

The Determinants of Employee Engagement in Nursing: A Systematic Review

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Abstract: *Employee engagement in nursing has become a strategic concern because engaged nurses are more likely to remain in post, sustain performance under pressure, and support safer care delivery. This systematic review synthesized the determinants of employee engagement in nursing and developed an integrated multilevel framework. Following PRISMA 2020 guidance, searches were conducted across major health and interdisciplinary databases and were supplemented with Google Scholar for English-language studies published between January 2015 and December 2025. After screening, eligibility assessment, and methodological appraisal using MMAT 2018, 53 studies were included in the final narrative synthesis. The evidence indicated that engagement in nursing is shaped by interacting individual, relational, work-design, and contextual determinants. Leadership, structural empowerment, favorable practice environments, psychological capital, emotional intelligence, core self-evaluation, self-efficacy, resilience, meaningful work, decent work, social support, and job crafting consistently strengthened engagement. By contrast, burnout, hindrance stress, compassion fatigue, perceived overqualification, organizational dehumanization, illegitimate tasks, and poor work-life fit weakened engagement or limited its sustainability. More recent evidence also suggests that digital literacy and nursing informatics capability function as emerging job resources rather than peripheral technical attributes. The literature remains dominated by cross-sectional self-report designs, limiting causal inference and weakening understanding of how engagement is built and sustained over time. This review contributes a clearer analytic structure by distinguishing foundational job resources, personal resources, and demand-related constraints. It also offers practical guidance for nursing leaders seeking to strengthen retention, well-being, and quality of care through deliberate engagement-building strategies.*

Keywords: Employee engagement, work engagement, nurses, determinants, nursing workforce, systematic review.

1. Introduction

Employee engagement in nursing is not merely a peripheral workforce outcome. It is a substantive indicator of whether nurses can sustain energy, dedication, and cognitive presence under demanding clinical conditions (Aunguroch et al., 2024). Higher engagement is associated with stronger job satisfaction, greater retention, and more effective contribution to care delivery (Midje et al., 2024). When engagement declines, turnover intention, exhaustion, and performance fragility become more likely, particularly in understaffed and high-pressure settings (Poku et al., 2025). The literature increasingly treats engagement as a central mechanism through which nursing organizations convert

available resources into meaningful workforce outcomes rather than as a by-product of general morale (Porter & Wang, 2022). This perspective is especially important in nursing because the work is routinely shaped by heavy workload, emotional strain, staffing instability, shift disruption, and professional accountability, all of which can either suppress or strengthen engagement depending on the resources available to nurses (Vargas-Benítez et al., 2023).

Recent reviews show that nurse engagement is influenced by multiple domains, including individual attributes, the work environment, leadership, and work-life conditions (Aunguroch et al., 2024). However, the evidence base remains fragmented. Some studies prioritize psychological capital or self-efficacy, others emphasize practice environment or empowerment, and others focus on stress, burnout, or job crafting without integrating these streams into a coherent analytic structure (Chiminelli-Tomás et al., 2025). That fragmentation creates a practical problem: managers are often left with long lists of correlates rather than a disciplined account of which determinants recur most consistently, how they cluster, and which factors are most actionable in real nursing settings (Midje et al., 2024). This review addresses that gap by synthesizing the determinants of employee engagement in nursing across hospital, acute care, long-term care, and related clinical settings. Employee engagement is used here as the umbrella term, while preserving the term work engagement where it appears in the primary studies. The review addresses three questions: (1) Which determinants are most frequently associated with employee engagement in nursing? (2) How are these determinants distributed across individual, relational, work-design, and contextual levels? and (3) What gaps remain in the current evidence base for explaining sustained engagement in nursing practice?

2. Methodology

This systematic review was designed to identify, appraise, and synthesize the determinants of employee engagement in nursing in accordance with established systematic review standards. The review process was aligned with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) to strengthen transparency, procedural clarity, and reproducibility in study identification and selection (Page et al., 2021). Searches were conducted across CINAHL, Scopus, Embase, PubMed, SAGE Journals, MEDLINE, the Cochrane Library, Web of Science, and PsycINFO, with Google Scholar used as a supplementary source to identify potentially relevant studies not captured in the indexed databases. The search strategy was organized around the core concepts of employee engagement in nursing and its determinants. Keywords included employee engagement, work engagement, nurse engagement, nurses, nursing staff, determinants, antecedents, predictors, influencing factors, job resources, leadership, psychological capital, resilience, job crafting, practice environment, psychological factors, organizational factors, and work environment. These terms were searched individually and in combination using database-specific Boolean operators. Preliminary searching indicated that relevant evidence was dispersed across multiple journals and disciplinary areas, making a broad and iterative search strategy necessary to balance comprehensiveness and relevance. Only English-language studies published between January 2015 and December 2025 were eligible for inclusion.

Eligibility was limited to studies examining employee engagement or work engagement among nurses or clearly identifiable nursing staff and treating determinants of engagement as a central analytical concern. Studies were considered eligible when they reported evidence on organizational, psychological, professional, or work-environment influences on engagement, including leadership, empowerment, resilience, psychological capital, job crafting, and practice environment. To reflect the breadth of the field, the review considered cross-sectional, longitudinal, qualitative, mixed-methods,

systematic review, and meta-analytic designs, provided that determinant-related evidence could be extracted clearly. Study selection followed a staged screening process. A total of 316 records were identified through database and supplementary searching. After title and abstract screening, 168 records were excluded, leaving 148 full-text articles for eligibility assessment. Following full-text review, 95 articles were excluded because they did not meet the objectives of the review or were not directly relevant to the determinants of employee engagement in nursing. The final synthesis therefore included 53 studies. Data extraction followed a structured process to capture study characteristics, nursing context, research design, and the determinant constructs examined in relation to engagement. Methodological quality was appraised using the Mixed Methods Appraisal Tool (MMAT) version 2018, which is suitable for reviews incorporating diverse study designs and supports a more critical interpretation of the evidence base rather than a purely descriptive summary (Hong et al., 2018). Because the included studies were heterogeneous in design, context, and conceptual emphasis, the findings were synthesized narratively rather than through meta-analysis.

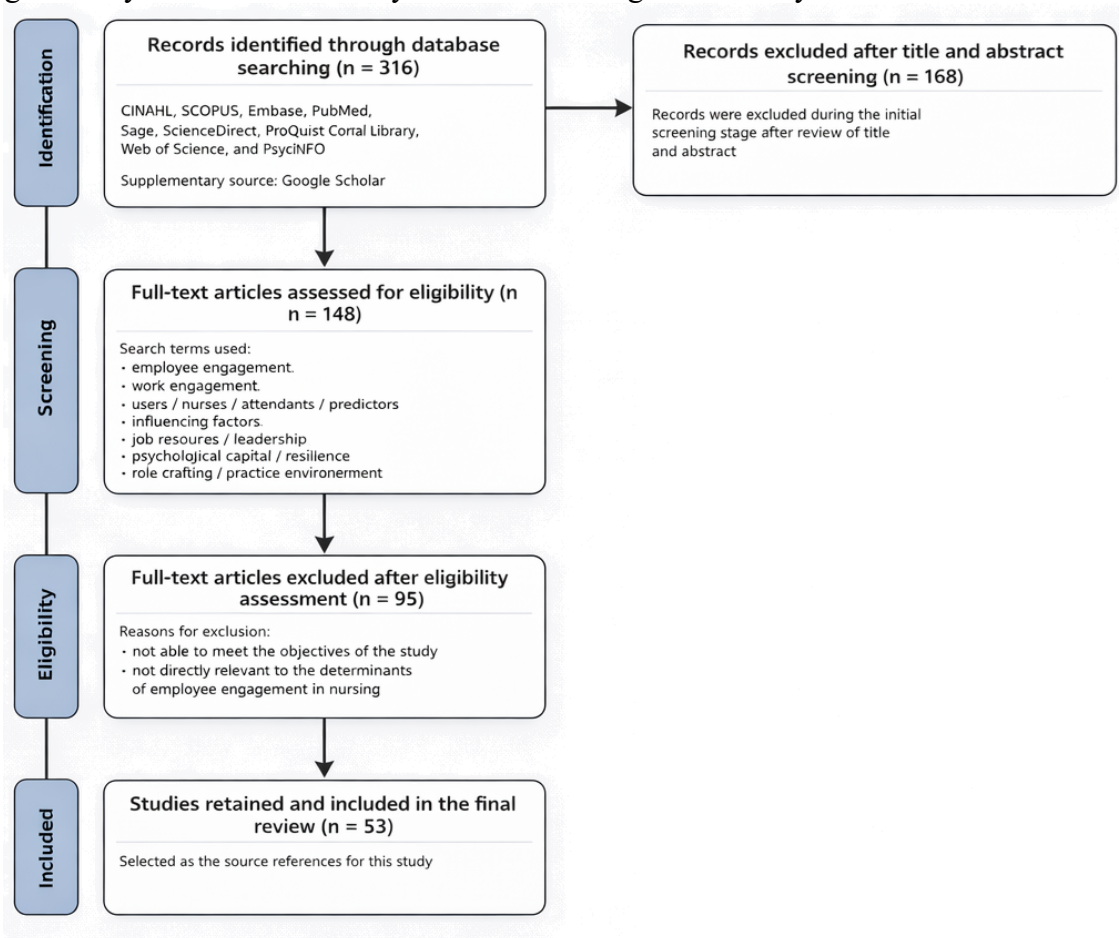


Figure 1. PRISMA-guided study selection workflow

3. Determinants of Employee Engagement in Nursing

Across the 53 studies included in this review, employee engagement in nursing emerges as a multidimensional outcome shaped by recurring determinant domains rather than by any single individual characteristic. As shown in Table 1, the literature consistently identifies leadership (LD), empowerment and autonomy (EM), and practice environment (PE) as major structural conditions influencing whether nurses remain psychologically invested, energetic, and dedicated in their work.

Alongside these organizational conditions, several personal-resource factors also appear prominently, including psychological capital (PC), self-efficacy and related self-evaluative resources (SE), resilience and personal strength (RE), job crafting (JC), and meaning or calling (MN). These patterns indicate that engagement depends not only on what nurses encounter in their work settings, but also on the internal capacities they draw on to interpret, manage, and respond to those conditions. The matrix further shows that engagement is strongly shaped by relational and social influences, particularly social or organizational support and climate (SS) and teamwork or relational climate (TM), which affect whether nurses feel supported, valued, and able to function effectively within care teams. At the same time, quality of work life, work-life balance, and decent work conditions (QW) appear as important sustaining factors, while stress, burnout, strain, and other demand-related constraints (SB) consistently emerge as suppressors of engagement. Taken together, the matrix indicates that employee engagement in nursing is best understood as the product of interacting structural, personal, relational, and strain-related determinants operating across multiple levels of practice.

Table 1. Matrix of determinants of employee engagement in nursing

No.	Study	LD	EM	PE	PC	SE	RE	JC	MN	SS	QW	SB	TM
1	Abou Zeid et al. (2024)											✓	
2	Abu-Qutaish et al. (2025)	✓											
3	Abualruz et al. (2024)		✓				✓						
4	Al Mamari & Groves (2023)	✓	✓						✓			✓	✓
5	Alasiry et al. (2025)			✓							✓		
6	Alkorashy & Alanazi (2023)			✓							✓		
7	Aunguroch et al. (2024)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	
8	Baghdadi et al. (2021)							✓					
9	Bonner (2016)				✓								
10	Cao et al. (2019)								✓				
11	Cayllahua Curiñaupa et al. (2025)												✓
12	Chiminelli-Tomás et al. (2025)	✓		✓								✓	✓
13	Chung et al. (2025)											✓	
14	Dan et al. (2023)			✓		✓			✓				
15	Feng et al. (2025)										✓	✓	
16	Forster & Koob (2023)	✓		✓						✓			
17	Fukuzaki et al. (2021)										✓		
18	Gao et al. (2024)						✓				✓		
19	Han (2023)							✓					
20	Hara et al. (2021)			✓						✓		✓	
21	Huang et al. (2025)	✓	✓		✓								
22	Iida et al. (2024)							✓					✓
23	Jia et al. (2025)											✓	
24	Jin et al. (2022)				✓								
25	Kato et al. (2023)			✓						✓		✓	
26	Kim et al. (2023)	✓		✓						✓			
27	Kohnen et al. (2023)			✓						✓			
28	Lee et al. (2025)							✓					
29	Li et al. (2024)											✓	
30	Luo et al. (2024)	✓				✓				✓			

No.	Study	LD	EM	PE	PC	SE	RE	JC	MN	SS	QW	SB	TM
31	Maung et al. (2025)	✓			✓								
32	Meng et al. (2023)						✓		✓		✓		
33	Ni et al. (2023)		✓	✓						✓			
34	Nurmeksela et al. (2025)	✓											
35	Park & Ha (2025)				✓			✓					
36	Poku et al. (2025)						✓						
37	Rawson et al. (2024)		✓										✓
38	Slåtten et al. (2022)			✓						✓			
39	Sun et al. (2023)				✓					✓		✓	
40	Tadić Vujčić (2019)					✓		✓					
41	Xiong et al. (2025)							✓				✓	
42	Xue et al. (2023)			✓	✓								
43	Xue et al. (2024)										✓	✓	
44	Zarrin et al. (2023)					✓							
45	Zeng et al. (2022)								✓	✓			
46	Zhang, M., et al. (2023)				✓								
47	Zhang, Y., et al. (2023)						✓		✓			✓	
48	Zhang et al. (2024)	✓							✓	✓			
49	Zhang et al. (2025)		✓		✓								
50	Zhong et al. (2025)								✓			✓	
51	Zhou et al. (2023)						✓			✓			
52	Zhou et al. (2025)						✓					✓	
53	Ziedelis (2019)								✓				

LD = leadership; EM = empowerment/autonomy; PE = practice environment; PC = psychological capital; SE = self-efficacy/achievement and related self-evaluative resources; RE = resilience/personal strength; JC = job crafting; MN = meaning/calling; SS = social or organizational support/climate; QW = quality of work life/work-life balance/decent work; SB = stress, burnout, strain, or other demand-related constraints; TM = teamwork/relational climate.

3.1. Core determinants enabling engagement

Leadership and structural empowerment were among the most recurrent positive determinants. Transformational, supportive, and resource-providing leadership consistently aligned with stronger engagement because nurses were more likely to perceive meaning, support, and control over their work when managerial behavior was enabling rather than merely supervisory (Nurmeksela et al., 2025). This leadership effect was rarely isolated from the surrounding work system. Across several studies, favorable practice environments, access to information and resources, and perceived empowerment strengthened engagement directly or through psychological mechanisms such as confidence and motivation (Zhang et al., 2025). The practice environment itself was one of the most stable determinants across the review. Better staffing support, stronger collaboration, and healthier clinical climates were associated with higher engagement and lower risk of disengagement-related burnout patterns (Chiminelli-Tomás et al., 2025). Psychological capital formed the clearest personal-resource determinant cluster. Hope, optimism, resilience, and self-efficacy repeatedly functioned as enabling conditions that increased nurses' willingness to invest energy and remain psychologically present at work (Bonner, 2016). Mixed-method evidence from long-term care further suggests that psychological empowerment and relational coordination can jointly support engagement in team-based settings (Rawson et al., 2024).

More recent studies reinforced this pattern by showing that psychological capital predicted engagement directly or mediated the effects of structural conditions such as healthy work environments and empowerment (Park & Ha, 2025). Self-efficacy and achievement-related confidence also mattered in their own right. Nurses who believed they could manage clinical challenges were more likely to sustain engagement, particularly when the work setting supported learning and professional growth (Dan et al., 2023). Longitudinal evidence likewise showed that organizational support, leader empowerment, and core self-evaluation predicted subsequent engagement, with organizational support emerging as the strongest predictor (Luo et al., 2024). Emotional intelligence and occupational well-being also showed strong positive associations with engagement among clinical nurses (Gao et al., 2024). A critical care study further found that resilience and psychological empowerment predicted higher engagement, with emotional intelligence operating as an upstream resource (Abualruz et al., 2024). Resilience similarly operated as a consistent facilitator. Studies from hospital and long-term care contexts showed that resilient nurses were better positioned to maintain engagement under pressure and less likely to convert demanding conditions into withdrawal or turnover intentions (Poku et al., 2025). Meaning-related determinants also mattered. Perceived calling, career identity, and the sense that nursing remains socially valuable and personally worthwhile strengthened engagement even when work was burdensome (Ziedelis, 2019).

Job crafting emerged as a particularly important proactive mechanism. Nurses who actively modified, reframed, or enriched their work were more likely to sustain engagement, and this pathway also appeared in the limited longitudinal evidence (Iida et al., 2024). Social and organizational support remained central throughout the evidence base. Support from nurse managers, peers, and the wider organization reduced motivational loss and increased the likelihood that other resources would translate into sustained engagement (Kim et al., 2023). Recent evidence further suggests that caring leadership can strengthen engagement through calling and affective organizational commitment (Zhang et al., 2024). Quality of work life and work-life balance were also recurrent determinants, although the evidence here was more conditional. Balance did not simply elevate engagement automatically; rather, imbalance, spillover, and chronic role strain gradually weakened vigor and dedication when not buffered by support or commitment (Fukuzaki et al., 2021). Perceptions of decent work were likewise positively associated with engagement, whereas compassion fatigue weakened this pattern (Feng et al., 2025).

3.2. Multilevel contexts shaping engagement

The second synthesis pattern concerned how determinant effects were distributed across levels. At the individual level, psychological capital, resilience, self-efficacy, and calling captured how nurses interpret and mobilize their internal resources (Meng et al., 2023). At the relational level, leadership, teamwork, and supervisor support shaped whether nurses felt recognized, heard, and supported in daily practice (Cayllahua Curiñaupa et al., 2025). At the work-design level, empowerment, staffing conditions, access to information, and the broader practice environment influenced whether nurses could realistically act with autonomy and competence rather than merely endure their shifts (Ni et al., 2023). Long-term care evidence further indicates that relational coordination matters because engagement is reinforced when nurses perceive themselves as active members of an integrated care team (Rawson et al., 2024). At the demand-constraint level, stress, burnout, role overload, hindrance stress, and illegitimate tasks repeatedly weakened engagement or interrupted the translation of resources into performance (Zhou et al., 2025). Perceived overqualification represented another constraint because it was negatively associated with engagement among hospital nurses (Li et al., 2024).

These negative determinants were not trivial background conditions. Several studies showed that engagement remained vulnerable even in otherwise supportive environments when hindrance stress or burdensome noncore tasks were left unaddressed (Jia et al., 2025). Organizational dehumanization also appears relevant because its relationship with lower engagement was partly transmitted through nurses' work stress (Abou Zeid et al., 2024). A newer strand of evidence further suggests that digital capability should be treated as a nursing job resource rather than as a purely technical competency. Nurses with stronger digital literacy and informatics capability were better positioned to avoid burnout and sustain engagement in increasingly digitized care settings (Chung et al., 2025). Overall, the review suggests that engagement in nursing is best understood as a layered configuration: personal strengths matter, but their effects are amplified or suppressed by leadership, team climate, work design, and the degree to which demands remain manageable.

Table 2. Summary of determinant domains influencing employee engagement in nursing

Category	Factors identified in the literature
Individual and personal-resource determinants	Psychological capital, emotional intelligence, core self-evaluation, self-efficacy, resilience, calling/meaning, reflective capacity, optimism, confidence, occupational well-being, and personal strengths.
Relational determinants	Transformational, supportive, or caring leadership, teamwork climate, relational coordination, peer support, supervisor support, organizational support, recognition, and communication quality.
Work-design and environment determinants	Structural empowerment, autonomy, access to information and resources, healthy practice environment, staffing support, learning opportunities, decent work conditions, and job crafting.
Demand and balance determinants	Burnout, hindrance stress, role stress, illegitimate tasks, workload strain, work-life imbalance, compassion fatigue, organizational dehumanization, and perceived overqualification.
Emerging contemporary determinants	Digital literacy, nursing informatics competency, and the ability to work effectively within increasingly digital care systems.

4. Discussion

This review indicates that employee engagement in nursing is best understood as a multilevel resource process rather than as a fixed attitude. The strongest pattern in the evidence is not that one determinant overrides all others, but that engagement is more sustainable when structural, relational, and personal resources reinforce one another. The practical implication is clear: organizations cannot expect durable engagement while weak leadership, poor practice environments, and chronic strain remain unaddressed. The evidence repeatedly shows that engagement erodes when demands outpace resources over time (Vargas-Benítez et al., 2023). Leadership deserves particular emphasis because it was one of the most recurrent and actionable determinants. Transformational and supportive leadership mattered because they helped create empowerment, information flow, recognition, and psychologically safer team climates (Huang et al., 2025). Practice environment and empowerment deserve equal weight. The studies do not support the assumption that engagement is primarily a matter of individual positivity. Nurses engage more deeply when organizations provide resources, support, influence, and workable systems rather than symbolic encouragement alone (Chiminelli-Tomás et al., 2025). Recent evidence on caring leadership sharpens this point further by showing that leadership effects can be transmitted through calling and affective organizational commitment (Zhang et al., 2024). Perceptions of decent work similarly reinforce engagement by linking fairness and dignified work conditions with stronger motivational investment (Feng et al., 2025).

Personal resources also matter, and they matter substantially. Psychological capital, resilience, self-efficacy, and meaning-oriented variables repeatedly predicted stronger engagement. Emotional intelligence and occupational well-being likewise deserve attention as engagement-relevant personal resources (Gao et al., 2024). Core self-evaluation appears similarly important because it predicts later engagement and conditions the benefits of empowering leadership (Luo et al., 2024). The more defensible interpretation, however, is that these resources help nurses use and convert available job resources; they do not compensate for deficient systems (Porter & Wang, 2022). The evidence on job crafting is especially important because it links agency with context. Nurses do not passively receive work conditions; some proactively reshape aspects of work to recover meaning, support, or challenge. Even so, job crafting is not a substitute for structurally sound environments. It works best when the surrounding system still allows discretion and support (Lee et al., 2025). The emergence of digital capability as a determinant is also noteworthy. Digital literacy and informatics competency are becoming part of the modern nursing resource base because contemporary engagement increasingly depends on whether nurses can function confidently in documentation-heavy, data-rich, and technologically mediated environments (Chung et al., 2025). Dehumanizing organizational climates likewise suppress engagement through heightened work stress (Abou Zeid et al., 2024). Figure 2 summarizes the overall logic of the evidence by positioning leadership, environment, personal resources, and demand-context variables as upstream conditions shaping psychological readiness and proactive adaptation, which in turn influence engagement and downstream workforce outcomes.

5. Research Gaps

Several gaps remain. First, the literature is still dominated by cross-sectional self-report studies. This design makes the evidence base broad but weak for causal inference and weak for understanding temporal dynamics. We still know too little about how engagement is built, lost, restored, or stabilized over time (Iida et al., 2024). Second, construct proliferation remains a problem. The field uses employee engagement, work engagement, job engagement, vigor, dedication, and related constructs in ways that are not always conceptually disciplined. This complicates comparison across studies and sometimes obscures the distinction between antecedents, mediators, and outcomes. Third, the geographical distribution of evidence is uneven. Much of the recent work comes from Asia, with comparatively fewer robust determinant studies from low-resource systems, community nursing settings, or underrepresented regions where the interaction between strain, staffing shortages, and engagement may look quite different (Midje et al., 2024). Fourth, relatively few studies integrate objective outcomes such as patient safety indicators, absenteeism, quality metrics, or retention data. The field still relies heavily on attitudinal end points and correlational models. Fifth, intervention evidence remains scarce. The literature is rich in predictors but poor in tested engagement-building programs. More longitudinal, experimental, and mixed-methods research is needed to determine which leadership, empowerment, staffing, digital capability, or resilience-building strategies actually shift engagement in practice.

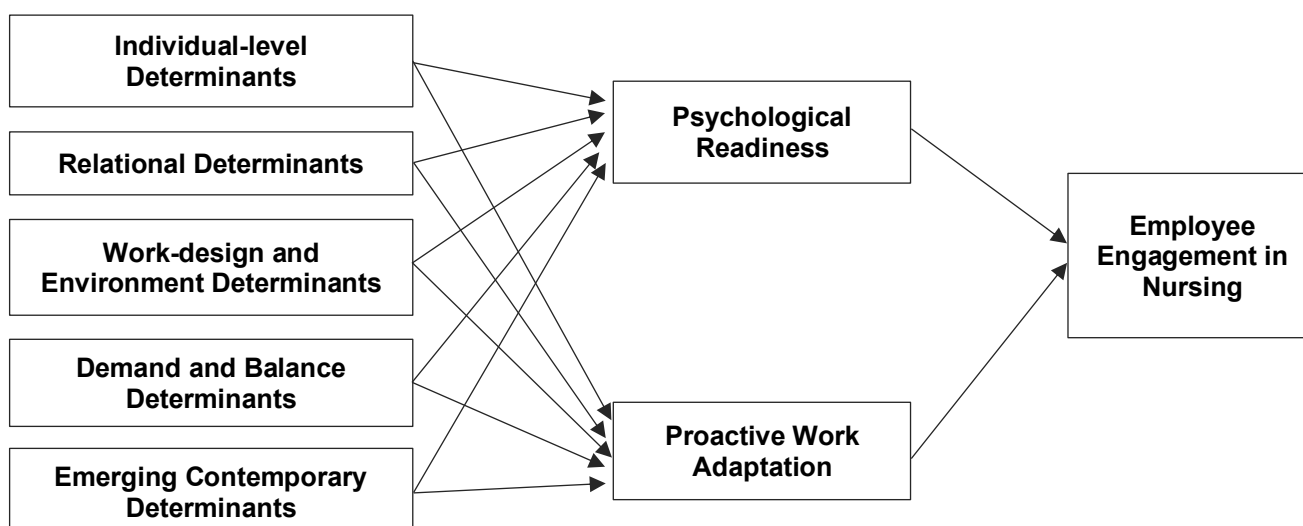


Figure 2. Integrated conceptual framework of employee engagement determinants in nursing

6. Conclusion

This systematic review shows that employee engagement in nursing is shaped by a coherent but multilevel configuration of determinants. Leadership, empowerment, and practice environment form the strongest structural cluster. Psychological capital, resilience, self-efficacy, emotional intelligence, core self-evaluation, and meaning-related variables form the strongest personal-resource cluster. Social support, teamwork, decent work, and quality-of-work-life conditions influence whether those resources remain usable in daily practice. Burnout, hindrance stress, compassion fatigue, organizational dehumanization, perceived overqualification, illegitimate tasks, and poor work-life fit operate as clear suppressors of engagement. The practical implication is direct: nursing organizations seeking stronger engagement should treat it as a resource-allocation, work-design, leadership, and capability challenge rather than as a vague morale issue. That is where the evidence points, and less targeted responses are unlikely to produce durable change.

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