The Influence of Workload, Job Satisfaction, and Work Environment on Nursing Job Dropout: A Conceptual Framework

¹Tagred Ibarhim F Almgadawi D, ²Faridah Mohd Said D, ³Dhakir Abbas Ali D

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Abstract

High nursing dropout rates remain a critical challenge for healthcare systems globally, impacting the quality and continuity of patient care. Many studies explore the theoretical model framework linking workload, job satisfaction, and the work environment to nursing job dropout, however, the linking of policy maker and stake holders were not well explored. This proposed framework examines how excessive workload, job dissatisfaction, and unfavorable work environments contribute to nurses' decisions to leave their profession. It also highlights the interplay between these factors and their cumulative impact on nurses' physical and emotional well-being. Drawing on established theories of occupational stress and organizational behavior, the framework identifies key pathways through which workload intensity, lack of job satisfaction, and inadequate workplace support lead to burnout and eventual dropout. The model emphasizes the need for systemic interventions, such as workload redistribution, enhancement of job satisfaction through recognition and career development opportunities, and the creation of a supportive and inclusive work environment. This study provides insights for healthcare administrators, policymakers, and researchers to address the underlying causes of nursing attrition. By focusing on organizational and policy-level solutions, the framework aims to reduce turnover rates, improve workforce stability, and ultimately enhance the quality of healthcare delivery. Future research directions and practical implications are discussed to support the development of targeted strategies for nurse retention.

1. Introduction

The nursing profession forms the backbone of healthcare systems worldwide, playing a pivotal role in ensuring patient safety, improving healthcare outcomes, and enhancing the overall quality of care. However, a growing concern in the healthcare sector is the alarming rate of nursing turnover, particularly in Saudi Arabia, where workforce shortages, rapid population growth, and the pressures of an expanding healthcare system exacerbate this challenge (Albalawi et al., 2024). Nursing job dropout the decision of nurses to leave their current roles or, in some cases, the profession entirely poses severe consequences for healthcare organizations. These include disruptions in patient care,

¹Faculty of nursing, Lincoln University College, Malaysia, <u>tagred.phdscholar@lincoln.edu.my</u> ²Faculty of nursing, Lincoln University College, Malaysia, faridah.msaid@lincoln.edu.my

³Faculty of management, Lincoln University College, Malaysia, <u>drdhakir@lincoln.edu.my</u>

increased workloads for remaining staff, diminished morale, and escalating recruitment and training costs (Alreshidi et al., 2021; Albalawi et al., 2024).

Two key factors often cited in the literature as drivers of nursing job dropout are workload and the work environment. Workload refers to the volume and intensity of tasks nurses manage, encompassing clinical responsibilities, administrative duties, and the complexity of patient care. When workloads become excessive, they create conditions for emotional exhaustion, stress, and burnout, all of which are associated with reduced job satisfaction and increased turnover intentions (Alenezi, Aboshaiqah, & Baker, 2018). This is especially pronounced in Saudi Arabia's healthcare system, where high patient-to-nurse ratios and staffing shortages compound the pressures on nurses, particularly in high-stress areas like intensive care units (Al Bazroun et al., 2023). For instance, Chetty (2021) highlights that Saudi ICU nurses frequently report feeling overwhelmed by the intensity of their roles, leading to a higher likelihood of leaving their positions.

The work environment also plays a crucial role in shaping nurses' experiences and decisions to remain in their jobs. A supportive work environment characterized by adequate managerial support, effective communication, opportunities for professional growth, and positive interpersonal relationships can significantly enhance job satisfaction and nurse retention (Alharbi, Dahinten, & MacPhee, 2020; Almutairi et al., 2022). Conversely, when nurses operate in environments where resources are insufficient, management is unsupportive, and collaboration is lacking, the resulting dissatisfaction can accelerate their intention to leave (Alzahrani, 2022). In the Saudi context, systemic challenges such as reliance on expatriate nurses, cultural barriers, and limited professional development opportunities further exacerbate the negative impact of an unfavorable work environment on turnover rates (Alreshidi et al., 2021).

Amid these challenges, job satisfaction emerges as a critical factor that mediates the relationship between workload, work environment, and nursing job dropout. Defined as the extent to which individuals feel content and fulfilled with their work, job satisfaction reflects both intrinsic factors (such as professional growth and recognition) and extrinsic factors (such as pay, work conditions, and job security). Studies consistently show that high levels of job satisfaction act as a protective factor, buffering the adverse effects of high workload and unfavorable work environments on turnover intentions (Alharbi & Alilyyani, 2023; Alzailai, Barriball, & Xyrichis, 2021). Conversely, low job satisfaction not only heightens the impact of these stressors but also serves as a direct predictor of nursing dropout. For instance, Alharbi et al. (2020) found that dissatisfaction with managerial support and workload significantly reduced nurses' emotional resilience, increasing their intent to leave.

In Saudi Arabia, the mediating role of job satisfaction becomes even more critical, given the unique characteristics of the healthcare system. The reliance on expatriate nurses, who often face cultural and language barriers, further complicates efforts to improve job satisfaction and retention (Alreshidi et al., 2021). Additionally, newly graduated Saudi nurses report high levels of work-related anxiety and stress, stemming from insufficient workplace support and mentorship opportunities (Alrashedi & Boshra, 2023). Addressing these issues requires not only a detailed understanding of how workload and work environment influence job satisfaction but also tailored interventions that align with the specific cultural and organizational dynamics of Saudi healthcare.

This study, therefore, seeks to investigate the complex interplay between workload, work environment, and job satisfaction and their collective impact on nursing job dropout in Saudi Arabia. By positioning job satisfaction as a mediating factor, the research aims to uncover the mechanisms through which these variables interact and identify strategies to improve nurse retention. The findings are expected to provide evidence-based insights for healthcare policymakers, administrators, and nursing managers, enabling them to design interventions that address the root causes of dissatisfaction and turnover. Ultimately, such efforts will not only stabilize the nursing workforce but also enhance the quality of healthcare services delivered in Saudi Arabia.

2. Theoretical Foundations

The theoretical underpinnings of this study are grounded in frameworks that explain how workplace conditions influence employee behavior, satisfaction, and turnover intentions. These foundations provide a lens through which the relationships between workload, work environment, job satisfaction, and nursing job dropout can be understood. This study integrates concepts from two primary theories: the Job Demands-Resources (JD-R) Model and the Two-Factor Theory of Motivation (Herzberg's Theory).

2.1The Job Demands-Resources (JD-R) Model

The Job Demands-Resources (JD-R) Model offers a comprehensive framework for understanding the interplay between workplace demands, resources, and their effects on employee outcomes. The model categorizes workplace characteristics into two key components: job demands and job resources. Job demands refer to the physical, emotional, or cognitive efforts required of employees that can lead to strain and burnout when excessive. In the context of nursing, these demands include high patient-to-nurse ratios, extended working hours, emotionally intense care responsibilities, and administrative tasks. These challenges are particularly pronounced in Saudi Arabia, where nurses frequently report overwhelming workloads due to staff shortages and the increasing complexity of patient care (Alenezi, Aboshaiqah, & Baker, 2018). Such demands are closely linked to stress, emotional exhaustion, and diminished job satisfaction, which ultimately contribute to turnover intentions (Chetty, 2021).

On the other hand, job resources are the physical, social, psychological, or organizational elements that help employees manage their demands and foster personal development, engagement, and well-being. In nursing, these resources include managerial support, effective teamwork, adequate staffing, access to training, and opportunities for professional development. The JD-R Model posits that these resources not only buffer the negative effects of high demands but also enhance motivation and job satisfaction. In Saudi healthcare settings, however, the availability of these resources is often limited. Many nurses cite insufficient managerial support, inadequate mentorship, and limited career advancement opportunities as significant barriers to job satisfaction (Alreshidi et al., 2021; Almutairi et al., 2022). A central tenet of the JD-R Model is its dual-process pathway. The first pathway, the health impairment process, suggests that excessive job demands deplete employees' energy and contribute to stress and burnout, ultimately leading to turnover. The second pathway, the motivational process, highlights how job resources enhance

engagement, foster job satisfaction, and improve retention. The interplay of these pathways is particularly relevant in Saudi Arabia's healthcare system, where the imbalance between high demands and limited resources has been identified as a significant driver of nursing turnover (Alharbi, Dahinten, & MacPhee, 2020).

Moreover, the JD-R Model underscores the critical role of job satisfaction as an outcome influenced by the balance of demands and resources. In high-demand environments, the availability of sufficient resources can mitigate stress and enhance job satisfaction, reducing the likelihood of turnover. Conversely, a lack of resources exacerbates the negative effects of job demands, leading to dissatisfaction and increased dropout rates. This dynamic is evident in Saudi Arabian hospitals, where many nurses report feeling undervalued and overburdened, resulting in decreased morale and a higher intention to leave their roles (Alzailai, Barriball, & Xyrichis, 2021). By applying the JD-R Model, this study seeks to explore the relationship between workload (as a job demand), work environment (as a job resource), and job satisfaction among nurses in Saudi Arabia. The framework provides a structured approach to understanding how these factors interact to influence nursing job dropout, offering insights for designing interventions that balance demands with adequate resources to improve satisfaction and retention.

2.2Two-Factor Theory of Motivation (Herzberg's Theory)

Herzberg's Two-Factor Theory, also known as the Motivation-Hygiene Theory, provides a foundational framework for understanding job satisfaction and its impact on employee behavior, including turnover intentions. The theory posits that workplace factors influencing job satisfaction and dissatisfaction can be categorized into two distinct groups: hygiene factors and motivators. These factors function independently, with hygiene factors addressing dissatisfaction and motivators enhancing satisfaction. Hygiene factors are extrinsic aspects of the work environment that, when inadequate or absent, lead to job dissatisfaction. These include salary, job security, working conditions, interpersonal relationships, and organizational policies. In the nursing profession, particularly in Saudi Arabia, issues such as excessive workload, inadequate staffing, limited managerial support, and insufficient resources are frequently cited as sources of dissatisfaction (Al-Dossary, 2022; Alreshidi et al., 2021). For instance, many nurses in Saudi hospitals report feeling overworked and unsupported, which not only diminishes their morale but also contributes to high turnover rates. While addressing hygiene factors can prevent dissatisfaction, their presence alone does not necessarily lead to job satisfaction, highlighting the need for additional efforts to foster positive engagement.

In contrast, motivators are intrinsic factors that drive job satisfaction and promote employee motivation. These include opportunities for professional growth, recognition, a sense of achievement, and meaningful work. In the Saudi nursing context, the lack of career advancement opportunities and recognition often leaves nurses feeling undervalued, reducing their intrinsic satisfaction (Al Bazroun et al., 2023). For example, many expatriate nurses in Saudi Arabia face barriers to professional development due to cultural and systemic challenges, further exacerbating their dissatisfaction and increasing their likelihood

of leaving the profession (Alreshidi et al., 2021). By focusing on motivators, organizations can enhance job satisfaction and foster long-term commitment. The Two-Factor Theory highlights the importance of addressing both hygiene factors and motivators to create a balanced and supportive work environment. While resolving hygiene issues such as improving working conditions or ensuring fair pay prevents dissatisfaction, fostering motivators is essential for achieving sustained satisfaction and retention. This dual approach is particularly relevant in high-demand professions like nursing, where both extrinsic and intrinsic factors significantly influence job outcomes (Alzahrani, 2022).

By incorporating Herzberg's theory, this study examines how both hygiene factors (e.g., workload and work environment) and motivators (e.g., recognition and growth opportunities) contribute to job satisfaction and nursing job dropout in Saudi Arabia. The theory underscores the need for healthcare organizations to simultaneously address dissatisfaction caused by poor working conditions and promote satisfaction through intrinsic motivators to enhance nurse retention. Understanding this balance is critical for designing effective interventions that improve job satisfaction, reduce turnover, and stabilize the nursing workforce in Saudi Arabia.

2.3 Mediating Role of Job Satisfaction

Job satisfaction plays a critical mediating role in the relationship between workplace factors such as workload and work environment and key outcomes like nursing job dropout. Defined as an employee's emotional and cognitive evaluation of their job experiences, job satisfaction reflects both intrinsic factors (e.g., professional growth and recognition) and extrinsic factors (e.g., salary, working conditions, and managerial support). This mediating role is particularly vital in high-demand professions like nursing, where workload and work environment have a profound influence on retention (Alharbi, Dahinten, & MacPhee, 2020). In the context of workload, excessive demands often lead to physical and emotional exhaustion, creating dissatisfaction that increases turnover intentions. Nurses in Saudi Arabia frequently report that high patient-to-nurse ratios, extended working hours, and the complexity of patient care contribute to burnout, directly affecting their job satisfaction (Alenezi, Aboshaiqah, & Baker, 2018; Al Bazroun et al., 2023). However, job satisfaction acts as a buffer, mitigating the negative effects of workload. For instance, nurses who find fulfillment in their roles through factors like a sense of purpose or professional growth may tolerate high workloads better, reducing the likelihood of job dropout (Alharbi & Alilyyani, 2023).

Similarly, the work environment plays a pivotal role in shaping nurses' satisfaction. A supportive work environment, characterized by adequate staffing, effective communication, managerial support, and opportunities for career advancement, fosters positive job satisfaction. Conversely, an unfavorable environment, marked by poor leadership, inadequate resources, and strained interpersonal relationships, contributes to dissatisfaction and turnover (Alzahrani, 2022; Almutairi et al., 2022). In Saudi Arabia, many nurses cite the lack of professional development opportunities and insufficient managerial support as significant barriers to job satisfaction (Alreshidi et al., 2021). In such cases, even a modest

improvement in job satisfaction such as recognition for their work or strengthened teamwork can mediate the negative impacts of the work environment on turnover intentions. Job satisfaction functions as a mediator by explaining the mechanism through which workload and work environment influence job dropout. This mediating role is supported by theoretical models like the Job Demands-Resources (JD-R) Model, which posits that workplace demands (e.g., workload) and resources (e.g., work environment) affect employee outcomes indirectly through job satisfaction. For instance, excessive workload leads to stress and dissatisfaction, increasing turnover risks, while supportive work environments enhance satisfaction and reduce the likelihood of leaving (Alharbi, Dahinten, & MacPhee, 2020; Alzailai, Barriball, & Xyrichis, 2021). Additionally, Herzberg's Two-Factor Theory underscores the importance of addressing both dissatisfactions caused by hygiene factors (e.g., poor working conditions) and promoting intrinsic motivators (e.g., recognition and growth opportunities) to boost satisfaction and retention.

Empirical evidence from Saudi Arabia highlights this mediating role. Alzailai, Barriball, and Xyrichis (2021) found that job satisfaction significantly influenced the relationship between work stressors and turnover intentions among critical care nurses. Similarly, Alharbi and Alilyyani (2023) observed that job satisfaction mitigated the adverse effects of poor work environments on nurses' emotional resilience, reducing their likelihood of leaving. These findings emphasize that interventions targeting job satisfaction can reduce the negative impacts of workload and poor work environments, ultimately lowering turnover rates.

2.4Relevance to Saudi Arabia's Healthcare Context

The issue of nursing job dropout is particularly relevant in Saudi Arabia, where the healthcare system faces unique challenges stemming from rapid population growth, the increasing burden of chronic diseases, and the accelerated expansion of healthcare infrastructure. These factors have created an unprecedented demand for nursing services, further straining an already limited workforce. Despite significant investments in healthcare development under initiatives such as Vision 2030, the nursing workforce in Saudi Arabia continues to grapple with high turnover rates, which undermine the stability of the system and affect the quality of care (Alreshidi et al., 2021; Albalawi et al., 2024). Workload in Saudi Arabia's healthcare context is a critical concern, driven by high patient-to-nurse ratios, extended working hours, and the complex care needs of an aging population. For example, nurses in intensive care units (ICUs) often report physical and emotional exhaustion due to excessive demands, which directly contributes to job dissatisfaction and turnover intentions (Al Bazroun et al., 2023; Chetty, 2021). The strain is further amplified in regions with limited nursing resources, where healthcare facilities rely heavily on expatriate nurses. These nurses, who comprise a significant portion of the workforce, often face additional challenges, such as cultural and language barriers, that exacerbate stress and dissatisfaction (Alreshidi et al., 2021).

The work environment in Saudi hospitals also presents significant challenges. Many nurses report inadequate managerial support, insufficient staffing levels, and limited opportunities for professional development as key factors contributing to dissatisfaction (Alzahrani, 2022; Almutairi et al., 2022). For newly graduated Saudi nurses, the transition into the workforce is particularly challenging, as they often encounter unsupportive environments that fail to provide adequate mentorship and training (Alrashedi & Boshra, 2023). These factors collectively create a negative workplace atmosphere that discourages retention and contributes to the high rates of nursing dropout observed in the country. Another factor unique to Saudi Arabia's healthcare system is the reliance on expatriate nurses, who make up the majority of the nursing workforce. While expatriates fill critical gaps, their retention is often complicated by factors such as limited cultural integration, absence of support networks, and systemic barriers to career progression. These challenges not only affect their job satisfaction but also contribute to high turnover rates among this group (Alreshidi et al., 2021). Additionally, Saudi hospitals must address the challenge of aligning diverse cultural perspectives within the workforce to create a harmonious and supportive work environment.

Job satisfaction is a particularly critical factor in the Saudi healthcare context, as it mediates the effects of workload and work environment on nursing job dropout. Studies in Saudi Arabia have consistently shown that dissatisfaction stemming from inadequate salaries, limited recognition, and unfavorable working conditions significantly predicts turnover intentions (Alharbi, Dahinten, & MacPhee, 2020; Alharbi & Alilyyani, 2023). Efforts to enhance job satisfaction by addressing both intrinsic motivators (e.g., professional growth and recognition) and extrinsic hygiene factors (e.g., pay and working conditions) are essential for improving retention. Given Saudi Arabia's cultural, systemic, and workforce dynamics, it is evident that addressing nursing job dropout requires targeted, context-specific strategies. Interventions must account for the interplay between workload, work environment, and job satisfaction while considering the unique challenges posed by the reliance on expatriates and the evolving demands of the healthcare system. The findings from this study aim to provide actionable insights for healthcare policymakers and administrators to address these issues, reduce turnover, and foster a more sustainable nursing workforce.

3. Gap in the Literature

While numerous studies have explored factors influencing nursing turnover, significant gaps remain in understanding the interplay between workload, work environment, and job satisfaction as predictors of nursing job dropout, particularly in the Saudi Arabian healthcare context. This section highlights key gaps that this study aims to address, emphasizing the need for a comprehensive examination of these variables in an integrated framework. Existing research has established that workload and work environment influence nursing turnover, but relatively few studies have investigated the mediating role of job satisfaction in these relationships. For instance, while studies such as Alenezi, Aboshaiqah, and

Baker (2018) highlight the direct impact of excessive workload on burnout and turnover, they often overlook how job satisfaction acts as a buffer, potentially mitigating these effects. Similarly, research focusing on work environment factors, such as managerial support and resource availability (Alharbi, Dahinten, & MacPhee, 2020), does not always account for how satisfaction mediates turnover intentions. This study addresses this gap by examining how job satisfaction mediates the relationships between workload, work environment, and nursing job dropout, providing a nuanced understanding of these dynamics.

The Saudi Arabian healthcare system presents unique challenges, including a heavy reliance on expatriate nurses, cultural diversity, and rapid expansion of healthcare services under Vision 2030. While global studies on nursing turnover provide valuable insights, they often fail to capture the cultural, systemic, and organizational nuances of Saudi Arabia. Research specific to Saudi Arabia has primarily focused on isolated factors, such as work stress (Alenezi, Aboshaiqah, & Baker, 2018) or job dissatisfaction (Alreshidi et al., 2021) but lacks a holistic approach that integrates multiple factors within a single conceptual framework. This study addresses this gap by examining workload, work environment, and job satisfaction collectively, with a focus on their cumulative impact on nursing job dropout in Saudi Arabia. Expatriate nurses constitute a significant portion of the nursing workforce in Saudi Arabia, yet their unique challenges and contributions are often underrepresented in turnover research. Issues such as cultural adaptation, language barriers, and limited career advancement opportunities are specific to this group and significantly influence their job satisfaction and retention (Alreshidi et al., 2021). Existing studies have largely treated the nursing workforce as a homogenous entity, without accounting for the differential experiences of expatriate nurses compared to their Saudi counterparts. This study seeks to fill this gap by incorporating the unique experiences of expatriate nurses into the analysis of job satisfaction and its mediating role in turnover. While workload has been identified as a key driver of nurse turnover, there is a lack of detailed investigation into its impact in high-stress settings such as intensive care units (ICUs) and emergency departments. Research has shown that these areas experience higher turnover rates due to the physical and emotional demands placed on nurses (Chetty, 2021; Al Bazroun et al., 2023). However, there is limited understanding of how workload in these settings interacts with other factors, such as work environment and job satisfaction, to influence dropout. This study seeks to address this by examining the role of workload across different nursing specialties, with a focus on high-stress units.

Although several studies have employed theoretical models like the Job Demands-Resources (JD-R) Model and Herzberg's Two-Factor Theory, they are often applied in isolation rather than integrated to provide a comprehensive understanding of turnover dynamics. For example, the JD-R Model emphasizes the balance between job demands and resources but does not explicitly address intrinsic motivators, such as professional growth, that are central to Herzberg's theory. Conversely, Herzberg's theory focuses on satisfaction and dissatisfaction but lacks the predictive structure provided by the JD-R framework. This study bridges this gap by integrating both theories to create a more robust framework for analyzing nursing job dropout. Despite the wealth of literature identifying factors contributing to nursing turnover,

there is limited empirical research on interventions that address these issues in the Saudi context. Studies have suggested potential solutions, such as improving staffing levels or providing professional development opportunities, but these recommendations are often not empirically tested (Alharbi & Alilyyani, 2023). This study aims to provide actionable insights by empirically validating the relationships among workload, work environment, job satisfaction, and nursing turnover, offering evidence-based recommendations for healthcare administrators and policymakers.

4. Conceptual Framework Development

4.1Workload

Defined as the volume and complexity of tasks nurses handle, workload is a critical factor influencing stress, emotional exhaustion, and burnout. Excessive workload has been consistently linked to increased turnover intentions in high-pressure settings like intensive care units (ICUs) and emergency departments (Alenezi, Aboshaiqah, & Baker, 2018). In Saudi Arabia, nursing workloads are further intensified by staff shortages and the growing complexity of patient needs (Chetty, 2021). High workload is thus hypothesized to directly increase nursing job dropout and indirectly reduce job satisfaction (Alharbi, Dahinten, & MacPhee, 2020).

4.2Work Environment

The work environment encompasses the organizational and interpersonal factors that shape nurses' job experiences. Positive work environments, characterized by managerial support, teamwork, and professional development opportunities, are strongly associated with increased job satisfaction and retention (Alzailai, Barriball, & Xyrichis, 2021). Conversely, environments with poor leadership, insufficient resources, and a lack of recognition contribute to dissatisfaction and turnover intentions (Almutairi et al., 2022). The Saudi context adds unique challenges, such as limited mentorship for newly graduated nurses and systemic barriers faced by expatriate nurses, which further diminish work environment quality (Alreshidi et al., 2021).

4.3Job Satisfaction

Acting as a mediating variable, job satisfaction reflects nurses' emotional and cognitive evaluations of their work. Herzberg's theory distinguishes between hygiene factors (e.g., pay, job security) and motivators (e.g., recognition, career growth) as determinants of satisfaction (Herzberg, 1968). High job satisfaction has been shown to buffer the adverse effects of workload and poor work environments, reducing the likelihood of turnover (Alharbi & Alilyyani, 2023).

4.4Nursing Job Dropout

Defined as the decision to leave a current nursing role or the profession entirely, nursing job dropout is the dependent variable in this study. High turnover disrupts healthcare delivery, increases workloads for remaining staff, and undermines workforce stability (Alreshidi et al., 2021).

4.5Theoretical Integration

This study integrates two key theoretical frameworks the Job Demands-Resources (JD-R) Model and Herzberg's Two-Factor Theory of Motivation to provide a comprehensive understanding of the factors influencing nursing job dropout, with a specific focus on the mediating role of job satisfaction. These frameworks complement each other by addressing both external workplace conditions and internal motivational drivers, offering a multidimensional approach to analyzing turnover in the nursing profession. The JD-R Model, introduced by Demerouti et al. (2001), provides a dual-process framework to explain how workplace conditions affect employee outcomes. The model posits that job demands, such as workload, create strain and lead to negative outcomes like stress, burnout, and turnover, especially when these demands exceed an employee's coping capacity. In contrast, job resources, such as a supportive work environment, promote engagement and mitigate the adverse effects of demands. These resources can include managerial support, effective teamwork, and opportunities for professional growth, which are critical in buffering the impact of high workload. In the Saudi Arabian context, the JD-R Model is particularly relevant as nurses face unique challenges, including high patient-to-nurse ratios, emotionally intense care demands, and insufficient staffing in critical care units (Chetty, 2021). By examining the interplay between demands and resources, the JD-R Model highlights the importance of balancing these factors to improve job satisfaction and reduce nursing turnover.

Herzberg's Two-Factor Theory (Herzberg, 1968) complements the JD-R Model by differentiating between two types of workplace factors: hygiene factors and motivators. Hygiene factors, such as salary, job security, and working conditions, are extrinsic elements that prevent dissatisfaction but do not inherently enhance satisfaction. In contrast, motivators, such as recognition, professional growth opportunities, and meaningful work, are intrinsic factors that drive job satisfaction and engagement. The theory emphasizes that addressing hygiene factors alone is insufficient for fostering retention; intrinsic motivators must also be cultivated. In Saudi Arabia, both hygiene factors and motivators are critical. Nurses frequently cite dissatisfaction with pay, lack of recognition, and limited career advancement opportunities as key reasons for turnover (Alreshidi et al., 2021). While addressing workload and improving the work environment can reduce dissatisfaction, incorporating motivators like professional development and recognition is essential to sustaining job satisfaction and commitment.

The integration of these two frameworks provides a holistic lens to understand nursing job dropout. The JD-R Model establishes the balance between demands (e.g., workload) and resources (e.g., work environment), while Herzberg's Two-Factor Theory focuses on the specific factors influencing job

satisfaction. Job satisfaction serves as the bridge between these theories, acting as both an outcome of the work environment and a mediating factor between workload and nursing job dropout. For instance, when job resources and intrinsic motivators are present, nurses are more likely to feel satisfied and less likely to leave, even under high workloads (Alharbi, Dahinten, & MacPhee, 2020). This theoretical integration is particularly significant in Saudi Arabia, where systemic challenges such as reliance on expatriate nurses, cultural adaptation, and limited professional development opportunities amplify turnover risks (Albalawi et al., 2024). The combined frameworks underscore the need to address both external workplace conditions (as per the JD-R Model) and internal motivators (as per Herzberg's theory) to reduce nursing job dropout. For example, providing adequate staffing, mentorship programs, and recognition for expatriate nurses can simultaneously improve job satisfaction and mitigate turnover.

4.6Proposed Framework

The proposed framework integrates insights from the Job Demands-Resources (JD-R) Model and Herzberg's Two-Factor Theory to explore the relationships between workload, work environment, job satisfaction, and nursing job dropout in the context of Saudi Arabia's healthcare system. It emphasizes the direct and indirect pathways that link these variables, with job satisfaction playing a central mediating role. This framework is designed to provide a comprehensive understanding of the factors influencing nursing turnover and to inform targeted interventions for workforce retention.

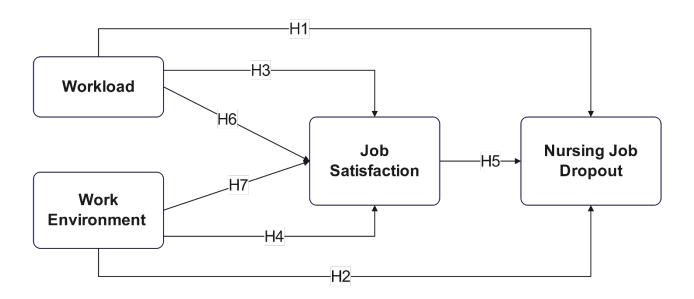


Fig. 1: Research Conceptual Framework

5. Practical Implications

Healthcare administrators are responsible for managing hospital operations and ensuring the well-being of staff. Addressing excessive workload is a critical focus area, as it is a primary driver of stress and burnout among nurses (Alenezi, Aboshaiqah, & Baker, 2018). Administrators can mitigate workload pressures by increasing nurse-to-patient ratios through strategic hiring, particularly in high-demand areas like ICUs and emergency departments. Delegating non-clinical tasks to support staff, such as nurse aides and administrative personnel, can also reduce the workload on nurses, allowing them to focus on patient care (Chetty, 2021). Additionally, healthcare administrators can improve workplace conditions by allocating resources to enhance facilities, such as providing well-equipped break rooms and ergonomic workstations. These changes improve nurses' comfort and well-being during shifts. Administrators can also establish formal recognition programs to acknowledge nurses' contributions, which significantly enhance morale and job satisfaction (Herzberg, 1968). Such initiatives foster a supportive workplace culture and reduce turnover.

Policymakers play a critical role in shaping systemic healthcare strategies and reforms. A key implication for policymakers is the development of national policies to standardize workload distribution, ensuring equitable patient assignments and preventing excessive workload among nurses (Alharbi, Dahinten, & MacPhee, 2020). Additionally, policymakers can establish mentorship and cultural orientation programs to support expatriate nurses, who often face adaptation challenges, including cultural and language barriers (Alreshidi et al., 2021). Monitoring systems for job satisfaction and turnover rates across healthcare institutions are essential for evidence-based policy decisions. These systems allow policymakers to identify areas with high turnover, allocate resources effectively, and tailor interventions to address workforce issues (Alzailai, Barriball, & Xyrichis, 2021). Aligning these policies with Vision 2030 goals further supports the sustainable development of Saudi Arabia's healthcare sector.

Nursing managers are instrumental in shaping nurses' day-to-day work experiences and ensuring a positive work environment. They can reduce workload-related stress by promoting equitable task distribution and offering flexible scheduling options. These approaches are particularly relevant in high-stress units like ICUs, where nurses often experience emotional exhaustion (Al Bazroun et al., 2023). To improve job satisfaction, nursing managers can implement recognition programs that celebrate individual and team achievements. Such programs enhance morale and reinforce a sense of value among staff (Herzberg, 1968). Additionally, providing mentorship for newly graduated and expatriate nurses helps build confidence and fosters a sense of belonging within teams (Alrashedi & Boshra, 2023). Maintaining open communication channels to address workplace concerns promptly further strengthens job satisfaction and retention.

Workforce development planners are tasked with ensuring the long-term sustainability of the nursing workforce. Investing in professional development programs, such as continuing education, leadership training, and advanced degree scholarships, is crucial for enhancing nurses' intrinsic motivation and

career satisfaction (Alharbi & Alilyyani, 2023). Planners should also prioritize expanding the pipeline of qualified nursing graduates by collaborating with educational institutions and offering financial incentives for local Saudi students pursuing nursing careers (Alreshidi et al., 2021). For expatriate nurses, workforce planners should address systemic barriers to career advancement and provide cultural orientation programs to ease their transition into the Saudi healthcare system. Tailored support for expatriate nurses, who make up a significant portion of the workforce, ensures their retention and engagement, thereby stabilizing the overall nursing workforce (Alzahrani, 2022).

6. Conclusion

This study provides a comprehensive understanding of the factors influencing nursing job dropout in Saudi Arabia by examining the relationships between workload, work environment, job satisfaction, and turnover intentions. Using the Job Demands-Resources (JD-R) Model and Herzberg's Two-Factor Theory of Motivation as theoretical foundations, the study highlights the critical role of job satisfaction as both a direct determinant of turnover and a mediator in the relationship between workplace conditions and nursing retention. The findings emphasize that excessive workload, characterized by high patient-to-nurse ratios and the intensity of clinical demands, directly increases stress and burnout among nurses, significantly contributing to turnover. Conversely, a supportive work environment marked by adequate managerial support, resource availability, and opportunities for professional growth positively influences job satisfaction and mitigates turnover risks. Job satisfaction emerges as a key variable, bridging the gap between these workplace factors and turnover, underscoring its importance in reducing nursing dropout.

In the Saudi Arabian healthcare context, addressing these issues requires targeted strategies tailored to the unique challenges of the sector, including high reliance on expatriate nurses, cultural adaptation barriers, and systemic workforce shortages. Practical implications include redistributing workload, fostering supportive environments, improving job satisfaction through intrinsic motivators such as recognition and career development, and implementing policies that address both local and expatriate nurses' needs. This study aligns with Saudi Arabia's Vision 2030 initiatives by providing actionable insights to improve workforce stability and healthcare quality. By addressing the root causes of nursing job dropout, healthcare administrators, policymakers, and nursing managers can create a sustainable and motivated workforce, ultimately enhancing patient care and the overall efficiency of the healthcare system.

Future research should explore longitudinal data to examine how interventions targeting workload, work environment, and job satisfaction affect turnover over time. Additionally, expanding the focus to include specific subpopulations of nurses, such as expatriates and newly graduated nurses, will provide deeper insights into their unique challenges and needs. With such efforts, the nursing workforce in Saudi Arabia can be better equipped to meet the growing demands of its dynamic healthcare system.

7. References

Agus, A., & Selvaraj, R. (2020). The mediating role of employee commitment in the relationship between quality of work life and the intention to stay. Employee Relations: The International Journal, 42(6), 1231-1248.

Al Bazroun, M. I., Aljarameez, F., Alhamza, R., Ahmed, G., & Alhybah, F. (2023). Factors influencing job satisfaction and anticipated turnover among intensive care nurses in Saudi Arabia. British Journal of Healthcare Management.

Albalawi, A. M., Pascua, G. P., Alsaleh, S. A., Sabry, W., Ahajan, S. N., Abdulla, J., ... & Salih, S. S. (2024). Factors influencing nurses turnover in Saudi Arabia: a systematic review. In Nursing Forum (Vol. 2024, No. 1, p. 4987339). Wiley.

Albougami, A., Almazan, J., Cruz, J., Alquwez, N., Alamri, M. S., Adolfo, C. A., & Roque, M. Y. (2020). Factors affecting nurses' intention to leave their current jobs in Saudi Arabia. International Journal of Health Sciences, 14, 33-40.

Al-Dossary, R. (2022). The effects of nursing work environment on patient safety in Saudi Arabian hospitals. Frontiers in Medicine, 9.

Alenezi, A., Aboshaiqah, A., & Baker, O. (2018). Work-related stress among nursing staff working in government hospitals and primary health care centres. International Journal of Nursing Practice, 24.

Alenezi, A., Aboshaiqah, A., & Baker, O. (2018). Work-related stress among nursing staff working in government hospitals and primary health care centres. International Journal of Nursing Practice, 24.

Alharbi, A. A., Dahinten, V. S., & MacPhee, M. (2020). The relationships between nurses' work environments and emotional exhaustion, job satisfaction, and intent to leave among nurses in Saudi Arabia. Journal of Advanced Nursing.

Alharbi, A., & Alilyyani, B. (2023). The effect of emergency nurses' job satisfaction and intent to leave on patient safety culture: A cross-sectional study. Nursing Forum.

Alkorashy, H., & Alanazi, M. (2023, February). Personal and job-related factors influencing the work engagement of hospital nurses: a cross-sectional study from Saudi Arabia. In Healthcare (Vol. 11, No. 4, p. 572). MDPI.

Almutairi, D. R., Alkorbi, S. A., Alghabbashi, M., Aly, S., & Alsulami, S. (2022). Effect of work environment on nurses' job performance: Systematic review. International Journal of Health Sciences.

Alrashedi, K., & Boshra, A. (2023). Exploring work-related anxiety among newly graduated nurses in the Riyadh region. Sudan Journal of Medical Sciences.

Alreshidi, N. M., Alrashidi, L. M., Alanazi, A. N., & Alshammeri, E. H. (2021). Turnover among foreign nurses in Saudi Arabia. Journal of public health research, 10(1), jphr-2021.

Alreshidi, N., Alrashidi, L., Alanazi, A. N., & Alshammri, E. H. (2021). Turnover among foreign nurses in Saudi Arabia. Journal of Public Health Research, 10.

Alshareef, A., Wraith, D., Dingle, K., & Mays, J. (2020). Identifying factors influencing Saudi Arabian nurses' turnover. Journal of Nursing Management.

Alsufyani, A., Almalki, K. E., Alsufyani, Y. M., Aljuaid, S. M., Almutairi, A., Alsufyani, B. O., Alshahrani, A., Baker, O., & Aboshaiqah, A. (2021). Impact of work environment perceptions and communication satisfaction on the intention to quit: An empirical analysis of nurses in Saudi Arabia. PeerJ, 9.

Alzahrani, M. S. (2022). Impact of work environment on nurse's retention at hospital: Scoping review. Evidence-Based Nursing Research, 4(2), 39-53.

Alzahrani, S., & Hasan, A. A. (2019). Transformational leadership style on nursing job satisfaction amongst nurses in hospital settings: Findings from systematic review. Global Journal of Health Science, 11(6), 25.

Alzailai, N., Barriball, L., & Xyrichis, A. (2021). Burnout and job satisfaction among critical care nurses in Saudi Arabia and their contributing factors: A scoping review. Nursing Open, 8.

Ambani, Z., Kutney-Lee, A., & Lake, E. (2020). The Nursing Practice Environment and Nurse Job Outcomes: A Path Analysis of Survey Data. Journal of Clinical Nursing.

Andargeery, S. (2019). Factors Associated with Turnover Intention among Saudi Newly Graduated Nurses (Doctoral dissertation, The University of Wisconsin-Milwaukee).

Assiri, S. M., Shehata, F., & Assiri, M. M. (2020). Relationship of job satisfaction with perceived organizational support and quality of care among Saudi nurses. Health.

Batayneh, M. H., Ali, S., & Nashwan, A. (2019). The burnout among multinational nurses in Saudi Arabia. Open Journal of Nursing.

Chetty, K. (2021). ICU nurses voice their concerns on workload and wellbeing in a Saudi Arabian Hospital: a need for employee wellbeing program. Saudi J Nurs Health Care, 4(9), 296-307.

Chetty, K. (2021). The cost of caring: ICU workload stressors and the Saudi Arabian nurse. Health Science Journal, 15(2), 1-7.

Falatah, R., & Conway, E. (2018). Linking relational coordination to nurses' job satisfaction, affective commitment and turnover intention in Saudi Arabia. Journal of Nursing Management, 27(4), 715-721.

Falatah, R., & Salem, O. (2018). Nurse turnover in the Kingdom of Saudi Arabia: An integrative

review. Journal of Nursing Management, 26, 630-638.

Felicia, F., Sudibjo, N., & Harsanti, H. R. (2023). Impact of psychosocial risk on intention to leave work during COVID-19 in Indonesia: The mediatory roles of burnout syndrome and job satisfaction. Heliyon, 9(7).

Hanoum, F. C., Rizan, M., & Handaru, A. W. (2024). The Role of Work-Life Balance, Work Stress, and Work-Family Conflict in Creating Job Satisfaction and Their Impact on Turnover Intention in Nurses at Level I Health Facilities Hospital in Karawang. Critical Care Nursing Quarterly, 47(4), 346-369.

Holland, P., Tham, T. L., Sheehan, C., & Cooper, B. (2019). The impact of perceived workload on nurse satisfaction with work-life balance and intention to leave the occupation. Applied Nursing Research, ANR.

Ishfaq, M., Al-Hajieh, H., & Alharthi, M. (2022). Quality of Work Life (QWL) and its impact on the performance of the banking industry in Saudi Arabia. International Journal of Financial Studies.

Kaddourah, B., Abu-Shaheen, A. K., & Al-Tannir, M. (2018). Quality of nursing work life and turnover intention among nurses of tertiary care hospitals in Riyadh: a cross-sectional survey. BMC Nursing, 17.

Kline, R. B. (2015). Principles and Practice of Structural Equation Modeling (4th ed.). Guilford Press.

Maharani, A., & Tamara, D. (2024). The occupational stress and work-life balance on turnover intentions with job satisfaction as mediating. SA Journal of Human Resource Management, 22, 2369.

Mansoori, A. A., Khatibi, A., & Azam, S. (2018). Aspects of Leadership Style and Organizational Culture on Organization Performance in Abu Dhabi Public Sector. European Journal of Social Sciences.

Meirun, T., Bano, S., Javaid, M. U., Arshad, M. Z., Shah, M. U., Rehman, U., ... & Ilyas, M. (2020). Nuances of COVID-19 and psychosocial work environment on nurses' Wellbeing: the mediating role of stress and eustress in Lieu to JD-R Theory. Frontiers in Psychology, 11, 570236.

Muthuswamy, V. V. (2022). Saudi Female health workers job performance: Examining the Influence of job burnout (JB), work-life balance (WLB), and work environment (WE). Przestrzeń Społeczna (Social Space), 22(3).

Otoum, R., Hassan, I. I., Ahmad, W. M. A. W., Al-Hussami, M., & Mohd Nawi, M. N. (2021). Mediating Role of Job Satisfaction in the Relationship between Job Performance and Organizational Commitment Components: A Study among Nurses at One Public University Hospital in Malaysia. Malaysian Journal of Medicine & Health Sciences, (3).

- Poku, C. A., Alem, J. N., Poku, R. O., Osei, S. A., Amoah, E. O., & Ofei, A. M. A. (2022). Quality of work-life and turnover intentions among the Ghanaian nursing workforce: A multicentre study. Plos one, 17(9), e0272597.
- Poon, Y. S. 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), 70.
- Saquib, N., Zaghloul, M. S., Saquib, J., Alhomaidan, H. T., Al-Mohaimeed, A., & Al-Mazrou, A. (2019). Association of cumulative job dissatisfaction with depression, anxiety, and stress among expatriate nurses in Saudi Arabia. Journal of Nursing Management, 27(4), 740-748.
- Saud, A. A. S. (2023). The impact of procedural justice on work engagement and career abandonment intention among healthcare workers in Iraq state hospitals (Master's thesis, İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü).
- Shdaifat, E., Al-Shdayfat, N., & Al-Ansari, N. (2023). Professional Quality of Life, Work-Related Stress, and Job Satisfaction among Nurses in Saudi Arabia: A Structural Equation Modelling Approach. Journal of Environmental and Public Health, 2023(1), 2063212.
- Sundari, Z. E., Djumarno, D., Rochbini, D. J., & Lo, S. (2023). The effect of workload, work environment, work stress, and responsibility on nurses' job satisfaction at businesses engaged in the health service sector. JURISMA: Jurnal Riset Bisnis & Manajemen.
- Zhang, Q., Li, X., & Gamble, J. H. (2022). Teacher burnout and turnover intention in higher education: The mediating role of job satisfaction and the moderating role of proactive personality. Frontiers in Psychology, 13, 1076277.