

TOWARDS A BEHAVIOURAL-QUANTUM LEADERSHIP FRAMEWORK FOR MALAYSIA'S PRIVATE HEALTHCARE SECTOR

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ABSTRACT

OBJECTIVE:

To propose a Behavioural-Quantum Leadership Framework tailored to the realities of Malaysia's private healthcare sector, addressing the gap between traditional leadership models and the complex, non-linear nature of private hospitals.

DESIGN:

A conceptual synthesis integrating task-relationship-change oriented behavioural leadership with adaptive, relational, and sensemaking capacities drawn from quantum and complexity leadership theories.

SETTING:

The private healthcare sector in Malaysia, characterized by workforce constraints, digital transformation, and commercial competition.

MAIN OUTCOME MEASURES:

The development of a theoretical framework that bridges classical and modern leadership paradigms to support operational stability and adaptive responsiveness.

RESULTS:

The proposed framework integrates three domains: (1) Behavioural foundations for operational stability; (2) Quantum adaptive capacities for navigating uncertainty; and (3) Complexity-informed processes for emergent decision-making

CONCLUSIONS:

The framework offers a structured foundation for future empirical testing and provides practical guidance for leadership development, aiming to strengthen resilience and service quality in Malaysian private hospitals.

KEYWORDS

behavioural leadership, quantum leadership, complexity leadership, private healthcare, Malaysia, leadership framework, adaptive leadership

INTRODUCTION

Leadership is a critical determinant of organisational effectiveness in healthcare, particularly in environments characterised by uncertainty, rapid technological change and complex patient-care demands. In Malaysia, the private healthcare sector has expanded rapidly, driven by rising patient expectations, medical tourism, competitive market pressures and organisational growth. As private hospitals compete on service quality, efficiency and innovation, leadership at the level of frontline managers, matrons, heads of department and clinical leaders become central to shaping staff behaviour and patient outcomes.

Traditional leadership models, including behavioural approaches derived from the Ohio State [1] and Michigan [2] studies, have long guided leadership development in healthcare. These models focus on observable leader behaviours such as structuring tasks, building relationships, communicating expectations and monitoring performance. Their appeal lies in being measurable, trainable and relatively easy to embed in management systems.

However, there is a growing recognition that healthcare organisations function as complex adaptive systems. While hospitals have always operated within complex dynamics, the increasing scale, interdependence and technological density of modern healthcare have made this complexity more visible and critical to management. They rely on interdependent teams, nonlinear workflows, unpredictable clinical demands and constant technological and regulatory change. In such systems, leadership requires more than behavioural clarity; it demands the capacity to navigate uncertainty, foster adaptability, stimulate collective intelligence and respond emergently to dynamic conditions. These requirements align with the principles of quantum and complexity leadership, which emphasise interconnectedness, relational intelligence, sensemaking and influence within dynamic networks. These perspectives have gained traction in international healthcare literature but remain underdeveloped in relation to Malaysia's private healthcare sector, creating a need for an integrated, contextually relevant leadership framework.

METHODOLOGY

This paper adopts a conceptual research design to develop a hybrid leadership framework. The study integrates theoretical perspectives from behavioural leadership, quantum leadership, and Complexity Leadership Theory (CLT) through a narrative synthesis of existing literature. The synthesis focuses on aligning these theories with the specific organizational context of Malaysia's private healthcare sector.

Ethical approval was not required for this study as it is a conceptual paper based on a synthesis of existing literature and theoretical frameworks. This research did not involve human participants or animal subjects.

RESEARCH GAP

Leadership research in Malaysia continues to rely heavily on classical models such as transformational, transactional and behavioural leadership, with limited engagement with modern theories suited to complex organisational environments. Although behavioural leadership remains widely applied due to its clarity and measurability, it does not fully address the nonlinear, interdependent and rapidly evolving conditions characteristic of private hospitals.

At the same time, quantum and complexity leadership perspectives — which emphasise adaptability, sensemaking, relational intelligence and emergent decision-making — have gained recognition internationally but remain conceptually fragmented and insufficiently integrated with established behavioural approaches. Most studies focus on nursing or public-sector contexts, offering little insight into leadership needs within Malaysia's private healthcare sector, where commercial pressures and patient expectations intensify organisational complexity.

Despite the sector's growing importance, there is a lack of leadership frameworks that combine behavioural structure with quantum-informed adaptability. No existing Malaysian studies propose a hybrid model or examine how such

integration could strengthen leadership effectiveness in private hospitals. This gap highlights the need for a theoretically grounded and contextually relevant Behavioural–Quantum Leadership Framework.

PROBLEM STATEMENT

Leadership in Malaysia's private healthcare sector remains guided largely by traditional behavioural models that emphasise task structuring, supervision and relational behaviours. While these models provide necessary operational clarity, they do not equip leaders to navigate the complex, interdependent and unpredictable conditions that characterise private hospitals today.

At the same time, quantum and complexity leadership theories offer adaptive and emergent perspectives but remain insufficiently integrated into Malaysian leadership practice and research. The absence of a hybrid model that combines behavioural structure with quantum adaptability creates a critical gap, limiting the sector's ability to develop leaders suited to contemporary healthcare demands.

LITERATURE REVIEW

SECTION 1 – BEHAVIOUR LEADERSHIP THEORY (CLASSICAL FOUNDATIONS)

Behavioural leadership emerged as an alternative to trait-based models, focusing on observable actions rather than inherent qualities. The Ohio State studies identified two core dimensions that Initiating Structure and Consideration, while the Michigan studies distinguished between production-centred and employee-centred behaviours. Blake and Mouton later consolidated these ideas through the Managerial Grid, mapping leadership along concerns for task and people [1-3].

These behavioural models remain influential in healthcare because they provide clear, measurable behaviours related to communication, supervision, role clarity and staff support. Research in the Malaysian context, such as the work by Ab Hamid and Johari [4], demonstrates that behavioural leadership significantly predicts employee engagement and team motivation. However, empirical studies specifically focusing on leadership effectiveness within the Malaysian private healthcare sector remain limited, highlighting a gap in the literature that necessitates further exploration. Task-oriented behaviours contribute to operational reliability, whereas relationship-oriented behaviours strengthen trust and psychological safety outcomes essential in clinical environments.

However, behavioural approaches offer limited guidance for navigating uncertainty, interdependence or rapidly evolving conditions common in modern healthcare. They explain what leaders do, but not how they adapt, sense-make or respond to emergent challenges. As private hospitals increasingly resemble complex adaptive systems, behavioural models alone are insufficient, signalling the need for complementary perspectives such as quantum and complexity leadership that better reflect dynamic organisational realities.

SECTION 2 – QUANTUM & COMPLEXITY LEADERSHIP (MODERN PERSPECTIVES)

Complexity Leadership Theory (CLT) positions leadership as a dynamic, interactive process embedded within complex adaptive systems rather than solely the actions of individuals. Uhl-Bien, Marion and McKelvey [5] argue that in environments marked by uncertainty, interdependence and rapid change, leadership must enable adaptability, learning and emergence. This perspective is increasingly relevant in private hospitals, where multidisciplinary teams, nonlinear workflows and unpredictable clinical demands reduce the effectiveness of hierarchical or purely behaviour-based approaches.

Quantum leadership extends this logic by highlighting relational intelligence, intuition, interconnectedness and influence within dynamic conditions. It emphasises how leaders shape outcomes through awareness, sensemaking and subtle interactions rather than only through directive behaviours [6]. However, definitions of quantum leadership vary widely, creating conceptual inconsistency. Dorri, Gorji and Bayati's review [7] found that quantum leadership lacks unified

dimensions, standardised competencies and validated measurement tools, limiting empirical application despite its growing relevance in healthcare.

Empirical evidence does, however, support the value of quantum-informed approaches. Afsar et al. [8] demonstrated that leadership fostering empowerment and learning enhances innovation performance, while studies in nursing contexts show that quantum leadership can strengthen collaboration, shared decision-making and team resilience [7,9].

Despite this promise, quantum and complexity leadership remain underdeveloped in Malaysian research, and few studies attempt to integrate them with established behavioural models. This absence of synthesis underscores the need for a hybrid framework that combines behavioural clarity with adaptive, relational and emergent capacities suited to contemporary healthcare environments.

SECTION 3 – LEADERSHIP IN MALAYSIA’S PRIVATE HEALTHCARE SECTOR (CONTEXTUAL NEED)

Malaysia's private healthcare system plays an increasingly significant role in national service delivery, relieving pressure on public hospitals and supporting medical tourism. Growth in bed capacity, digitalisation and service diversification has intensified market competition and placed greater focus on leadership effectiveness [10,11]. Within this context, leaders must balance service quality, financial performance, regulatory compliance and workforce capability while navigating rapid organisational and technological change. While public hospitals also face resource constraints and organisational complexity, the private sector is uniquely distinguished by its reliance on commercial sustainability and market competition. Private hospital leaders must balance clinical outcomes with direct financial accountability to shareholders and intense competition for medical tourists and insured patients. This specific tension between 'care' and 'commerce' creates a distinct leadership challenge that differentiates the private sector from the public system, necessitating a framework that addresses both operational efficiency and adaptive market responsiveness.

Private hospitals face challenges distinct from the public sector, including high patient expectations, commercial pressures, talent shortages and accelerated digital transformation. Studies within Malaysian healthcare show that leadership practices strongly influence employee engagement, service climate and operational outcomes [4]. However, most research continues to rely on traditional models. Ramli and Ahmad [12] observed that leadership development in private hospitals remains inconsistent and still grounded mainly in classical approaches, while Salleh and Ngah [13] highlighted structural and managerial challenges that require more adaptive forms of leadership.

Despite these pressures, leadership scholarship in Malaysia remains narrow. Existing studies are predominantly behaviour-based, and very few examine adaptive or complexity-informed perspectives relevant to modern healthcare conditions. Research focusing specifically on private hospitals is limited, creating a disconnect between leadership theory and the realities of commercial, fast-paced clinical environments.

These conditions make the integration of behavioural and quantum perspectives particularly relevant. Behavioural leadership provides operational clarity, communication structure and relational consistency — all essential for clinical safety and coordination. Quantum leadership contributes adaptability, sensemaking and emergent decision-making, enabling leaders to respond effectively to uncertainty, interdependence and dynamic patient-care demands.

Yet, no existing Malaysian study proposes a hybrid behavioural–quantum model, nor does any research address how such integration could support leadership development in private hospitals. This theoretical and practical gap strengthens the justification for a Behavioural–Quantum Leadership Framework tailored to Malaysia's private healthcare sector.

THEORETICAL FOUNDATION

The proposed framework is grounded in three complementary leadership theories: behavioural leadership, quantum leadership and Complexity Leadership Theory (CLT). Together, these perspectives provide both operational structure and adaptive capacity, reflecting the realities of Malaysia's private healthcare sector.

Behavioural leadership theory offers the foundational layer by emphasising observable and trainable leader behaviours. Derived from the Ohio State, Michigan and Managerial Grid traditions, behavioural theories highlight task-oriented, relationship-oriented and change-oriented behaviours that directly influence communication, supervision and coordination [1-3]. These behaviours remain central to clinical safety and workforce management in hospital settings.

Quantum leadership contributes a second layer centred on adaptability, relational intelligence and sensemaking. Rooted in metaphors of interconnectedness and non-linearity, quantum leadership emphasises how leaders influence outcomes through awareness, emergent decision-making and subtle interactions rather than directive control [6, 9]. Although conceptually diverse, quantum perspectives offer valuable insights for environments characterised by uncertainty and rapid change.

Complexity Leadership Theory provides a third, system-level layer. CLT conceptualises leadership as a dynamic process that enables learning, emergence and adaptability within complex adaptive systems [5]. In private hospitals — where interdependent workflows, multidisciplinary teams and unpredictable clinical conditions are the norm — CLT helps explain how leadership must operate across formal, informal and relational structures.

Integrating these perspectives creates a more complete understanding of leadership suited to Malaysia's private healthcare sector. Behavioural theory provides structure and clarity; quantum leadership introduces adaptability and relational depth; and CLT explains how leadership emerges within interconnected organisational systems. This combined foundation supports the development of a Behavioural–Quantum Leadership Framework that addresses both operational demands and dynamic complexities in private hospitals.

PROPOSED BEHAVIOURAL–QUANTUM LEADERSHIP FRAMEWORK

The proposed Behavioural–Quantum Leadership Framework synthesizes the theories discussed above into a practical model for Malaysian private hospitals. It structures leadership into three operational domains: (1) Behavioural foundations, which ensure regulatory and clinical compliance; (2) Quantum adaptive capacities, which address uncertain market and patient demands; and (3) Complexity-informed processes, which facilitate cross-departmental collaboration. Unlike previous models that view these as separate styles, this framework posits them as simultaneous requirements for the private healthcare leader.

Behavioural foundations represent the structural core of leadership. They include task-oriented behaviours such as role clarification, performance monitoring and coordination, as well as relationship-oriented behaviours that support communication, trust and staff engagement. These behaviours align with established leadership scholarship and remain essential for ensuring safety, consistency and accountability in private hospitals.

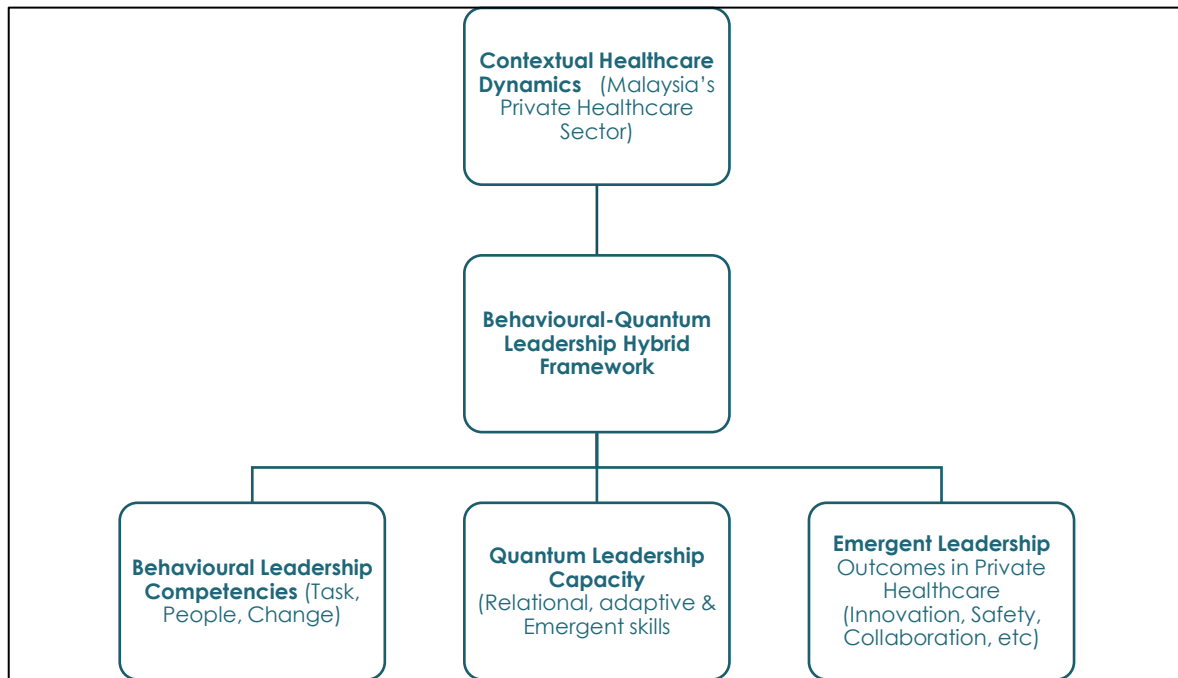
Quantum adaptive capacities form the second domain, capturing leaders' ability to navigate uncertainty, interpret emerging conditions and foster relational intelligence. This includes sensemaking, intuitive judgement, flexible decision-making and the capacity to create conditions where innovation and collaboration can emerge. These capabilities respond to the nonlinear nature of private hospital operations, where leaders frequently encounter unpredictable patient loads, shifting team dynamics and rapid technological changes.

The third domain, complexity-informed emergent processes, reflects the system-level interactions through which leadership unfolds. Drawing on Complexity Leadership Theory, this domain highlights how leadership emerges across formal and informal structures, enabling adaptability, learning and the mobilisation of distributed expertise within multidisciplinary teams.

The integration of these three domains provides a cohesive model that balances stability with adaptability. Behavioural elements anchor daily operations, quantum capacities support responsiveness under uncertainty and complexity

processes enable collective problem-solving. Together, they form a framework suited to the realities of Malaysia's private healthcare sector and provide the conceptual basis for future empirical testing.

FIGURE 1. BEHAVIOURAL-QUANTUM LEADERSHIP FRAMEWORK FOR MALAYSIA'S PRIVATE HEALTHCARE SECTOR.



DISCUSSION AND IMPLICATIONS

The integrated Behavioural–Quantum Leadership Framework advances leadership scholarship by bridging classical behavioural theory with modern complexity-oriented perspectives. Behavioural leadership remains essential for structuring communication, clarifying expectations and ensuring reliable clinical operations, yet it does not fully address the nonlinear and emergent challenges present within private hospitals. By incorporating quantum principles and complexity-based processes, the model offers a more comprehensive understanding of how leaders can navigate uncertainty, facilitate collaboration and support adaptive decision-making in dynamic healthcare environments.

Theoretical implications include expanding current Malaysian leadership research beyond traditional models and providing a foundation for future empirical validation. The framework offers a structured basis for examining how behavioural, relational and emergent leadership capacities interact, enabling new measurement tools and competency models tailored to healthcare settings.

Practical implications extend to leadership development, performance management and succession planning in private hospitals. Training programs can incorporate behavioural competencies while cultivating adaptive skills such as sensemaking, relational intelligence and real-time decision-making. Hospital administrators may also use the framework to assess leadership effectiveness and to design interventions that strengthen team coordination, staff engagement and service quality.

Policy and education implications arise as well. Healthcare training institutions and professional bodies can adopt hybrid leadership models that reflect contemporary organisational demands, while policymakers may integrate adaptive leadership competencies into leadership benchmarks for private healthcare organisations.

Overall, the framework highlights the need for leadership approaches that balance operational stability with adaptive responsiveness — a requirement increasingly critical for Malaysia's evolving private healthcare sector.

CONCLUSION

This paper proposes a Behavioural–Quantum Leadership Framework designed to address the leadership demands of Malaysia's private healthcare sector. By integrating behavioural clarity with quantum-informed adaptability and complexity-based emergence, the framework responds to organisational conditions characterised by uncertainty, interdependence and rapid change. It offers a more comprehensive approach than traditional behavioural models alone, which remain necessary but insufficient for contemporary clinical environments.

The framework provides a foundation for future empirical research, including the development of leadership competencies, measurement scales and intervention models suited to private hospitals. It also offers practical guidance for leadership development, organisational strategy and talent management. As the sector continues to evolve, hybrid leadership models such as this have the potential to strengthen resilience, innovation and service quality across Malaysia's private healthcare landscape.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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