

The Determinants of Emergency Nurses' Adaptive Performance; A Systematic Review

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Abstract: *This systematic review synthesizes heterogeneous evidence on determinants, constraints, and proximal capacities associated with emergency nurses' adaptive performance in high-uncertainty clinical environments. Because direct adaptive-performance instruments remain uncommon in health care, the review distinguishes observable performance from closely aligned adaptive capacities, including resilience and coping, clinical judgment and triage competence, learning and evidence-use behavior, disaster competence, work engagement, and interpersonal or organizational adaptation. A systematic search with PRISMA-guided reporting covered English-language peer-reviewed empirical reports published from 2015 through 2025 and retained 57 eligible reports. Thirteen determinant domains were mapped in an evidence matrix and integrated through structured narrative synthesis. Across designs, evidence converged on a multilevel pattern in which excessive demands, traumatic stress, workplace violence, weak resources, and moral strain were associated with constrained adaptive functioning, whereas organizational support, supportive leadership, team resources, resilience, constructive coping, professional self-belief, training, and clinical competence were associated with greater adaptive capacity. The review integrates adaptive-performance, Job Demands-Resources, Conservation of Resources, and social-cognitive perspectives while distinguishing frequency of investigation from causal importance. Its contribution is to show that emergency-nursing adaptation is studied through fragmented but theoretically connected evidence streams, while direct multidimensional measurement and prospective testing of adaptive-performance pathways remain limited within emergency nursing.*

Keywords: emergency nurses; adaptive performance; resilience; clinical judgment; coping; organizational support; job demands; systematic review.

1. Introduction

Emergency nursing requires rapid prioritization, clinical judgment, coordination, emotional regulation, and safe action while patient acuity, staffing pressure, technology, information, and risks change from moment to moment. Adaptive performance is therefore a particularly relevant lens because it concerns effective behavioral adjustment when work requirements or contexts change, rather than routine task performance alone (Pulakos et al., 2000). In health care, adaptive expertise and adaptive performance are increasingly recognized as important but inconsistently operationalized

constructs, and available measurement approaches remain conceptually heterogeneous (Hissink et al., 2025). Emergency nurses provide an especially informative context because their work combines unpredictable demand, time-critical decisions, exposure to trauma and violence, and frequent need to learn or improvise within professional standards. Qualitative evidence shows that experienced emergency nurses describe resilience through decisive action, self-control, interpersonal connectedness, tenacity, and optimism when facing unpredictable stressors (Tubbert, 2016). Recent performance-oriented evidence also shows that resourceful job configurations and work capabilities are associated with emergency nurses' job performance, suggesting that adaptive functioning is not only an individual trait but is enabled or constrained by the work system (Barnard et al., 2023).

The evidence relevant to adaptive performance is dispersed across literatures that rarely use a single label. Studies of occupational stress and work environment examine the demands and resources that shape sustained functioning (Adriaenssens et al., 2015). Research on workplace violence examines how nurses recover, reinterpret events, and build coping strategies after disruption (Han et al., 2021). Disaster-preparedness studies assess knowledge, skills, readiness, and the ability to function under exceptional conditions (Chegini et al., 2022). Triage studies examine professional self-concept, learning, rapid assessment, prioritization, and clinical decision performance (Cho et al., 2022). Intervention research demonstrates that repeated competency-based training can improve triage competency and performance (Moon & Cho, 2022). This conceptual dispersion creates a problem for synthesis: resilience, coping, competence, engagement, and clinical judgment are not synonyms for adaptive performance, yet each can function as a determinant, mechanism, or proximal domain through which adaptation becomes visible in emergency work. The present review therefore uses a deliberately bounded operational definition that treats these constructs as evidence about adaptive capacity only when they are linked to changing, stressful, novel, high-risk, or performance-relevant emergency nursing conditions.

Four theoretical perspectives organize the synthesis. The adaptive-performance taxonomy emphasizes handling emergencies, managing work stress, learning new tasks or technologies, solving novel problems, and adjusting interpersonal behavior as distinct forms of adaptation (Pulakos et al., 2000). Job Demands–Resources theory explains how sustained demands can deplete energy while job resources support engagement, learning, and effective performance (Bakker & Demerouti, 2017). Conservation of Resources theory predicts that repeated losses of time, control, safety, energy, and social support create vulnerability to further loss, whereas resource gains can build recovery capacity (Hobfoll et al., 2018). Social cognitive theory highlights self-efficacy and reciprocal person–environment processes through which people regulate effort, learning, and coping under challenge (Bandura, 1997). Together these perspectives imply that adaptive performance should not be reduced to personal resilience: it is shaped through interactions among demands, organizational resources, social relations, professional beliefs, learning opportunities, clinical competence, and ethical conditions.

Accordingly, this review asks four questions: which determinants of emergency nurses' adaptive performance and closely aligned adaptive capacities were examined in empirical reports published from 2015 through 2025; how can those determinants be organized into a coherent multilevel framework; which determinant domains received the greatest research attention and what direction of evidence is most defensible; and which conceptual, methodological, measurement, and implementation gaps remain? The aim is not to claim that every proximal construct is adaptive performance itself. Rather, the review integrates a fragmented evidence base around the conditions that help emergency nurses maintain, modify, recover, learn, and perform effectively when clinical work changes or becomes disruptive.

2. Methodology

This study employed a systematic literature review using evidence mapping and structured narrative synthesis. PRISMA 2020 principles guided the reporting of identification, screening, eligibility, inclusion, and numerical reconciliation (Page et al., 2021). The review was not prospectively registered, and independent duplicate screening was not undertaken. Narrative synthesis was selected because the eligible studies differed substantially in design, population, determinant measures, performance-related outcomes, and effect reporting, making statistical pooling inappropriate. The synthesis combined a defined operational boundary for adaptive performance, domain-based evidence mapping, consideration of study design and direction of findings, and theoretically informed interpretation of heterogeneous evidence. The search covered English-language, peer-reviewed primary empirical reports published between 1 January 2015 and 31 December 2025, with the final search update conducted on 1 September 2026. Sources used for discovery and bibliographic verification included MEDLINE via PubMed, PubMed Central, OpenAlex, publisher and DOI records, together with backward and forward citation tracing. Searches did not claim coverage of proprietary CINAHL, Scopus, or Web of Science. Search terms combined emergency-nursing concepts with adaptive-performance or related constructs, including resilience, coping, work engagement, job performance, triage competence, clinical judgment, disaster preparedness, and professional resilience, alongside determinant terms such as workload, stress, violence, support, leadership, training, and resources.

Adaptive performance was operationalized as the capacity to maintain or modify effective nursing behavior in response to changing tasks, technologies, patient acuity, emergency demand, disaster conditions, traumatic exposure, workplace violence, or other disruptive work requirements. Eligible evidence included direct adaptive or job-performance studies; performance-proximal evidence involving clinical judgment, triage, disaster competence, or learning behavior; adaptive-capacity evidence involving resilience, coping, self-efficacy, engagement, or organizational support; and antecedent or constraint evidence involving demands, stress, violence, weak resources, or moral strain. Studies were included only when these constructs were linked to changing, stressful, novel, high-risk, or performance-relevant emergency-work conditions. Eligible reports also required an emergency-department or clearly separable emergency-nurse population, primary empirical methods, sufficient extractable information, and traceable scholarly metadata. Non-emergency, non-empirical, review, editorial, non-English, out-of-period, and conceptually unaligned reports were excluded.

As shown in Figure 1, 312 records were identified and 48 duplicates removed, leaving 264 records for title-and-abstract screening. After 156 exclusions, 108 reports underwent full-text or authoritative full-record assessment; 51 were excluded for lack of focus alignment, ineligible design, insufficient outcome data, overlapping evidence, or incomplete full text, leaving 57 reports for final synthesis. Screening and extraction were managed through a structured single-reviewer evidence ledger. The MMAT v2018 informed design-appropriate appraisal across quantitative, qualitative, and mixed-method studies (Hong et al., 2018), without converting appraisal into numerical quality weights. Thirteen determinant domains were then harmonized for evidence mapping, and frequency counts were interpreted as indicators of research attention rather than effect magnitude, significance, causality, or importance.

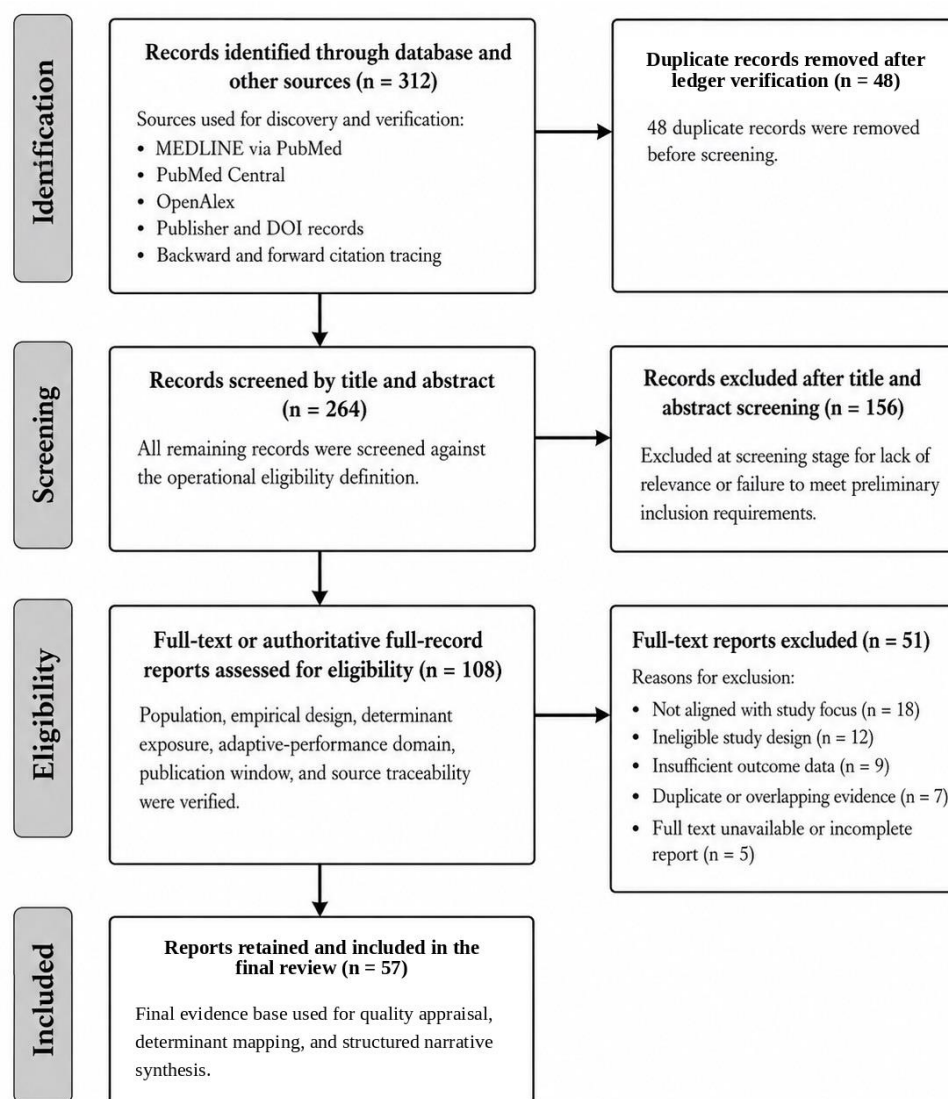


Figure 1: The Systematic Review Process

3. Determinants of Emergency Nurses' Adaptive Performance: Evidence Landscape and Conceptual Synthesis

The 57-report evidence base supports a multilevel model of emergency-nurse adaptation rather than a single-factor explanation. At the task and exposure level, workload, time pressure, traumatic events, violence, disasters, role ambiguity, and rapidly changing clinical demands create conditions in which routine performance may become insufficient. At the organizational and relational level, staffing and material resources, leadership, perceived organizational support, team relationships, role clarity, and ethical climate shape whether nurses can mobilize support and convert knowledge into effective action. At the person–professional interface, resilience, coping, professional self-belief, learning behavior, and clinical judgment shape how nurses interpret and respond to demands. This organization is consistent with adaptive-performance theory because emergency response, stress management, learning, and interpersonal adaptation are recurring features of the mapped evidence (Pulakos et al., 2000). It is also consistent with Job Demands–Resources theory because the reports repeatedly locate adaptive capacity in the balance between demands and enabling resources rather

than in personal qualities alone (Bakker & Demerouti, 2017). Frequency mapping shows that the most commonly examined domains were Stress/Trauma ($n = 34$; 59.6%), Work Environment/Resources ($n = 28$; 49.1%), Resilience ($n = 26$; 45.6%), Job Demands ($n = 22$; 38.6%), Coping/Self-Regulation ($n = 17$; 29.8%), Team/Social Support ($n = 16$; 28.1%), Professional Self-Belief ($n = 15$; 26.3%). These counts measure research attention, not causal importance. Across the mapped evidence, demands and stress are mainly constraining, whereas resources, learning, coping, and competence are mainly enabling, but heterogeneous measures and designs limit inference. Cross-sectional evidence dominates, so directional consistency cannot establish causality or rank determinants. The matrix therefore separates frequency from direction, design, and practical meaning in all cases here in this review.

The determinant clusters also reveal different pathways to adaptive functioning. Job demands and stress-related exposures can impair concentration, recovery, engagement, and decision capacity, especially when organizational resources are weak. Organizational support, leadership, and team resources can buffer demands by providing information, psychological safety, staffing flexibility, role clarity, and access to help. Resilience and coping operate as dynamic processes that can sustain functioning after violence or critical events, but the evidence does not support treating them as substitutes for safe systems. Training and clinical-judgment studies provide the clearest performance-proximal evidence because they examine how education, competency verification, and repeated practice affect triage or disaster-related performance. Ethical-climate evidence adds a distinct mechanism: adaptive behavior can be constrained when nurses know the clinically appropriate action but experience moral or relational barriers to delivering it. The least frequently mapped domains were Moral/Ethical Climate and Leadership/Empowerment (each $n = 5$; 8.8%), followed by Violence/Safety ($n = 12$; 21.1%) and Organizational Support, Training/Learning, and Clinical Competence/Judgment (each $n = 13$; 22.8%). Lower frequency does not imply triviality. Ethical climate and leadership remain relevant because professional agency, authority, and psychological safety affect whether knowledge becomes action, while training and clinical judgment connect learning with performance under changing triage, disaster, and technology demands. Table 1 is therefore an evidence-domain map, not an effect-size table. Its Adaptive Perf. column denotes relevance to the review's operational framework, not direct measurement with a validated adaptive-performance instrument; checkmarks likewise do not establish significance, direction, causality, or methodological strength in all cases here in this review and in emergency care settings.

Table 1: Literature Review Matrix

No.	Author(s) and Year	Demands	Stress	Violence	Org Support	Leadership	Team Support	Resilience	Coping	Self-Belief	Training	Clinical Judg.	Work Resources	Ethical Climate	Adaptive Perf.
1	Adriaenssens et al. (2015)	✓	✓				✓						✓		✓
2	Hunsaker et al. (2015)	✓	✓				✓	✓					✓		✓
3	Kim & Choi (2016)	✓	✓				✓						✓		✓
4	Tubbert (2016)		✓					✓	✓	✓					✓
5	Crilly et al. (2017)	✓	✓				✓						✓		✓
6	Rozo et al. (2017)	✓	✓										✓		✓
7	Bardhan et al. (2019)	✓	✓										✓		✓
8	Xu et al. (2019)	✓	✓						✓				✓		✓
9	Brewer et al. (2020)										✓	✓	✓		✓

No.	Author(s) and Year	Demands	Stress	Violence	Org Support	Leadership	Team Support	Resilience	Coping	Self- Belief	Self- Efficacy	Training	Clinical Judg.	Work Resour	Ethical Climate	Adaptive Perf.
10	Koota et al. (2020)									✓	✓	✓				✓
11	Portero de la Cruz et al. (2020)	✓	✓						✓					✓		✓
12	Wu et al. (2020)		✓				✓			✓						✓
13	Alomari et al. (2021)	✓	✓											✓		✓
14	Han et al. (2021)		✓	✓			✓	✓	✓	✓						✓
15	Koota et al. (2021)									✓	✓	✓				✓
16	Abu-Alhaija & Gillespie (2022)		✓					✓						✓		✓
17	Alruwaili et al. (2022)	✓	✓				✓		✓					✓		✓
18	Chegini et al. (2022)										✓	✓	✓			✓
19	Cho et al. (2022)		✓							✓		✓				✓
20	Choi et al. (2022)		✓	✓				✓	✓							✓
21	Jiang et al. (2022)		✓				✓	✓	✓							✓
22	Lopez et al. (2022)	✓	✓					✓								✓
23	Moon & Cho (2022)									✓	✓	✓				✓
24	Norouzinia et al. (2022)						✓	✓	✓	✓		✓				✓
25	Siam & Alrasheedi (2022)	✓	✓											✓		✓
26	Yang et al. (2022)	✓	✓					✓								✓
27	Barnard et al. (2023)	✓			✓	✓	✓			✓		✓	✓	✓		✓
28	Haugland et al. (2023)				✓			✓	✓		✓					✓
29	Khrais & Nashwan (2023)				✓	✓				✓				✓		✓
30	Lan et al. (2023)							✓	✓		✓	✓				✓
31	Park & Song (2023)			✓	✓			✓						✓		✓
32	Powell et al. (2023)		✓	✓	✓			✓	✓							✓
33	Trisyani et al. (2023)					✓	✓				✓	✓			✓	✓
34	Zhou et al. (2023)	✓	✓				✓	✓								✓
35	Öztaş et al. (2023)		✓	✓					✓							✓
36	Alruwaili et al. (2024)		✓					✓							✓	✓
37	Braun et al. (2024)	✓	✓											✓		✓
38	C.-P. Huang et al. (2024)	✓	✓											✓		✓
39	Hetherington et al. (2024)	✓	✓						✓					✓		✓
40	H. Huang et al. (2024)			✓	✓			✓								✓
41	Jain et al. (2024)						✓							✓	✓	✓
42	Kusumawati et al. (2024)	✓	✓							✓				✓		✓
43	Liao et al. (2024)			✓	✓			✓	✓		✓					✓
44	Sexton et al. (2024)		✓					✓							✓	✓
45	Topal et al. (2024)		✓							✓	✓	✓	✓	✓		✓
46	Barnard (2025)	✓	✓					✓		✓				✓		✓
47	El Riz et al. (2025)			✓				✓						✓		✓

No.	Author(s) and Year	Demands	Stress	Violence	Org Support	Leadership	Team Support	Resilience	Coping	Self-Belief	Self-Training	Clinical Judg.	Work Resource	Ethical Climate	Adaptive Perf.
48	Kızıltepe & Koç (2025)						✓		✓				✓	✓	✓
49	Levin et al. (2025)									✓	✓	✓			✓
50	Liao, Wu, et al. (2025)			✓	✓			✓	✓						✓
51	Liao, Guo, et al. (2025)			✓	✓			✓	✓		✓				✓
52	Malak et al. (2025)		✓		✓			✓					✓		✓
53	Mao et al. (2025)	✓	✓	✓											✓
54	Munn et al. (2025)	✓			✓	✓	✓	✓					✓		✓
55	Tao et al. (2025)			✓	✓			✓		✓					✓
56	Wolf et al. (2025)					✓	✓				✓	✓			✓
57	Zhou & Yin (2025)		✓		✓			✓							✓

Table 1 demonstrates that emergency-nursing adaptation is studied primarily through interconnected demand, stress, resilience, resource, and competence literatures rather than through a single standardized adaptive-performance measure. The strongest concentration of research lies in stress-related constraints, job demands, resilience, and work-resource conditions, whereas moral/ethical climate and leadership/empowerment are comparatively less represented. The matrix also shows that training and clinical-judgment evidence often co-occurs, reflecting the practical connection between learning and performance in triage, disaster response, and evidence-based practice. Violence studies frequently co-map resilience, coping, and organizational support, indicating that recovery after disruption is simultaneously personal and systemic. These patterns support a multilevel interpretation but do not establish causal rank order; a checkmark indicates substantive examination only, not effect magnitude or methodological strength.

4. Discussion

Across the evidence base, adaptive functioning is most defensibly understood as a multilevel property of the nurse–work-system relationship. Longitudinal emergency-nursing evidence shows that changes in job demands, control, social support, reward, and harassment are associated with changes in engagement, exhaustion, and intention to leave, indicating that functioning shifts as work conditions change rather than reflecting stable personal capacity alone (Adriaenssens et al., 2015). A direct performance-oriented study similarly found that job-demand/resource profiles and work capabilities were associated with emergency nurses' job performance and intention to leave (Barnard et al., 2023). This convergence accords with the Job Demands–Resources proposition that resources sustain performance under demanding work. It also accords with a core adaptive-performance assumption: effective action under change depends on both the demands presented and the resources available to modify behavior. The evidence remains predominantly observational, however, so associations between resources and performance should not be translated into unqualified causal claims.

Stress, trauma, and workload form the central constraint cluster. Emergency nurses report high workload, role pressure, fatigue, infectious-disease stress, and repeated critical events, all of which consume cognitive and emotional resources needed for adaptive action. During the MERS outbreak, job stress and limited hospital resources were associated with emergency-nurse burnout, illustrating

how acute system disruption can amplify demand while reducing available resources (Kim & Choi, 2016). In an Indonesian emergency-nurse sample, workload and self-efficacy were examined as determinants of work stress, reinforcing the interaction between contextual load and personal belief (Kusumawati et al., 2024). Recent systems-focused research also linked job-related and work-environment factors with burnout and engagement, strengthening the case for interventions that modify work conditions rather than relying only on individual coping (Munn et al., 2025). Under Conservation of Resources theory, these patterns are consistent with resource-loss cycles in which sustained demand drains energy, control, time, and recovery opportunities. The practical implication is that adaptive-performance initiatives may include workload, staffing, schedule, role-clarity, and resource design alongside individual development.

Workplace violence provides clear evidence that adaptation unfolds through both organizational and personal mechanisms. Grounded-theory evidence describes a staged resilience process in which emergency nurses release emotions, interpret conflicting thoughts and actions, and establish future coping strategies after violence (Han et al., 2021). Cross-sectional evidence shows that perceived organizational support and coping styles are associated with resilience among violence-exposed emergency nurses, consistent with resilience being partly socially enabled (Liao, Wu, et al., 2025). Structural-equation evidence further associates workplace violence with professional identity through modeled organizational-support and resilience pathways (Tao et al., 2025). Intervention evidence is especially informative because a structured resilience-education program improved resilience-related outcomes after workplace violence and remained beneficial at follow-up (Liao et al., 2024). The follow-up report showed persistence of resilience gains and interaction with baseline violence exposure, suggesting that intervention effects can depend on the severity of the disruption being adapted to (Liao, Guo, et al., 2025). These studies do not justify shifting responsibility for violence onto nurses; they show instead that adaptive capacity requires prevention, organizational support, and recovery resources as well as coping skills.

Training, learning, and clinical judgment constitute the performance-proximal determinant cluster. From a social-cognitive perspective, structured education can strengthen emergency nurses' evidence-based-practice self-efficacy, knowledge, skills, and behaviors, although gains may vary over follow-up (Koota et al., 2021). A competency-based mobile triage application improved triage competency and performance compared with book-based learning, providing direct evidence that repeated, scenario-based learning can change observable emergency-nursing performance (Moon & Cho, 2022). Disaster-focused training likewise improved disaster nursing ability and psychological resilience in a randomized trial, linking competence development with the capacity to function under exceptional conditions (Lan et al., 2023). Qualitative work identifies emergency nursing competence as encompassing acute critical care, communication and coordination, disaster roles, research, teaching, leadership, and ethical/legal standards, emphasizing that adaptation is broader than technical skill (Trisyani et al., 2023). A 2025 survey further identified triage competencies involving expert assessment, clinical judgment, resource management, communication, and timely decisions (Wolf et al., 2025). Cross-national evidence on generative-AI-supported clinical decision making highlights a new adaptive challenge in which emergency nurses must integrate technological assistance while retaining context-sensitive judgment (Levin et al., 2025).

Leadership, team support, organizational support, and ethical climate shape whether adaptive knowledge can be converted into action. During the COVID-19 pandemic, leadership practices were associated with structural and psychological empowerment among emergency nurses, underscoring the role of authority, information, and access to resources in enabling professional agency (Khrais & Nashwan, 2023). Team resilience and job involvement were inversely associated with occupational stress in emergency nurses, suggesting that adaptation can be a collective property of teams as well

as individuals (Zhou et al., 2023). Moral-distress research adds a boundary condition because resilience may be lower when professional values conflict with organizational or clinical constraints (Sexton et al., 2024). Poorer nurse–physician relationships have also been associated with higher moral distress, indicating that interprofessional coordination can influence whether nurses are able to act consistently with clinical and ethical judgment (Jain et al., 2024). These findings extend adaptive-performance theory by showing that emergency adaptation is not merely flexibility in task execution; it also requires relational permission, psychological safety, and ethical conditions that allow appropriate action.

The evidence base nevertheless permits only limited confidence in causal ordering. Most included reports use cross-sectional or survey designs, while fewer use longitudinal, randomized, quasi-experimental, or qualitative process designs. Direct adaptive-performance measurement is also rare: the literature more often measures resilience, coping, competence, engagement, burnout-related constraints, or job performance as conceptually related but non-equivalent outcomes. The recent scoping review of adaptive expertise and adaptive-performance instruments in health care reached a similar measurement conclusion, identifying limited health-care-specific instruments and substantial variation in operationalization (Hissink et al., 2025). Accordingly, the review's contribution is not a causal ranking of determinants but an account showing how fragmented evidence on demands, resources, professional capacities, and adaptation-related outcomes converges within a multilevel framework. Confidence is stronger for this cross-domain pattern and the measurement gap it reveals than for precise estimates of relative causal effects.

5. Research Gaps and Future Research Directions

The primary conceptual gap is measurement specificity. None of the 57 included emergency-nursing reports used a widely validated emergency-nurse-specific adaptive-performance scale that directly captures multiple adaptive-performance dimensions as a single focal outcome. Instead, studies operationalized adaptation through performance, work capabilities, resilience, coping, triage competence, disaster preparedness, work engagement, professional identity, or stress-related constraints. This fragmentation is consistent with the wider health-care measurement literature, in which adaptive expertise and adaptive performance remain variably defined and measured (Hissink et al., 2025). Future work should therefore develop and validate emergency-nursing adaptive-performance measures that preserve clinically meaningful domains such as emergency handling, stress adaptation, learning, interpersonal adaptation, resource coordination, and novel-problem solving while demonstrating discriminant validity from resilience, burnout, engagement, and general competence. Measurement development should include scenario-based and supervisor- or behavior-based methods rather than relying only on self-report.

Design imbalance also limits causal inference. In the present evidence map, 39 of 57 reports (68.4%) were cross-sectional or survey-based, compared with 2 longitudinal reports (3.5%), 6 intervention or evaluation reports (10.5%), 7 qualitative reports (12.3%), and 3 mixed-method or psychometric reports (5.3%). Prospective and multilevel studies should test whether workload, organizational support, leadership, team resources, and self-efficacy precede changes in adaptive performance rather than merely co-occur with related outcomes. Comparative designs should examine how emergency-system organization, staffing models, disaster exposure, technology adoption, and cultural expectations modify determinant relationships across settings. Interpretation of the present review should recognize review-level constraints, including single-reviewer screening, absence of

prospective registration, English-language eligibility, restricted database coverage, and heterogeneity that precluded defensible statistical pooling.

Implementation research should move beyond isolated wellness programs toward integrated system interventions. The evidence suggests value in resilience education, triage training, disaster preparation, and evidence-based-practice development, but the sustainability, cost, transferability, and interaction of these interventions with staffing and organizational conditions remain insufficiently tested. Future trials should compare individual-only interventions with combined strategies that simultaneously address workload, violence prevention, leadership, team communication, protected learning time, and ethical support. Technology is another emerging gap: generative artificial intelligence and other decision-support tools alter information availability and task demands, but research must determine when such tools enhance adaptive judgment and when they create automation bias or context loss. Replication with objective performance outcomes, longer follow-up, and transparent reporting of implementation fidelity would materially strengthen the evidence needed for policy and practice.

6. Conclusion

This systematic review synthesized 57 empirical reports published from 2015 through 2025 to examine determinants, constraints, and adaptive capacities associated with emergency nurses' adaptive performance using an operational framework. The evidence indicates that adaptive functioning most clearly reflects interactions among demands, trauma exposure, workplace violence, organizational resources, leadership, resilience, coping, professional self-belief, learning, clinical judgment, work-environment conditions, and ethical climate. Frequently examined domains represent concentrations of research attention rather than rankings of causal importance. Direct performance evidence links resource configurations and work capabilities with emergency-nurse performance, while intervention evidence shows that structured learning can improve triage and disaster competencies. Across the literature, personal resources are defensible when interpreted as mechanisms embedded within organizational conditions rather than substitutes for safe staffing, adequate resources, violence prevention, or ethical and relational support. The review therefore contributes a clear multilevel interpretation that coherently integrates fragmented adaptation-related evidence.

For emergency nursing practice and management, the synthesis suggests a combined strategy: reduce preventable demands and violence exposure; provide staffing, equipment, role clarity, leadership access, and team support; strengthen resilience and coping; and maintain competency development for triage, disaster response, evidence use, and evolving technologies. For research, the priority is direct measurement of emergency nurses' adaptive performance using multidimensional instruments and behavior-based performance indicators. Longitudinal, multilevel, and intervention designs are needed to distinguish determinants from consequences and identify resource combinations that remain effective under disruption. The evidence supports a multilevel account of adaptation but is insufficiently standardized to justify a single causal hierarchy. Its central unresolved issue is measurement fragmentation: emergency-nursing research frequently examines adaptation-related capacities and conditions without directly operationalizing adaptive performance as the focal construct. Adaptive performance is therefore best treated as a dynamic capability associated with professional competence, self-regulation, social support, organizational resources, and changing emergency-care conditions.

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