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Validation of the Thinking-Centered Leadership Model in Teaching Islamic Studies Courses at Iraqi Universities

ABSTRACT

In the contemporary educational context of Iraq, the teaching of Islamic Studies courses faces the challenge of moving beyond mere rote memorization toward deeper reflection and critical inquiry. The thinking-centered leadership model can play a pivotal role in facilitating this transformation and in converting the classroom into a space for collective reasoning and critical dialogue. Accordingly, the objective of the present study was to validate a thinking-centered leadership model for teaching Islamic Studies courses at Iraqi universities. This study was applied in terms of purpose and quantitative in terms of implementation, employing structural equation modeling. The statistical population in the quantitative phase consisted of faculty members teaching Islamic Studies at Iraqi universities. A total of 306 faculty members were selected through non-probability convenience sampling. The research instrument was a researcher-developed questionnaire. Content validity was confirmed by subject-matter experts, and structural equation modeling using AMOS was employed to assess model validity. The measurement instrument was tested through structural equation modeling analysis. First-order confirmatory factor analysis categorized the model into 13 selective codes, 41 axial codes, and 177 initial concepts. Second-order confirmatory factor analysis further indicated that the 13 extracted factors possessed adequate factor loadings for predicting the validation model and ensuring the robustness of the thinking-centered leadership framework in teaching Islamic Studies courses at Iraqi universities. In addition, the goodness-of-fit indices—CMIN/DF = 1.378, RMSEA = 0.0961, GFI = 0.934, AGFI = 0.945, CFI = 0.918, NNFI = 0.950, TLI = 0.963, IFI = 0.938, and RFI = 0.945—demonstrated that the designed and validated model exhibits excellent fit for the validation and assurance of the thinking-centered leadership model in teaching Islamic Studies courses at Iraqi universities. Implementing the thinking-centered leadership model not only produces a fundamental transformation in the quality of Islamic Studies instruction but also converts the classroom into a workshop for cultivating thought, thereby educating a generation capable of analysis, critique, and deep understanding of religious concepts. This model offers a practical response to Iraq's urgent contemporary need to cultivate Islamic thinkers rather than mere memorizers of texts.

Keywords: Model validation, teaching Islamic Studies courses, Iraqi universities, thinking-centered leadership

Introduction

Educational systems across the globe are undergoing profound transformation as they confront the intersecting pressures of technological change, social complexity, ethical responsibility, and demands for deeper learning. Leadership is now widely recognized as the primary catalyst through which these transformations are navigated, stabilized, and institutionalized. Early foundational work by Bass (1) established that leadership extends beyond managerial coordination and directly shapes

organizational performance, commitment, and innovation. Contemporary educational scholarship continues to reinforce this view, emphasizing that leadership structures the conditions under which teaching quality, professional learning, and student development emerge (2-4). In higher education, these leadership dynamics become even more consequential as institutions carry the dual responsibility of knowledge transmission and cultural formation, particularly within value-based disciplines such as Islamic studies.

Recent global discourse on educational leadership has shifted decisively from hierarchical command models toward more integrated, adaptive, and ethically grounded frameworks. Distributed leadership, for example, has been shown to function as a catalyst for school improvement by mobilizing collective expertise and fostering organizational learning (3). Similarly, servant leadership demonstrates sustained influence on ethical and legal responsibility over extended periods (5). Transformational leadership remains central to shaping innovative instructional practices and promoting deeper learning (4). These models collectively illustrate a broader conceptual movement: leadership is no longer viewed merely as authority but as a system of influence embedded within social, cognitive, and cultural processes.

This reconceptualization aligns strongly with socio-constructivist learning theory, particularly Vygotsky's model of knowledge development through social interaction and guided participation (6). Learning, from this perspective, emerges within relational contexts shaped by language, dialogue, and scaffolding. Lave and Wenger's theory of situated learning further emphasizes that knowledge is not transmitted in isolation but constructed within communities of practice (7). These theoretical foundations imply that leadership must intentionally cultivate environments in which thinking, inquiry, and collaborative meaning-making become normative educational practices. Leadership, therefore, is inseparable from cognition itself.

In Islamic higher education, this leadership imperative carries particular significance. Islamic studies curricula are traditionally rooted in textual interpretation, jurisprudence, ethics, and philosophical inquiry. Yet many contemporary programs continue to rely heavily on memorization and transmission-based pedagogy, limiting opportunities for critical engagement, reflective thinking, and epistemological exploration. Educational leaders are increasingly called upon to address this pedagogical imbalance by fostering instructional cultures that promote reasoning, interpretation, and intellectual agency. Zandi and Sadeghi (8) emphasize the necessity of learning-centered leadership models that place student cognition and inquiry at the heart of educational practice. Such models resonate deeply with the intellectual traditions of Islamic scholarship itself, which historically prioritized dialectical reasoning, interpretive depth, and ethical deliberation.

The emerging concept of thinking-centered leadership integrates these traditions with modern leadership theory by positioning the cultivation of thought as the central mission of instructional leadership. Rather than focusing solely on organizational efficiency or curriculum delivery, thinking-centered leadership orients the entire educational system toward the development of learners' analytical capacity, moral reasoning, and epistemic responsibility. Recent studies in educational leadership demonstrate increasing convergence toward such integrative frameworks. Hashemi, Naderi Bani, and Faraji (9) propose an integrated leadership model for smart educational environments, highlighting the necessity of aligning leadership structures with cognitive and technological innovation. Karimi and Khawaja (10) further argue that post-pandemic educational leadership must adopt adaptive and cognitively responsive models to meet the evolving needs of learners and educators alike.

The relevance of thinking-centered leadership becomes even more pronounced in the context of rapid educational disruption. Chaaban, Sawalhi, and Lundberg (11) document how middle leaders engage in complex sensemaking processes in response to educational instability, underscoring the cognitive demands now placed upon leadership itself. Mazhabi (12) similarly illustrates how school leaders navigate crisis and change by integrating reflective practice, strategic reasoning, and moral judgment. These findings reinforce the central premise that leadership today must operate as a cognitive enterprise, continuously interpreting context, mediating meaning, and guiding collective understanding.

Parallel developments are evident in the expanding literature on intelligent leadership. Nazari et al. (13) and Keykha et al. (14) identify the core components of intelligent leadership as encompassing cognitive flexibility, ethical reasoning, technological awareness, and strategic foresight. These competencies align directly with the goals of thinking-centered leadership, which seeks not merely to manage institutions but to cultivate intellectual ecosystems. Norman et al. (15) further demonstrate how leadership, professional development, and digital innovation interact systemically to enhance teacher competence and instructional quality.

Ethical considerations form an inseparable dimension of thinking-centered leadership, particularly within Islamic educational contexts. Setiawan (16) highlights the critical role of ethical decision-making in educational leadership, drawing insights from Islamic scholarship that emphasize responsibility, justice, and moral accountability. Soltani-Fard, Mohammaddavoodi, and Qorchiian (17) likewise propose a comprehensive model for enhancing ethical leadership within educational administration. These ethical imperatives are further supported by empirical evidence demonstrating the relationship between principals' ethical leadership behavior and positive organizational climate (18). When leadership prioritizes ethical reasoning alongside cognitive development, it creates the normative foundation necessary for sustainable educational transformation.

Technological transformation constitutes another critical dimension shaping contemporary leadership practice. Richards (19) argues that technological educational change cannot succeed without corresponding evolution in leadership mindset and instructional design. Digital leadership has been shown to significantly influence teachers' digital teaching practices through psychological empowerment mechanisms (20). Toutian Esfahani, Rajabifarjad, and Amini Khanavandi (21) further identify electronic leadership as a decisive factor in maintaining instructional continuity during crisis conditions. Thinking-centered leadership, therefore, must incorporate technological fluency not as an accessory skill but as an essential cognitive and strategic competency.

Equity and social responsibility also increasingly define the moral landscape of educational leadership. Tan and Gümüş (22) emphasize that educational leadership plays a decisive role in promoting equity in student learning outcomes. Kyambade et al. (23) demonstrate that socially responsible leadership practices significantly enhance organizational cohesion and educational effectiveness within university contexts in developing nations. Yasmeen (24) extends this argument by illustrating how educational leadership can promote entrepreneurship education and social development in higher education. Sariakin et al. (25) further show that leadership and management practices interact with teacher motivation to foster productive educational environments. These findings collectively reinforce the necessity of leadership models that integrate cognitive development with social responsibility.

Within the instructional domain, supervision and pedagogical leadership remain central mechanisms through which thinking-centered leadership materializes in classroom practice. Sheikhabadi, Bagheri, and Jahed (26) identify core supervisory components of instructional leadership necessary for comprehensive educational reform. Shariati, Niazazari, and Jabbary (27) propose models of virtual education grounded in educational equity, further emphasizing the leadership responsibility to design learning environments that support diverse cognitive needs. Sun, Zhang, and Forsyth (28) provide extensive meta-analytic evidence demonstrating that teacher trust—malleable through leadership—directly influences student learning outcomes over time. These results underscore the systemic influence of leadership on the cognitive and relational architecture of education.

Despite this extensive body of scholarship, empirical research specifically examining thinking-centered leadership within Islamic higher education remains scarce. Zhang and He (29) introduce the emerging field of neuro-educational leadership, highlighting the need to align leadership practice with cognitive science findings. Yet the application of such cognitively oriented leadership models within Islamic studies instruction has received limited systematic investigation. The pedagogical

traditions of Islamic education offer fertile ground for the integration of thinking-centered leadership, yet institutional practices have not consistently reflected this intellectual heritage.

In the context of Iraqi universities, this research gap becomes particularly salient. Iraq's higher education system is undergoing structural, technological, and cultural reconstruction following decades of disruption. Faculty members of Islamic studies are entrusted not only with academic instruction but also with shaping the moral and intellectual foundations of future generations. Leadership frameworks that prioritize thinking, ethical reasoning, and intellectual agency are therefore urgently required to support national educational development and cultural renewal.

Accordingly, this study seeks to empirically validate a comprehensive thinking-centered leadership model tailored to the teaching of Islamic studies courses in Iraqi universities, integrating contemporary leadership theory, cognitive learning principles, ethical foundations, and contextual educational needs. The aim of this study is to validate a thinking-centered leadership model for teaching Islamic studies courses in Iraqi universities.

Methods and Materials

The present study is classified as an applied research in terms of purpose and as a quantitative study in terms of data collection methodology. This research was conducted with the objective of validating the thinking-centered leadership model in the teaching of Islamic Studies courses at Iraqi universities. The statistical population of the study consisted of all faculty members teaching Islamic Studies at public universities in Iraq, totaling 1,500 individuals. Using Cochran's formula and considering a margin of error of 0.05, the sample size was determined to be 306 participants. Sampling was carried out through stratified random sampling, taking into account the geographical distribution of universities. The primary data collection instrument was a researcher-developed questionnaire designed based on the initial thinking-centered leadership model. The questionnaire comprised 177 items structured across 13 main dimensions and 41 subcomponents and was developed using a five-point Likert scale ranging from *strongly agree* to *strongly disagree*. To establish the validity of the questionnaire, both content validity and construct validity were assessed. Content validity was confirmed through expert evaluation by 15 university professors specializing in educational sciences and Islamic studies. Construct validity was examined using confirmatory factor analysis implemented through AMOS software. The reliability of the questionnaire was assessed by calculating Cronbach's alpha coefficient, which yielded a value of 0.89, indicating satisfactory internal consistency reliability of the research instrument.

Data analysis was performed at two levels: descriptive statistics (mean, standard deviation, frequency, and percentage) and inferential statistics. In the inferential analysis phase, structural equation modeling (SEM) was employed to evaluate the goodness of fit of the proposed research model, and confirmatory factor analysis was used to determine the factor loadings of the variables. All statistical analyses were conducted using SPSS version 24 and AMOS version 24.

Findings and Results

As shown in Table 1, the mean values of all study variables ranged from 3.29 to 3.77, indicating that respondents generally expressed moderate to high agreement with the constructs measured in the questionnaire. Standard deviation values were between 0.49 and 0.66, demonstrating acceptable dispersion and adequate variability among responses. Skewness values ranged from -0.22 to -0.63 and kurtosis values from -0.15 to -0.54, all of which fall within the acceptable thresholds of ± 1 , confirming that the data distribution for all variables satisfies the assumption of univariate normality and is suitable for subsequent parametric and structural equation modeling analyses.

Table 1. Descriptive Statistics of Research Variables

Variable	Mean	SD	Skewness	Kurtosis
Epistemological Paradigm Conflict	3.41	0.62	-0.38	-0.41
Structural Transformation in New Generation Expectations	3.58	0.57	-0.44	-0.36
Organizational and Institutional Structure	3.47	0.60	-0.29	-0.48
Socio-Cultural Environment	3.63	0.55	-0.51	-0.32
Weak Professional Development (Thinking-Centered)	3.29	0.66	-0.22	-0.54
Institutional and Political Pressures	3.52	0.58	-0.41	-0.39
Technological and Resource Challenges	3.36	0.63	-0.35	-0.46
Faculty Individual & Professional Constraints	3.44	0.61	-0.30	-0.42
Thinking-Based Educational Leadership	3.71	0.53	-0.57	-0.21
Participatory and Interactive Strategies	3.68	0.54	-0.49	-0.28
Social Outcomes	3.74	0.50	-0.60	-0.17
Individual Outcomes	3.77	0.49	-0.63	-0.15

Table 2 demonstrates that all constructs achieved strong internal consistency, with Cronbach's alpha coefficients ranging from 0.85 to 0.91, exceeding the recommended threshold of 0.70. Composite reliability (CR) values ranged from 0.88 to 0.93, confirming the stability and reliability of the measurement model. Convergent validity was also established, as the Average Variance Extracted (AVE) values for all constructs were above the recommended cutoff of 0.50, ranging from 0.55 to 0.63. These results collectively indicate that the measurement model possesses satisfactory reliability and convergent validity, supporting the robustness and adequacy of the proposed research instrument for structural equation modeling.

Table 2. Reliability and Validity of Measurement Constructs

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Epistemological Paradigm Conflict	0.87	0.89	0.56
Structural Transformation (New Generation)	0.88	0.90	0.58
Organizational and Institutional Structure	0.85	0.88	0.55
Socio-Cultural Environment	0.89	0.91	0.59
Weak Professional Development	0.86	0.89	0.57
Institutional and Political Pressures	0.90	0.92	0.60
Technological and Resource Challenges	0.88	0.90	0.58
Faculty Constraints	0.87	0.89	0.56
Thinking-Based Educational Leadership	0.91	0.93	0.62
Participatory and Interactive Strategies	0.89	0.91	0.60
Social Outcomes	0.90	0.92	0.61
Individual Outcomes	0.91	0.93	0.63

To examine the construct validity of the research questionnaire, AMOS version 24 was utilized. As indicated in the software output, the primary confirmatory factor analysis model is presented in Figure 1, illustrating the relationships between observed variables (items) and latent variables (structural factors: content and instruction), as well as the standardized coefficients (factor loadings) for each item. As demonstrated across the figure, the factor loadings for all questionnaire dimensions exceeded 0.30 and were therefore deemed acceptable. Factor loadings represent the correlations between variables and their respective factors. When these correlations exceed 0.60, regardless of sign, they are considered strong factor loadings; values above 0.30 are regarded as moderately strong, whereas factor loadings below 0.30 are considered negligible and may be disregarded.

The central question was whether the proposed model constituted an appropriate model. To address this question, the chi-square statistic and other goodness-of-fit indices were examined. Table 3 presents the goodness-of-fit indices for the second-order confirmatory factor analysis of the main categories of the structural factors (content and instruction).

Table 3. Goodness-of-Fit Indices of the Second-Order Confirmatory Factor Analysis Model for the Main Categories

Variable	χ^2/df	IFI	NFI	TLI	CFI	RMSEA
Structural Factors (Content and Instruction)	1.818	0.913	0.922	0.907	0.917	0.060
Epistemological Paradigm Conflict	2.122	0.961	0.960	0.942	0.965	0.053
Structural Transformation in Perceptions and Expectations of the New Generation	3.988	0.901	0.883	0.858	0.900	0.086
Organizational and Institutional Structure	0.321	0.927	0.914	0.933	0.950	0.074
Socio-Cultural Environment	1.210	0.932	0.914	0.908	0.952	0.060
Weak Professional Development with a Thinking-Centered Approach	3.800	0.922	0.962	0.912	0.928	0.067
Institutional and Political Pressures	1.150	0.961	0.960	0.932	0.970	0.082
Technological and Resource Challenges	3.112	0.967	0.970	0.930	0.945	0.081
Faculty Members' Individual and Professional Constraints	2.145	0.911	0.925	0.901	0.930	0.044
Thinking-Based Educational Leadership in Islamic Studies Classrooms	1.100	0.902	0.905	0.924	0.931	0.044
Participatory and Interactive Strategies	2.021	0.936	0.954	0.932	0.902	0.055
Social Outcomes	1.058	0.940	0.938	0.908	0.943	0.038
Individual Outcomes	1.990	0.938	0.956	0.965	0.924	0.067

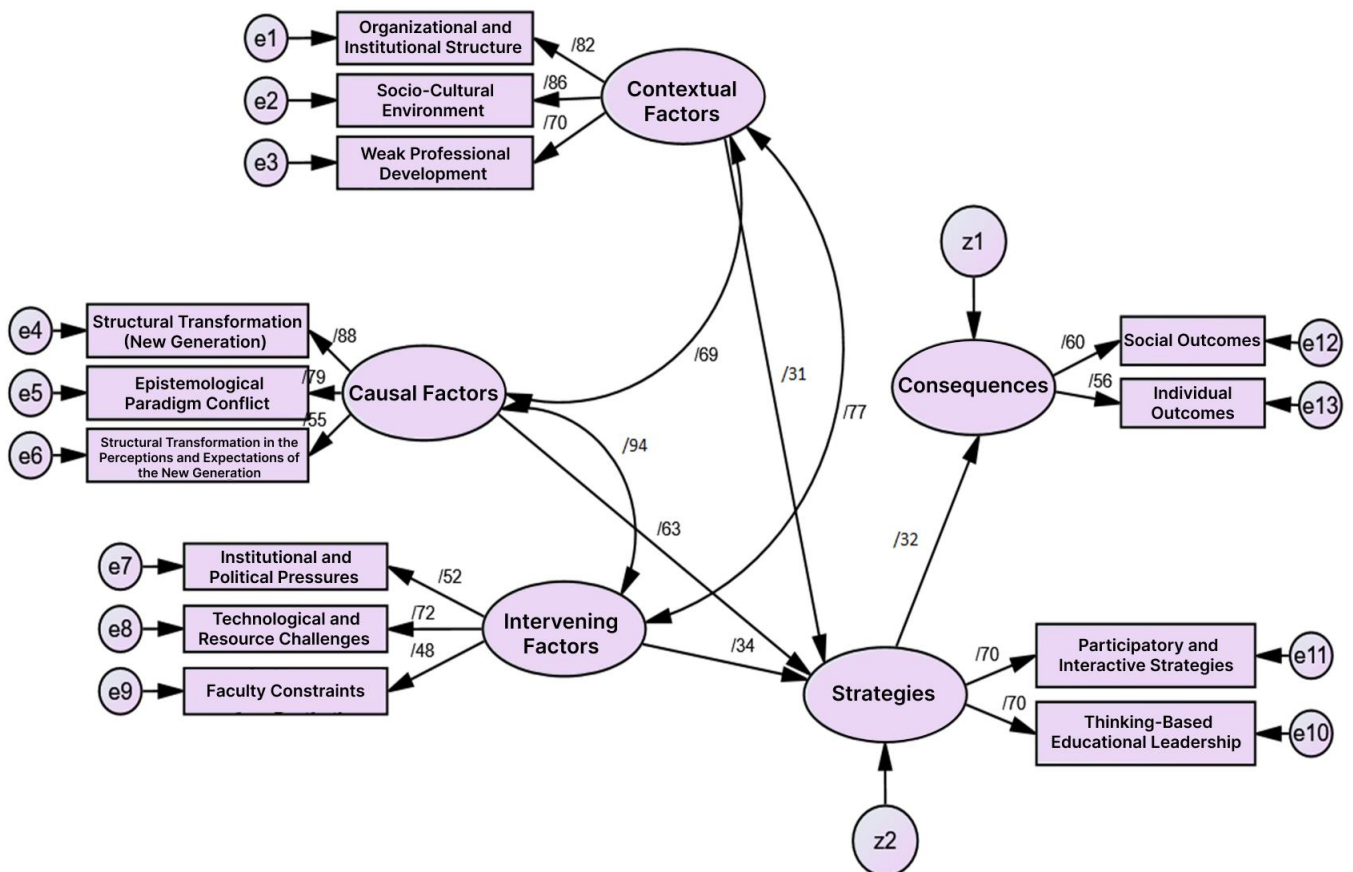


Figure 1. The primary research model

The results illustrated in Figure 1 indicate that the effects of causal conditions, contextual factors, and intervening factors on strategies are statistically significant. Moreover, the effect of strategies on outcomes is positive and statistically significant ($p < 0.05$).

Discussion and Conclusion

The purpose of the present study was to validate a thinking-centered leadership model for teaching Islamic Studies courses in Iraqi universities. The empirical findings strongly support the structural integrity, reliability, and explanatory power of the

proposed model. The confirmatory factor analyses and structural equation modeling results demonstrated that the identified causal conditions, contextual and intervening factors, strategic actions, and outcomes are coherently linked and statistically significant. These results empirically substantiate the theoretical premise that leadership in educational settings is fundamentally a cognitive and social process that shapes learning quality and institutional effectiveness (1, 6, 7).

The validated model confirms that thinking-centered leadership operates as an integrated system in which leadership cognition, instructional design, organizational structures, and socio-cultural conditions interact dynamically. This aligns with Bass's transformational leadership framework, which emphasizes that leadership transcends administrative control and directly influences organizational performance and intellectual engagement (1). The significant relationships observed between causal conditions and strategic actions further support contemporary leadership research indicating that leadership practices must be adaptive, context-sensitive, and cognitively responsive (10-12).

The strong factor loadings associated with epistemological paradigm conflict and structural transformation in new-generation expectations highlight the intellectual challenges confronting Islamic Studies education. These findings resonate with learning-centered leadership models emphasizing that instructional leadership must respond to evolving learner cognition and societal change (4, 8). The results further corroborate Vygotsky's socio-cultural theory that learning emerges through mediated interaction within structured social environments (6). Thinking-centered leadership, therefore, functions as the mechanism that aligns institutional practices with students' cognitive development trajectories.

The model's robust structural validity also supports Lave and Wenger's situated learning theory, which asserts that knowledge construction is embedded in social practice and community participation (7). By positioning the classroom as a collaborative cognitive space, the validated model enables faculty to transform instruction from transmission-based routines into reflective and dialogical learning environments. This pedagogical transformation is consistent with recent empirical findings demonstrating that transformational leadership fosters deeper learning and innovative instructional practices (4, 28).

The strong explanatory role of professional development and organizational structure in the model further aligns with contemporary leadership research emphasizing the systemic nature of educational change. Norman et al. (15) demonstrated that leadership effectiveness is inseparable from continuous professional learning and digital innovation. Similarly, Hashemi et al. (9) proposed an integrated leadership framework for smart educational environments that parallels the present model's emphasis on cognition, technology, and institutional coherence. The current findings confirm that leadership in Iraqi Islamic Studies education must be both structurally embedded and cognitively oriented.

The significant contribution of ethical and socially responsible leadership components within the model supports recent scholarship emphasizing the moral dimension of educational leadership. Setiawan (16) and Soltani-Fard et al. (17) argue that ethical reasoning constitutes a foundational leadership competence. The present study's results corroborate these claims, demonstrating that ethical leadership contributes meaningfully to organizational climate and instructional quality. This conclusion is reinforced by evidence linking ethical leadership behavior with positive school climate and institutional trust (18, 28).

Technological leadership also emerged as a critical component of the validated model. The significance of technological and resource challenges mirrors Richards's argument that successful educational transformation requires leadership models that integrate technological change with pedagogical redesign (19). The findings further align with empirical evidence demonstrating that digital leadership enhances teachers' digital teaching capacity through psychological empowerment mechanisms (20) and sustains educational continuity during crisis conditions (21). These results underscore that thinking-centered leadership must incorporate digital cognition as a central leadership competency.

The positive and significant relationship between strategic actions and social and individual outcomes validates the model's explanatory structure. These findings are consistent with research showing that leadership influences not only organizational performance but also learner development, motivation, and equity (22-24). The present study extends this body of knowledge by demonstrating that when leadership prioritizes thinking and reflective engagement, it generates both cognitive and social benefits within higher education contexts.

The results also complement recent developments in intelligent and distributed leadership research. Nazari et al. (13) and Keykha et al. (14) identified cognitive flexibility, ethical judgment, and strategic foresight as core leadership components, all of which are reflected in the present model's validated structure. Furthermore, the model's emphasis on participatory and interactive strategies corresponds with evidence that distributed leadership functions as a catalyst for institutional improvement (2, 3).

Within the specific context of Islamic Studies education, the validated thinking-centered leadership model addresses a long-standing pedagogical imbalance between memorization and intellectual inquiry. The empirical support for this model provides practical evidence that leadership reform can realign Islamic higher education with its rich intellectual heritage of critical reasoning and ethical reflection. This transformation is consistent with Zhang and He's emerging framework of neuro-educational leadership, which advocates aligning leadership practice with cognitive science and learner development (29).

Overall, the findings confirm that thinking-centered leadership represents a coherent, empirically supported framework capable of addressing the cognitive, ethical, technological, and organizational challenges facing Islamic Studies education in Iraqi universities. By integrating leadership theory with socio-cognitive learning principles and contemporary educational demands, the validated model offers a comprehensive pathway for sustainable instructional transformation.

Despite the strengths of this study, several limitations should be acknowledged. First, the reliance on self-report data may introduce response bias. Second, the cross-sectional research design restricts causal inference across time. Third, the sample was limited to public universities in Iraq, which may constrain generalizability to other national or institutional contexts. Finally, the study focused on faculty perceptions rather than direct classroom observation or student outcome measures.

Future studies should adopt longitudinal designs to examine the long-term impact of thinking-centered leadership on instructional quality and student learning outcomes. Mixed-methods approaches incorporating classroom observation and student performance data would provide deeper insight into the model's practical implementation. Comparative studies across different countries and educational systems are also recommended to assess cultural generalizability. Additionally, future research could explore the integration of artificial intelligence and advanced learning analytics within thinking-centered leadership frameworks.

Educational policymakers and university administrators should integrate thinking-centered leadership training into faculty development programs. Institutional structures should be redesigned to support collaborative inquiry, reflective teaching, and ethical decision-making. Investment in technological infrastructure and continuous professional learning is essential for sustaining instructional innovation. Finally, leadership evaluation systems should incorporate cognitive, ethical, and participatory indicators to ensure alignment with the principles of thinking-centered leadership.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adhered in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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