

RESEARCH ARTICLE

Predictors of Nurses' Organizational Commitment in Crisis: Evidence from Saudi Arabia

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Abstract

Background: Organizational commitment strengthens care delivery and system responsiveness, yet high turnover and workforce exhaustion threaten healthcare stability. Understanding factors that sustain commitment is especially critical during crises such as the COVID-19 pandemic.

Aim: This study examined how nurses' attitudes toward their practice environment predict organizational commitment at King Abdullah Medical City (KAMC), Makkah, Saudi Arabia.

Design: A cross-sectional predictive correlational design was used.

Methods: Data was collected from 275 staff nurses between October and November 2020 using convenience sampling. Attitudes toward the practice environment were assessed with the Practice Environment Scale of the Nursing Work Index (PES-NWI), while organizational commitment was measured using the Revised Three-Component Model Employee Commitment Survey. Descriptive statistics, Pearson's correlations, and multiple regression were conducted in SPSS version 21.

Results: Nurses reported positive work attitudes, with the highest ratings for nursing care and interdisciplinary relationships, followed by management and leadership, and the lowest for adequate resources. Organizational commitment was moderate across affective, normative, and continuance domains. Regression analyses identified nursing care and interdisciplinary relationships as the most consistent predictor across all domains of commitment, including affective ($p < .001$), normative ($p = .047$), continuance ($p = .004$), and overall organizational commitment ($p < .001$). Adequate resources significantly predicted affective ($p = .014$) and overall commitment ($p = .050$), while management and leadership predicted normative commitment ($p = .016$).

Conclusion: Nurses' perceptions of their practice environment significantly shape organizational commitment during crisis conditions. Interdisciplinary collaboration consistently emerged as the strongest predictor, underscoring the value of teamwork and nurse-physician partnerships. Adequate staffing and resources also reinforced commitment, particularly in sustaining affective bonds. These findings underscored that supportive practice environments, through collaboration, adequate resources, and participatory leadership, enhance nurses' autonomy and sense of meaningful work, which in turn strengthen organizational commitment, retention, and resilience during crises.

Keywords: *Organizational commitment; nurses; nursing staff, hospital; work environment; autonomy; meaningful work; interprofessional relations; leadership; COVID-19; Saudi Arabia*

Introduction

Nurses' organizational commitment is a cornerstone of healthcare stability and quality care. A committed nursing workforce enhances retention, engagement, and patient outcomes (Meyer, 2016; Labrague & de Los Santos, 2021).

During crises such as the COVID-19 pandemic, commitment became even more critical, as it influences nurses' willingness to remain, to adapt, and to perform under pressure (Boamah et al., 2018; Gasparino et al., 2021).

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Organizational commitment reflects an employee's psychological attachment to the organization and is widely conceptualized through the Three-Component Model (TCM), comprising affective, normative, and continuance dimensions (Allen & Meyer, 1990; Klein, H. J., Becker, T. E., & Meyer, J. P., 2022). *Affective commitment* represents emotional attachment and identification with organizational values; *normative commitment* reflects a sense of moral obligation to remain; and *continuance commitment* arises from perceived costs of leaving (Meyer, 2016). In nursing, affective commitment has been associated with job satisfaction, patient safety, and retention (Pursio et al., 2024), whereas continuance commitment often reflects employment necessity rather than genuine loyalty (Al-Haroon & Al-Qahtani, 2020).

The practice environment plays a central role in shaping these forms of commitment. Supportive leadership, adequate resources, and strong interdisciplinary relationships cultivate autonomy, trust, and meaningful work, thereby fostering affective and normative bonds (Rouhi-Balasi et al., 2020; Pursio et al., 2024). Conversely, staffing shortages and limited participation in decision-making weaken morale and loyalty (Lasater et al., 2021). These dynamics are especially salient in the Middle East, where multicultural nursing workforces encounter unique cultural and organizational challenges that influence commitment levels (Alshabani, E., Qureshi, M. I., & Rashid, M., 2024).

Two leadership capabilities are particularly vital during crises: resilience and strategic foresight. *Resilience* refers to the capacity of individuals and systems to adapt and to recover from adversity, nurtured by autonomy, supportive teams, and meaningful work (Pursio et al., 2024; Rouhi-Balasi et al., 2020). *Strategic foresight* denotes the anticipatory ability of leaders to scan for weak signals, envision alternative futures, and prepare proactive responses that stabilize workflows and resources under uncertainty. In nursing management, foresight involves anticipating and adapting to emerging challenges through participatory and evidence-informed leadership (Rasmussen & Borch, 2020; Vecchiato, 2020). Practically, foresight manifests in surge staffing plans, transparent communication, and shared governance—features that enhance nurses' trust, fairness perceptions, and professional empowerment. Leadership research further links such future-oriented and empowering practices to meaningful work and sustained commitment (Boamah et al., 2018; Kim & Beehr, 2018).

Despite growing recognition of these dynamics, empirical research examining the predictors of nurses' organizational commitment during crises in Saudi Arabia remains limited. While existing studies report moderate commitment levels (Al-

Haroon & Al-Qahtani, 2020), few have explored how specific practice environment dimensions—leadership, collaboration, and resource adequacy—interact with resilience and foresight to shape commitment.

This study, therefore, investigated the predictors of nurses' organizational commitment in crisis conditions at King Abdullah Medical City (KAMC), while focusing on attitudes toward leadership participation, interdisciplinary collaboration, and resource adequacy. By situating these predictors within the frameworks of resilience and strategic foresight, the study sought to contribute evidence that can inform leadership development, workforce retention, and crisis-readiness strategies in healthcare organizations.

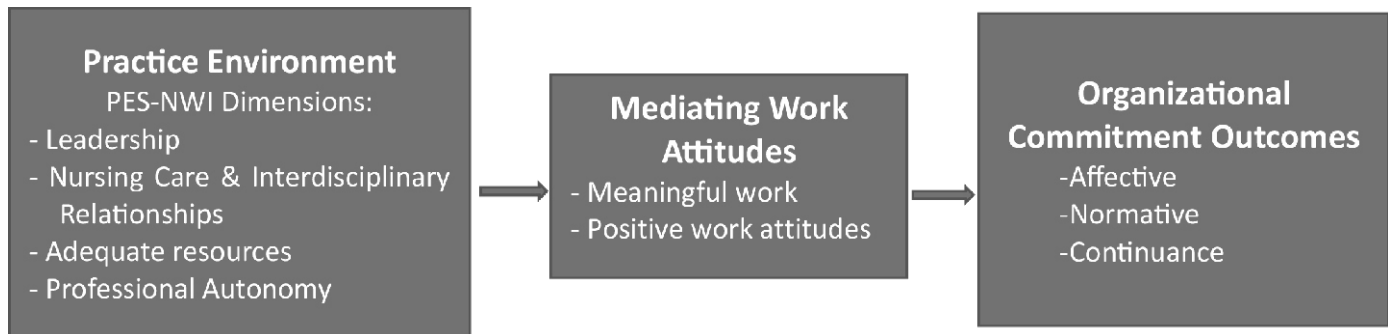
Conceptual Framework

This study is anchored on the premise that the nursing practice environment shapes nurses' work attitudes, which in turn influence their organizational commitment. Evidence indicates that autonomy within supportive environments fosters meaningful work, strengthens job satisfaction, and enhances commitment (Pursio et al., 2024; Rouhi-Balasi et al., 2020). The Practice Environment Scale of the Nursing Work Index (PES-NWI) provides a framework for assessing the quality of the practice environment, while the Three-Component Model (TCM) explains the affective, normative, and continuance dimensions of organizational bonds (Allen & Meyer, 1990; Klein, H. J., Becker, T. E., & Meyer, J. P., 2022).

In integrating these perspectives, the study posited that favorable perceptions of the practice environment—characterized by supportive leadership, interdisciplinary collaboration, adequate resources, and professional autonomy—enhance positive work attitudes and foster meaningful work. In turn, these conditions are expected to predict stronger affective, normative, and continuance commitment. Figure 1 presents the conceptual model integrating the PES-NWI and TCM frameworks, illustrating how leadership, collaboration, and resource adequacy create conditions for autonomy and meaningful work that reinforce nurses' organizational commitment.

Within this framework, autonomy operates as a mechanism linking supportive practice environments to meaningful work, while strategic foresight and resilience serve as contextual lenses that explain how leaders and teams sustain engagement under crisis conditions. Foresight enables anticipatory planning and participatory decision-making, while resilience strengthens individual and collective capacity to maintain performance amid uncertainty (Rasmussen & Borch, 2020; Vecchiato, 2020;

Figure 1. Conceptual framework: Practice Environment, Work Attitudes, and Organizational Commitment



Pursio et al., 2024). Together, these dimensions underscored the dynamic relationship between the practice environment and commitment, particularly in high-pressure healthcare settings.

Operational Definitions and Measurement Bridge

Aligned with the conceptual framework, the predictor variables—participation in management and leadership, adequacy of resources, and interdisciplinary collaboration—were operationalized using corresponding subscales of the Practice Environment Scale of the Nursing Work Index (PES-NWI). These domains captured nurses' perceptions of leadership support, teamwork quality, and resource sufficiency within their work settings. The outcome variable, organizational commitment was measured using the Three-Component Model (TCM) framework, encompassing affective, normative, and continuance dimensions that reflect emotional attachment, moral obligation, and perceived costs of leaving. Together, these measures provide a coherent basis for examining how practice environment attributes predict the multidimensional nature of nurses' organizational commitment during a crisis.

Methodology

Design

This study employed a cross-sectional predictive correlational design to examine the relationship between nurses' attitudes toward their practice environment and their organizational commitment.

Setting

The study was conducted at King Abdullah Medical City (KAMC), a quaternary hospital in Makkah, Saudi Arabia, during the height of the COVID-19 pandemic.

Participants and Sampling

Participants were recruited using non-probability convenience sampling, an appropriate approach for urgent data collection during the pandemic when access and resources were limited. Using G*Power analysis, the minimum recommended sample size was 119, based on a 95% confidence level, 5% margin of error, and $\alpha = 0.05$.

Inclusion criteria consisted of staff nurses from all clinical areas, excluding those in nursing administration, education, or quality management. Staff nurses with less than one year of service were also excluded.

A total of 298 nurses responded to the survey, of whom 275 met the eligibility criteria and completed the questionnaire. Data from all 275 participants were included in the final analysis to enhance statistical power, predictive accuracy, and generalizability of findings.

Instruments

Data was collected using validated instruments. The **shortened version of the Practice Environment Scale of the Nursing Work Index (PES-NWI)** measured nurses' attitudes toward three key dimensions of the practice environment:

- Participation in management and leadership,**
- Focus on nursing care and interdisciplinary relationships,** and
- Adequacy of resources.**

The tool has demonstrated robust psychometric properties across international studies (Gea-Caballero et al., 2019; Lake et al., 2023).

Organizational commitment was measured using the Revised Three-Component Model (TCM) Employee Commitment Survey, which assesses affective, normative, and continuance commitment. The instrument has shown stability and validity across cultural contexts (Choi, S. P. P., Cheung, K., & Pang, S. M. C. (2020); Meyer, 2016). Permission from the instrument's author was obtained prior to use.

Data Collection

Data was collected online through the KAMC Nursing Service Office. An electronic invitation containing the informed consent form was distributed to eligible nurses. The survey was designed to ensure anonymity, confidentiality, and voluntary participation.

Data Analysis

Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to summarize participants' demographic characteristics, work attitudes, and commitment levels. **Pearson's correlation coefficient** examined relationships between work attitudes and organizational commitment, with significance set at $p < .05$. Correlation strength was interpreted following guidance for health sciences research (Schober, Boer, & Schwarte, 2018).

Multiple regression analysis was used to identify predictors of affective, normative, continuance, and overall organizational commitment. Analyses were conducted using SPSS version 21.

To strengthen methodological rigor, internal consistency reliability was evaluated for both instruments. Cronbach's alpha coefficients indicated strong reliability—0.89 for the PES-NWI

and 0.91 for the Revised TCM Employee Commitment Survey—exceeding accepted benchmarks for health research (Taber, 2018).

Prior to regression analysis, assumptions of normality, linearity, homoscedasticity, and multicollinearity were examined and satisfied (Schober et al., 2018). To minimize bias, several safeguards were implemented: surveys were anonymous and self-administered online, participation was voluntary, and respondents were assured of confidentiality. Measures were also incorporated to reduce social desirability bias, consistent with Latkin et al. (2017), ensuring candid responses within the multicultural nursing workforce.

Ethical Considerations

Ethical approval was obtained from the KAMC Ethics Committee. Participation was voluntary, with informed consent embedded within the online survey invitation. Personal identifiers were excluded, and data access was restricted to the researcher and the KAMC Ethics Committee representative.

Results

Profile of Respondents

Of the 298 nurses who initially participated, 15 did not complete demographic data and eight had less than one year of service, resulting in 275 valid responses for analysis.

The demographic profile of respondents is presented in **Table 1**. The majority were aged 20–35 years (65.8%), followed by 36–45 years (28.7%), 46–55 years (5.1%), and 56 years and above (0.4%). Most were bachelor's degree holders (90.9%),

Table 1. Demographic Profile of Participants (N = 275)

Variable	Categories	n	%
Age Group	20-35 years	181	65.8
	36-45 years	79	28.7
	46-55 years	14	5.1
	56 years and above	1	0.4
	56 years and above	1	0.4
Educational Attainment	Bachelor's degree	250	90.9
	Master's degree	20	7.3
	Doctorate degree	5	1.8
Length of Service	1–5 years	84	30.6
	5–10 years	122	44.4
	More than 10 years	69	25.1

Note. Values are presented as n (%).

Table 2. Work Attitudes of Staff Nurses at KAMC (N = 275)

Dimension	n	Mean	SD
Participation in management and leadership	247	3.77	0.77
Nursing care and interdisciplinary relationships	246	3.84	0.71
Adequate resources	245	3.34	1.02
Overall	247	3.65	0.72

Table 3. Organizational Commitment among Staff Nurses at KAMC (N = 275)

Domain	n	Mean	SD
Affective commitment	236	3.52	0.51
Normative commitment	236	3.50	0.60
Continuance commitment	236	3.45	0.61
Overall	236	3.49	0.44

Note. Mean interpretation: < 2.99 = Low; 3.00–3.99 = Moderate; ≥ 4.00 = High.

Table 4. Correlation between Work Attitudes and Organizational Commitment

Work Attitude → Outcome	r	r ²	% Variance Explained
Affective commitment	.193*	.04	3.7%
Normative commitment	.388**	.15	15%
Continuance commitment	.304**	.09	9%
Overall organizational commitment	.393**	.15	15%

Note. $p < .05$; $p < .01$.

with smaller proportions holding master's (7.3%) and doctoral degrees (1.8%). In terms of length of service, 44.4% had 5–10 years of employment, 30.6% had 1–5 years, and 25.1% had more than 10 years.

Work Attitudes of Staff Nurses

Staff nurses' work attitudes across three practice environment dimensions are summarized in **Table 2**. The highest mean score was reported in nursing care and interdisciplinary relationships ($M = 3.84$, $SD = 0.71$), followed by participation in management and leadership ($M = 3.77$, $SD = 0.77$). Adequate resources received the lowest score ($M = 3.34$, $SD = 1.02$). The overall mean of 3.65 indicated generally positive work attitudes among staff nurses, with low variability across responses ($SD = 0.72$).

Organizational Commitment of Staff Nurses

Findings on organizational commitment are presented in **Table 3**. Across domains, commitment levels were moderate, with mean scores ranging from 3.45 to 3.52. Affective commitment

ranked highest ($M = 3.52$, $SD = 0.51$), followed closely by normative commitment ($M = 3.50$, $SD = 0.60$) and continuance commitment ($M = 3.45$, $SD = 0.61$). The overall organizational commitment score was 3.49 ($SD = 0.44$), also within the moderate range.

Correlation between Work Attitudes and Organizational Commitment

Pearson correlation analysis examined the relationship between work attitudes and organizational commitment. Scatter plots (Figure 1) demonstrated linear, positive, and weak-to-moderate associations between the variables. As shown in **Table 4**, work attitudes were positively correlated with affective commitment ($r = .193$, $p < .05$), normative commitment ($r = .388$, $p < .001$), continuance commitment ($r = .304$, $p < .01$), and overall organizational commitment ($r = .393$, $p < .001$). Work attitudes explained 3.7% of the variance in affective commitment, 15% in normative commitment, 9% in continuance commitment, and 15% in overall organizational commitment.

Table 5. Multiple Regression Predicting Organizational Commitment from Work Attitudes ($N = 275$)

Outcome Variable	Predictor	B	SE	β	t	p
Affective commitment	Management and leadership	0.042	.072	0.048	0.59	.558
	Nursing care & interdisciplinary relationships	0.310	.078	0.334	3.98	< .001
	Adequate resources	0.119	.048	0.179	2.47	.014
Normative commitment	Management and leadership	0.162	.067	0.205	2.44	.016
	Nursing care & interdisciplinary relationships	0.144	.072	0.174	2.00	.047
	Adequate resources	0.087	.045	0.145	1.94	.053
Continuance commitment	Management and leadership	-0.022	.073	-.027	-0.31	.759
	Nursing care & interdisciplinary relationships	0.228	.079	0.267	2.91	.004
	Adequate resources	0.070	.049	0.114	1.44	.153
Overall commitment	Management and leadership	0.061	.048	0.097	1.26	.210
	Nursing care & interdisciplinary relationships	0.228	.052	0.351	4.39	< .001
	Adequate resources	0.092	.032	0.196	2.84	.005

Note. B = unstandardized coefficient; SE = standard error; β = standardized coefficient. $p < .05$ considered statistically significant.

Regression Analysis

Multiple regression analysis identified the predictors of organizational commitment domains (see **Table 5**).

For **affective commitment**, attitudes toward nursing care and interdisciplinary relationships ($B = 0.310$, $p < .001$) and adequate resources ($B = 0.119$, $p = .014$) emerged as significant predictors.

For **normative commitment**, attitudes toward management and leadership ($B = 0.162$, $p = .016$) and nursing care and interdisciplinary relationships ($B = 0.144$, $p = .047$) were significant predictors.

For **continuance commitment**, only nursing care and interdisciplinary relationships significantly predicted outcomes ($B = 0.228$, $p = .004$).

For **overall organizational commitment**, both nursing care and interdisciplinary relationships ($B = 0.228$, $p < .001$) and adequate resources ($B = 0.092$, $p = .005$) were significant predictors. Together, these variables accounted for 32% of the variance ($R^2 = .320$).

These results highlighted the consistent role of nursing care and interdisciplinary relationships as a significant predictor across all domains of organizational commitment.

Discussion

Staff Nurses' Work Attitudes in KAMC

This study demonstrated that staff nurses at King Abdullah Medical City (KAMC) generally held positive attitudes toward their practice environment. Participation in management and leadership was reinforced by perceptions that active programs are in place to guarantee quality and patient safety, which foster trust in organizational systems. When nurses feel valued and supported through these initiatives, they are more likely to develop job satisfaction and constructive work attitudes (Pursio et al., 2024; Rouhi-Balasi et al., 2020).

Attitudes toward nursing care and interdisciplinary relationships stood out as the strongest contributors to positive work attitudes. Contemporary research confirms that collegial nurse–physician relationships are fundamental to job satisfaction and retention (Pursio et al., 2024; Oshodi et al., 2019). By contrast, adequate resources scored lowest, particularly regarding staffing levels. The literature consistently emphasizes that inadequate staffing

and strained resources undermine both morale and patient outcomes (Shang et al., 2019; Lasater et al., 2021).

Overall, this reinforces that supportive practice environments—anchored in leadership, collaboration, and resources—shape nurses' attitudes, equipping them to perform optimally and maintain engagement even under crisis conditions.

Theoretical Integration with Organizational Commitment

KAMC nurses reported moderate overall commitment, with affective commitment most pronounced. This pattern aligned with Meyer and Allen's (1991, 2016) Three-Component Model (TCM), wherein emotionally meaningful, values-congruent work most robustly anchors attachment. The consistent predictive effect of *nursing care and interdisciplinary relationships* across commitment domains suggested that collegial partnerships and high-quality team functioning are primary mechanisms through which the practice environment cultivates attachment. Such collaboration enhanced recognition, efficacy, and meaningful work—mechanisms shown to reinforce affective bonds and prosocial intent (Pursio et al., 2024; Kim & Beehr, 2018).

Normative commitment was positively associated with *participation in management and leadership*, consistent with the notion that participatory governance and fair procedures create a sense of reciprocal obligation, particularly in collectivist or high-power-distance contexts common in the Gulf region. Conversely, continuance commitment, often driven by perceived job alternatives and economic considerations, was less strongly tied to leadership and resource perceptions—echoing that it reflects pragmatic retention rather than identification (Al-Haroon & Al-Qahtani, 2020; Klein, H. J., Becker, T. E., & Meyer, J. P., 2022).

Together, these results show an encouraging profile: stronger affective and normative commitment, moderated continuance commitment, and overall resilience of the nursing workforce during crisis conditions.

Positioning Strategic Foresight and Resilience in the Explanatory Chain

Although strategic foresight was not directly measured, its influence is evident in the way participatory leadership and resource adequacy operate. Foresightful management—anticipating surges, pre-positioning staffing and supplies, and maintaining rapid decision-making pathways—likely stabilized workflows during the pandemic. These anticipatory practices signal reliability and competence, reducing uncertainty and

reinforcing nurses' autonomy and trust in leadership—conditions that enhance meaningful work and organizational attachment (Boamah et al., 2018; Pursio et al., 2024).

Similarly, resilience operated as a complementary mechanism: teams with clear roles, timely resources, and psychologically safe collaboration recover more quickly from stress, while preserving professional motivation and commitment (Rouhi-Balasi et al., 2020). Within the KAMC context, this synergy between foresightful leadership and resilient teamwork appears to have underpinned nurses' continued commitment despite crisis pressures.

Comparison with Crisis-Era Literature and Managerial Implications

The findings converged with international COVID-19 research indicating that adequate staffing, supportive leadership, and transformational management buffered strain and sustained engagement and retention (Gasparino et al., 2021; Lasater et al., 2021; Boamah et al., 2018). Similar trends were observed in Middle Eastern and Asian contexts, where supportive climates and job resources helped multicultural nursing workforces remain committed during crises (Al-Haroon & Al-Qahtani, 2020; Alshaibani et al., 2024).

This study had extended such evidence by demonstrating, in a Saudi quaternary hospital, that interdisciplinary collaboration is the most consistent predictor across affective, normative, and continuance commitment, highlighting the centrality of team-level relational dynamics during crisis.

Managerial Implications

Develop foresight capability in nurse leadership.

Integrate horizon scanning, scenario exercises, and surge-capacity planning into leadership programs. Foresight-informed governance operationalizes anticipatory management that nurses can perceive at the point of care.

Hard-wire collaborative practice. Institutionalize interprofessional rounds, shared nurse–physician leadership, and conflict-resolution protocols that foster everyday collaboration—the strongest driver of commitment.

Ensure core resources and flexibility. Maintain safe staffing ratios and resilient supply chains, complemented by autonomy-supportive policies (e.g., flexible scheduling) to enhance meaningful work.

Foster autonomy and professional voice. Encourage shared governance, clinical ladders, and unit-level quality councils—structures proven to nurture affective and normative commitment (Pursio et al., 2024; Kim & Beehr, 2018).

Limitations and Generalizability

This single-site, cross-sectional study precluded causal inference and limits external validity beyond the institutional and cultural context of a Saudi quaternary hospital. Convenience sampling and self-report introduce potential selection and social-desirability biases, despite anonymity safeguards (Latkin et al., 2017). Data collection during the COVID-19 surge may also have heightened nurses' perceptions of workload and commitment relative to non-crisis periods. Future longitudinal and intervention studies across multiple institutions and countries should examine whether enhancing participatory leadership, interdisciplinary collaboration, and resource resilience—hallmarks of strategic foresight—produces durable gains in commitment across the TCM domains.

Integrative Summary

In sum, the results supported a theoretically coherent pathway: foresightful, participatory leadership and resource-secure, collaborative practice environments enable autonomy and meaningful work, which in turn strengthen affective and normative ties while stabilizing continuance motives. Investing in these levers offered a practical route for nursing administrators to cultivate a committed and resilient workforce capable of sustaining high-quality care during crises and beyond.

Conclusion and Recommendations

This study demonstrated that staff nurses' perceptions of their practice environment significantly influenced organizational commitment. Interprofessional collaboration and adequate resources consistently predicted commitment, while autonomy played a critical role in enabling meaningful work. Given these, this study's findings emphasized that commitment is strongest when nurses experience supportive leadership, adequate resources, and the freedom to exercise professional judgment, conditions that generate meaningful work and reinforce affective, normative, and continuance bonds. Beyond these, emerging evidence highlighted that supportive environments foster professional autonomy, which enhances the sense of meaningful work and, in turn, strengthens organizational

commitment (Pursio et al., 2024). This pathway underscores why investing in collaborative practice, adequate staffing, and participatory management is vital—not only to retain nurses but to also cultivate their professional fulfillment and resilience in times of crisis.

Healthcare institutions should prioritize structured programs that cultivate nurse–physician and broader interprofessional partnerships, as these relationships reinforce belonging and professional value (Boamah et al., 2018). Adequate staffing and material resources must also be secured to reduce workload stress, particularly in crisis situations when patient demand surges (Lasater et al., 2021). Nursing administrators are encouraged to adopt participatory leadership approaches that actively involve nurses in decision-making and quality improvement, thereby reinforcing autonomy, meaningful work, and affective commitment. Retention strategies should especially focus on enhancing affective commitment, since nurses who “want to stay” because they find alignment with organizational values are more likely to demonstrate loyalty, resilience, and sustained high performance (Kim & Beehr, 2018).

Finally, further research—particularly longitudinal and intervention studies—is needed to explore how autonomy and meaningful work mediate the relationship between practice environments and commitment in culturally diverse nursing workforces. Such inquiry will deepen understanding of how organizations can sustain engagement and strengthen system resilience globally.

Implications for Nursing Practice, Education, and Research

For nursing practice, the findings highlighted that supportive environments—where collaboration, autonomy, and resource adequacy are prioritized—enable meaningful work and reinforce commitment. By fostering interprofessional collaboration, ensuring adequate staffing and resources, and adopting participatory leadership, organizations create conditions where nurses experience autonomy and meaningful work. This, in turn, nurtures affective commitment—the most authentic and enduring form of organizational attachment. Hospitals that invest in autonomy-supportive environments will not only improve retention but also build resilient teams capable of sustaining high-quality care in crises.

For nursing education, the findings indicated the need for nursing curricula to prepare future nurses not only with clinical expertise but also with the skills to thrive in collaborative,

autonomy-supportive, and resource-sensitive environments. Nursing education should integrate interprofessional collaboration, leadership, and resilience training, alongside strengthening autonomy through decision-making and critical thinking skills. Preparing nurses to exercise autonomy ensures they find meaningful work in their practice, while sustaining long-term commitment.

Future studies should test intervention models that deliberately strengthen autonomy and meaningful work (e.g., participatory leadership programs, shared governance, and role redesign). Such approaches would clarify how these mechanisms translate into improved organizational commitment across contexts. Longitudinal and intervention studies, especially in culturally diverse nursing workforces, can illuminate how supportive environments translate into durable engagement over time. Evaluating organizational initiatives, such as participatory leadership models, staffing reforms, or structured interprofessional programs, will generate actionable evidence on how best to strengthen autonomy, cultivate meaningful work, and ultimately retain a committed nursing workforce.

Limitations and Future Directions

This study had several limitations. The cross-sectional design precluded causal inference, and self-reported measures may have been influenced by response or social desirability bias. The use of non-probability convenience sampling, although necessary during the COVID-19 pandemic, limits generalizability beyond King Abdullah Medical City. Furthermore, data collection during a global health emergency may have heightened nurses' perceptions of workload and commitment compared to non-crisis contexts.

Future research should adopt longitudinal and intervention designs to track changes in organizational commitment over time and evaluate the effectiveness of targeted strategies. Comparative studies across multiple institutions and cultural contexts are also warranted to understand the influence of workforce diversity. Intervention trials focused on enhancing interprofessional collaboration, participatory leadership, and staffing adequacy would provide valuable evidence for retention policies and the promotion of organizational resilience during both crisis and routine operations.

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“Innovation is not merely the pursuit of the new, but the refinement of what matters.”