptive patterns do not establish which constructs exert explanatory force within the structural model. The table is important because it frames one of the paper's central arguments: perceived capability strength is not equivalent to demonstrated capability effectiveness.

Table 2: Descriptive statistics for study constructs.

Construct	N	Mean	SD
Reconfiguration capabilities (RC)	206	3.973	0.805
Coordinating capabilities (CC)	206	3.772	0.905
Integrating capabilities (IC)	206	3.811	0.969
Organizational learning (OL)	206	3.773	0.950
Healthcare management quality (HMQ)	206	3.890	0.820

Measurement Model

Analysis of Measurement Model (Reflective)

Figure 2 indicates that the reflective measurement model provides adequate support for structural interpretation. Indicator loadings are consistently high across the focal constructs, ranging from 0.840 to 0.882 for reconfiguration capability, 0.876 to 0.909 for coordinating capability, 0.932 to 0.954 for integrating capability, 0.899 to 0.951 for organizational learning, and 0.853 to 0.884 for healthcare management quality. At the construct level, the values displayed in Figure 2 are also high, including 0.886 for

reconfiguration capability, 0.920 for coordinating capability, 0.957 for integrating capability, 0.955 for organizational learning, and 0.935 for healthcare management quality. Taken together, these results indicate strong indicator representation and provide an appropriate basis for the subsequent assessment of reliability and validity.

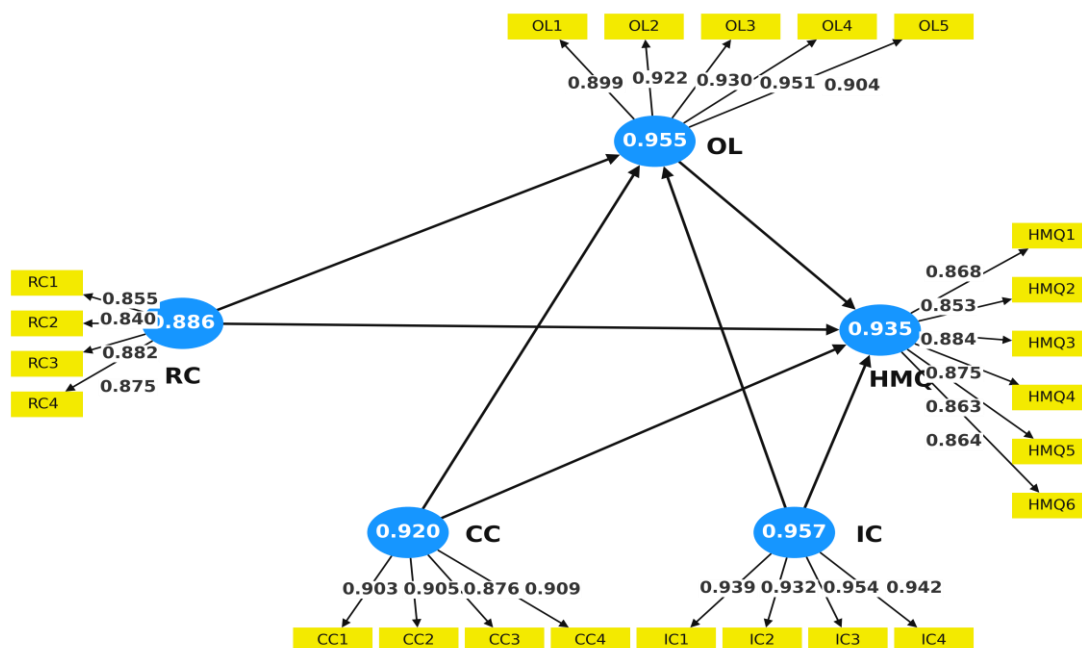


Figure 2: Evaluation of Measurement Model (Initial and Final Model)

Preliminary diagnostics supported factorability. The KMO statistic was 0.925 and Bartlett's test of sphericity was significant ($\chi^2 = 2288.709$, $df = 28$, $p < .001$), indicating that the data were suitable for factor analysis. The exploratory factor analysis retained one dominant component with an eigenvalue of 6.623, explaining 82.787% of the variance. Table 3 further indicates acceptable internal consistency and convergent validity across the focal constructs.

Table 3: Internal consistency and convergent validity.

Construct	Items	Loading range	Cronbach's alpha	AVE
RC	4	0.840–0.882	0.886	0.745
CC	4	0.876–0.909	0.920	0.807
IC	4	0.932–0.954	0.917	0.887
OL	5	0.899–0.951	0.915	0.849
HMQ	6	0.853–0.884	0.935	0.754

Keywords: RC: Reconfiguration capabilities; CC: Coordinating capabilities; IC: Integrating capabilities; OL: Organizational learning; HMQ: Healthcare management quality

The loading ranges, Cronbach's alpha values, and AVE statistics collectively support the adequacy of the reflective measures for the subsequent structural analysis. Overall, the

measurement-model evidence supports the use of the focal constructs in the structural model. The indicators show strong representation of their intended constructs, while the reliability and validity results are sufficiently robust for testing the differentiated relationships proposed in the framework. This is especially important because the study's theoretical contribution depends on distinguishing among several closely related capabilities rather than collapsing them into a single undifferentiated adaptive factor.

Table 4 indicates that the focal constructs satisfy discriminant validity when assessed through the HTMT criterion, as all reported ratios remain below the conservative threshold of 0.90. This matters because the paper argues for a selective and differentiated capability structure rather than a single undivided adaptive capability factor. The relatively strong but still acceptable associations among coordinating capability, integrating capability, reconfiguration capability, organizational learning, and healthcare management quality imply that these constructs are related in meaningful ways without collapsing into one another empirically. That distinction is essential for the study's logic. If the constructs were not sufficiently distinct, the argument that some capabilities influence quality directly while others operate through learning would lose precision. Table 4 therefore supports the theoretical credibility of the model by showing that the focal variables are connected enough to justify structural testing, yet sufficiently separate to allow differentiated interpretation of their direct and indirect effects.

Table 4: Selected HTMT ratios for focal constructs.

Construct pair	HTMT
CC–IC	0.762
CC–OL	0.666
CC–RC	0.849
CC–HMQ	0.738
IC–OL	0.771
IC–RC	0.815
IC–HMQ	0.721
OL–RC	0.745
OL–HMQ	0.761
RC–HMQ	0.871

Keywords: RC: Reconfiguration capabilities; CC: Coordinating capabilities; IC: Integrating capabilities; OL: Organizational learning; HMQ: Healthcare management quality

Discriminant validity refers to the extent to which two or more theoretically distinct constructs are empirically different and exhibit low correlations with one another (Badlishah et al., 2019). Table 5 reinforces the discriminant-validity assessment by showing that the square root of the AVE for each focal construct exceeds the corresponding inter-construct correlations. This pattern is theoretically consequential because the study's core claim rests on the idea that reconfiguration, coordinating, and integrating capabilities are not interchangeable expressions of one generic adaptive resource. Instead, each construct must retain enough conceptual and empirical

distinctiveness for the model to identify different routes to healthcare management quality. At the same time, the correlations reported in Table 5 are substantively meaningful because they indicate that the constructs operate within a tightly connected organizational system. In other words, the variables are neither isolated nor redundant. This combination of relatedness and distinctiveness is exactly what the theoretical framework requires: enough overlap to justify mediation through organizational learning, but enough separation to explain why some capabilities act directly on quality whereas others derive their value primarily through learning and institutional integration.

Table 5: Fornell-Larcker criterion for focal constructs.

Construct	CC	IC	OL	RC	HMQ
CC	0.899				
IC	0.704	0.942			
OL	0.706	0.729	0.921		
RC	0.770	0.755	0.780	0.863	
HMQ	0.775	0.777	0.714	0.796	0.868

Keywords: RC: Reconfiguration capabilities; CC: Coordinating capabilities; IC: Integrating capabilities; OL: Organizational learning; HMQ: Healthcare management quality

Structural Model and Hypothesis Testing

Collinearity remained acceptable for structural analysis. The VIF values ranged from 4.524 to 5.517. Although some predictors slightly exceed the stricter benchmark of 5, all values remain below the more permissive threshold of 10 and were therefore retained. The model shows substantial explanatory power, with $R^2 = 0.865$ for healthcare management quality and $R^2 = 0.900$ for organizational learning. Predictive relevance is also strong, with $Q^2 = 0.815$ for healthcare management quality and $Q^2 = 0.890$ for organizational learning. The direct-path results support a selective structure of effects. Organizational learning has a strong positive effect on healthcare management quality ($\beta = 0.544$, $p < .001$). Reconfiguration capability is the only focal dynamic capability dimension with a significant direct effect on healthcare management quality ($\beta = 0.225$, $p = .005$). Coordinating capability and integrating capability do not show significant direct effects on healthcare management quality. With respect to organizational learning, coordinating capability ($\beta = 0.273$, $p < .001$) and integrating capability ($\beta = 0.528$, $p < .001$) are significant positive antecedents, whereas reconfiguration capability is not.

Table 6: Structural-model quality indicators.

Metric	Endogenous construct / path	Reported value
	HMQ	$R^2 = 0.865$; adjusted $R^2 = 0.861$

Coefficient of determination	OL	$R^2 = 0.900$; adjusted $R^2 = 0.897$
Predictive relevance	HMQ	$Q^2 = 0.815$; RMSE = 0.438; MAE = 0.301
	OL	$Q^2 = 0.890$; RMSE = 0.336; MAE = 0.222
Effect size	OL $\rightarrow$ HMQ	$f^2 = 0.220$
	IC $\rightarrow$ OL	$f^2 = 0.438$
	CC $\rightarrow$ OL	$f^2 = 0.120$
	RC $\rightarrow$ HMQ	$f^2 = 0.071$

Predictive Relevance (Q^2)

Figure 3 further supports the paper by demonstrating that the structural model has substantial predictive relevance for the key endogenous constructs. The Q^2 values reported for organizational learning and healthcare management quality are both well above zero, confirming that the model has predictive capability rather than mere post hoc explanatory fit. This matters because the proposed relationships are not only statistically meaningful but also useful for predicting how learning and quality outcomes emerge within UAE hospitals. The stronger predictive relevance for organizational learning reinforces its central role as the model's main explanatory mechanism, while the substantial predictive relevance for healthcare management quality confirms that the combined effects of the focal capabilities and organizational learning offer a robust basis for understanding sustained quality improvement.

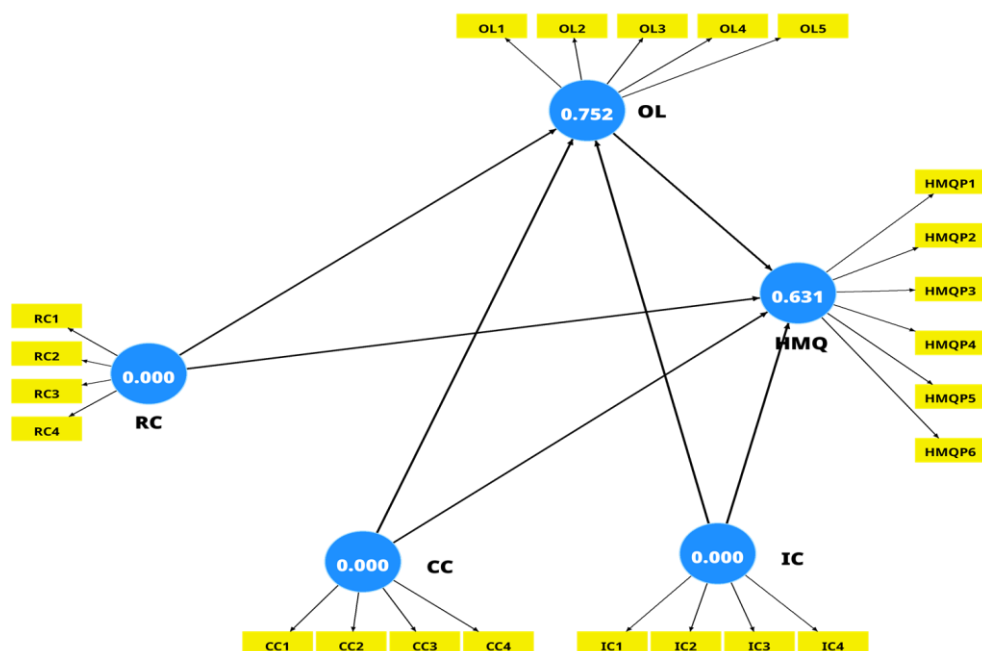


Figure 3: Predictive Relevance Model (Q^2) (Construct Cross-Validated Redundancy).

Table 7 provides the clearest expression of the study's selective capability logic. Among the focal direct hypotheses, H1, H5, H6, and H7 are supported, whereas H2, H3, and H4 are not supported. Substantively, this indicates that reconfiguration capability

contributes directly to healthcare management quality, while coordinating and integrating capabilities do not generate immediate quality gains on their own. Instead, coordinating and integrating capabilities derive much of their value through organizational learning, and organizational learning itself emerges as the strongest direct predictor of healthcare management quality. The non-significant RC → OL path is also informative because it suggests that a capability may matter operationally without necessarily strengthening organization-wide learning.

Table 7: Direct-path results for focal hypotheses.

Hypothesis	Path	β	p	Decision
H1	RC → HMQ	0.225	0.005	Accepted
H2	CC → HMQ	0.170	0.061	Rejected
H3	IC → HMQ	0.125	0.176	Rejected
H4	RC → OL	0.016	0.773	Rejected
H5	CC → OL	0.273	< 0.001	Accepted
H6	IC → OL	0.528	< 0.001	Accepted
H7	OL → HMQ	0.544	< 0.001	Accepted

Keywords: RC: Reconfiguration capabilities; CC: Coordinating capabilities; IC: Integrating capabilities; OL: Organizational learning; HMQ: Healthcare management quality

Table 8 demonstrates that organizational learning functions as a selective mediator rather than as a universal transmission mechanism. The significant indirect effects for coordinating capability and integrating capability show that these two capabilities improve healthcare management quality primarily by enabling knowledge sharing, routine alignment, and the institutionalization of improved practice. By contrast, the non-significant indirect effect for reconfiguration capability indicates that not every operationally relevant capability depends on the same explanatory route. This is one of the study's most important findings because it supports a differentiated capability architecture instead of a generic mediation story. Organizational learning is central, but its mediating role is conditional on the nature of the antecedent capability.

Table 8: Indirect-path results for focal hypotheses through organizational learning.

Hypothesis	Indirect path	β	p	Decision
H8	RC → OL → HMQ	0.009	0.771	Rejected
H9	CC → OL → HMQ	0.149	0.001	Accepted
H10	IC → OL → HMQ	0.287	< 0.001	Accepted

Keywords: RC: Reconfiguration capabilities; CC: Coordinating capabilities; IC: Integrating capabilities; OL: Organizational learning; HMQ: Healthcare management quality

Mediation Analysis

Figure 4 aligns with the paper's central argument by showing that organizational learning is the key mechanism through which selected dynamic capabilities translate into healthcare management quality. The model demonstrates strong explanatory power, with $R^2 = 0.900$ for organizational learning and $R^2 = 0.865$ for healthcare management

quality, indicating that the proposed relationships account for a substantial proportion of variance in both constructs. Reconfiguration capability shows a significant direct effect on healthcare management quality ($\beta = 0.225$, $p = .005$) but not on organizational learning ($\beta = 0.016$, $p = .773$), suggesting a more immediate execution-based contribution. By contrast, coordinating capability ($\beta = 0.273$, $p < .001$) and integrating capability ($\beta = 0.528$, $p < .001$) significantly strengthen organizational learning, while their direct effects on healthcare management quality remain non-significant. The mediated pattern therefore reinforces the study's argument that learning is the principal route through which coordination and integration are converted into sustained quality improvement.

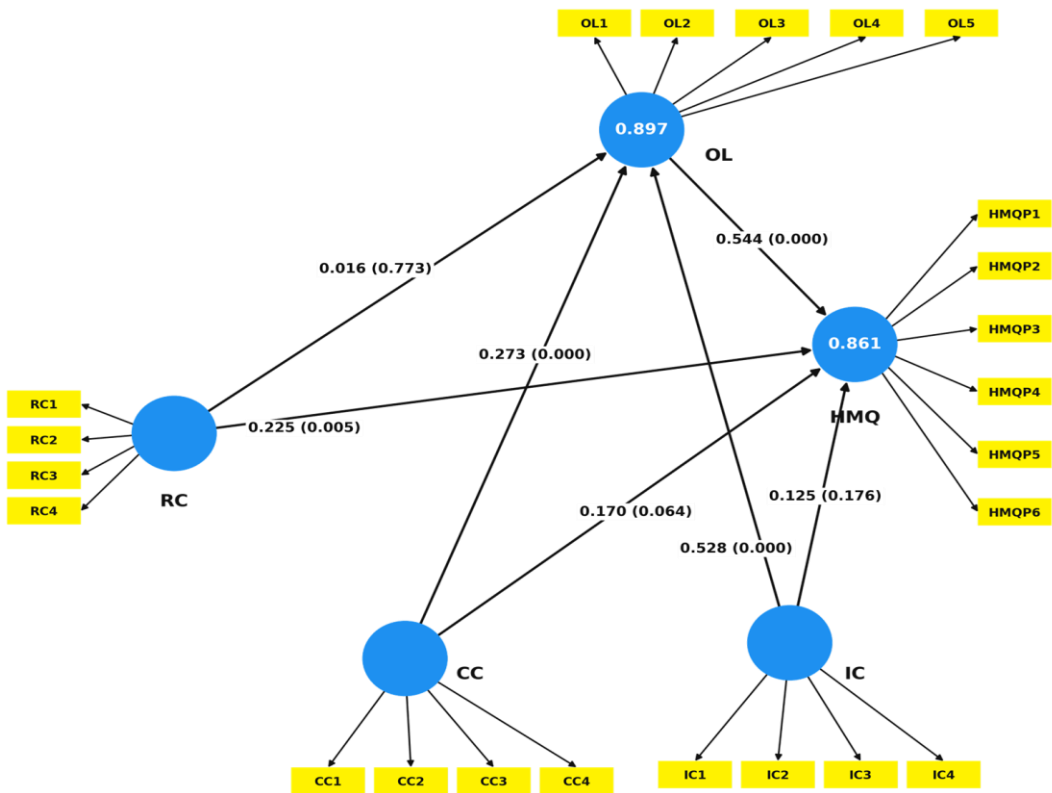


Figure 4 : Path Model Results of Mediation.

DISCUSSION

The strongest result in the model is the direct effect of organizational learning on healthcare management quality. This finding is theoretically important because it indicates that hospitals improve quality when knowledge is systematically analyzed, shared across units, documented, reused, and translated into revised practice. Quality improvement is therefore not simply a function of acquiring resources or technologies; it depends on whether the organization learns in a disciplined and institutionally embedded manner from operations, feedback, and prior experience. That interpretation

is consistent with recent research showing that continuous quality improvement becomes sustainable when local improvement work is connected to stronger learning capability and organizational routines (Bierbaum et al., 2025). Reconfiguration capability was the only focal dynamic capability dimension with a significant direct effect on healthcare management quality. This result is coherent with dynamic capabilities theory because reconfiguration is the capability most closely tied to execution, process redesign, and resource redeployment. In hospital settings, quality gains occur when organizations can actually realign workflows and service processes rather than merely recognize the need for change (Pellerito et al., 2023). At the same time, the non-significant RC → OL path indicates that operationally consequential capability does not always operate through the same learning mechanism as other capabilities.

By contrast, coordinating capability and integrating capability did not generate direct quality gains in the reported model. Their importance lies in the learning pathway. Both capabilities significantly improved organizational learning, and both exhibited significant indirect effects on healthcare management quality through organizational learning. This pattern suggests that coordination and integration create value because they enable knowledge to move across units, become shared practice, and be embedded in routines that support more consistent service delivery. In theoretical terms, the findings connect dynamic capabilities theory with organizational learning theory by showing that some capabilities are valuable primarily because they strengthen the organization's capacity to absorb, distribute, and institutionalize knowledge (Easterling et al., 2024). The result also fits recent evidence that sustained improvement depends on organizational structures that support digital competence, leadership development, and cross-unit learning rather than on technology acquisition alone (Abou Hashish et al., 2025). An important tension emerges when the structural findings are read alongside the descriptive statistics. All focal constructs recorded means above the midpoint of the scale, yet only some produced significant direct structural effects. That gap matters because favorable managerial perceptions of capability strength are not equivalent to demonstrated effects on healthcare management quality.

The study therefore advances a differentiated explanation of how adaptive capability creates value in UAE hospitals. Dynamic capabilities theory explains why hospitals need adaptive capacity under turbulence. The resource-based view explains why internally developed and difficult-to-imitate routines matter for sustained performance. Organizational learning theory explains how those routines are converted into repeatable quality improvement. The evidence supports a selective rather than universal capability logic: reconfiguration acts directly on healthcare management quality, whereas coordinating and integrating capabilities derive much of their value from strengthening organizational learning. That interpretation keeps the manuscript aligned with the approved study model while clarifying its contribution to current debates on

capability deployment in healthcare organizations facing digital transformation and operational strain ([Mauro et al., 2024](#))(Mauro et al., 2024).

IMPLICATIONS

Theoretical Implications

The primary theoretical implication is that dynamic capabilities should not be treated as a uniform bundle with automatically positive performance effects. In this study, the explanatory structure is selective. Reconfiguration capability matters because it is close to execution. Coordinating capability and integrating capability matter because they activate organizational learning. Organizational learning matters because it is the strongest direct route to healthcare management quality. This offers a more precise explanation than the generic claim that all adaptive capabilities are equally beneficial across healthcare settings. The paper also contributes by integrating dynamic capabilities theory, organizational learning theory, and the resource-based view into a single account of how hospitals convert adaptive potential into quality outcomes. In doing so, it shifts the discussion from broad claims about adaptability toward a narrower and more defensible explanation of which capabilities matter, how they matter, and through which mechanism they matter.

Managerial Implications

The managerial implications follow directly from the observed pattern of results. Hospital leaders should not assume that broad adaptability rhetoric or favorable perceptions of capability strength will automatically improve quality performance. Capability development should instead prioritize three linked areas. First, hospitals need stronger reconfiguration routines, including process redesign, role realignment, and rapid adaptation of service workflows. Second, they need coordination mechanisms that reduce departmental silos, improve knowledge exchange, and support feedback-rich improvement work. Third, they need integration routines that allow technologies, practices, and service innovations to become institutionally embedded rather than remaining isolated initiatives. These priorities are consistent with recent quality-improvement research showing that active leadership, staff development, and organizational capability building are critical to sustained improvement performance.

Policy Implications

At the policy level, the findings suggest that health-sector modernization in the UAE should focus less on visible investment alone and more on the organizational conditions required to absorb and operationalize that investment. Digital infrastructure, accreditation systems, and service reform can improve healthcare management quality only when hospitals also develop learning systems capable of converting new resources into repeatable improvement. Policies that encourage cross-unit coordination,

managerial learning, digital capability development, and workforce support may therefore be as important as investment in technology or formal quality programs. This implication is consistent with recent evidence showing that continuous quality improvement depends not only on tools and frameworks but also on culture, leadership, and organizational readiness.

LIMITATIONS AND FUTURE RESEARCH

Several limitations should be acknowledged. First, the study used a cross-sectional design, which supports the testing of associations but does not permit strong causal inference. Longitudinal research is therefore needed to determine how capability development and organizational learning translate into healthcare management quality over time. Second, the data were self-reported by middle-level managers. That perspective is analytically valuable because such respondents are closely involved in capability deployment and operational translation, but it may still reflect perceptual bias and common-method pressure. Multi-source designs combining managerial, clinical, and archival quality indicators would strengthen future evidence. Third, the empirical setting was restricted to UAE hospitals. The findings are therefore contextually informative rather than automatically generalizable. Comparative studies across GCC countries or other developing healthcare contexts would help determine whether the selective capability structure identified here is context-specific or more broadly replicable. Fourth, the achieved usable sample was 206 respondents rather than the planned 242. Although the sample was adequate for PLS-SEM, future research should seek larger samples to improve subgroup analysis, model stability, and external validity.

Future research should also extend the measurement and reporting rigor of this line of inquiry. Although the current results provide adequate support for structural interpretation, subsequent studies should continue refining the measurement instrument, replicate the model with larger samples, and test the framework across different healthcare settings. Greater use of multi-source data and longitudinal designs would also help strengthen inference and clarify how capability development and organizational learning evolve over time.

CONCLUSION

This study examined how selected dynamic capabilities and organizational learning shape healthcare management quality in UAE hospitals. The evidence does not support a blanket claim that all dynamic capabilities improve quality in the same way. Instead, the results indicate a selective structure of effects: organizational learning is the strongest direct predictor of healthcare management quality, reconfiguration capability improves quality directly and coordinating and integrating capabilities improve quality indirectly through organizational learning. The practical implication is clear. Hospitals seeking stronger healthcare management quality should focus less on generic claims of agility and more on the organizational mechanisms that redesign work and convert

coordination and integration into institutional learning. The theoretical implication is equally important: in healthcare settings, dynamic capabilities matter most when they are either close to operational reconfiguration or embedded in learning processes that institutionalize change. That is the paper's central contribution and the most defensible interpretation of the reported evidence.

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