

Should I Stay or Should I Go? A Stimulus-Organism-Response Perspective on Post-COVID-19 Fears and Nursing Students' Career Withdrawal Turnover Intentions

Azlina Muzaini¹, Beni Widarman Yus Kelana¹, Nur Zainie Abd Hamid², Noorul Amilin Mohamed³ & Almi Mahmud¹

¹Azman Hashim International Business, Universiti Teknologi Malaysia, ²Faculty of Business and Management, UiTM (Kedah) Malaysia, ³School of Healthcare Management, KPJ Healthcare University, Malaysia

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v16-i5/28201>

Published Date: 12 May 2026

Abstract

This conceptual study examines how nursing students' perceptions of workplace safety climate and organizational support influence their future turnover intentions in the post-COVID-19 context. Drawing on the Stimulus–Organism–Response (SOR) theory, COVID-19-related fears are conceptualized as external stimuli, perceived organizational support as a mediating psychological mechanism, and workplace safety climate as a moderating contextual factor. Evidence suggests that strong organizational support enhances resilience and professional commitment, mitigating the negative effects of fear, while a robust safety climate strengthens this protective effect. The study emphasizes the importance of fostering supportive and safe clinical environments to retain future nurses, providing practical guidance for healthcare policymakers, educators, and clinical managers.

Keywords: Safety Climate, Turnover Intention, SOR Theory, Post-COVID-19

Introduction

Ensuring a safe and supportive clinical environment is essential for nursing students' well-being and for sustaining a competent healthcare workforce. The COVID-19 pandemic has fundamentally transformed healthcare systems worldwide, exposing longstanding structural weaknesses in workforce sustainability, occupational safety, and psychological well-being among healthcare professionals. Among the professions most severely affected is nursing, which experienced unprecedented levels of workload pressure, emotional exhaustion, burnout, and workforce attrition during and after the pandemic period (Poon et al., 2022; Yildirim et al., 2024). As future nurses, students' perceptions of workplace safety climate and organizational support shape their psychological resilience, professional commitment, and career intentions, particularly regarding their willingness to remain in the

profession (Tolksdorf et al., 2022; Jarden et al., 2023). The COVID-19 pandemic has heightened these concerns, exposing students to risks such as infection, inadequate personal protective equipment (PPE), workplace violence, and emotional stress during clinical placements (Cho et al., 2021; Pourshaban, 2025; Matsuura et al., 2024). While substantial attention has been directed toward practicing nurses, comparatively less emphasis has been placed on nursing students, despite their critical role as the future healthcare workforce. This oversight is concerning because nursing students were similarly exposed to pandemic-related stressors during clinical placements, which may significantly influence their professional identity and long-term career commitment. Such experiences can influence students' perceptions of organizational support and safety climate, which are critical determinants of their professional identity and long-term career decisions (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022).

The post-Covid-19 era has intensified concerns regarding the sustainability of the global nursing workforce. Several countries continue to report severe nursing shortages, increasing turnover rates, and declining interest in nursing careers, raising concerns about the long-term resilience of healthcare system (Murphy et al., 2022; Watson et al., 2024). In Malaysia, the issue is particularly pressing due to growing healthcare demands, workforce migration, burnout among healthcare personnel, and challenges in retaining young nurses within the profession. Understanding these dynamics is vital, particularly in Malaysia, where the nursing shortage poses serious challenges to healthcare sustainability. By examining how perceptions of organizational support and workplace safety climate affect nursing students' turnover intentions in the post-pandemic context, this study provides insights for policymakers, educators, and clinical managers to design interventions that enhance safety, resilience, and retention among future nurses (Murphy et al., 2022, Watson et al., 2024).

Theoretically, this study is grounded in the Stimulus-Organism-Response (SOR) framework, which explains how external environmental stimuli influence individuals' internal psychological processes and subsequent behavioural responses. In this study, COVID-19-related fears function as external stimuli, perceived organizational support represents the internal psychological mechanism, and turnover intention constitutes the behavioural response, while workplace safety climate acts as a contextual moderator influencing these relationships. Applying the SOR framework provides a comprehensive explanation of how external threats and organizational conditions jointly shape nursing students' future career decisions.

Problem Statement

The COVID-19 pandemic has intensified the global nursing workforce crisis by increasing stress, burnout, and turnover intentions among practicing nurses and nursing students alike (Tolksdorf et al., 2022; Poon et al., 2022; Yildirim et al., 2024). The global healthcare sector continues to face severe nursing shortages, creating substantial challenges for healthcare sustainability and service delivery. Although extensive research has examined turnover intention among practicing nurses, growing evidence suggests that nursing students are also increasingly reconsidering their future commitment to the profession due to negative experiences encountered during clinical training in the pandemic and post-pandemic environment.

Nursing students, as the future workforce, report heightened concerns regarding safety and career viability. Nearly half of nursing students consider leaving the profession due to perceived risks, including infection exposure, inadequate protective equipment, and workplace violence during clinical placements (Pourshaban, 2025; Matsuura et al., 2024, Sperling, 2021). These experiences significantly shape students' perceptions of organizational support and workplace safety climate, which influence their professional identity, motivation, and long-term career intentions (Allah, 2021, Larsman et al., 2024; Aslan et al., 2022).

Systematic reviews confirm that fear of COVID-19 exposure, psychological responses to stress, adverse working conditions, and organizational support are among the most prominent factors influencing healthcare workers' turnover intentions during the pandemic (Poon et al., 2022). Specifically, fear of COVID-19 has been shown to be positively correlated with turnover intention across multiple studies and healthcare contexts (Tolksdorf et al., 2022; Poon et al., 2022; EKINGEN et al., 2023). Furthermore, shortages of PPE and equipment contribute to heightened anxiety and fear of infection among staff, which leads to poor quality of care, psychological distress, burnout, and increased intentions to leave the profession (Pourshaban, 2025).

Despite growing recognition of these challenges, organizational and environmental factors that may buffer the negative effects of pandemic-related fears among nursing students remain insufficiently explored. Existing literature suggests that perceived organizational support and workplace safety climate play protective roles in reducing stress, strengthening resilience, and improving retention among healthcare professionals (Aslan et al., 2022; Labrague, 2025). However, limited attention has been given to understanding how these factors interact to shape nursing students' career intentions within the post-COVID-19 context. These compounding pressures underscore the urgency of addressing nursing students' anticipatory career decisions before they enter the workforce. Empirical evidence from China reveals that turnover intention among hospital nurses remained alarmingly high at approximately 72–73% during both the full liberalization of COVID-19 and the post-pandemic era, with dissatisfaction with nursing work, lack of interest in nursing, and depression identified as significant risk factors (Xiao et al., 2025).

Research Gap

Despite extensive research on practicing nurses' turnover intentions, limited studies focus on nursing students' future career intentions in the post-COVID-19 context (Tolksdorf et al., 2022; Poon et al., 2022). This creates a significant knowledge gap because nursing students represent the future nursing workforce, and their career intentions may be shaped differently due to their transitional professional status, limited clinical experience, and developing professional identity. Specifically, there is a lack of empirical evidence on how perceived organizational support mediates the relationship between COVID-19-related fears and turnover intentions, and how workplace safety climate moderates this effect (Lotfi et al., 2022; Herrera & Guirardello, 2023; Labrague, 2025). Current literature primarily examines immediate psychological outcomes of the pandemic, such as anxiety, stress, fear, and burnout, without sufficiently addressing how these experiences influence nursing students' long term career commitment and anticipatory turnover intentions in the post-pandemic era (EKINGEN et al., 2023; Watson et al., 2024).

Most studies examine immediate pandemic-related fears without addressing their long-term impact on students' anticipatory career decisions (EKINGEN et al., 2023; Watson et al., 2024). Furthermore, while previous studies have independently examined organizational support, safety climate, or turnover intention, limited research has integrated these variables within unified theoretical framework capable of explaining the psychological and behavioural mechanisms underlying students' career decisions. Existing studies rarely conceptualize perceived organizational support as a mediating mechanism or workplace safety climate as a moderating contextual factor influencing nursing students' responses to pandemic-related stressors.

While previous studies have identified organizational support and workplace safety climate as important protective factors against turnover intention among healthcare professionals (Poon et al., 2022; Larsman et al., 2024), the mechanisms through which these factors influence nursing students' long-term career intentions in the post-COVID-19 context remain insufficiently explored. Understanding these relationships is essential for developing evidence-based interventions that strengthen resilience, enhance safety perceptions, and improve retention among the future nursing workforce, thereby supporting the sustainability of healthcare systems (Murphy et al., 2022; Watson et al., 2024; Labrague, 2025).

Purpose and Scope of the Conceptual paper

This conceptual paper aims to develop an integrated theoretical framework to examine how COVID-19-related fears influence nursing students' turnover intentions in the post-pandemic context. Guided by the Stimulus–Organism–Response (SOR) theory, COVID-19-related fears are conceptualized as external stimuli, perceived organizational support as a mediating psychological mechanism, and workplace safety climate as a moderating contextual factor shaping career intentions (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022). By synthesizing empirical evidence and aligning it with established organizational and psychological theories, this paper extends research beyond practicing nurses to include students' anticipatory career decisions. The proposed framework offers a foundation for future empirical testing and provides actionable insights for healthcare institutions and nursing educators to enhance safety perceptions, foster resilience, and promote workforce retention in the post-COVID-19 era (Murphy et al., 2022; Watson et al., 2024; Labrague, 2025).

Literature Review

COVID-19-Related Fears and Psychological Distress Among Nursing Students and Nurses

The COVID-19 pandemic has profoundly affected nursing students and nurses, exposing them to heightened psychological distress, including anxiety, fear, and depressive symptoms due to infection risks, clinical demands, and workplace uncertainty (Tolksdorf et al., 2022; Yildirim et al., 2024; Cho et al., 2021). Qualitative evidence from nurses who resigned during COVID-19 highlights that the pandemic, uncertainty of role, workload, and not feeling supported, respected, or valued were primary factors contributing to their departure (Jarden et al., 2023). Nurses working in COVID-19 wards experienced conflicts related to the risk of infection, role execution, organizational challenges, and interpersonal relationships, alongside a sense of mistrust towards their organizations (Matsuura et al., 2024). These experiences are illustrative of the dilemmas faced by healthcare professionals in balancing the distress and rewards inherent in their roles (Matsuura et al., 2024).

Empirical studies consistently demonstrate that psychological characteristics such as anxiety, fear, and perceived threat of COVID-19 are significantly associated with nurses' turnover intention (Tolksdorf et al., 2022; Poon et al., 2022; EKINGEN et al., 2023). Specifically, turnover intention was positively associated with the perceived threat of COVID-19 ($r = 0.47$; $p < .001$) and anxiety ($r = 0.43$; $p < 0.001$), with anxiety enhancing the relationship between perceived threat and turnover intention (Tolksdorf et al., 2022). Fear of COVID-19 has been shown to have a positive effect on both organizational and professional turnover intentions, with work stress partially mediating this relationship (EKINGEN et al., 2023). A study of operating room nurses found that nurses' anxiety and fear about COVID-19 increased their reported rate of turnover intention (Lotfi et al., 2022).

Among nursing students specifically, more than 20% experienced some degree of depression, anxiety, and stress during the COVID-19 pandemic, and nearly one-third reported a high level of intention to leave (Haririan et al., 2022). A cross-sectional study on COVID-19 phobia among undergraduate nursing students found a mean COVID-19 Phobia Scale score of 52.92 (± 13.02), indicating moderate levels of phobia, with gender, chronic disease, and perceived susceptibility being significant predictors (Luo et al., 2024). Qualitative themes emerging from this study included concerns of infection risk, professional commitment, compromise and acceptance, and confronting phobia, illustrating the complex interplay between fear and career decision-making (Luo et al., 2024). Furthermore, nursing and midwifery students reported feeling less prepared for practice due to changes in education delivery during COVID-19, with 27% reporting a change in desire to enter the workforce related to negative experiences (Jones et al., 2024).

Perceived Organizational Support as a Mediating Mechanism

Perceived organizational support (POS) plays a critical mediating role in the relationship between COVID-19-related fears and turnover intentions (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022). POS refers to workers' perceptions that their effort and contribution are appreciated by their organization, and it helps nurses display positivity, take ethical decisions, increase their commitment, and reduce job stress (Allah, 2021). Research demonstrates that as perceived organizational support of nurses increases, job satisfaction increases and the intention to leave decreases (Aslan et al., 2022). Organizational trust and perceived organizational support were identified as core factors that protected nurses from increased turnover intention in a global systematic review (Poon et al., 2022).

A longitudinal study among Swedish hospital nurses found that organizational support positively influenced job satisfaction and tended to decrease burnout, with nurses who perceived a high POS-climate also reporting higher job satisfaction, less burnout symptoms, and less turnover intent (Larsman et al., 2024). The association between POS-climate and stress-related ill-health such as burnout symptoms may be stronger under conditions of high work demands and high work stress, such as the strains put on the healthcare system by the COVID-19 pandemic (Larsman et al., 2024). Furthermore, a study of nurse managers during COVID-19 found a highly statistically significant negative correlation between challenges faced by managers and their perception of organizational support, with higher perception of organizational support minimizing managers' perception of being challenged in times of pandemics (Allah, 2021).

Critically, perceived organizational support has been shown to have a partial mediating role in the effect of pandemic-related perceptions on the intention to quit, demonstrating that macro measures taken against the pandemic and organizational support received by nurses negatively affected their intention to leave (Aslan et al., 2022). Lack of communication and support within organizations may exacerbate nurses' stress, forming the root cause of their distress and dilemmas, underscoring the importance of creating a safe and secure environment for nurses (Matsuura et al., 2024). Among nursing graduates, psychological capital, a positive psychological condition exhibited by individuals during the process of growth and development has been identified as the most significant factor influencing employment intentions, with professional values and learning satisfaction also playing important roles (Zhang et al., 2025), further underscoring the importance of internal psychological resources in shaping career decisions.

Workplace Safety Climate as a Moderating Factor

Workplace safety climate serves as a key moderator in the relationship between organizational support and turnover intentions (Lotfi et al., 2022; Herrera & Guirardello, 2023; Cho et al., 2021; Labrague, 2025). A study of operating room nurses during COVID-19 found that safety climate significantly reduced turnover intention ($p < 0.001$), with an increase of one unit in the total score of safety climate leading to a 0.6 reduction in turnover intention (Lotfi et al., 2022). This finding is corroborated by a global systematic review, which found that perceived safety climate was negatively correlated with turnover intention, and that a strong safety climate may mitigate turnover intention (Poon et al., 2022).

Research on Korean frontline nurses demonstrated that the higher the perceived hospital safety climate, the lower were nurses' psychological symptoms, including fear, anxiety, and depressive symptoms (Cho et al., 2021). Strengthening safety-related management, safety-related feedback, and communication in a hospital environment helps improve the mental status of nurses in charge of COVID-19-related tasks (Cho et al., 2021). A cross-sectional study among Filipino nurses found that workplace safety culture was negatively associated with compassion fatigue ($\beta = -0.2604$, $p = 0.0012$) and turnover intention ($\beta = -0.2778$, $p = 0.0048$), and positively associated with career satisfaction ($\beta = 0.3986$, $p = 0.0001$), with compassion fatigue partially mediating these relationships (Labrague, 2025).

A study examining patient safety climate and intention to remain in one's job found that higher scores in dimensions related to organizational, work unit, and interpersonal aspects were associated with higher intention to stay (Herrera & Guirardello, 2023). Positive and supportive leadership positively affects nurses' commitment to the organization, leading to increased job satisfaction, productivity, retention, patient safety, and an overall safe climate (Watson et al., 2024). These findings collectively underscore that a robust safety climate not only directly reduces turnover intentions but also amplifies the protective effects of organizational support.

Resilience, Professional Commitment, and Retention

Despite the significant stressors associated with the COVID-19 pandemic, some nurses and nursing students maintained a sense of vocational calling and professional commitment, reflecting a complex interplay between resilience and mental health needs (Jarden et al.,

2023; Watson et al., 2024; Sperling, 2021). Psychological resilience helps to control burnout in nurses and prevent the development of a global nurse shortage, with a negative and highly significant correlation between psychological resilience and burnout levels (Yildirim et al., 2024). Nurses with supportive and communicative leaders and higher team cohesion indicate a lower intention to leave their job (Jarden et al., 2023; Murphy et al., 2022).

Positive associations have been found between work engagement and intention to stay and organizational support, while stress and workload showed negative relationships (Aydoğdu, 2024). A supportive climate may enhance nurses' sense of belonging and purpose, translating into higher job satisfaction and lower intent to leave (Baek, 2025). Factors most negatively correlated with nurse turnover included more supportive and communicative leaders, higher team cohesion, more positive organizational climate and greater organizational support, better fit with the organization, and nurses higher in commitment, job involvement, and job satisfaction (Murphy et al., 2022).

Among nursing students, professional identity promotion strategies have been shown to significantly improve both professional identity and resilience, with significant differences found between intervention and control groups in professional identity ($p < 0.001$) and resilience ($p < 0.001$) (Wang et al., 2022). This suggests that targeted educational interventions can strengthen the internal psychological resources that buffer against COVID-19-related fears and reduce turnover intentions. Furthermore, newly hired nurses who cared for COVID-19 patients expressed the presence of work-related stress and low to moderate levels of resilience, with nursing managers urged to take necessary measures to promote better work conditions and improve resilience to avoid nurses leaving the profession (Hadid et al., 2022).

Theoretical Framework

The Stimulus–Organism–Response (SOR) Theory

The Stimulus–Organism–Response (SOR) theory provides a robust framework for understanding how external factors influence internal psychological states and subsequent behaviours. In this study, COVID-19-related fears including concerns about infection, workplace safety, exposure to violence, and emotional exhaustion during clinical placements, serve as external stimuli that trigger internal psychological processing (Tolksdorf et al., 2022; Poon et al., 2022; Cho et al., 2021). These stimuli are well-documented in the literature; fear of COVID-19 exposure, psychological responses to stress, adverse working conditions, and organizational support are among the most prominent factors influencing healthcare workers' turnover intentions (Poon et al., 2022; Pourshaban, 2025; Matsuura et al., 2024).

The organism component represents internal resources such as resilience, coping mechanisms, and perceived organizational support, which mediate the impact of these fears by fostering a sense of value, safety, and belonging (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022). Research confirms that organizational support helps nurses display positivity, increase their commitment, and reduce job stress, thereby buffering the negative effects of external stressors (Allah, 2021). The response component reflects students' future career intentions, with higher fears and lower support associated with increased turnover intentions (Tolksdorf et al., 2022; EKINGEN et al., 2023).

Integration of Workplace Safety Climate as Moderator

By integrating workplace safety climate as a moderator, the SOR framework recognizes that contextual safety cues can strengthen or weaken the effect of organizational support on career intentions (Lotfi et al., 2022; Herrera & Guirardello, 2023; Cho et al., 2021; Labrague, 2025). A positive safety climate enhances the protective effect of organizational support, whereas a weak safety climate reduces it, increasing turnover risk (Lotfi et al., 2022; Labrague, 2025). This moderation is supported by empirical evidence showing that the higher the perceived hospital safety climate, the lower nurses' psychological symptoms and turnover intentions (Cho et al., 2021), and that workplace safety culture is negatively associated with turnover intention and positively associated with career satisfaction (Labrague, 2025).

Overall, the SOR framework illustrates how environmental stressors, psychological resources, and contextual safety interact to shape nursing students' career decisions, highlighting the importance of supportive and safe clinical environments for retention (Jarden et al., 2023; Larsman et al., 2024; Murphy et al., 2022).

Proposed Model and Conceptual Framework

Proposed Model

Building on the SOR theory, this study proposes a model in which COVID-19-related fears function as external stimuli influencing nursing students' perceptions of their clinical environment. Perceived organizational support serves as a mediator, shaping how these fears translate into future career intentions by fostering resilience, professional commitment, and a sense of belonging. Workplace safety climate acts as a moderator, strengthening or weakening the effect of organizational support on turnover intentions depending on the perceived quality of safety practices and management commitment.

When students perceive strong organizational support and a positive safety climate, their motivation and retention intentions increase, whereas negative perceptions amplify fear and heighten turnover intentions. This model highlights the interactive role of external stressors and internal perceptions in determining nursing students' career decisions during and after the COVID-19 pandemic, providing a foundation for interventions to enhance retention and workforce sustainability.

Conceptual Framework

The conceptual framework integrates the SOR theory to explain how COVID-19-related fears influence nursing students' future turnover intentions. In this model:

- Stimuli: COVID-19-related fears such as infection risk, inadequate PPE, workplace violence, emotional exhaustion serve as external stimuli that trigger psychological responses.
- Organism (Mediation): Perceived organizational support functions as a mediating factor by enhancing resilience, motivation, and professional commitment
- Moderation: Workplace safety climate moderates this relationship, amplifying the protective effects of organizational support when safety perceptions are high and weakening them when safety perceptions are low.
- Response: Nursing students' future turnover intentions, shaped by the interplay of the above factors.

Together, these interactions illustrate that nursing students' career intentions are shaped not only by external threats but also by the interplay of internal coping resources and contextual safety cues (Jarden et al., 2023; Larsman et al., 2024; Murphy et al., 2022). This framework provides a structured basis for future empirical testing and offers practical guidance for healthcare educators and policymakers to strengthen support systems and safety practices, ultimately improving retention and sustaining the future nursing workforce (Murphy et al., 2022; Watson et al., 2024; Labrague, 2025).

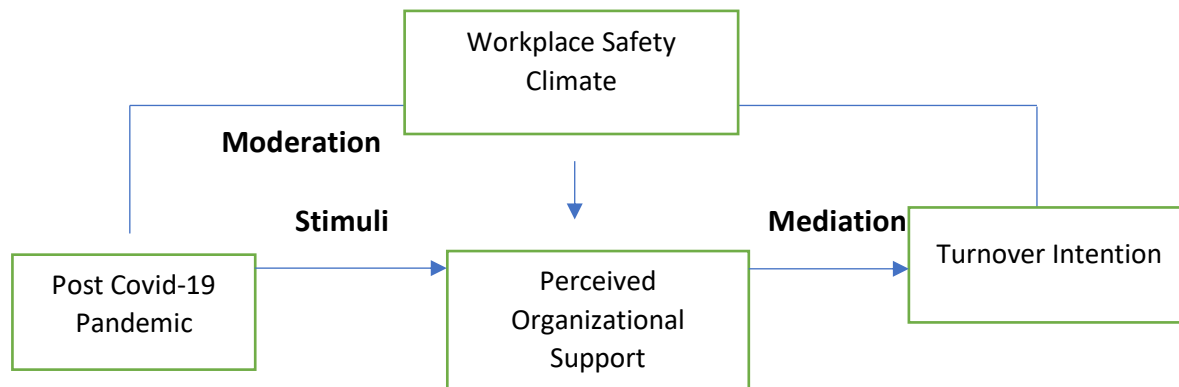


Figure 1.0 Conceptual Framework

Theoretical Application and Alignment

The SOR theory provides a robust framework for understanding how nursing students' career intentions are shaped in high-risk healthcare environments. COVID-19-related fears act as external stimuli arising from factors such as infection risks, workplace violence, emotional exhaustion, and uncertainty during clinical placements (Tolksdorf et al., 2022; Pourshaban, 2025; Matsuura et al., 2024; Sperling, 2021), which trigger internal psychological processing captured in the organism component, including coping resources, resilience, and perceptions of organizational support (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022). These internal evaluations mediate the influence of external stressors, enhancing students' sense of value, belonging, and professional commitment (Allah, 2021; Larsman et al., 2024).

The response component reflects future career intentions, including turnover or continued commitment to nursing (Tolksdorf et al., 2022; EKINGEN et al., 2023). By integrating workplace safety climate as a moderator, the framework recognizes that contextual safety cues can strengthen or weaken the effect of organizational support on career intentions (Lotfi et al., 2022; Herrera & Guirardello, 2023; Labrague, 2025), highlighting that students' decisions are shaped by a dynamic interplay of environmental threats, internal resources, and perceived organizational conditions (Jarden et al., 2023; Cho et al., 2021; Murphy et al., 2022).

This theoretical alignment is further supported by evidence that positive associations exist between work engagement and intention to stay and organizational support (Aydoğdu, 2024), and that a supportive climate may enhance nurses' sense of belonging and purpose, translating into higher job satisfaction and lower intent to leave (Baek, 2025). The SOR framework thus provides a comprehensive and theoretically grounded explanation of the complex mechanisms underlying nursing students' career decisions in the post-COVID-19 context.

Research Questions

Guided by the SOR framework and existing literature, this study addresses the questions:

RQ 1: How do COVID-19-related fears influence nursing students' turnover intentions?

RQ 2: To what extent does workplace safety climate moderate the effect of COVID-19-related fears on nursing students' turnover intentions?

RQ 3: How does perceived organizational support mediate the relationship between COVID-19-related fears and nursing students' turnover intentions?

Research Objectives

Based on the research questions, the objectives of this study are:

RO 1: To examine the direct influence of COVID-19-related fears on nursing students' turnover intentions.

RO 2: To assess the moderating role of workplace safety climate in the relationship between COVID-19-related fears and turnover intentions.

RO 3: To evaluate the mediating effect of perceived organizational support on the relationship between COVID-19-related fears and turnover intentions.

Hypotheses Development

Based on SOR theory and prior empirical findings, the following hypotheses are proposed:

H1: COVID-19-related fears positively influence nursing students' turnover intentions.

This hypothesis is supported by consistent empirical evidence demonstrating that fear of COVID-19 is positively correlated with turnover intention across multiple healthcare contexts and countries (Poon et al., 2022). Specifically, an increased level of fear of COVID-19 was associated with increased organizational ($B = .428$; $\beta = .298$; $p = .001$) and professional ($B = .314$; $\beta = .219$; $p = .001$) turnover intentions (Tolksdorf et al., 2022). Fear of COVID-19 has been shown to have a direct positive effect on both organizational and professional turnover intentions, with work stress partially mediating this relationship (EKINGEN et al., 2023). Among nursing students, COVID-19 phobia significantly affected their intentions to leave the nursing profession ($\beta = 0.226$, $p < 0.001$) Luo et al., 2024), and nearly one-third of nursing, midwifery, and operating room students reported high levels of intention to leave during the pandemic (Haririan et al., 2022).

H2: Perceived organizational support mediates the relationship between COVID-19-related fears and turnover intentions, such that higher organizational support reduces the effect of fear on turnover intentions.

This hypothesis is supported by evidence that perceived organizational support has a partial mediating role in the effect of pandemic-related perceptions on the intention to quit (Aslan et al., 2022). Organizational support helps nurses display positivity, increase their commitment, and reduce job stress, thereby buffering the negative effects of external stressors (Allah, 2021). A longitudinal study found that organizational support positively influenced job satisfaction and tended to decrease burnout, with nurses who perceived a high POS-climate also reporting less turnover intent (Larsman et al., 2024). Among nursing graduates, psychological capital—a key internal resource closely related to perceived support was identified as the most significant factor influencing employment intentions (Zhang et al., 2025).

H3: Workplace safety climate moderates the relationship between perceived organizational support and turnover intentions, such that the negative effect of organizational support on turnover intention is stronger under a positive safety climate.

This hypothesis is supported by evidence that safety climate significantly reduced turnover intention among nurses in the COVID-19 pandemic (Lotfi et al., 2022), and that workplace safety culture was negatively associated with turnover intention and positively associated with career satisfaction (Labrague, 2025). The higher the perceived hospital safety climate, the lower nurses' psychological symptoms and turnover intentions (Cho et al., 2021), suggesting that a positive safety climate amplifies the protective effects of organizational support.

Significance of the study

Theoretical Significance

This study holds significant theoretical value by extending the SOR framework to nursing education and workforce planning by incorporating perceived organizational support as a mediator and workplace safety climate as a moderator, offering deeper insight into how external stressors influence nursing students' long-term career decisions (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022). The integration of these constructs within a unified theoretical framework addresses a notable gap in the literature, as most existing studies examine immediate pandemic-related fears without addressing their long-term impact on students' anticipatory career decisions (Tolksdorf et al., 2022; Poon et al., 2022; EKINGEN et al., 2023). The study also contributes to the broader theoretical discourse by demonstrating how professional identity, resilience, and psychological capital interact with organizational and environmental factors to shape career intentions (Wang et al., 2022; Zhang et al., 2025; Gendler et al., 2025).

Practical Significance

Practically, the findings provide evidence-based guidance for healthcare policymakers, nursing educators, and clinical managers, emphasizing the protective roles of organizational support and a positive safety climate (Herrera & Guirardello, 2023; , Murphy et al., 2022; Watson et al., 2024; Labrague, 2025). By strengthening students' perceptions of support and safety, targeted interventions can reduce turnover intentions, enhance resilience, and retain a committed nursing workforce (Jarden et al., 2023; Murphy et al., 2022). Strategies such as training personnel on disease transmission prevention, creating proper supportive environments, and providing appropriate protective equipment to prevent infection seem vital to improving the safety climate, thereby reducing turnover intention Lotfi et al., 2022; Cho et al., 2021). Organizational interventions by nurse managers are of great importance to prevent the global nurse shortage (Yildirim et al., 2024). Furthermore, professional identity promotion strategies have demonstrated effectiveness in improving nursing students' professional identity and resilience Wang et al., 2022), suggesting that educational interventions targeting these internal resources can complement organizational and safety climate improvements.

Implication for Future Research

Future studies should empirically test the proposed conceptual framework using longitudinal or mixed-method designs to capture changes in nursing students' perceptions,

resilience, and career intentions over time (Tolksdorf et al., 2022; Jarden et al., 2023; Watson et al., 2024). Comparative research across countries or healthcare systems can illuminate cultural and institutional influences on safety climate and organizational support (Poon et al., 2022; Murphy et al., 2022). Additionally, examining other psychological mechanisms such as professional identity, moral distress, or psychological capital may deepen understanding of career decision-making (Seiler et al., 2024; Sperling, 202; Zhang et al., 2025). Research on the mediating effects of burnout and job satisfaction on the relationship between professional identity, occupational stress, and turnover intentions in the post-pandemic era has demonstrated that professional identity mitigates nurse turnover by increasing job satisfaction and reducing burnout (Gendler et al., 2025), suggesting that professional identity is a valuable additional construct to examine in future research within the SOR framework.

Future research should also focus on specific vulnerable groups, including nursing students transitioning to practice, to aid policymakers in adopting strategies to support and incentivize them to remain in their healthcare roles (Poon et al., 2022; Murphy et al., 2022). The impact of COVID-19 on career intentions among health professions students has yet to be thoroughly explored, leaving uncertainty in understanding whether these intentions have remained stable or shifted in response to the pandemic (Ha et al., 2024), underscoring the need for longitudinal studies. These insights can guide targeted interventions to enhance retention, foster resilience, and sustain a skilled nursing workforce in post-pandemic healthcare environments (Jarden et al., 2023; Watson et al., 2024; Labrague, 2025).

Data Collection

Future empirical studies based on this conceptual framework may employ quantitative survey designs targeting nursing students in clinical placements across public and private healthcare institutions. Validated instruments should measure COVID-19-related fears, perceived organizational support, workplace safety climate, and turnover intentions. Structural equation modelling (SEM) is recommended to simultaneously test mediation and moderation effects, as demonstrated in prior studies examining the mediating role of perceived organizational support in the relationship between pandemic-related perceptions and turnover intention. Ethical approval and informed consent are essential to ensure confidentiality and voluntary participation.

Expected Contribution

This study is expected to advance nursing and healthcare management literature by providing a theoretically grounded explanation of nursing students' turnover intentions in the post-COVID-19 context. By integrating perceived organizational support and workplace safety climate within the SOR framework, it offers a comprehensive view of how environmental stressors influence anticipatory career decisions. Practically, the findings can guide healthcare institutions and nursing educators in designing safe, supportive clinical environments that enhance resilience, professional commitment and retention, ultimately sustaining a future-ready nursing workforce.

The study also contributes to the broader discourse on healthcare workforce sustainability by highlighting the importance of addressing nursing students' career intentions before they enter the workforce, thereby providing a proactive approach to mitigating the global nursing shortage (Poon et al., 2022; Yildirim et al., 2024; Murphy et al.,

2022). Given that turnover intention among hospital nurses remained alarmingly high during both the full liberalization of COVID-19 and the post-pandemic era (Xiao et al., 2025), and that COVID-19 phobia continues to affect nursing students' career aspirations (Luo et al., 2024), the proposed framework offers timely and practically relevant insights for sustaining the future nursing workforce.

Conclusion

This conceptual paper has presented a theoretically grounded framework for understanding the complex interplay of COVID-19-related fears, perceived organizational support, and workplace safety climate in shaping nursing students' future turnover intentions. Drawing on the Stimulus–Organism–Response (SOR) theory, the study has systematically synthesized empirical evidence to demonstrate that COVID-19-related fears constitute powerful external stimuli that significantly elevate nursing students' intentions to withdraw from the profession (Tolksdorf et al., 2022; Poon et al., 2022; EKINGEN et al., 2023; Haririan et al., 2022; Luo et al., 2024). These fears are not merely transient responses to an acute crisis; rather, evidence suggests that the COVID-19 pandemic has had a long-term and profound negative impact on nursing work, leading to increased turnover intention and workforce shortages that persist well into the post-pandemic era (Xiao et al., 2025).

The proposed framework makes a distinctive theoretical contribution by positioning perceived organizational support as a critical mediating mechanism through which the deleterious effects of COVID-19-related fears on career intentions can be attenuated (Allah, 2021; Larsman et al., 2024; Aslan et al., 2022). Empirical evidence consistently demonstrates that when nurses and nursing students perceive that their organizations value their contributions and care about their well-being, they exhibit greater resilience, higher job satisfaction, and reduced intentions to leave the profession (Larsman et al., 2024; Aslan et al., 2022). This mediating role is particularly salient in the context of nursing students, whose professional identity and commitment are still being formed during clinical placements, making them especially susceptible to the influence of organizational signals (Wang et al., 2022; Zhang et al., 2025).

Equally important is the moderating role of workplace safety climate, which this study has conceptualized as a contextual amplifier or attenuator of the protective effects of organizational support (Lotfi et al., 2022; Herrera & Guirardello, 2023; Cho et al., 2021; Labrague, 2025). A robust safety climate not only directly reduces turnover intentions by alleviating fear and psychological distress (Cho et al., 2021), but also strengthens the buffering capacity of organizational support, creating a synergistic protective effect (Lotfi et al., 2022; Labrague, 2025). Conversely, a weak safety climate undermines the effectiveness of organizational support, leaving nursing students more vulnerable to the career-altering consequences of COVID-19-related fears (Lotfi et al., 2022). These findings align with broader evidence that positive and supportive leadership, adequate resourcing, and a culture of safety are among the most powerful determinants of nurses' intention to remain in the profession (Jarden et al., 2023; Murphy et al., 2022; Watson et al., 2024).

The practical implications of this framework are substantial and urgent. The global nursing shortage, exacerbated by the COVID-19 pandemic, demands proactive and evidence-based strategies to retain the future nursing workforce (Poon et al., 2022; Murphy et al.,

2022; Yildirim et al., 2024). Healthcare institutions and nursing educators must prioritize the creation of safe, supportive clinical environments that address students' fears, validate their contributions, and foster their professional identity and resilience (Wang et al., 2022; Hadid et al., 2022). Specific interventions should include providing adequate PPE and infection control training, implementing structured psychological support programs, strengthening supervisory relationships, and cultivating a culture of safety and open communication (Lotfi et al., 2022; Cho et al., 2021; Sperling, 2021). Professional identity promotion strategies have demonstrated effectiveness in improving nursing students' professional identity and resilience (Wang et al., 2022), and psychological capital development programs have been shown to significantly influence employment intentions among nursing graduates (Zhang et al., 2025), suggesting that educational interventions targeting internal psychological resources can complement organizational and safety climate improvements.

Future empirical research should test the proposed model using longitudinal designs and validated instruments across diverse cultural and institutional contexts (Tolksdorf et al., 2022; Jarden et al., 2023; Ha et al., 2024). The examination of additional mediating and moderating variables such as professional identity, moral distress, burnout, and psychological capital may further enrich understanding of the mechanisms underlying nursing students' career decisions in the post-pandemic era (Seiler et al., 2024; Zhang et al., 2025; Gendler et al., 2025). Comparative studies across countries and healthcare systems will be particularly valuable in illuminating how cultural norms, institutional policies, and socioeconomic factors shape the relationships proposed in this framework (Poon et al., 2022; Murphy et al., 2022).

In conclusion, the question of whether nursing students will stay or go is not determined by fear alone, but by the organizational and environmental conditions that either mitigate or amplify the impact of that fear. By fostering strong perceived organizational support and a robust workplace safety climate, healthcare institutions can transform the clinical environment from a source of threat into a source of resilience and professional commitment, thereby securing the future of the nursing workforce in the post-COVID-19 era (Lotfi et al., 2022; Larsman et al., 2024; Labrague, 2025; Wang et al., 2022). The sustainability of healthcare systems depends on the collective commitment of policymakers, educators, and clinical managers to create conditions in which nursing students not only choose to stay, but are empowered to thrive (Murphy et al., 2022; Watson et al., 2024; Xiao et al., 2025).

References

- Allah, A. R. G. (2021). Challenges facing nurse managers during and beyond COVID-19 pandemic in relation to perceived organizational support. *Nursing Forum*, 56(3), 539-549. <https://doi.org/10.1111/nuf.12578>.
- Aslan, E. Ç., TÜRKMEN, İ., & Top, M. (2022). The effect of macro-control and organizational support perception on nurses and physicians intention to quit during the COVID-19 pandemic. *Journal of Nursing Scholarship*, 55(4), 843-852. <https://doi.org/10.1111/jnu.12849>.
- Aydoğdu, A. L. F. (2024). Work engagement among nurses in the context of the COVID-19 pandemic: A systematic review. *Nursing Ethics*, 31(8), 1688-1708. <https://doi.org/10.1177/09697330241257570>.
- Baek, H. (.), Cho, H., Han, K., & Heo, H. (2025). The Mediating Role of Speak-up Climate in the Relationship Between Nurse Managers' Inclusive Leadership, Patient Safety, and Nurse Job Outcomes. *International Nursing Review*, 72(4). <https://doi.org/10.1111/inr.70126>.
- Cho, M., Kim, O., Pang, Y., Kim, B., Jeong, H., Lee, J., ... & Dan, H. (2021). Factors affecting frontline Korean nurses' mental health during the COVID-19 pandemic. *International Nursing Review*, 68(2), 256-265. <https://doi.org/10.1111/inr.12679>.
- Gendler, Y., Ofri, L., Talia, D., Yosefa, D., Mursi, J., Tali, S., ... & Ayala, B. (2025). The Mediating Effect of Burnout and Job Satisfaction on the Relationship Between Professional Identity, Occupational Stress, and Turnover Intentions in the Post-Pandemic Era. *Worldviews on Evidence-Based Nursing*, 22(2). <https://doi.org/10.1111/wvn.70014>
- Hadid, L. A., Barmawi, M. A., Alnjadat, R., & Farajat, L. A. (2022). The impact of stress associated with caring for patients with COVID-19 on career decisions, resilience, and perceived self-efficacy in newly hired nurses in Jordan: A cross-sectional study. *Health Science Reports*, 5(6). <https://doi.org/10.1002/hsr2.899>
- Haririan, H., Samadi, P., Lalezari, E., Habibzadeh, S., & Porter, J. E. (2022). Nursing and Midwifery Students' Mental Health Status and Intention to Leave During Covid-19 Pandemic. *Sage Open Nursing*, 8. <https://doi.org/10.1177/23779608221120506>
- Ha, T. M., Dao, C. H., Nguyen, T. H. H., Nguyen, H. L., & Le, P. (2024). Examining dimensions of career intentions: insights from medical and nursing students at a private not-for profit university in Vietnam. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-06028-3>.
- Herrera, C. N. and Guirardello, E. d. B. (2023). Patient Safety Climate, Quality of Care, and Intention of Nursing Professionals to Remain in Their Job During the COVID-19 Pandemic. *Journal of Patient Safety*, 19(6), 403-407. <https://doi.org/10.1097/pts.0000000000001133>.
- Jarden, R., Scott, S., Rickard, N., Long, K., Burke, S., Morrison, M., ... & Twomey, B. (2023). Factors contributing to nurse resignation during COVID -19: A qualitative descriptive study. *Journal of Advanced Nursing*, 79(7), 2484-2501. <https://doi.org/10.1111/jan.15596>
- Jones, R., Jackson, D., Rice, K., Fisher, M., Calleja, P., Hopkins, M., ... & Usher, K. (2024). Nursing/midwifery students' perceptions of caring pedagogy and online learning during the COVID -19 pandemic. *Journal of Advanced Nursing*, 80(11), 4712-4724. <https://doi.org/10.1111/jan.16224>.
- Larsman, P., Pousette, A., & Törner, M. (2024). The impact of a climate of perceived organizational support on nurses' well-being and healthcare-unit performance: A

- longitudinal questionnaire study. *Journal of Advanced Nursing*, 80(12), 4921-4932. <https://doi.org/10.1111/jan.16188>.
- Labrague, L. J. (2025). Compassion Fatigue Mediates the Relationship Between Workplace Safety Climate, Career Satisfaction, and Turnover Intention Among Nurses: A Cross-Sectional Study. *Worldviews on Evidence-Based Nursing*, 22(5). <https://doi.org/10.1111/wvn.70073>.
- Luo, Y., Li, J. X., Qiao, X., & Zheng, M. (2024). A cross-sectional survey on COVID-19 phobia and its influencing factors among undergraduate nursing students. *BMC Nursing*, 23(1). <https://doi.org/10.1186/s12912-024-02404-y>
- Lotfi, M., Akhuleh, O. Z., Judi, A., & Khodayari, M. (2022). Turnover intention among operating room nurses during the COVID-19 outbreak and its association with perceived safety climate. *Perioperative Care and Operating Room Management*, 26, 100233. <https://doi.org/10.1016/j.pcorn.2021.100233>.
- Matsuura, A., Sasahara, S., Tachikawa, H., Wataya, K., Ujihara, M., Kawashima, Y., ... & Matsuzaki, I. (2024). Distress and Rewards of Nurses with Experience in COVID-19 Wards: A Qualitative Study. *F1000research*, 13, 559. <https://doi.org/10.12688/f1000research.147675.1>.
- Murphy, G. T., Sampalli, T., Bearskin, L. B., Cashen, N., Cummings, G. G., Rose, A. E., ... & Villeneuve, M. (2022). Investing in Canada's nursing workforce post-pandemic: A call to action. *Facets*, 7, 1051-1120. <https://doi.org/10.1139/facets-2022-0002>.
- Pourshaban, M., Allahbakhshian, A., & Purabdollah, M. (2025). Mapping the Contributing Factors to Missed Nursing Care in Hospital Settings During a Global Health Crisis: A Systematic Scoping Review. *Journal of Nursing Management*, 2025(1). <https://doi.org/10.1155/jonm/7343469>.
- Poon, Y. R., Lin, Y. P., Griffiths, P., Yong, K. K., Seah, B., & Liaw, S. Y. (2022). A global overview of healthcare workers' turnover intention amid COVID-19 pandemic: a systematic review with future directions. *Human Resources for Health*, 20(1). <https://doi.org/10.1186/s12960-022-00764-7>.
- Sperling, D. (2021). Nurses' challenges, concerns and unfair requirements during the COVID-19 outbreak. *Nursing Ethics*, 28(7-8), 1096-1110. <https://doi.org/10.1177/09697330211005175>.
- Tolksdorf, K. H., Tischler, U., & Heinrichs, K. (2022). Correlates of turnover intention among nursing staff in the COVID-19 pandemic: a systematic review. *BMC Nursing*, 21(1). <https://doi.org/10.1186/s12912-022-00949-4>.
- Wang, P., Wang, H., Qin, Q., Li, Y., Hong, J., & Li, S. (2022). Effectiveness of a professional identity promotion strategy for nursing students during the COVID-19 pandemic: A quasi-experimental study. *Japan Journal of Nursing Science*, 19(3). <https://doi.org/10.1111/jjns.12479>
- Watson, C., Bernabeu-Tamayo, M. D., Giménez-Díez, D., Lillo-Crespo, M., & Leyva-Moral, J. M. (2024). Factors Contributing to Nurses' Intention to Leave the Profession: A Qualitative Study in Catalonia, Spain, following the Latest Waves of COVID-19. *Journal of Nursing Management*, 2024, 1-11. <https://doi.org/10.1155/2024/7971020>.
- Xiao, J., Liu, L., Peng, Y., Lyu, X., Xing, C., Tao, Y., ... & Luo, W. (2025). What is behind the high turnover intention among hospital nurses during the full liberalization of COVID-19 and the postpandemic era in China: a 2-wave multicentre cross-sectional comparison study. *BMC Nursing*, 24(1). <https://doi.org/10.1186/s12912-025-02851-1>.

- Yildirim, D. U., Şenyuva, E., & Kaya, E. (2024). Turkish nurses' psychological resilience and burnout levels during the COVID-19 pandemic: A correlational study. *International Journal of Nursing Practice*, 30(4). <https://doi.org/10.1111/ijn.13239>
- Zhang, X., Zhang, Y., Han, J., Jiao, Y., Chen, J., Chu, M., ... & Guo, Z. (2025). Employment Intention and Associated Factors of Nursing Graduates: A Structural Equation Model. *Journal of Nursing Management*, 2025(1). <https://doi.org/10.1155/jonm/7402874>.