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Innovative Work Behaviour in Healthcare: A Systematic Literature Review of Emerging Drivers, Theoretical Foundations, and Digital Transformation

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A R T I C L E I N F O

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A B S T R A C T

This study systematically reviews Innovative Work Behaviour (IWB) research in healthcare from 2016–2026 using PRISMA guidelines, analysing 54 studies from Scopus and Watase databases. The findings reveal rapid growth of IWB research after 2021, with leadership was the most frequently examined antecedent/domain, followed by organizational climate, motivation, and psychological capital. Existing studies remain largely focused on individual-level factors and nursing populations, with Social Exchange Theory as the most frequently applied framework, while theoretical integration across perspectives remains limited. Recent studies highlight the growing influence of digital organizational culture, digital self-efficacy, artificial intelligence, and technology dependence, indicating a shift toward digitally integrated explanations of IWB. This review proposes a leadership–resource–digital framework and emphasizes the need for future multilevel, cross-disciplinary, longitudinal, and technology-oriented healthcare innovation research.

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INTRODUCTION

In healthcare organizations, there is a growing emphasis on Innovative Work Behavior (IWB) as a means of enhancing service quality, operational efficiency, and organizational adaptability through continuous innovation. As healthcare organizations contend with the escalating demands for organizational responsiveness, competitive pressures, escalating service complexity, and rapid technological change, its relevance has been heightened. As a result, the ability of employees to generate, promote, and implement new ideas in their work is becoming increasingly important for healthcare-related innovation. Research conducted in the past has shown that IWB is influenced by a variety of organizational and individual conditions, such as organizational values, leadership, psychological resources, and work-related characteristics. (Afsar et al., 2018; Brunetto et al., 2021; Masood & Afsar, 2017).

From relatively conventional individual and organizational explanations to more multidimensional perspectives, research on IWB in healthcare has undergone a transformation. Organizational values, leadership, psychological empowerment, knowledge sharing, and organizational climate were prioritized in previous research (Afsar et al., 2018; Afsar & Umrani, 2020). The perspective was further developed by subsequent research, which investigated the psychosocial safety climate, psychological capital, job crafting, and mindful leadership (Baig et al., 2022; Brunetto et al., 2021; Zheng et al., 2022). There has been an increase in the number of diverse leadership and cultural mechanisms that have been introduced in recent studies. For instance, ambidextrous leadership has emerged as another pertinent leadership perspective (El-Sayed et al., 2025), while paternalistic leadership and public service motivation have been investigated as determinants of IWB (Hussain et al., 2025). These advancements suggest that healthcare IWB is becoming more widely recognized as the result of the interplay between individual, leadership, organizational, and contextual factors.

In IWB research for healthcare, the digital transformation has more relevance in defining a new trajectory. Increasingly, research is being conducted on the mechanisms that influence the innovative behavior of employees. These include digital organizational culture, digital self-efficacy, dependence on technology and use of artificial intelligence (AI). For instance, Liu et al. (2026) pointed out the importance of digital organizational culture by investigating digital self-efficacy and technology dependence. In contrast, Ghorbanzadeh et al. (2026) found AI adoption as a growing antecedent of innovative activity. At the same time, recent studies have increased our knowledge of negative organizational factors such as toxic leadership and workplace abuse that may hinder IWB (Bou et al., 2025). Taken together these advances suggest a move away from leadership and organization-centric explanations to a more complex socio-technical understanding of IWB.

But despite this development, the literature is still inconsistent. Previous reviews have been concentrated on specific leadership, organizational and geographical contexts, rather than comprehensively converging well-documented factors with new psychological and digital-technological

mechanisms (Alshahrani, 2023). In addition, the intellectual and methodological landscape of healthcare IWB research is poorly understood, given the dominance of cross-sectional designs and an inconsistent distribution of evidence across various geographical contexts (Afsar & Umrani, 2020; Shakil et al., 2021). Emerging evidence on ambidextrous leadership, cultural intelligence, AI, and digital culture has also not been duly integrated into existing syntheses.

The conceptual, contextual, methodological, and thematic dimensions of IWB research in healthcare are integrated in this systematic literature review to address these gaps. Its uniqueness is derived from its ability to integrate established leadership, organizational, and psychological explanations with emerging digital-technological drivers within an integrative framework. Consequently, this review addresses three research questions: RQ1: In what ways has healthcare IWB research advanced in terms of theoretical foundations, geographical contexts, and publication trends? RQ2: Which technological, organizational, leadership, and individual factors have been identified as antecedents and mechanisms of healthcare IWB? RQ3: What are the most significant thematic patterns and relationships that are evident in these research streams?

The remainder of the article presents the systematic review methodology, research profiling and thematic synthesis, integrative framework and future research agenda, and theoretical and practical implications.

LITERATURE REVIEW

Conceptual Foundations and Theoretical Scope

Innovative Work Behavior (IWB) refers to employees' intentional efforts to generate, promote, and implement new ideas to improve individual, team, and organizational performance (Durrah & Kahwaji, 2022). Janssen (2000) conceptualized IWB as a multidimensional process consisting of idea generation, idea promotion, and idea implementation, distinguishing it from creativity because IWB emphasizes the social and behavioral processes required to realize innovations. In healthcare, IWB has become increasingly important due to technological changes, complex patient needs, resource limitations, and demands for service improvement. Recent studies have expanded IWB research by incorporating psychological empowerment, commitment, cultural intelligence, digital self-efficacy, and other psychological mechanisms.

Evolution of IWB Research in Healthcare

Research on IWB in healthcare has evolved from leadership-focused models toward broader multidimensional approaches involving individual, organizational, and technological factors. Early studies emphasized transformational leadership, motivation, and organizational climate, while recent research highlights mediating mechanisms such as psychological safety, empowerment, emotional commitment, and resilience. Digital transformation has further expanded IWB perspectives through concepts such as digital organizational culture, artificial intelligence, and digital self-efficacy, demonstrating that technology increasingly shapes employees' capacity to

innovate. However, existing research remains fragmented across specific antecedents, professions, and organizational contexts, requiring stronger theoretical integration.

Classical Theoretical Approaches

Social Exchange Theory (SET) and Contingency Theory are two dominant perspectives explaining IWB. SET suggests that employees reciprocate organizational support, trust, and fairness through positive discretionary behaviors, including innovation (Blau, 1964; Brunetto et al., 2020). Meanwhile, Contingency Theory emphasizes that the effectiveness of leadership and organizational practices depends on contextual conditions (Fiedler, 1967). Although valuable, these theories alone cannot fully explain contemporary IWB influenced by digitalization, artificial intelligence, psychological resources, and socio-technical interactions. Therefore, an integrated theoretical framework is needed to explain the interaction between relational, organizational, psychological, and technological factors.

Interdisciplinary and Multilevel Perspectives

Recent IWB research integrates perspectives from organizational behavior, leadership, psychology, human resource management, and digital management. Leadership remains a major determinant of IWB through mechanisms such as psychological safety, empowerment, and innovation climate. Individual factors, including psychological capital, resilience, emotional intelligence, and creativity, explain differences in employees' innovative responses. Meanwhile, organizational and technological factors, such as digital culture, AI adoption, workload, job security, and HR support, increasingly influence innovation behavior. Despite this progress, many studies still examine these factors separately rather than through integrated multilevel models.

Synthesis and Research Gap

The literature identifies four major gaps in healthcare IWB research: (1) limited theoretical integration among existing perspectives such as Social Exchange Theory, Contingency Theory, resource-based views, and socio-technical approaches; (2) insufficient synthesis of mechanisms involving psychological and technological mediators; (3) limited multilevel studies connecting individual, leadership, organizational, and technological factors; and (4) fragmented interdisciplinary perspectives across leadership, psychology, HRM, and digital management. Therefore, a systematic review is needed to consolidate theoretical foundations, identify emerging drivers, and develop a more comprehensive understanding of IWB in digitally transforming healthcare environments.

METHODOLOGY

This systematic literature review was accomplished based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards (Moher et al., 2009) in an effort to ensure methodological rigor, transparency and reproducibility. PRISMA offers a systematic approach for identifying, screening,

and selecting relevant studies and is widely utilized in different disciplines (Panic et al., 2013; Siddaway et al., 2019). Figure 1 outlines the review process showing the PRISMA flowchart for each phase: identification, screening, eligibility, and inclusion.

The identification process began with a large-scale search in the Scopus database, chosen for its strict indexing standards and reliability (Lasda Bergman, 2012). Scopus offers a good quality coverage of peer-reviewed literature, especially in health care and management studies (Rocha et al., 2020). The search technique applied the specific terms "innovative work behavior in healthcare hospital" and "employee innovative behavior in healthcare" to indicate the studies relevant to the research objective. The search strategy employed the TITLE-ABS-KEY field code to identify relevant publications based on their titles, abstracts, and author keywords. The initial search identified 179 records. Duplicates (n = 20), publications outside the pre-defined period 2016–2026 (n = 25) and papers from journals outside the Q1–Q4 range (n = 1) were excluded. No articles were rejected due to lacking abstract. At this stage, 133 items remained for screening.

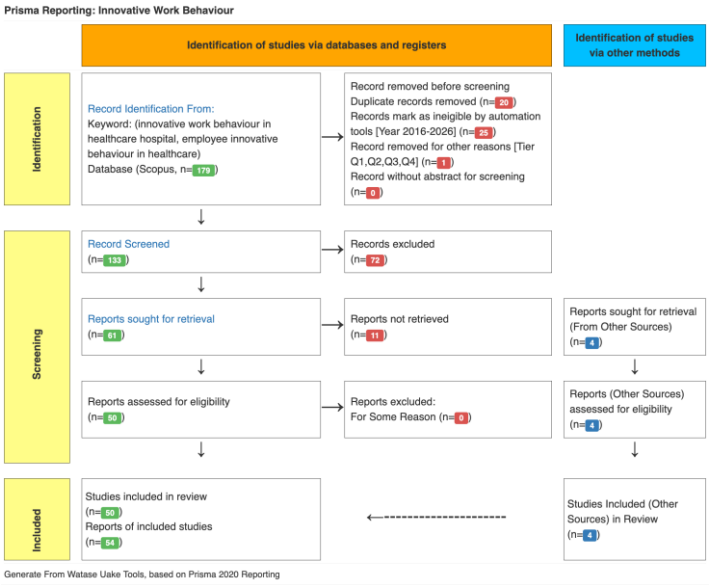


Figure 1. the PRISMA flowchart

During the screening phase, these 133 records underwent detailed evaluation to confirm their relevance to the inclusion criteria. Seventy-two articles were excluded for not meeting the relevance requirements, leaving 61 articles for full-text retrieval. Eleven of these could not be accessed, leaving 50 articles to proceed to the eligibility phase. During the eligibility phase, the full-text articles were assessed based on the predefined criteria, including their focus on healthcare employees, explicit examination of innovative work behaviour or synonymous constructs, empirical quantitative, qualitative, or mixed-method research designs, publication within the 2016–2026 period, and publication in English. All 50 articles met the eligibility criteria and were retained. In addition, four relevant studies were identified from the Watase database. In the inclusion phase, 50 studies met all criteria and were included in the final review, alongside

four additional studies from the Watase database, resulting in a total of 54 articles for qualitative synthesis.

To identify trends and emerging topics within the included research, a qualitative thematic analysis was carried out once the articles were selected. The Watase Uake System (Wahyudi, 2024), which facilitated data organization, coding, and interpretation, supported this analysis. Additionally, descriptive and trend analyses were conducted to highlight publication trends over time, identify dominant research themes, examine theoretical and methodological developments, and summarize the findings related to innovative work behaviour in healthcare. Figure 1 shows a visual representation of the review process, including the identification, screening, eligibility, and inclusion stages. Overall, this systematic and transparent approach ensures the credibility of the review process. By following PRISMA principles, this study provides a reproducible and evidence-based synthesis of the literature on innovative work behaviour in healthcare, thereby strengthening the methodological validity and robustness of the findings.

RESULTS

Year Publication

The results are organised to move from descriptive research profiling to an integrative explanation of how innovative work behaviour (IWB) has been conceptualised in healthcare. The presentation begins with the temporal development of the field (Figure 2) and its geographical distribution (Figure 3), followed by four analytical tables that map the principal antecedent domains (Table 1), levels of analysis (Table 2), occupational groups represented in the evidence base (Table 3), and the theories explicitly used to explain IWB (Table 4). This sequence enables the review to distinguish growth in publication volume from substantive development in the field and to assess whether recent interest in digital transformation has been accompanied by comparable theoretical and multilevel advances.

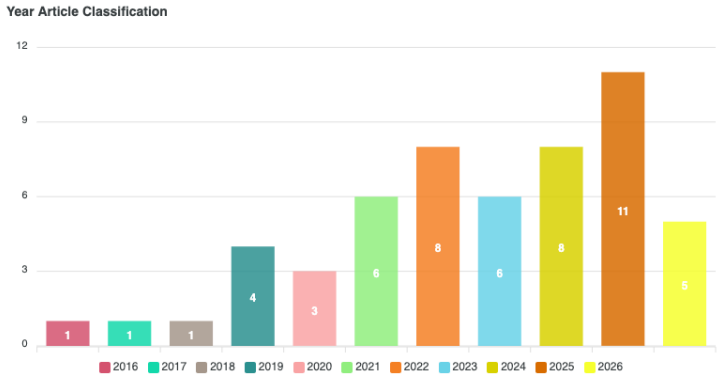


Figure 2. Year Publication Trend

The results are organised to move from descriptive research profiling to an integrative explanation of how Innovative Work Behaviour (IWB) has been conceptualised in healthcare. The presentation begins with the temporal development of the field (Figure 2) and its geographical distribution (Figure 3), followed by four analytical tables that map the principal antecedent domains

(Table 1), levels of analysis (Table 2), occupational groups represented in the evidence base (Table 3), and the theories explicitly used to explain IWB (Table 4). This sequence enables the review to distinguish growth in publication volume from substantive development in the field and to assess whether recent interest in digital transformation has been accompanied by comparable theoretical and multilevel advances.

Country of Study

Figure 3 shows that healthcare IWB research is geographically dispersed but unevenly concentrated. Pakistan represents the largest national cluster (seven studies), followed by Egypt (five), Türkiye (four), and China (three). In contrast, Australia, the United States, Norway, and several European settings appear only once or twice. This distribution is analytically consequential. A substantial proportion of the evidence has been generated in healthcare systems experiencing institutional reform, resource constraints, workforce pressure, and rapid technological change. Research in developing countries such as Pakistan, Oman and Bangladesh often examines whether leadership, motivation, work resources, or organizational atmosphere can compensate for restrictive environments and encourage employee innovation (Masood & Afsar, 2017; Yousaf et al., 2019; Durrah & Kahwaji, 2022; Bhatta et al., 2024).

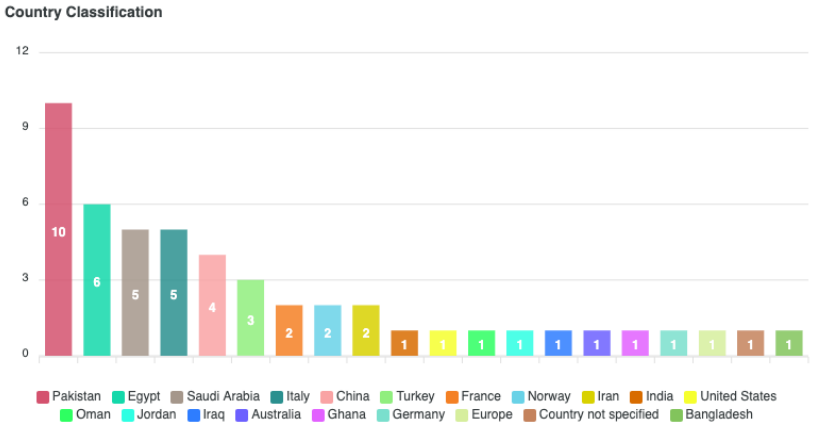


Figure 3. CountryPublication

Factors Influencing Innovative Behavior

Table 1 demonstrates that leadership is the dominant explanatory domain, appearing in 22 studies, substantially more often than organisational climate (11), motivation (10), psychological capital (8), technology (2), or organisational culture (1). This concentration confirms that healthcare IWB has largely been theorised as a response to managerial influence. Across transformational, inclusive, mindful, ethical, paternalistic, ambidextrous, and other leadership forms, the recurring assumption is that leaders shape whether employees perceive sufficient autonomy, support, safety, meaning, or resources to engage in innovation (Masood & Afsar, 2017; Shakil et al., 2021; Zheng et al., 2022; Alshahrani, 2023; El-Sayed et al., 2025). Leadership is therefore not merely one antecedent among many; it functions as the principal organising mechanism through which much of the field explains IWB.

Table 1. Factors Influencing Innovative Behavior

No	Factors Influencing Innovative Behavior	Count	Authors
1	Leadership	22	Masood and Afsar, 2017; Oppi et al., 2019; Afsar and Umrani, 2019; Ahmad et al., 2021; Shakil et al., 2021; Bilgen and El, 2022; Korku and Kaya, 2022; Zheng et al., 2022; Durrah and Kahwaji, 2022; Alshahrani et al., 2023; Alshahrani, 2023; Raoush, 2023; Abdelwahab et al., 2024; Sorour et al., 2024; Lee and Seo, 2024; Bou et al., 2025; El-Sayed et al., 2025; Hussain et al., 2025; Agaoglu et al., 2025; Ma et al., 2025; Jatoi and Channar, 2026; Ibrahim, 2026
2	Organizational Climate	11	Mura et al., 2016; Afsar et al., 2018; CARLUCCI et al., 2019; Zappala et al., 2020; Palumbo, 2021; Xerri et al., 2021; Di and Iacopino, 2021; Baig et al., 2022; Mutonyi et al., 2022; Demirarslan et al., 2025; Ali et al., 2025
3	Motivation	10	Yousaf et al., 2019; Slatten et al., 2020; Jain, 2022; Pierre et al., 2024; Wang et al., 2024; Bhatta et al., 2024; Pierre et al., 2025; Fumagalli et al., 2025; Awad et al., 2025; Budur, 2026
4	Psychological Capital	8	Brunetto et al., 2020; Brunetto et al., 2021; Anjum and Zhao, 2022; Binsaeed et al., 2023; Anjum et al., 2023; Toscano et al., 2023; Kotb et al., 2024; Dziwornu et al., 2025
5	Technology	2	Atalla et al., 2024; Ghorbanzadeh et al., 2026
6	Organizational Culture	1	Liu et al., 2026

Level of Analysis

Table 2 clarifies this interpretation by demonstrating that 39 of the 54 studies included operate at the individual level, while 14 operate at the organizational level and only one at the dyadic level. Consequently, the evidence base primarily considers IWB to be an individual employee outcome, despite the fact that it occurs within interdependent clinical systems. This micro-level dominance is comprehensible, as IWB is frequently evaluated by the generation, promotion, and implementation of employee ideas. In healthcare, innovation is contingent upon supervisor–employee relationships, interdisciplinary coordination, professional boundaries, and implementation across units, which is why the scarcity of dyadic and multilevel work is particularly significant. The sole study classified at the dyadic level, Bou et al. (2025), emphasizes the impact of relational dynamics on innovative behavior, while organizational-level studies illustrate that climate and structural conditions are significant factors in addition to individual dispositions.

Table 2. Level of Analysis

No	Level of Analysis	Count	Authors
1	Individual Level	39	Masood and Afsar, 2017; Afsar et al., 2018; Oppi et al., 2019; Yousaf et al., 2019; Afsar and Umrani, 2019; Slatten et al., 2020; Zappala et al., 2020; Brunetto et al., 2020; Shakil et al., 2021; Brunetto et al., 2021; Di and Iacopino, 2021; Xerri et al., 2021; Jain, 2022; Zheng et al., 2022; Anjum and Zhao, 2022; Baig et al., 2022; Durrah and Kahwaji, 2022; Toscano et al., 2023; Anjum et al., 2023; Binsaeed et al., 2023; Bhatta et al., 2024; Pierre et al., 2024; Kotb et al., 2024; Atalla et al., 2024; Lee and Seo, 2024; Wang et al., 2024; Pierre et al., 2025; Fumagalli et al., 2025; Dziwornu et al., 2025; Demirarslan et al., 2025; El-Sayed et al., 2025; Awad et al., 2025; Ali et al., 2025; Agaoglu et al., 2025; Ma et al., 2025; Ghorbanzadeh et al., 2026; Liu et al., 2026; Budur, 2026; Ibrahim, 2026
2	Organizational Level	14	Mura et al., 2016; CARLUCCI et al., 2019; Palumbo, 2021; Ahmad et al., 2021; Mutonyi et al., 2022; Bilgen and El?i, 2022; Korku and Kaya, 2022; Alshahrani et al., 2023; Alshahrani, 2023; Raoush, 2023; Abdelwahab et al., 2024; Sorour et al., 2024; Hussain et al., 2025; Jatoi and Channar, 2026
3	Dyadic Level	1	Bou et al., 2025

Type of Occupation

Table 3 reveals a pronounced occupational concentration: nurses are the focal group in 22 studies, compared with five studies of supporting healthcare personnel, three of physicians, and two of middle managers. Categories were not mutually exclusive; therefore, the total number of occupational classifications exceeds/does not equal the number of included studies. The prominence of nursing is theoretically plausible. Nurses operate at the interface of clinical protocols, patient needs, multidisciplinary coordination, and day-to-day service delivery, making them highly exposed to operational problems that can trigger idea generation and local process innovation (Afsar et al., 2018; Lee & Seo, 2024; Ma et al., 2025). The nursing focus has therefore generated valuable evidence on how leadership, psychological resources, and work climates influence frontline innovation.

Table 3. Type of Occupation

No	Type of Occupation	Count	Authors
1	Nurses	22	Masood and Afsar, 2017; Afsar et al., 2018; Yousaf et al., 2019; Afsar and Umrani, 2019; Zappala et al., 2020;

			Baig et al., 2022; Raoush, 2023; Toscano et al., 2023; Abdelwahab et al., 2024; Lee and Seo, 2024; Wang et al., 2024; Sorour et al., 2024; Kotb et al., 2024; Atalla et al., 2024; Bou et al., 2025; Demirarslan et al., 2025; El-Sayed et al., 2025; Awad et al., 2025; Ali et al., 2025; Agaoglu et al., 2025; Ma et al., 2025; Ibrahim, 2026
2	Supporting Healthcare Personnel	5	Oppi et al., 2019; Brunetto et al., 2020; Palumbo, 2021; Xerri et al., 2021; Hussain et al., 2025
3	Physicians	3	Di and Iacopino, 2021; Ghorbanzadeh et al., 2026; Jatoi and Channar, 2026

Theory Underpinning

Table 4 shows that the explicit theoretical core of the reviewed literature is comparatively narrow. Social Exchange Theory (SET) is the most frequently identified foundation (five studies), followed by Conservation of Resources (COR) Theory (three) and Social Cognitive Theory (two). SET presents an insightful perspective through which to understand why individuals reciprocate discretionary innovative work behaviour in response to supportive leadership and appropriate organizational treatment (Masood & Afsar, 2017; Shakil et al., 2021; Jain, 2022). COR Theory furthers this logic by describing how access to psychological and work resources guards against resource depletion and promotes investment in demanding behaviors such as experimentation and creativity (Brunetto et al., 2021; Xerri et al., 2021; Baig et al., 2022). Social Cognitive Theory brings a capability-oriented process, emphasizing learning, efficacy beliefs and behavioral agency (Oppi et al., 2019; Awad et al., 2025) and Self-determination theory (SDT) (Sltten et al., 2020).

Table 4. Theory underpinning

No	Theory underpinning	Count	Authors
1	Social Exchange Theory	5	Masood and Afsar, 2017; Shakil et al., 2021; Jain, 2022; Demirarslan et al., 2025; Budur, 2026
2	Conservation Of Resources Theory	3	Xerri et al., 2021; Brunetto et al., 2021; Baig et al., 2022
3	Social Cognitive Theory	2	Oppi et al., 2019; Awad et al., 2025
4	Self-determination theory	1	Slatten et al., 2020

DISCUSSION

This systematic review synthesizes cross-regional evidence on Innovative Work Behaviour (IWB) in the healthcare sector, providing an integrative perspective that connects theoretical frameworks, and practical consequences. The present review makes a sophisticated and globally relevant contribution by extending the current understanding of WE beyond individual factors to multilevel and contextual impacts. This is achieved by mapping research patterns across geographies and levels of study.

Interpretation of the Main Findings

This systematic literature review illustrates that research on Innovative Work Behavior (IWB) in healthcare has evolved around three explanatory domains that are closely interconnected: leadership, social and organizational resources, and individual psychological mechanisms. The literature reviewed indicates that leadership, especially transformational, inclusive, mindful, and quantum leadership, has been found to be a significant predictor of employees' innovative behavior (Durrah & Kahwaji, 2022; Shakil et al., 2021; Korku & Kaya, 2023; Raoush, 2023; Alshahrani, 2023). At the same time, psychological resources such as psychological capital, psychological safety, well-being, empowerment and affective commitment have increasingly been integrated as mechanisms that translate organizational conditions into innovative action (Brunetto et al., 2020; Xerri et al., 2021; Demirarslan et al., 2025). The existing explanatory landscape has been lately extended by digital organizational culture, digital self-efficacy, AI adoption and technology dependence (Atalla et al., 2024; Ghorbanzadeh et al., 2026; Liu et al., 2026).

The ongoing importance of leadership is consistent with prior healthcare research that regards leaders as essential agents for fostering innovation, encouraging experimentation, and establishing organizational environments that are conducive to idea generation (Durrah & Kahwaji, 2022; Korku & Kaya, 202). Nevertheless, the current synthesis provides a layer of complexity to this pre-existing relationship. Leadership appears to affect IWB through intermediate psychological and organizational mechanisms, such as psychological safety, psychological capital, organizational support, and innovation climate, rather than through direct behavioral influence (Brunetto et al., 2020; Demirarslan et al., 2025; Ghorbanzadeh et al., 2026). This distinction is especially pertinent in the healthcare sector, where employees are required to operate within environments that are highly regulated, professionally hierarchical, and risk-sensitive. In such circumstances, employees may identify opportunities for development but may be hesitant to challenge existing routines unless organizational conditions make experimentation acceptable.

Consequently, the results expand upon the findings of leadership-centered research by suggesting that supportive leadership may be essential but insufficient for the development of long-term IWB. Transformational or inclusive leaders may articulate an innovation-oriented vision; however, it is unlikely that such leadership will result in innovative action when employees lack autonomy, psychological resources, organizational support, or confidence that unsuccessful experimentation will not lead to punitive consequences (Brunetto et al., 2021; Demirarslan et al., 2025). The implication is that the leadership–IWB relationship should be viewed as an enabling process that is embedded within a broader resource and organizational system, rather than as an isolated direct association.

Theoretical Fragmentation and the Need for an Integrative Explanation

This interpretation is further supported by the theoretical profile of the reviewed studies. Social Exchange Theory (SET) is a theoretical perspective that is frequently employed, particularly in the context of elucidating how discretionary innovative behavior is influenced by perceived organizational support, trust, leader–employee relationships, and reciprocal exchanges (Durrah & Kahwaji, 2022; Shakil et al., 2021; Demirarslan et al., 2025; Budur, 2026). The significance of SET is conceptually comprehensible due to the fact that IWB frequently involves activities that exceed formal job requirements. Employees who perceive favorable treatment from leaders or organizations may respond by dedicating additional cognitive and behavioral energy to the development and execution of novel concepts.

However, the current results also reveal the drawbacks of placing an inordinate emphasis on exchange-based explanations. SET offers a compelling explanation of why employees may reciprocate organizational support with innovative behavior; however, it fails to provide a comprehensive account of whether employees have the necessary resources, motivation, opportunities, and technological capabilities to convert innovative intentions into implementation. This limitation becomes increasingly significant in the digital transformation of healthcare systems, where innovation is contingent upon access to technological infrastructure, digital competence, organizational adaptability, and institutional support, in addition to interpersonal reciprocity (Atalla et al., 2024; Ghorbanzadeh et al., 2026; Liu et al., 2026).

Consequently, the complementary characteristics of the Conservation of Resources (COR), Self-Determination Theory (SDT), and Job Demands–Resources (JD–R) perspectives suggests theoretical complementarity, not theoretical competition (Brunetto et al., 2021; Alshahrani et al., 2023; Dziwornu et al., 2025). COR focuses on the attainment, safeguarding, and deployment of valued resources by employees in demanding work settings, while SDT emphasizes autonomy, competence, and intrinsic motivation as the basis of proactive behavior (Alshahrani et al., 2023; Ibrahim, 2026). JD–R further elaborates on the balance between job demands and job resources and its effect on the capacity of employees to engage in discretionary and possibly risky inventive activities (Dziwornu et al., 2025).

These findings indicate that neither one theoretical paradigm can account for healthcare IWB. The findings suggest that employees are more likely to engage in innovation when they have supporting social interactions, appropriate psychological and organizational resources, and the willingness and opportunity to explore. The review is informed by theory-driven investigations and identifies theoretical fragmentation as a limitation of the current understanding. The IWB in contemporary healthcare organizations might be accounted for by an integrative paradigm which combines relational, resource-based, motivational and increasingly technical perspectives (Raoush, 2023; Ghorbanzadeh et al., 2026).

From Individual-Centric Explanations to Multilevel Healthcare Innovation

Another important finding is how well the existing healthcare IWB literature. Individual-centric scholarship has neglected team, departmental, organizational,

and system mechanisms. Nursing studies predominate, while physicians, middle managers, administrative staff, and interdisciplinary teams receive less empirical attention (Pierre et al., 2024; Ghorbanzadeh et al., 2026). The strategic role of nurses in healthcare delivery matches their visibility. Since they interact with patients, physicians, managers, technology, and operational systems, nurses can spot inefficiencies and service improvement opportunities (Durrah & Kahwaji, 2022; Shakil et al., 2021). However, the concentration of evidence in this professional group calls into doubt the generalizability of existing theories. Physicians, healthcare administrators, pharmacists, technology specialists, and interdisciplinary teams may have different antecedents and mechanisms of innovative behavior related to professional autonomy, hierarchy, knowledge specialization, decision authority, and accountability.

As a result, future research should expand beyond models that explicitly predict IWB based on individual motivation or psychological capital and instead examine cross-level processes that connect individual agency with team climate, organizational resources, and institutional arrangements. Frameworks such as the Ability–Motivation–Opportunity perspective, Resource-Based View, and socio-technical approaches may be particularly beneficial for elucidating how individual innovative capacity is either amplified or constrained by organizational opportunities and technological infrastructures (Demirarslan et al., 2025; Ghorbanzadeh et al., 2026; Liu et al., 2026).

Geographical and Institutional Context of Healthcare IWB

Geographic distribution of literature provides another interpretive perspective. Pakistan, Egypt, Turkey, and China dominate research, while Sub-Saharan Africa and Latin America, which have sophisticated healthcare systems, are underrepresented. This distribution raises theoretical questions about the contextual dependency of established IWB ties, not only evidence base characteristics. Studies in emerging and developing healthcare systems may reflect the importance of innovative behavior in environments with resource constraints, institutional reform, workforce pressures, and rapid technological change (Bhatta et al., 2024). Such scenarios may encourage staff to use discretionary innovation to overcome operational issues. This regional pattern also contradicts the idea that Western organizational theories are universally applicable to healthcare systems.

Institutional and cultural factors may affect the strength and form of leadership and psychological antecedent ties, contrary to an implicitly universal understanding. Leadership effectiveness might vary depending on power distance, professional hierarchy, resource availability, institutional regulations, and organizational digital transformation readiness (Korku & Kaya, 2023; Alshahrani, 2023; Liu et al., 2026). So institutional and cultural circumstances should be considered theoretically significant contingencies, not sample characteristics. Comparative research in mature and developing healthcare systems would help determine whether leadership, psychological safety, organizational support, and IWB connections are contextually robust or institutionally contingent.

Digital Transformation as an Emerging Reconfiguration of IWB

Perhaps the most significant development identified in this review is the increasing integration of digital transformation into healthcare IWB research. Constructs such as digital organizational culture, digital self-efficacy, AI adoption, and technology dependence have been introduced in recent studies (Atalla et al., 2024; Ghorbanzadeh et al., 2026; Liu et al., 2026). However, these variables are significantly less represented than leadership or psychological antecedents and their presence signals an important conceptual change. As compared with previous research that has focused on technology as a part of the organizational setting, this analysis reveals that digitalization becomes an integrated aspect of the innovation process. Digital technologies are progressively influencing the ways in which healthcare personnel obtain information, exchange ideas, collaborate across professional boundaries, make decisions, and experiment with new modes of service provision (Liu et al., 2026). This relationship becomes even more complicated with AI-enabled systems that increase the capacity for innovation among employees, while simultaneously provoking worries about professional autonomy, technology dependence, accountability, and job security (Atalla et al., 2024; Ghorbanzadeh et al., 2026).

The results suggest that technology capabilities are increasingly linked to psychological and relational resources, expanding on leadership and resource-based studies. Supportive leadership and sophisticated technological infrastructure may not inspire innovation if employees lack digital competence and psychological safety or organizational permission to experiment (Demirarslan et al., 2025; Liu et al., 2026). Thus, digital transformation is not a standalone predictor of IWB. Instead, the evidence supports a socio-technical approach that technological, organizational, and human resources interact. This perspective becomes more relevant when AI, EHRs, telemedicine, clinical decision-support systems, and data-driven management are incorporated into healthcare (Atalla et al., 2024; Ghorbanzadeh, 2026). Future healthcare IWB models must explore if digital capability strengthens, weakens, or profoundly changes leadership, psychological resources, organizational atmosphere, and innovative work behaviour.

Novelty and Theoretical Contributions

This review provides a leadership-resource-digital view of healthcare IWB by integrating social interactions, psychological and organizational resources, and digital transformation. The findings suggest a transition from conventional individual and leadership-based explanations to a multi-level and digitalized view of innovation. Rather than being a mere antecedent, digital transformation is emphasized in this review for reconfiguring the relationships between leadership, psychological resources, organizational climate, and innovative behavior. The proposed leadership–resource–digital configuration explains how organizational support, leadership practices, employee psychological resources, and digital capabilities combined influence the generation, communication, and implementation of innovative ideas. This framework offers a basis for the

integration of Social Exchange Theory, Conservation of Resources Theory, Self-Determination Theory in future IWB research.

CONCLUSIONS AND RECOMMENDATIONS

This systematic literature analysis synthesizes 54 studies from 2016 to 2026 to explain the digital features, theoretical foundations, and developing factors of healthcare innovative work behavior (IWB). The evidence shows that healthcare IWB is a multidimensional phenomenon influenced by leadership, psychological resources, organizational conditions, and a digital work environment. Psychological safety, capital, empowerment, and supportive organizational climates enhance innovative behavior, while transformational, inclusive, collaborative, and emergent leadership techniques remain important antecedents.

This review's main contribution is the shift from a fragmented compendium of IWB antecedents to a holistic interpretation of healthcare innovation. Social Exchange Theory, Conservation of Resources, and Self-Determination Theory remain prominent, but the literature is fragmented and focused on individual-level explanations. Thus, healthcare IWB must be viewed as a multidimensional, socio-technical process that integrates human agency with team connections, organizational structures, leadership systems, and technological settings. Digital culture, artificial intelligence, and technology-enabled healthcare are becoming more important, therefore conventional explanations of IWB must include digital capacity, human–technology interaction, and technology dependence.

FURTHER STUDY

These findings also identify a research priority. First, longitudinal, experimental, and multilevel designs are needed to overcome cross-sectional SEM/PLS-SEM investigations and show temporal and causal correlations among IWB drivers. Second, future research should combine SET, SDT, COR, resource-based, and socio-technical perspectives. Third, AI-enabled work, digital self-efficacy, telemedicine, algorithmic decision support, and how digital transformation affects innovation must be prioritized. Fourth, to assess model contextual generalizability, comparison studies across underrepresented regions, such as Sub-Saharan Africa and Latin America, and mature healthcare systems are needed. Finally, studies should include physicians, managers, allied health professionals, and interdisciplinary teams and link IWB to patient safety, service quality, organizational performance, and cost-effectiveness.

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