

Relationships Between Professional Growth, Work Stress, and Reflective Ability in Mid- and Senior-Level Nurses

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Abstract

The nursing profession faces unprecedented challenges in contemporary healthcare environments, with increasing demands, complex patient needs, and evolving professional roles. This article examines the intricate relationships between professional growth, work stress, and reflective ability among mid- and senior-level nurses. Through an extensive review of current literature, this paper explores how nurses at advanced career stages navigate professional development while managing various stressors in their work environments. The analysis reveals that reflective practice serves as a critical mediating factor in this relationship, potentially buffering the negative impacts of work stress while simultaneously promoting professional growth. The paper discusses challenge-hindrance stress frameworks, job crafting and leisure crafting as adaptive strategies, and the unique contextual factors affecting mid- and senior-level nurses across different healthcare systems. Implications for nursing education, practice, and leadership development are considered, with recommendations for fostering supportive environments that enhance reflective capabilities and promote sustainable career trajectories for experienced nurses. This comprehensive examination contributes to our understanding of how nursing professionals can thrive throughout their careers despite workplace challenges.

INTRODUCTION

The nursing profession stands at a critical crossroads in the 21st century. As healthcare systems worldwide face increasing complexity, resource constraints, and evolving patient needs, nurses at all levels encounter significant challenges in their professional lives (Davidson et al., 2003). Mid- and senior-level nurses, in particular, navigate unique stressors

as they balance advanced clinical responsibilities, leadership roles, and mentorship duties while attempting to maintain their own professional growth and well-being (Ryan et al., 2017).

The contemporary nursing landscape has been characterized by heightened work demands, staffing shortages, and expanding scope of practice (Snow et al., 2024). In China, for example, the nurse-to-population ratio remains significantly lower than in many developed countries, creating substantial workload pressures (Chinese National Health Commission, 2021). Similar challenges exist globally, with nurses reporting increasing levels of work stress, burnout, and intentions to leave the profession (You et al., 2022; Yang et al., 2021). Within this challenging context, reflective ability has emerged as a potentially powerful resource for nurses. Defined as "the process of engaging in meaningful contemplation of experiences to develop deeper understanding and insights that inform future practice" (Richard et al., 2019, p. 425), reflective practice has been associated with improved clinical reasoning, enhanced interprofessional collaboration, and greater professional satisfaction (Nishimoto et al., 2021). However, the specific role of reflective ability in mediating the relationship between work stress and professional growth, particularly among mid- and senior-level nurses, remains incompletely understood.

This article examines the complex interrelationships between professional growth, work stress, and reflective ability among nurses at advanced career stages. By synthesizing current literature on these topics, we aim to elucidate the mechanisms through which experienced nurses navigate workplace challenges while continuing to develop professionally. We consider the differential impacts of challenge and hindrance stressors (Cavanaugh et al., 2000; Zhang et al., 2024), explore the potential of job crafting and leisure crafting as adaptive strategies (Roczniewska et al., 2023; Liu et al., 2024), and analyze contextual factors that influence these relationships across different healthcare settings and cultural contexts.

The findings from this analysis have significant implications for nursing education, practice, and leadership development. By better understanding the interplay between stress, reflection, and growth, healthcare organizations and educational institutions can develop targeted interventions to support experienced nurses, potentially improving retention, job satisfaction, and ultimately patient care quality. As Snow et al. (2024) argue, recognizing and harnessing "the power of nursing" requires attention to the factors that enable nurses to thrive throughout their careers, particularly during the challenging mid- and senior-level phases.

THEORETICAL FRAMEWORKS

The Job Demands-Resources Model

The Job Demands-Resources (JD-R) model provides a valuable framework for understanding the dynamics of work stress and professional growth in nursing contexts. This model posits that job characteristics can be categorized into demands (aspects of work that require sustained effort and may lead to strain) and resources (aspects that help achieve work goals, reduce job demands, or stimulate growth) (van den Tooren & de Jonge, 2008). For nurses, demands may include high workloads, time pressure, and emotional labor, while resources might encompass supportive leadership, professional autonomy, and opportunities for skill development (Möckli et al., 2020).

The JD-R model has been extended to recognize that job demands themselves can be differentiated into challenge stressors and hindrance stressors (Cavanaugh et al., 2000; Zhang et al., 2024). Challenge stressors—such as high responsibility, time pressure, and complex patient cases—can potentially stimulate growth and achievement despite being

stressful. Hindrance stressors—including excessive paperwork, inadequate resources, and role ambiguity—tend to obstruct goal achievement and professional development (Sun et al., 2022). This distinction is particularly relevant for mid- and senior-level nurses who often face high levels of both types of stressors simultaneously.

Recent adaptations of the JD-R model have incorporated individual differences in how employees respond to demands and resources. Wang and Xie (2023) describe a "demands-resources-individual effects perspective" that acknowledges how personal characteristics, including reflective ability, can modify the impact of workplace factors on outcomes such as innovation performance and professional growth. This nuanced approach helps explain why some experienced nurses thrive under pressure while others struggle with similar conditions.

Reflective Practice in Nursing

Reflective practice theory provides another essential framework for this analysis. Schön's seminal work on reflection-in-action and reflection-on-action laid the groundwork for understanding how professionals learn from experience (Richard et al., 2019). In nursing, reflective practice has been conceptualized as a process through which practitioners critically analyze their clinical experiences, examine underlying assumptions, and integrate new insights into future practice (Nishimoto et al., 2021).

Nishimoto et al. (2021) developed and validated a Reflective Ability Scale for Clinical Nurses that encompasses four dimensions: "objective self-evaluation," "awareness of feelings in uncomfortable situations," "critical and objective examination of care quality," and "clarification of one's own perceptions and recognition of the complexity of care." This multidimensional conceptualization highlights the cognitive, affective, and evaluative aspects of reflection that are particularly relevant for experienced nurses navigating complex clinical situations.

Recent theoretical work by Nishimoto et al. (2023) suggests that reflective ability may develop differently across career stages, with mid- and senior-level nurses potentially demonstrating more sophisticated reflective capabilities compared to novice nurses. This developmental perspective aligns with Benner's novice-to-expert model, suggesting that advanced reflective ability may be both a product of experience and a catalyst for continued professional growth among seasoned practitioners (Sandvik & Hilli, 2023).

Professional Growth and Career Development in Nursing

Theories of professional growth and career development provide the third pillar of our theoretical framework. Traditional career stage models in nursing have described a progression from novice to advanced beginner, competent, proficient, and ultimately expert practitioner (Sandvik & Hilli, 2023). However, contemporary approaches recognize that career development in nursing is often non-linear and influenced by multiple factors beyond clinical experience, including formal education, mentorship opportunities, organizational context, and personal life circumstances (de Lange et al., 2019).

Shi et al. (2022) examined the development of master nursing specialists in China, highlighting how advanced practitioners navigate complex identity formation processes as they transition from primarily clinical roles to positions involving greater leadership, education, and research responsibilities. Similarly, Zhan et al. (2023) analyzed reflective writings from master nursing specialists during their internships, revealing themes of professional identity negotiation, knowledge integration, and adaptive responses to challenging practice situations.

These theoretical perspectives collectively suggest that the relationships between work stress, reflective ability, and professional growth among mid- and senior-level nurses are bidirectional and contextually embedded. Experienced nurses both shape and are shaped by their work environments, with reflective processes potentially serving as mechanisms

through which workplace challenges are transformed into opportunities for growth rather than sources of burnout.

Work Stress in Mid- and Senior-Level Nurses

Distinguishing Challenge and Hindrance Stressors

The challenge-hindrance stress framework offers valuable insights into how different types of work stressors affect mid- and senior-level nurses. Challenge stressors represent work demands that, while requiring effort and potentially generating strain, also offer opportunities for growth, achievement, and reward. For experienced nurses, these might include managing complex patient cases, taking on leadership responsibilities, implementing new evidence-based practices, or mentoring junior colleagues (Zhang et al., 2019). Despite being demanding, these challenges can stimulate professional development and contribute to a sense of accomplishment when successfully navigated.

In contrast, hindrance stressors are work demands that typically interfere with goal achievement and professional development without corresponding benefits. Examples in nursing include excessive documentation requirements, inadequate staffing, poor interprofessional communication, resource constraints, and organizational politics (Yang et al., 2021). These stressors tend to generate frustration and emotional exhaustion without the compensatory satisfaction of growth or achievement.

Research suggests that mid- and senior-level nurses often experience high levels of both challenge and hindrance stressors simultaneously. Zhang et al. (2024) found that daily fluctuations in both types of stressors significantly affected work engagement, with challenge stressors sometimes enhancing engagement while hindrance stressors consistently undermined it. This mixed stress profile creates a complex psychological landscape for experienced nurses, potentially explaining the seemingly contradictory reports of both high job satisfaction and high burnout rates in this population.

Contextual Factors Influencing Work Stress

Work stress among experienced nurses is significantly shaped by contextual factors at organizational, systemic, and cultural levels. Härenstam (2008) argues for an organizational approach to understanding job demands and control, highlighting how structural features of healthcare institutions influence individual stress experiences. For mid- and senior-level nurses, organizational factors such as leadership styles, decision-making processes, and resource allocation policies can either amplify or buffer the impact of work stressors.

Healthcare system factors also play a crucial role. In China, for example, the nurse-to-population ratio of 3.34 nurses per 1,000 population (Chinese National Health Commission, 2021) creates substantial workload pressures that differ from contexts with more favorable staffing ratios. Similarly, the nature of the doctor-patient relationship varies across healthcare systems, with Zeng et al. (2022) identifying this relationship as a "challenge job demand" in Chinese public hospitals that requires significant emotional and cognitive resources from healthcare providers.

Cultural factors further influence how nurses experience and respond to work stress. Wei et al. (2024) examined how social expectations and gender roles affect mental health among Chinese women, including those in nursing professions. Traditional expectations regarding caregiving, emotional labor, and work-family balance can create additional layers of stress for nurses, particularly those in mid-career stages who may be simultaneously managing demanding professional roles and significant family responsibilities.

Consequences of Prolonged Work Stress

The consequences of prolonged exposure to work stress among mid- and senior-level nurses are well-documented and concerning. At the individual level, experienced nurses facing chronic stress may develop compassion fatigue, a state of physical and emotional

depletion resulting from continuous caregiving under difficult circumstances (Xie et al., 2023). This can manifest as decreased empathy, diminished professional satisfaction, and a reduced sense of accomplishment despite years of experience and expertise.

Work alienation represents another potential consequence, particularly in environments where hindrance stressors predominate. You et al. (2022) conducted a systematic review of work alienation among Chinese nurses, finding that alienation was associated with reduced work engagement, increased turnover intention, and poorer quality of care. Mid- and senior-level nurses may be especially vulnerable to alienation when bureaucratic demands and resource constraints prevent them from practicing in alignment with their professional values and expertise.

At the organizational level, the stress experienced by experienced nurses can lead to premature departure from the profession, creating critical losses of expertise and mentorship capacity. Yang et al. (2021) found that occupational stress and perceived distributive injustice significantly predicted turnover intention among Chinese hospital nurses. The departure of mid- and senior-level nurses not only reduces the overall experience level within healthcare organizations but also disrupts succession planning and knowledge transfer to the next generation of practitioners.

These negative consequences highlight the urgent need for effective strategies to help experienced nurses manage work stress while continuing their professional growth trajectories. As we will explore in subsequent sections, reflective ability may serve as a critical resource in this regard, potentially transforming stressful experiences into opportunities for development rather than catalysts for burnout and disengagement.

Reflective Ability in Nursing Practice

Components and Development of Reflective Ability

Reflective ability in nursing encompasses multiple interrelated components that collectively enable practitioners to learn from experience, adapt to changing circumstances, and continuously improve their practice. Nishimoto et al. (2021) identified four key dimensions of reflective ability among clinical nurses: objective self-evaluation, awareness of feelings in uncomfortable situations, critical examination of care quality, and clarification of perceptions regarding care complexity. These dimensions highlight that effective reflection involves both cognitive analysis and emotional awareness, focusing on both the self and the broader context of care delivery.

The development of reflective ability appears to follow a trajectory influenced by both experience and deliberate practice. Nishimoto et al. (2023) conducted a cross-sectional study examining predictors of reflective ability across different career stages. They found that while factors such as role model presence and reflective writing experience predicted reflective ability across all career stages, mid- and senior-level nurses demonstrated different patterns of association between specific workplace factors and reflective capabilities compared to early-career nurses. This suggests that reflective ability may be both a product of accumulated experience and a skill that can be deliberately cultivated through specific practices and supportive environments.

Zhou et al. (2024) examined reflective ability specifically among junior nurses in China, finding that professional attitude significantly predicted reflective ability, which in turn influenced off-duty time planning. This suggests that the foundations of reflective practice are established early in nursing careers but may continue to evolve as nurses gain experience and encounter more complex clinical situations that demand sophisticated reflection.

Measuring and Evaluating Reflective Ability

The measurement and evaluation of reflective ability present significant challenges due to the internal, subjective nature of reflective processes. However, several validated instruments have been developed to assess reflective capacity among nursing professionals. The Reflective Ability Scale for Clinical Nurses, developed and validated by Nishimoto et al. (2021), represents one such instrument that has demonstrated reliability and validity in measuring the multidimensional nature of reflection in clinical practice.

Shao et al. (2023) translated and psychometrically tested the Chinese version of the Clinical Nurse Reflective Ability Scale, providing a culturally adapted instrument for assessing reflection among Chinese nursing professionals. The availability of validated measures across different cultural contexts facilitates comparative research and enables the evaluation of interventions designed to enhance reflective capabilities among experienced nurses.

Beyond quantitative measurement, qualitative approaches offer valuable insights into the nature and depth of reflective practice. Zhan et al. (2023) analyzed written reflections from master nursing specialists during their internships, identifying themes related to professional identity, knowledge integration, and responses to practice challenges. These qualitative analyses reveal the richness and complexity of reflection that may not be fully captured by standardized instruments, particularly among nurses at advanced career stages who may engage in more sophisticated and nuanced reflective processes.

Reflective Ability and Professional Outcomes

A growing body of evidence suggests that reflective ability is associated with positive professional outcomes among nurses. Richard et al. (2019) conducted a realist review of reflective practice in interprofessional education and practice, identifying mechanisms through which reflection contributes to improved communication, collaborative problem-solving, and patient-centered care. For mid- and senior-level nurses who often work at the intersection of multiple professional disciplines, these interprofessional benefits of reflection may be particularly valuable.

Yan et al. (2022) examined facilitators and barriers to nurses' innovation at work, finding that reflective processes played a crucial role in identifying problems, generating creative solutions, and adapting innovations to specific clinical contexts. This suggests that reflective ability may be an important precursor to innovative practice among experienced nurses, potentially contributing to both individual professional growth and organizational improvement.

The relationship between reflective ability and professional resilience represents another important outcome domain. Yu et al. (2019) conducted a systematic review of personal and work-related factors associated with nurse resilience, identifying reflective practice as a key factor that helps nurses process challenging experiences, derive meaningful learning, and sustain engagement despite workplace adversity. For mid- and senior-level nurses facing complex stressors, the capacity for productive reflection may be an essential resource for maintaining resilience throughout extended careers.

The Mediating Role of Reflection

Reflection as a Buffer Against Negative Stress Effects

Emerging evidence suggests that reflective ability may serve as a buffer against the negative effects of work stress among nurses. By enabling practitioners to process challenging experiences, extract meaningful learning, and contextualize stressors within broader professional narratives, reflection potentially transforms what might otherwise be depleting experiences into opportunities for growth and development.

Zhang et al. (2024) examined how daily challenge and hindrance stressors affected work engagement among teachers, finding that positive affect and mindfulness—both related to

reflective capacity—mediated these relationships. When individuals were able to maintain positive emotional states and present-moment awareness despite stressors, they demonstrated greater resilience to the negative impacts of workplace demands. Similar mechanisms may operate among experienced nurses, with reflective processes helping to maintain emotional equilibrium and professional perspective amid stressful circumstances. Babamiri et al. (2022) investigated how different theoretical models of work stress predicted counterproductive work behaviors, finding that personal resources including reflective capabilities moderated these relationships. For mid- and senior-level nurses, well-developed reflective abilities may serve as protective factors against the adoption of counterproductive coping strategies in response to workplace stressors, instead facilitating constructive adaptation and problem-solving.

Reflection and Career Stage-Specific Challenges

The buffering effect of reflection may be particularly important for addressing career stage-specific challenges faced by mid- and senior-level nurses. These experienced practitioners often navigate complex role transitions, manage competing priorities, and confront the physical and psychological effects of aging while remaining in demanding clinical environments (Ryan et al., 2017).

de Lange et al. (2019) studied postdoctoral nurses' experiences with leadership and career development, finding that reflective processes were essential for integrating research knowledge with clinical expertise and navigating evolving professional identities. Through reflection, these advanced practitioners were able to make meaning of ambiguous situations, reconcile competing demands, and chart personalized career trajectories aligned with their values and strengths.

For senior nurses approaching retirement, reflective practice may facilitate productive engagement with the challenges of aging in the nursing workforce. Ryan et al. (2017) described senior nurses as "valuable yet vulnerable," highlighting how they possess tremendous experiential knowledge but may also face physical limitations and changing practice environments. Reflection potentially helps these seasoned practitioners adapt their practice approaches, focus on strengths, and find sustainable ways to contribute their expertise while managing age-related challenges.

Reflection and Knowledge Transfer

An additional mediating function of reflection involves facilitating knowledge transfer between experienced nurses and their less experienced colleagues. Through articulating tacit knowledge, examining practice patterns, and making explicit the reasoning behind clinical decisions, reflective mid- and senior-level nurses contribute to the development of collective wisdom within healthcare organizations.

Sandvik and Hilli (2023) explored understanding and formation as processes of becoming a nurse, highlighting how the reflective practices of experienced nurses create learning opportunities for novices. When mid- and senior-level nurses model reflective approaches to practice, they not only enhance their own professional development but also foster reflective capabilities among junior colleagues, creating a positive cycle of growth within the nursing community.

This knowledge transfer function of reflection is particularly important in contexts facing nursing shortages or rapid expansion of the nursing workforce. In China, for example, where significant increases in nursing education capacity have created a relatively young workforce (Chinese National Health Commission, 2021), the reflective capabilities of experienced nurses represent a crucial resource for accelerating the professional development of recent graduates and ensuring quality care despite workforce challenges.

Job Crafting and Leisure Crafting as Adaptive Strategies

Job Crafting in Nursing Roles

Job crafting represents a proactive approach through which employees modify aspects of their work to enhance person-job fit, potentially increasing engagement and reducing stress (Roczniewska et al., 2023). For mid- and senior-level nurses, job crafting may involve reshaping task boundaries, cultivating meaningful professional relationships, and reframing the cognitive significance of nursing work to align with evolving values and capabilities. Seck et al. (2024) examined nurses' perceived barriers and facilitators to implementing nurse prescribing, finding that experienced nurses often engaged in informal task crafting by expanding their roles before formal authorization, drawing on their extensive knowledge to meet patient needs. This proactive role expansion represents a form of job crafting through which experienced nurses address practice gaps while simultaneously creating opportunities for professional growth.

Yan et al. (2022) similarly identified job crafting behaviors among innovative nurses, who modified work processes, initiated improvements, and built supportive networks to implement practice changes. Mid- and senior-level nurses, with their deep understanding of organizational systems and established professional relationships, may be particularly well-positioned to engage in effective job crafting that benefits both individual practitioners and healthcare organizations.

However, the effectiveness of job crafting depends significantly on organizational context. Li et al. (2024) examined factors influencing the thriving of emergency department nurses in China, finding that organizational support and leader behavior substantially affected nurses' ability to craft meaningful and sustainable roles. This suggests that while experienced nurses may possess the capabilities for effective job crafting, supportive leadership and organizational cultures are necessary to enable these adaptive strategies.

Leisure Crafting as a Complementary Strategy

Complementing job crafting, leisure crafting involves the proactive design of off-duty time to meet personal needs for recovery, meaning, and growth (Petrou et al., 2016). For nurses experiencing high work demands, deliberate attention to leisure activities may represent an important strategy for maintaining well-being and sustaining professional engagement over extended careers.

Liu et al. (2024) investigated leisure crafting among Chinese ICU nurses, finding that it positively affected work engagement through multiple mediating pathways involving recovery experiences and humanistic care ability. This suggests that how nurses structure their time outside work influences not only their well-being but also their capacity to deliver compassionate, engaged care during work hours—a finding with particular relevance for mid- and senior-level nurses seeking to sustain high-quality practice despite increasing work demands.

Chen (2023) specifically examined leisure crafting during the COVID-19 pandemic, finding that it reduced emotional exhaustion by improving sleep quality and reducing rumination about pandemic-related stressors. For experienced nurses who faced extraordinary demands during the pandemic while simultaneously carrying leadership responsibilities, leisure crafting potentially served as a critical resource for maintaining psychological health amid unprecedented challenges.

Integration of Work and Non-Work Domains

Increasingly, researchers recognize that work and non-work domains are deeply interconnected, with experiences in one domain affecting functioning in the other (Kerksieck et al., 2024). Mid- and senior-level nurses must navigate this work-life interface effectively to sustain both professional growth and personal well-being throughout extended careers.

Sheng et al. (2024) studied the current status and influencing factors of nurses' off-duty time planning in China, finding that experienced nurses often struggled to implement

effective recovery strategies despite recognizing their importance. This suggests that even as nurses develop sophisticated reflective abilities within their professional practice, they may require additional support in applying similar reflective approaches to personal life management.

Zhou et al. (2024) identified a mediating effect of reflective ability on the relationship between professional attitude and off-duty time planning among junior nurses, suggesting that reflective processes may help integrate professional and personal domains across career stages. For mid- and senior-level nurses, who often face complex responsibilities in both domains simultaneously, this integrative function of reflection may be particularly valuable for crafting sustainable career trajectories.

Guo et al. (2022) translated and validated a leisure crafting scale for Chinese nursing populations, providing a measurement tool that can facilitate future research on how nurses at different career stages approach non-work time. This growing research focus on the work-life interface acknowledges that sustainable nursing careers require attention to both professional development and personal recovery, with reflection potentially serving as a bridge between these domains.

Professional Growth Trajectories

Career Development Pathways

Professional growth among mid- and senior-level nurses follows diverse pathways shaped by individual preferences, organizational opportunities, and healthcare system structures. Traditional career advancement often involves progression from clinical roles to management positions, potentially creating tensions between hands-on patient care and administrative responsibilities (de Lange et al., 2019). However, contemporary nursing career frameworks increasingly recognize multiple pathways for advancement, including clinical specialist roles, educational positions, research careers, and advanced practice designations.

Shi et al. (2022) examined the cultivation of master nursing specialists in China through qualitative content analysis, identifying key stakeholder perspectives on how these advanced practitioners should be prepared and deployed within healthcare systems. Their findings highlighted the importance of structured mentorship, protected time for skill development, and clear role definitions in supporting the growth of specialized nursing expertise. For mid-career nurses transitioning into specialized roles, these structural supports may be particularly important for successful role integration and continued professional development.

Zhan et al. (2023) analyzed written reflections from master nursing specialist interns, revealing how these advanced practitioners negotiated professional identity transitions, integrated theoretical knowledge with practical experience, and developed adaptive responses to practice challenges. Their findings suggest that growth at advanced career stages often involves complex identity work, as experienced nurses incorporate new roles and responsibilities into established professional self-concepts.

Barriers and Facilitators to Professional Growth

Multiple factors influence whether mid- and senior-level nurses experience continued professional growth or stagnation. Cohen et al. (2023) conducted a systematic review of workplace interventions to improve well-being and reduce burnout among healthcare professionals, identifying organizational factors such as workload management, professional autonomy, and supportive leadership as critical determinants of sustained engagement. For experienced nurses, organizational environments that recognize their expertise while providing opportunities for new challenges may be particularly conducive to ongoing growth.

Individual factors also play important roles in professional growth trajectories. Yi et al. (2024) evaluated the effects of action learning on research competency among nursing students, finding that reflective processes significantly enhanced learning outcomes. Similar mechanisms likely operate among experienced practitioners, with those possessing well-developed reflective capabilities better positioned to derive growth from practice experiences despite workplace challenges.

Systemic barriers to professional growth include resource constraints, rigid organizational hierarchies, and traditional role boundaries that limit opportunities for innovation and expansion of practice (Yan et al., 2022). Mid- and senior-level nurses often navigate these systemic constraints while simultaneously addressing age-related challenges and evolving family responsibilities, creating complex growth contexts that require sophisticated adaptive strategies.

Integrating Professional Growth with Sustainable Careers

A key challenge for mid- and senior-level nurses involves balancing continued professional growth with sustainable career practices that prevent burnout and premature departure from the profession. Czakert et al. (2024) examined how transformational leadership affects the off-work recovery of daily personal energy resources via work engagement, identifying both resource-based and demand-based pathways through which leadership influences sustainability. For experienced nurses, leadership approaches that recognize their expertise while protecting recovery time may be particularly important for integrating growth with sustainability.

Hong et al. (2024) investigated how abusive supervision affects nursing students' intention to leave the profession, finding that the quality of the nurse-patient relationship mediated this relationship. For mid- and senior-level nurses, maintaining meaningful connections with patients amid increasing administrative demands represents a similar challenge, with those able to preserve these connections potentially experiencing greater professional satisfaction and reduced turnover intention despite workplace stressors.

Professional growth at advanced career stages increasingly requires attention to both development and sustainability, with reflective practice potentially serving as an integrating mechanism that helps experienced nurses craft meaningful, sustainable career trajectories aligned with evolving values, capabilities, and life circumstances. Organizations seeking to retain experienced nursing talent must similarly balance growth opportunities with supports for sustainable practice, recognizing that mid- and senior-level nurses represent valuable resources whose continued engagement requires thoughtful attention to both professional development and personal well-being.

Implications and Recommendations

For Nursing Education

The findings of this review have significant implications for nursing education, particularly for programs focused on continuing professional development and advanced practice preparation. Educational approaches should explicitly cultivate reflective capabilities alongside clinical and leadership skills, recognizing that reflection serves as a critical mediating mechanism between workplace experiences and professional growth.

Specific recommendations include:

1. Incorporate structured reflective practice components within continuing education programs for experienced nurses, using evidence-based approaches such as reflective writing, guided group reflection, and reflective case analysis (Richard et al., 2019).
2. Develop educational modules specifically addressing the relationships between challenge-hindrance stressors, reflective processes, and professional growth, helping mid-

and senior-level nurses conceptualize workplace challenges as potential catalysts for development (Zhang et al., 2024).

3. Provide training in job crafting and leisure crafting strategies, equipping experienced nurses with concrete approaches for shaping both work and non-work domains to support well-being and sustainable practice (Liu et al., 2024; Roczniowska et al., 2023).

4. Create educational pathways that acknowledge and build upon the extensive experiential knowledge of mid- and senior-level nurses while introducing new evidence-based practices and technologies in ways that respect their established expertise.

For Healthcare Organizations

Healthcare organizations play crucial roles in creating environments that either facilitate or impede the professional growth of experienced nurses. Based on the findings of this review, organizations should:

1. Implement workload management systems that distinguish between challenge and hindrance stressors, minimizing bureaucratic demands that contribute little to patient care while preserving challenging aspects of nursing work that stimulate growth and engagement (Sun et al., 2022).

2. Establish formal mentorship programs that leverage the expertise of senior nurses while providing them with meaningful opportunities to share knowledge and support the development of less experienced colleagues (de Lange et al., 2019).

3. Create flexible role structures that allow experienced nurses to craft positions aligned with their evolving capabilities, interests, and life circumstances, potentially including phased retirement options for senior practitioners (Ryan et al., 2017).

4. Develop leadership approaches that specifically address the needs of mid- and senior-level nurses, recognizing their desire for professional autonomy, meaningful contribution, and work arrangements that support sustainable careers (Czakert et al., 2024).

For Policy Development

At the healthcare system level, policy initiatives should focus on:

1. Addressing structural factors that contribute to excessive hindrance stressors in nursing work, including inadequate staffing ratios, burdensome documentation requirements, and fragmented care coordination processes (Yang et al., 2021).

2. Developing career advancement frameworks that recognize and reward the diverse contributions of experienced nurses, including clinical expertise, mentorship capacity, and system improvement knowledge (Shi et al., 2022).

3. Creating regulatory frameworks that support expanded nursing roles while ensuring appropriate preparation and oversight, enabling experienced nurses to practice at the full extent of their capabilities (Seck et al., 2024).

4. Investing in nursing workforce planning that specifically addresses the needs and contributions of mid- and senior-level nurses, recognizing them as valuable resources whose retention should be prioritized (Chinese National Health Commission, 2021).

For Future Research

Future research should address several important gaps in our understanding of the relationships between professional growth, work stress, and reflective ability among mid- and senior-level nurses:

1. Longitudinal studies examining how reflective ability, stress experiences, and professional growth trajectories evolve over the course of nursing careers, identifying critical transition points and intervention opportunities.

2. Intervention studies testing specific approaches for enhancing reflective capabilities among experienced nurses and evaluating their effects on professional growth and stress management.

3. Comparative research examining how cultural, organizational, and healthcare system contexts influence the relationships between work stress, reflection, and growth among nurses at similar career stages across different settings.
4. Mixed-methods investigations exploring the subjective experiences of mid- and senior-level nurses as they navigate workplace challenges, engage in reflective processes, and pursue continued professional development despite constraints.

CONCLUSION

The relationships between professional growth, work stress, and reflective ability among mid- and senior-level nurses are complex, bidirectional, and contextually embedded. This review suggests that reflective ability serves as a critical mediating factor in these relationships, potentially buffering the negative impacts of work stress while simultaneously promoting professional growth and development.

Mid- and senior-level nurses face unique challenges as they navigate evolving professional identities, manage increasing responsibilities, and confront age-related changes while continuing to provide high-quality patient care in demanding healthcare environments. However, they also possess significant resources, including extensive experiential knowledge, established professional networks, and potentially well-developed reflective capabilities that can transform workplace challenges into opportunities for growth rather than catalysts for burnout.

The challenge-hindrance stress framework provides a valuable lens for understanding how different types of work stressors affect experienced nurses, with challenge stressors potentially stimulating growth despite generating strain, while hindrance stressors predominantly obstruct development without compensatory benefits. Job crafting and leisure crafting represent promising strategies through which mid- and senior-level nurses can shape both work and non-work domains to support well-being and sustainable careers. Healthcare organizations, educational institutions, and policy makers have important roles to play in creating environments that support the continued growth and contribution of experienced nurses. By minimizing hindrance stressors, providing opportunities for meaningful challenge, and fostering reflective capabilities, these stakeholders can help ensure that mid- and senior-level nurses continue to develop professionally while maintaining engagement and well-being throughout extended careers.

As the global nursing workforce faces unprecedented challenges, including aging populations, increasing patient complexity, and persistent resource constraints, the expertise and leadership of experienced nurses represent invaluable resources. Understanding and supporting the relationships between professional growth, work stress, and reflective ability among these practitioners is not merely an academic exercise but an essential component of developing sustainable, high-quality healthcare systems capable of meeting the complex needs of contemporary societies.

References

1. Babamiri, M., Heydari, B., Mortezapour, A., & Tamadon, T. M. (2022). Investigation of demand-control-support model and effort-reward imbalance model as predictor of counterproductive work behaviors. *Safety and Health at Work*, 13(4), 469-474.
2. Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*, 85(1), 65-74.

3. Chen, I. S. (2023). Using leisure crafting to reduce emotional exhaustion at home during the COVID-19 pandemic through better sleep and not thinking about the pandemic. *Stress and Health*, 39(5), 1047-1057.
4. Chinese National Health Commission. (2021). *China Health Statistics Yearbook 2021*. Beijing: Peking Union Medical College Press.
5. Cohen, C., Pignata, S., Bezak, E., Tie, M., & Childs, J. (2023). Workplace interventions to improve well-being and reduce burnout for nurses, physicians and allied healthcare professionals: A systematic review. *BMJ Open*, 13(6), e071203.
6. Czakert, J., Ureña, D., & Berger, R. (2024). How transformational leadership affects the off-work recovery of daily personal energy resources via work engagement: Resource and demand-based pathways. *Spanish Journal of Psychology*, 27.
7. Davidson, P. M., Meleis, A., Daly, J., & Douglas, M. M. (2003). Globalisation as we enter the 21st century: Reflections and directions for nursing education, science, research and clinical practice. *Contemporary Nurse*, 15(3), 162-174.
8. de Lange, W., Kars, M. C., Poslawsky, I. E., Schuurmans, M. J., & Hafsteinsdóttir, T. B. (2019). Postdoctoral nurses' experiences with leadership and career development: A qualitative study. *Journal of Nursing Scholarship*, 51(6), 689-698.
9. Guo, Y. F., Wang, Y., Wang, C. Y., & Fan, J. Y. (2022). Chinese translation and reliability and validity analysis of the leisure crafting scale in a nursing population. *Journal of Nursing Science*, 37(21), 62-64.
10. Härenstam, A. (2008). Organizational approach to studies of job demands, control and health. *Scandinavian Journal of Work, Environment & Health*, 144-149.
11. Hong, Y. J., Chen, M. J., Chen, C. M., & Qiu, M. C. (2024). Abusive supervision and nursing students' intention to leave the nursing profession: A moderated mediation model of emotional exhaustion and the nurse-patient relationship. *BMC Nursing*, 23(1).
12. Kerksieck, P., Kujanpää, M., de Bloom, J., Brauchli, R., & Bauer, G. F. (2024). A new perspective on balancing life domains: Work-nonwork balance crafting. *BMC Public Health*, 24(1).
13. Li, C., Hou, X., Cui, X., Zhao, Y., & Zhu, Y. (2024). Factors influencing the thriving of emergency department nurses in China. *International Emergency Nursing*, 74, 101441.
14. Liu, Q., Zhao, L., Guo, X., Zhang, Y., Xin, C., & Gai, Y. (2024). Leisure crafting and work engagement among Chinese ICU nurses: The multiple mediation effect of recovery experience and humanistic care ability. *International Nursing Review*, 71(4), 776-785.
15. Möckli, N., Denhaerynck, K., De Geest, S., Leppla, L., Beckmann, S., Hediger, H., & Zúñiga, F. (2020). The home care work environment's relationships with work engagement and burnout: A cross-sectional multi-centre study in Switzerland. *Health & Social Care in the Community*, 28(6), 1989-2003.
16. Nishimoto, A., Fukada, M., Okuda, R., & Tanimura, C. (2023). Career stage-specific predictors of reflective ability among clinical nurses. *Journal of Advanced Nursing*, 79(10), 3981-3996.
17. Nishimoto, A., Tanimura, C., Okuda, R., & Fukada, M. (2021). Development of a reflective ability scale for clinical nurses. *Yonago Acta Medica*, 64(3), 303-314.
18. Petrou, P., & Bakker, A. B. (2016). Crafting one's leisure time in response to high job strain. *Erasmus University Rotterdam Netherlands*, 69(2), 507-529.
19. Richard, A., Gagnon, M., & Careau, E. (2019). Using reflective practice in interprofessional education and practice: A realist review of its characteristics and effectiveness. *Journal of Interprofessional Care*, 33(5), 424-436.
20. Roczniowska, M., Rogala, A., Marszalek, M., Hasson, H., Bakker, A. B., & Schwarz, U. V. (2023). Job crafting interventions: What works, for whom, why, and in which contexts?

- Research protocol for a systematic review with coincidence analysis. *Systematic Reviews*, 12(1).
21. Ryan, C., Bergin, M., & Wells, J. S. (2017). Valuable yet vulnerable-A review of the challenges encountered by older nurses in the workplace. *International Journal of Nursing Studies*, 72, 42-52.
 22. Sandvik, A. H., & Hilli, Y. (2023). Understanding and formation-A process of becoming a nurse. *Nursing Philosophy*, 24(1), e12387.
 23. Seck, F., Masot, O., Carey, N., Roca, J., Botigué, T., Paraíso Pueyo, E., & Lavedán Santamaría, A. (2024). Nurses' perceived barriers and facilitators to the implementation of nurse prescribing: Delphi study and focus group. *Journal of Advanced Nursing*, 80(5), 2106-2120.
 24. Shao, L. J., Wang, J. X., Wu, T. R., Zhao, Y. H., & Ge, S. Y. (2023). The Chinese version of the clinical nurse reflective ability scale: Translation and psychometric testing. *Chinese Journal of Nursing Education*, 20(4), 462-466.
 25. Sheng, Z. Q., Yan, X. Y., Liu, Y. W., Li, S. H., Ding, Y. J., Chen, S. S., Ye, M. H., & Sun, C. X. (2024). Study on the current status and influencing factors of nurses' off-duty time planning. *Chinese Journal of Nursing*, 59(5), 588-593.
 26. Shi, X., Yao, X., Liang, J., Gan, S., & Li, Z. (2022). China's cultivation of master nursing specialist: A qualitative content analysis of the stakeholders. *Nurse Education in Practice*, 63, 103359.
 27. Snow, F., Brown, L. M., & Scheller, S. (2024). The power of nursing. *Holistic Nursing Practice*, 38(5), 252-258.
 28. Sun, J. D., Fan, X. X., & Li, H. T. (2022). How do high-performance work systems affect work fatigue: The mediating effect of job responsibility and role overload. *PLoS ONE*, 17(7).
 29. van den Tooren, M., & de Jonge, J. (2008). Managing job stress in nursing: What kind of resources do we need? *Journal of Advanced Nursing*, 63(1), 75-84.
 30. Wang, L. Y., & Xie, T. Y. (2023). Double-edged sword effect of flexible work arrangements on employee innovation performance: From the demands-resources-individual effects perspective. *Sustainability*, 15(13).
 31. Wei, Y., Chen, Q., Wu, D., Fu, X., & Song, H. (2024). Exploring the role of psychological assistance hotlines in improving mental health problems among Chinese adult women: A perspective based on social expectations and gender roles. *Asian Journal of Psychiatry*, 96, 104026.
 32. Xie, W., Liu, M., Okoli, C. T. C., Zeng, L., Huang, S., Ye, X., Liu, F., & Wang, J. (2023). Construction and evaluation of a predictive model for compassion fatigue among emergency department nurses: A cross-sectional study. *International Journal of Nursing Studies*, 148, 104613.
 33. Yan, D., Li, M., Zhang, Y., & Zhang, Y. (2022). A qualitative study of facilitators and barriers to nurses' innovation at work. *Journal of Nursing Management*, 30(7), 3449-3456.
 34. Yang, T., Jin, X., Shi, H., Liu, Y., Guo, Y., Gao, Y., & Deng, J. (2021). Occupational stress, distributive justice and turnover intention among public hospital nurses in China: A cross-sectional study. *Applied Nursing Research*, 61, 151481.
 35. Yi, J. S., Kim, H., Yoon, J. Y., & Kim, E. (2024). Evaluating the effects of action learning on the research competency of undergraduate nursing students: A mixed-methods study. *Nurse Education Today*, 140.
 36. You, Q., Bai, D. X., Wu, C. X., Gao, J., & Hou, C. M. (2022). Status of work alienation among nurses in China: A systematic review. *Frontiers in Psychiatry*, 13.

37. Yu, F., Raphael, D., Mackay, L., Smith, M., & King, A. (2019). Personal and work-related factors associated with nurse resilience: A systematic review. *International Journal of Nursing Studies*, 93, 129-140.
38. Zeng, W. L., Ma, S. Z., Callan, V. J., & Wu, L. H. (2022). Exploring the doctor-patient relationship as a challenge job demand: Application of the job demands-resources model in a Chinese public hospital. *Psychology, Health & Medicine*, 27(8), 1661-1671.
39. Zhan, T. T., Wang, L. L., Yan, W., & Sun, C. J. (2023). Master of nursing specialist experiences of an internship through the use of written reflections: A qualitative research study. *Heliyon*, 9(2), e13299.
40. Zhang, J., Zhang, Q., Wang, Y., Xiao, B., Wang, S., Xu, Y., & Li, Y. (2024). Daily challenge-hindrance stress and work engagement in preschool teacher: The role of affect and mindfulness. *BMC Public Health*, 24(1), 2779.
41. Zhang, Y., Shi, Z. B., Zhang, L. Y., Cui, J. Z., Feng, M., Yang, J., & Gu, X. L. (2019). Trial use of the challenge-hindrance work stress scale in professional populations. *Chinese Journal of Mental Health*, 27(5), 384-388.
42. Zhou, H. B., Song, Y. X., Wu, M. M., Yang, L., & Yang, J. J. (2024). The mediating effect of reflective ability on the relationship between professional attitude and off-duty time planning among low-level nurses. *Chinese Journal of Nursing Education*, 21(4), 461-465.