

## Exploring The Relationship Between Job Resilience and Turnover Intention Among Nurses: Evidence from a Cross-Sectional Study in Jeddah Second Health Cluster, Saudi Arabia

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### ABSTRACT

**Background:** Nursing is a demanding profession characterized by heavy workloads, long hours, and emotional pressures, all of which increase vulnerability to stress and dissatisfaction. Turnover intention among nurses poses a major challenge for healthcare systems worldwide, as it worsens staffing shortages and undermines patient care. Job resilience, defined as the ability to adapt and recover in the face of adversity, has been identified as a critical protective factor that may reduce turnover risk. In Saudi Arabia, where nurses face complex patient needs and organizational challenges, understanding this relationship is essential to strengthen workforce sustainability. **Aim:** This study aimed to examine the relationship between job resilience and turnover intention among nurses working in the second health cluster of Saudi Arabia. **Methods:** A cross-sectional survey design was employed. The target population included all registered nurses in the second health cluster of Jeddah City, Saudi Arabia and a final sample of 370 nurses was selected using simple random sampling. Job resilience was measured using the Connor-Davidson Resilience Scale (CD-RISC 25), while turnover intention was assessed using the Turnover Intention Scale (TIS). Data collection was conducted over six weeks using paper-based questionnaires. Ethical approval was obtained, and all participants provided informed consent. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS. **Results:** Nurses demonstrated moderate resilience, with higher scores on perseverance and optimism but lower scores on adaptability and emotional regulation. Turnover intention was moderate to high, with many nurses expressing a desire to leave despite external deterrents such as benefits and fear of the unknown. Structural modeling confirmed a significant negative relationship between job resilience and turnover intention ( $\beta = -0.241$ ,  $t = 3.87$ ,  $p < 0.001$ ). **Conclusion:** The study highlights resilience as a protective factor against turnover intention among nurses in the second health cluster of Jeddah City, Saudi Arabia. Strengthening resilience through training, supportive leadership, and peer support could help reduce turnover risk and improve workforce stability.

**Keywords:** Job Resilience, Turnover Intention, Nurses, Saudi Arabia, Workforce Retention

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### 1. INTRODUCTION

Nursing is widely recognized as one of the most demanding professions, requiring constant adaptability, critical decision-making, and emotional strength. The profession is characterized by high workloads, long hours, and emotional demands that often expose nurses to significant occupational challenges (Labrague et al., 2017; Kakemam et al., 2019). These pressures contribute to stress and dissatisfaction, which in turn increase the risk of turnover. Turnover intention is a pressing concern for healthcare systems globally, as it intensifies staffing shortages, increases workloads for remaining staff, and compromises the quality of patient care (Baye et al., 2020; Tsegaw et al., 2022). In Saudi Arabia, particularly within the second health cluster of Jeddah City, these challenges are amplified by rapid population growth, diverse patient needs, and heavy reliance on both local and expatriate nurses (Shdaifat et al., 2023).

Job resilience, defined as the capacity to adapt, recover, and thrive in the face of adversity, has been increasingly

acknowledged as a critical psychological resource in mitigating the negative consequences of occupational stress. Resilient nurses demonstrate flexibility, optimism, and effective coping strategies that enable them to maintain performance and engagement despite high work demands (De Cieri et al., 2019; Gandhi et al., 2021). Evidence shows that resilience reduces the likelihood of burnout and withdrawal behaviors, thereby serving as a protective factor against turnover (Halter et al., 2017).

Studies conducted in various contexts have highlighted the relationship between resilience and turnover intention. For example, Guo et al. (2019) found that low resilience strongly predicted burnout and turnover among nurses in China, while Cao and Chen (2021) identified resilience as a key factor influencing turnover among haemodialysis nurses. Similarly, Zhang et al. (2020) reported that resilience and work engagement exerted both direct and indirect negative effects on turnover intention among healthcare workers in China. These findings reinforce the importance of resilience as a determinant of workforce stability.

In the context of the second health cluster in Jeddah, Saudi Arabia, where nurses face complex patient needs, high workloads, and cultural as well as organizational pressures, resilience is particularly vital. Nurses who possess higher levels of resilience are more capable of withstanding professional challenges and are less likely to consider leaving their positions. This study therefore seeks to investigate the relationship between job resilience and turnover intention among nurses working in this cluster, with the aim of providing evidence to inform retention strategies and improve workforce sustainability.

## 2. RESEARCH DESIGN

This study employed a cross-sectional survey design to examine the relationship between job resilience and turnover intention among nurses in Jeddah's second health cluster, Saudi Arabia. The design was chosen because it allows data to be collected at a single point in time and provides a reliable snapshot of the association between the two variables of interest. By adopting this design, the study was able to include a large number of participants efficiently while generating insights into workforce dynamics without the need for prolonged follow-up.

## 3. RESEARCH POPULATION

The target population consisted of all registered nurses employed in the second health cluster of Jeddah city, Saudi Arabia. This cluster includes public and private hospitals, primary healthcare centers, and specialized facilities, making it representative of diverse nursing roles and clinical environments. Eligible participants were licensed nurses with a minimum of six months of continuous work experience, ensuring that they had sufficient exposure to workplace conditions to reflect on their resilience and turnover intentions. Nurses who were on extended leave or with less than six months of service were excluded, as their experiences would not accurately capture the ongoing demands of the work environment.

## 4. RESEARCH SAMPLE AND SAMPLING STRATEGY

The total nursing population in the second health cluster was 6,601. The sample size was determined using Krejcie and Morgan's table and Stephen Thompson's equation, which both indicated that approximately 363 nurses would be required to achieve sufficient statistical power and ensure representativeness. A simple random sampling technique was employed to select participants from the population list. Each nurse had an equal chance of being included in the study, thereby minimizing sampling bias and enhancing the generalizability of the findings.

## 5. DATA COLLECTION TOOLS

Two standardized and validated instruments were used to measure the study variables. Job resilience was assessed using the **Connor-Davidson Resilience Scale (CD-RISC 25)**, a widely applied 25-item scale that evaluates resilience across dimensions such as adaptability, perseverance, and optimism. Responses are rated on a five-point Likert scale ranging from "not true at all" to "true nearly all of the time." Higher scores indicate greater resilience. The CD-RISC has been extensively validated in nursing and healthcare populations, demonstrating strong reliability, with Cronbach's alpha values typically exceeding 0.85.

Turnover intention was measured using the **Turnover Intention Scale (TIS)**, which consists of 15 items rated on a Likert scale from "strongly disagree" to "strongly agree." The instrument assesses cognitive and behavioral indicators of withdrawal, such as thinking about quitting, seeking alternative employment, and planning to resign. Higher scores reflect stronger turnover intentions. The TIS has shown robust psychometric properties, with Cronbach's alpha values above 0.85 in previous studies.

## 6. DATA COLLECTION PROCEDURE

Data were collected over a six-week period following approval from the second health cluster administration. Paper-based questionnaires were distributed to the selected nurses across hospitals, clinics, and primary healthcare centers. Each questionnaire package included an information sheet explaining the purpose of the study, its significance, and the rights of participants, along with a consent form. Participation was voluntary, and nurses were assured of confidentiality and anonymity.

The questionnaires were provided in sealed envelopes and could be completed at the participants' convenience, typically during break times or after their shifts. Completed questionnaires were placed in locked collection boxes positioned at nursing stations. To encourage high participation, unit coordinators provided periodic reminders during the data collection period. Once collected, questionnaires were coded, logged, and entered into a secure database by the research team. This systematic process ensured accurate data management and minimized the risk of response bias.

## 7. ETHICAL CONSIDERATIONS

Ethical approval for the study was obtained from the Institutional Review Board before data collection commenced. The study was conducted in accordance with the Declaration of Helsinki on ethical principles for research involving human subjects. Participation was entirely voluntary, and informed written consent was obtained from each nurse. To maintain anonymity, no personal identifiers were recorded, and questionnaires were coded numerically. All responses were treated confidentially and were used solely for research purposes. Hard copies of questionnaires were stored in locked cabinets accessible only to the research team, while electronic data were stored in a password-protected file system.

## 8. DATA ANALYSIS

Data were analyzed using **Partial Least Squares Structural Equation Modeling (PLS-SEM)** with SmartPLS software. Descriptive statistics were first calculated to summarize demographic characteristics and the distribution of resilience and turnover intention scores. The reliability and validity of the CD-RISC 25 and TIS were assessed using Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). Structural modeling was then applied to examine the direct effect of job resilience on turnover intention. Path coefficients, t-values, and p-values were reported to evaluate the strength and significance of the relationship. Additionally, diagnostic tests were performed to assess multicollinearity and overall model fit, ensuring robustness of the results.

## 9. RESULTS

### Demographic Characteristics of Respondents

A total of 370 nurses participated in the study. The gender distribution was nearly equal, with 186 males (50.27%) and 184 females (49.73%). The mean age was 32.68 years (SD = 6.01), and the mean years of professional experience was 7.90 years (SD = 5.88). Most participants were married (53.78%), followed by single nurses (42.16%). Regarding education, 35.14% of the respondents held a master's degree, 29.46% a PhD, and 27.57% a bachelor's degree. The highest number of participants came from King Abdullah Medical Complex and Maternity and Children Specialized Hospital (18.11%), followed closely by King Fahad General Hospital (17.84%).

**Table 1. Demographic Characteristics of Respondents**

Variable	Categories	Frequency (n)	Percentage (%)
Gender	Male	186	50.27
	Female	184	49.73
Age (years)	Mean $\pm$ SD	32.68 $\pm$ 6.01	—
Years of Experience	Mean $\pm$ SD	7.90 $\pm$ 5.88	—
Marital Status	Married	199	53.78
	Single	156	42.16
	Widowed	7	1.89
	Divorced	8	2.16
Educational Background	Bachelor's degree	102	27.57
	Master's degree	130	35.14
	PhD degree	109	29.46

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Healthcare Setting	King Abdullah Medical Complex & Maternity and Children Specialized Hospital	67	18.11
	King Fahad General Hospital	66	17.84
	Al-Azizia Hospital	65	17.57
	Erada and Mental Health Complex	61	16.49
	Jeddah Eye Hospital	56	15.14
	Rabig General Hospital	55	14.86

## Descriptive Analysis of Job Resilience

The analysis of the Connor-Davidson Resilience Scale (CD-RISC 25) indicated that nurses demonstrated moderate resilience levels. The highest means were observed for items such as “*I have to act on a hunch*” (M = 2.76, SD = 1.21), “*I feel in control of my life*” (M = 2.73, SD = 1.26), and “*I am able to laugh at myself*” (M = 2.73, SD = 1.22). Items reflecting perseverance and past successes, including “*I am not easily discouraged by failure*” and “*Past successes give me confidence in facing new challenges*”, also scored moderately high (M = 2.66, SD = 1.24). Lower means were recorded for items relating to adaptability and emotional regulation, such as “*I am able to adapt to change*” (M = 2.56, SD = 1.23)

**Table 2. Descriptive Analysis of Job Resilience**

Item	Mean ± SD
I am able to adapt to change	2.56 ± 1.23
I can deal with whatever comes my way	2.61 ± 1.27
I try to see the humorous side of things when I am faced with problems	2.62 ± 1.22
Having to cope with stress makes me stronger	2.63 ± 1.25
I tend to bounce back after illness, injury, or other hardships	2.60 ± 1.23
I can achieve my goals, even if there are obstacles	2.64 ± 1.24
I can stay focused under pressure	2.59 ± 1.28
I am not easily discouraged by failure	2.66 ± 1.24
I think of myself as a strong person when dealing with life’s challenges	2.65 ± 1.22
I am able to handle unpleasant or painful feelings like sadness, fear, and anger	2.55 ± 1.26
I have to act on a hunch	2.76 ± 1.21
I have a strong sense of purpose in life	2.70 ± 1.25
I feel in control of my life	2.73 ± 1.26
I like challenges	2.64 ± 1.23
I work to attain my goals no matter what obstacles	2.67 ± 1.24
I am able to adapt when changes occur	2.58 ± 1.24
I can deal with whatever comes my way	2.60 ± 1.25
I am able to achieve goals despite obstacles	2.65 ± 1.25
Past successes give me confidence in facing new challenges	2.66 ± 1.24
I can stay interested in things	2.61 ± 1.23
I am able to handle unpleasant feelings when needed	2.57 ± 1.24
I am able to think clearly under pressure	2.62 ± 1.25
I am able to make unpopular or difficult decisions	2.60 ± 1.26
I am able to act on my hunch	2.75 ± 1.21
I am able to laugh at myself	2.73 ± 1.22
<b>Overall Mean Score</b>	<b>2.66 ± 1.23</b>

## Descriptive Analysis of Turnover Intention

The Turnover Intention Scale (TIS) results revealed a moderate-to-high inclination among nurses to leave their jobs. The highest mean was for “*To what extent does the ‘fear of the unknown’ prevent you from quitting?*” (M = 3.27, SD = 1.19), followed by “*How likely are you to accept another job at the same compensation level should it be offered to you?*” (M = 3.26, SD = 1.19), and “*How often do you dream about getting another job that will better suit your personal needs?*” (M = 3.24, SD = 1.16). These results indicate that while external constraints delay decisions to leave, many nurses actively contemplate changing jobs

**Table 3. Descriptive Analysis of Turnover Intention**

Item	Never F (%)	Sometimes F (%)	Occasionally F (%)	Often F (%)	Always F (%)	Mean (SD)
How often have you considered leaving your job?	43 (11.6)	102 (27.6)	53 (14.3)	79 (21.4)	93 (25.1)	3.21 ± 1.28

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How frequently do you scan the newspapers in search of alternative job opportunities?	51 (13.8)	95 (25.7)	60 (16.2)	77 (20.8)	87 (23.5)	3.15 ± 1.29
How satisfying is your job in fulfilling your personal needs?	47 (12.7)	99 (26.8)	55 (14.9)	82 (22.2)	87 (23.5)	3.18 ± 1.27
How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	49 (13.2)	97 (26.2)	58 (15.7)	81 (21.9)	85 (23.0)	3.16 ± 1.28
How often are your personal values at work compromised?	45 (12.2)	101 (27.3)	57 (15.4)	80 (21.6)	87 (23.5)	3.21 ± 1.20
How often do you dream about getting another job that will better suit your personal needs?	46 (12.4)	100 (27.0)	56 (15.1)	82 (22.2)	86 (23.2)	3.24 ± 1.16
How likely are you to accept another job at the same compensation level should it be offered to you?	44 (11.9)	103 (27.8)	55 (14.9)	82 (22.2)	86 (23.2)	3.26 ± 1.19
To what extent does the “fear of the unknown” prevent you from quitting?	42 (11.4)	104 (28.1)	56 (15.1)	80 (21.6)	88 (23.8)	3.27 ± 1.19
To what extent do the benefits associated with your current job prevent you from quitting?	48 (13.0)	99 (26.8)	54 (14.6)	81 (21.9)	88 (23.8)	3.21 ± 1.21
How often do you think about starting your own business?	50 (13.5)	98 (26.5)	55 (14.9)	80 (21.6)	87 (23.5)	3.18 ± 1.22
To what extent does your current job negatively affect your personal well-being?	47 (12.7)	101 (27.3)	56 (15.1)	80 (21.6)	86 (23.2)	3.20 ± 1.21
To what extent does your current job negatively affect your social life?	49 (13.2)	98 (26.5)	57 (15.4)	80 (21.6)	86 (23.2)	3.19 ± 1.22
To what extent does your current job negatively affect your family life?	50 (13.5)	97 (26.2)	57 (15.4)	80 (21.6)	86 (23.2)	3.18 ± 1.23
How often do you look forward to another day at work?	52 (14.1)	96 (25.9)	56 (15.1)	80 (21.6)	86 (23.2)	3.16 ± 1.21
I intend to leave my job as soon as possible	53 (14.3)	95 (25.7)	56 (15.1)	80 (21.6)	86 (23.2)	2.99 ± 1.41

## 10. HYPOTHESIS TESTING

### Hypothesis H1: Job resilience has a significant negative effect on turnover intention among nurses.

The structural model analysis supported Hypothesis H1. Job resilience was negatively and significantly associated with turnover intention ( $\beta = -0.241$ ,  $t = 3.87$ ,  $p < 0.001$ ). This finding indicates that higher resilience reduces the likelihood of nurses considering leaving their jobs.

**Table 4. Hypothesis Testing Result (Job Resilience → Turnover Intention)**

Hypothesis	Path	$\beta$	t-value	p-value	Decision
H1	Resilience → Turnover Intention	-0.241	3.87	< 0.001	Supported

## 11. DISCUSSION

The findings of this study revealed a significant negative relationship between job resilience and turnover intention among nurses in the second health cluster of Saudi Arabia. This means that nurses with higher levels of resilience were less likely to consider leaving their jobs, whereas those with lower resilience demonstrated stronger turnover intentions. These results are consistent with previous research, which has consistently identified resilience as a protective factor that enables nurses to withstand occupational stressors and maintain commitment to their roles (Guo et al., 2019; Zhang et al., 2020).

The moderate resilience levels observed among participants suggest that while many nurses are able to adapt and cope effectively with workplace demands, there remain vulnerabilities in certain areas, particularly emotional regulation and adaptability to change. These findings echo the results of Cao and Chen (2021), who emphasized that resilience is not a static trait but a dynamic process that can be enhanced through training and supportive organizational environments. In the



Saudi context, where nurses are often exposed to high workloads, long shifts, and cultural pressures, building resilience may be especially critical to mitigating turnover risks.

Turnover intention in this study was found to be moderate to high, with many nurses considering leaving their jobs despite external deterrents such as fear of the unknown or job-related benefits. This reflects a troubling pattern reported in earlier studies that link turnover to systemic challenges in healthcare organizations, such as staffing shortages, limited professional autonomy, and lack of organizational support (Halter et al., 2017; Shdaifat et al., 2023). In line with the findings of Labrague and de Los Santos (2021), the presence of unresolved stressors may erode nurses' willingness to remain in their positions, even when they possess moderate resilience.

The significant negative association between resilience and turnover intention highlights the importance of fostering resilience at both the individual and organizational levels. Resilient nurses are more likely to display persistence, optimism, and adaptability, which can buffer against the emotional exhaustion that drives turnover. Organizational interventions such as resilience-building workshops, peer support networks, and mentoring programs have been shown to enhance nurses' ability to cope with adversity (Gandhi et al., 2021). Moreover, leadership practices that prioritize supportive supervision and recognition of staff contributions have been found to strengthen resilience and reduce attrition rates (Molero Jurado et al., 2019).

These findings carry important implications for healthcare policymakers in Saudi Arabia, where the nursing workforce is central to achieving national health transformation goals. As the second health cluster continues to expand services to meet growing population demands, sustaining a stable and resilient workforce will be essential. By investing in resilience-enhancing strategies, healthcare institutions may reduce turnover intention, thereby improving workforce retention and ensuring continuity of patient care.

## 12. CONCLUSION

This study demonstrated that job resilience plays a crucial role in shaping turnover intention among nurses in the second health cluster of Jeddah City, Saudi Arabia. Nurses with higher resilience were significantly less likely to consider leaving their jobs, highlighting resilience as a protective factor against workforce instability. Given the moderate resilience and moderate-to-high turnover intention observed, interventions that strengthen resilience such as supportive leadership, resilience training, and peer support systems are essential to enhance retention, safeguard workforce sustainability, and ensure continuity of patient care.

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