

## A Nationwide Analysis of the Correlation Between Work Environment and Nurses' Job Satisfaction in Saudi Arabia's Government Hospitals

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### Abstract

*The conditions that nurses experience at work constitute an essential factor for maintaining staff satisfaction along with current employee retention rates in hospitals. Stress and burnout together with other workplace issues have intensified the worry about healthcare employee retention. The working environment strongly shapes nurse job satisfaction while also influencing their professional retention decisions. The comprehension of these underlying factors represents an essential requirement for creating methods that enhance caregiving staff stability as well as workplace conditions. The research seeks to assess different elements of workplace environment for their impact on job satisfaction among nursing staff in Saudi Arabia. This research seeks to discover critical workplace satisfaction elements that will allow developing better retention and workplace condition enhancement strategies in Saudi governmental hospitals. The work environment assessment alongside nurse satisfaction measurements focused on 375 staff members from Saudi Arabian governmental hospitals through a cross-sectional design. Participants accessed and completed a self-serving online questionnaire for data collection which included both the Practice Environment Scale of the Nursing Work Index and the Minnesota Satisfaction Questionnaire. Data researchers employed the SPSS software for their information analyses. Workers in nursing positions showed positive opinions about their workplace atmosphere particularly regarding basic nursing care delivery alongside physician collegiality. Staffing levels alongside resources came under severe dissatisfaction from respondents who numbered 18% in these areas. Women and qualified personnel with higher pay rates demonstrated distinct perspectives toward their working conditions and satisfaction according to One-Way ANOVA results. The work environment in nursing turned out to be a strong predictor of job satisfaction since it explained 37.1% of variation in nurse satisfaction levels according to multiple regression tests. The research demonstrates that work environment conditions significantly affect nurse satisfaction within Saudi Arabian governmental hospitals. The work environment displays some strengths but nurses require higher staffing levels together with better resource availability and enhanced compensation to reach full satisfaction and minimize attrition rates.*

**Keywords:** *Work Environment, Job Satisfaction, Nurses, Saudi Arabia.*

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## Introduction

Healthcare professionals currently face rising levels of stress within their workplace environment while experiencing job-related challenges that leads to burnout and decreases their satisfaction at work. The situation has worsened in recent years which leads numerous nurses to evaluate whether they should keep working as part of their profession (Elbarazi et al., 2017).

The last ten years have exposed nurses to enhanced work environment effects and researchers identified job satisfaction alongside work environment quality as critical elements for retaining nursing staff (Al-Maaitah, AbuAlRub, & Al Blooshi, 2018). The link between inadequate work environments and nurse burnout rates and turnover rates continues to undermine both retention efforts and patient safety results according to Al-Hamdan et al. (2017), Carthon et al. (2021), Huang et al. (2021), Nantsupawat et al. (2022) and Wan et al. (2018).

Research authors agree that the international concern about nursing workplace quality requires improvement of hospital settings to boost nurse wellness (Khan, 2021). Nurses employed in practice environments with high quality report decreased stress and greater job satisfaction and enhance patient outcomes and demonstrate less intention to leave their roles (Copanitsanou, Fotos & Brokalaki, 2017; Huang et al., 2021; Schlak et al., 2021). Lake (2007) describes an optimal nursing work environment as a setting which supports nurses to use their maximal clinical skills to work together with teams effectively and swiftly deploy resources.

Healthcare organizations that support safety and security as well as achievement recognition and employee decision-making input and professional relations can create this environment (Edem, Akpan, & Pepple, 2017; Carthon et al., 2021). Healthcare organizations benefit from effective leadership which creates positive work cultures that foster both nurse value and motivation and engagement (Huang et al., 2021). Strong leadership together with organizational support in hospitals leads to decreased burnout with increased job satisfaction and better patient health results (Schlak et al., 2021; Nantsupawat et al., 2022).

Job satisfaction represents a complex multifaceted thought which has occupied researchers in organizational behavior for many years. The definition of job satisfaction according to Khamisa et al. (2015) includes individual job contentment along with work characteristics and employee work expectations. Staff shortages together with high patient acuity and long shifts and personality hardiness among individuals lead to nurse dissatisfaction (Wilkinson, Whittington, Perry, & Eames, 2017). Job satisfaction operates at different levels throughout the nursing profession and thus needs specific organizational context analysis to grasp individual nursing group issues (Li et al., 2018).

Novel research at Saudi Arabian healthcare institutions provides essential knowledge about nurse satisfaction within the work setting. Aldhafeeri (2022) performed a systematic review of ten studies that examined job satisfaction and nurse retention factors in Saudi Arabian healthcare from 2006 until 2016. Job satisfaction among some nurses was moderate to high yet salary issues combined with excessive workload and insufficient stress relief assistance and scarce opportunities for both career progression and educational development acted as substantial obstacles to their job satisfaction according to the review. Studies have revealed that insufficient leadership combined with minimal professional support and limited career growth chances represent major areas of concern during nursing practice.

The research conducted by Hakami et al. (2020) demonstrated that Saudi hospital nurses displayed a strong connection between job satisfaction and organizational commitment. According to Al-Haroon and Al-Qahtani (2019) intrinsic staff aspects including work nature and colleague relations proved greater influences on job satisfaction than external factors including compensation. Job satisfaction improved among Saudi governmental hospital nurses when organizations provided better support according to Assiri et al. (2020). This enhanced nursing care quality.

The research by Ambani et al. (2020) showed that substandard practice environments together with elevated patient-to-nurse ratios function as main causes behind nursing professional dissatisfaction and burnout

which subsequently increases departure intentions. Data from Alharbi et al. (2020) revealed that nurse involvement in hospital governance and sufficient staffing levels together with quality resources directly influenced employee satisfaction and their chance of seeking new employment. The strength of correlation existed between job satisfaction and both manager support and nurse-physician relationships in the workplace. Research by Alenazy et al. (2023) shows that nurses work better when their workplace environment is positive which results in higher satisfaction and less desire to leave but job satisfaction itself does not cause meaning changes in turnover intent.

The findings demonstrate organizational support together with proper staffing along with nurse involvement in hospital management directly enhances job satisfaction and minimizes burnout and turnover desires among nursing professionals. The growing healthcare sector of Saudi Arabia needs an extensive current assessment of nursing work environments and their effects on staff satisfaction levels and retention patterns for all areas of the kingdom.

This research evaluates nurse work environment conditions in every hospital throughout Saudi Arabia with national coverage. This study identifies regional differences and trends alongside nurse challenges in order to establish nationwide insights that lead to better nurse retention and satisfaction. This investigation will benefit healthcare service quality in Saudi Arabia.

## Method and Subjects

**Study Design:** This study employed a cross-sectional correlational design to assess the relationship between work environment and job satisfaction among nurses in governmental hospitals in Saudi Arabia.

### *Study Setting and Sampling*

The study was conducted in governmental hospitals across Saudi Arabia, covering multiple health clusters in all regions including the Central region (Riyadh, Qassim), Western region (Makkah, Madinah, Jizan), Eastern region (Eastern Province), Southern region (Asir, Najran, Al Baha) and Northern region (Tabuk, Hail, Northern Borders, Al Jouf). A convenience sampling technique was used to recruit participants. Eligible participants were nurses who provided direct patient care in inpatient or outpatient nursing units and had at least one year of nursing experience. Exclusion criteria included other healthcare professionals (e.g., physicians, allied health workers), nurses working in non-governmental hospitals (private, military, or university hospitals), and nurses with less than one year of work experience. The sample size was determined based on Alharbi et al. (2020), which reported a job satisfaction rate of 42% among nurses in Saudi Arabia. Using this estimate, a minimum sample size of 375 nurses was required to achieve statistical significance with a 95% confidence level and a 5% margin of error.

### *Data Collection Tools and Procedures*

Data were collected using a self administered standardized and validated questionnaire. The questionnaire comprised three sections: demographic information, work environment assessment, and job satisfaction evaluation.

The demographic section included key participant characteristics such as region, age, gender, nationality, marital status, job title, qualifications, years of experience and income. The work environment was assessed using the Practice Environment Scale of the Nursing Work Index (PES-NWI) by Lake (2002), a widely validated instrument designed to measure the quality of nursing practice environments. This scale consists of 31 items categorized into five subscales: nurse participation in hospital affairs, nursing foundations for quality of care, nurse manager ability, leadership and support, staffing and resource adequacy, and collegial nurse-physician relationships. Each item was rated on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree), with higher scores reflecting a more favorable work environment. The PES-NWI has demonstrated strong reliability in previous research, with Cronbach's alpha values ranging from 0.81 to 0.91 across subscales, indicating high internal consistency (Lake, 2002).

Job satisfaction was measured using the 20-item Minnesota Satisfaction Questionnaire (MSQ) (Weiss et al., 1967). This validated tool assesses two dimensions of job satisfaction: intrinsic satisfaction (related to job tasks and responsibilities) and extrinsic satisfaction (related to external workplace conditions such as pay and benefits). Responses were recorded on a 5-point Likert scale (1 = very dissatisfied to 5 = very satisfied), with higher scores indicating greater job satisfaction. The MSQ has been widely used in nursing research and has shown high reliability, with Cronbach's alpha values exceeding 0.85, ensuring the robustness of the findings (Kassa & Bedada, 2021).

For this study, data collection was conducted in September 2024 through an online survey in English, ensuring accessibility for nurses across different regions. The survey link was distributed via official emails sent to nursing leaders in various health clusters in Saudi Arabia, in collaboration with the General Administration of Nursing at the Ministry of Health.

### *Ethical Consideration*

The study proposal was approved by the IRB, MOH, Saudi Arabia (Ref: 1046660930) on 21/7/2024. All ethical issues were considered during the process, with participants providing informed consent prior to participation. They were informed about the objectives of the study, their right to withdraw at any time, and the confidentiality of the collected information.

### *Data Management and Analysis*

All collected data were cleaned, coded, and entered into an Excel sheet, then converted into a Statistical Package for Social Sciences (SPSS) dataset. After reviewing and coding the data, it was analyzed using SPSS Version 24. Descriptive statistics, such as frequency and percentage for qualitative variables, and mean and standard deviation (SD) for quantitative variables, were calculated. Advanced analyses, such as One-Way ANOVA and multiple regression tests, were applied to compare dependent and independent variables.

## **Results**

**Table 1. Demographic Characteristics of Participants**

		<i>f</i>	%
Region	Central (Riyadh, Qassim)	23	6.1
	Western (Makkah, Madinah, Jizan)	173	46.1
	Eastern (Eastern Province)	38	10.1
	Southern (Asir, Najran, Al Baha)	78	20.8
	Northern (Tabuk, Hail, Northern Borders, Al Jouf)	63	16.8
Gender	Male	72	19.2
	Female	303	80.8
Age group in years	20-29	71	18.9
	30-39	196	52.3
	40-49	80	21.3
	50 +	28	7.5
Nationality	Saudi Arabian	117	31.2
	Middle Eastern countries	40	10.7
	South Asian countries	142	37.9
	Southeast Asian countries	59	15.7
	Africa	16	4.3
	Other	1	.3
Qualification	Diploma	66	17.6
	BSc	247	65.9
	MSc	61	16.3

	PhD	1	.3
Marital Status	Single	101	26.9
	Married/Partnered	262	69.9
	Widowed / Divorced	12	3.2
Working Experience In Years	Less than 5	84	22.4
	5 - 10	146	38.9
	More Than 10	145	38.7
Job title	Nurse Assistant	5	1.3
	Staff Nurse	237	63.2
	Charge Nurse	51	13.6
	Head Nurse	41	10.9
	Nursing Supervisor	29	7.7
	Nursing Director	12	3.2
Job Type	Administrative	105	28.0
	Medical	270	72.0
Monthly income in SRs	Less than 5000	46	12.3
	5000 - 10000	217	57.9
	10000 - 15000	86	22.9
	More than 15000	26	6.9

The study surveyed 375 nurses across various regions in Saudi Arabia, revealing a diverse demographic profile. Most participants were female (80.8%) and primarily stationed in the Western region (46.1%). The predominant age group was 30-39 years, comprising 52.3% of the sample. A majority held a Bachelor of Science in Nursing (BSc) degree (65.9%) and had between 5 to 10 years of professional experience. Most participants work in medical roles (72.0%). The income distribution shows that the largest proportion (57.9%) earn between 5000-10000 SR, reflecting the salary range typical for healthcare professionals in the region.

**Table 2. Cronbach Alpha Reliability**

	<i>k</i>	<i>a</i>
The Practice Environment Scale of the Nursing Work	31	0.96
Job satisfaction scale	21	0.96

The Cronbach's Alpha values provided for all items in the reliability test are consistently very high at 0.96, indicating excellent internal consistency across the entire questionnaire.

**Table 3. The Practice Environment Scale of the Nursing Work Index**

		Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Mean	Rank
Nurse Participation in Hospital Affairs	Fr.	15	42	104	180	34	3.5	2
	%	4	11	28	48	9		
Nursing Foundations for Quality of Care	Fr.	8	30	94	199	44	3.6	1
	%	2	8	25	53	12		
Nurse Manager Ability, Leadership, and Support of Nurses	Fr.	13	37	100	184	41	3.5	2
	%	3	10	27	49	11		
	Fr.	25	65	100	153	32	3.4	3

Staffing and Resource Adequacy	%	7	18	28	41	6		
Collegial Nurse-Physician Relations	Fr.	9	33	96	193	44	3.6	1
	%	2	9	26	51	12		

Table 3 present The Practice Environment Scale of the Nursing Work Index. The highest satisfaction was observed in 'Nursing Foundations for Quality of Care' and 'Collegial Nurse-Physician Relations,' both averaging a score of 3.6 out of 4. These areas were positively rated by over 50% of participants, indicating a strong professional collaboration and a solid foundation in nursing care practices. Conversely, 'Staffing and Resource Adequacy' received the lowest satisfaction score (3.4), with 18% of nurses expressing dissatisfaction, highlighting concerns about staffing levels and available resources. The Nurse Participation in Hospital Affairs and Nurse Manager Ability, Leadership, and Support of Nurses categories share similar satisfaction levels (mean of 3.5), indicating that nurses feel moderately supported and involved.

**Table 4. Job Satisfaction Statistics**

		Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Mean	Rank
Intrinsic satisfaction								
Intrinsic Satisfaction	Fr.	10	45	97	193	30	3.5	High
	%	3	12	26	51	8		
Extrinsic Satisfaction	Fr.	16	51	90	190	28	3.4	High
	%	4	14	24	51	7		
General Satisfaction	Fr.	14	46	94	195	26	3.5	High
	%	4	12	25	52	7		

Table 4 presents the participants' current job satisfaction across three categories: intrinsic satisfaction, extrinsic satisfaction, and general satisfaction. For all three categories, the majority of participants report being satisfied or very satisfied, with mean scores ranging from 3.4 to 3.5, indicating a generally high level of satisfaction. Intrinsic satisfaction has the highest percentage of "satisfied" responses (51%) and a mean of 3.5, followed by general satisfaction, which also has a mean of 3.5, with 52% of participants indicating satisfaction. Extrinsic satisfaction, with a slightly lower mean of 3.4, shows 51% satisfaction as well. Overall, the results suggest that the participants are generally content with their jobs, particularly with intrinsic and general aspects, while extrinsic factors show a slightly lower but still high level of satisfaction.

**Table 5. One – Way ANOVA Comparison Between Demographic Characteristics and Nursing Practice Environment Using “The Practice Environment Scale of the Nursing Work Index”:**

		<i>f</i>	%	F	Sig
Region	Central (Riyadh, Qassim)	23	6.1	1.58	.178
	Western (Makkah, Madinah, Jizan)	173	46.1		
	Eastern (Eastern Province)	38	10.1		
	Southern (Asir, Najran, Al Baha)	78	20.8		
	Northern (Tabuk, Hail, Northern Borders, Al Jouf)	63	16.8		
Gender	Male	72	19.2	20.4	.000

	Female	303	80.8		
Age group in years	20-29	71	18.9	.971	.406
	30-39	196	52.3		
	40-49	80	21.3		
	50 +	28	7.5		
Nationality	Saudi Arabian	117	31.2		
	Middle Eastern countries	40	10.7		
	South Asian countries	142	37.9		
	Southeast Asian countries	59	15.7		
	Africa	16	4.3		
	Other	1	.3		
Qualification	Diploma	66	17.6	9.54	.000
	BSc	247	65.9		
	MSc	61	16.3		
	PhD	1	.3		
Marital Status	Single	101	26.9	.017	.983
	Married/Partnered	262	69.9		
	Widowed / Divorced	12	3.2		
Working Experience In Years	Less than 5	84	22.4	2.43	.089
	5 - 10	146	38.9		
	More Than 10	145	38.7		
Job title	Nurse Assistant	5	1.3	.492	.782
	Staff Nurse	237	63.2		
	Charge Nurse	51	13.6		
	Head Nurse	41	10.9		
	Nursing Supervisor	29	7.7		
	Nursing Director	12	3.2		
Job Type	Administrative	105	28.0	3.57	.060
	Medical	270	72.0		
Monthly income in SRs	Less than 5000	46	12.3	3.09	.027
	5000 - 10000	217	57.9		
	10000 - 15000	86	22.9		
	More than 15000	26	6.9		

The One-Way ANOVA analysis reveals that significant differences in opinions regarding the nursing practice environment exist based on gender, qualification, and monthly income. Specifically, gender differences indicate that male and female participants perceive the work environment differently, while those with varying educational qualifications (Diploma, BSc, MSc, PhD) also report distinct opinions, **p value < 0.05**. Additionally, monthly income levels influence perceptions, suggesting that higher-income individuals may have different views compared to those with lower salaries. However, no significant differences were found based on region, age group, marital status, working experience, job title, or job type, suggesting these demographic factors do not significantly affect participants' views on the nursing practice environment, **p value > 0.05**.

**Table 6. One – Way ANOVA to Comparison Between Demographic Characteristics and Job Satisfaction:**

		<i>f</i>	%	F	Sig
Region	Central (Riyadh, Qassim)	23	6.1	.344	.848
	Western (Makkah, Madinah, Jizan)	173	46.1		
	Eastern (Eastern Province)	38	10.1		

	Southern (Asir, Najran, Al Baha)	78	20.8		
	Northern (Tabuk, Hail, Northern Borders, Al Jouf)	63	16.8		
Gender	Male	72	19.2	22.4	.000
	Female	303	80.8		
Age group in years	20-29	71	18.9	.973	.405
	30-39	196	52.3		
	40-49	80	21.3		
	50 +	28	7.5		
Nationality	Saudi Arabian	117	31.2	3.10	.009
	Middle Eastern countries	40	10.7		
	South Asian countries	142	37.9		
	Southeast Asian countries	59	15.7		
	Africa	16	4.3		
	Other	1	.3		
Qualification	Diploma	66	17.6	6.04	.000
	BSc	247	65.9		
	MSc	61	16.3		
	PhD	1	.3		
Marital Status	Single	101	26.9	.340	.712
	Married/Partnered	262	69.9		
	Widowed / Divorced	12	3.2		
Working Experience In Years	Less than 5	84	22.4	3.66	.027
	5 - 10	146	38.9		
	More Than 10	145	38.7		
Job title	Nurse Assistant	5	1.3	2.09	.066
	Staff Nurse	237	63.2		
	Charge Nurse	51	13.6		
	Head Nurse	41	10.9		
	Nursing Supervisor	29	7.7		
	Nursing Director	12	3.2		
Job Type	Administrative	105	28.0	1.54	.214
	Medical	270	72.0		
Monthly income in SRs	Less than 5000	46	12.3	1.51	.209
	5000 - 10000	217	57.9		
	10000 - 15000	86	22.9		
	More than 15000	26	6.9		

The One-Way ANOVA results suggest that gender, nationality, qualification, and working experience have a significant impact on participants' job satisfaction. Gender differences show a clear divide in how male and female participants perceive their job satisfaction, with females generally reporting more positive satisfaction. Nationality also plays a role, with participants from different regions (e.g., Middle Eastern, South Asian, and Southeast Asian) expressing differing levels of job satisfaction. Qualification further influences job satisfaction, with participants holding higher qualifications (e.g., MSc or PhD) displaying different perceptions compared to those with a diploma. Working experience also significantly affects job satisfaction, with those having 5-10 years of experience showing different job satisfaction compared to those with less or more experience, **p value < 0.05**. However, no significant differences were found based on region, marital status, job title, job type, or monthly income, **p value > 0.05**, indicating that these factors do not significantly alter participants' satisfaction about their current job.

**Table 7. Multiple Regression Test Comparison Between Nursing Practice Environment Using “The Practice Environment Scale of the Nursing Work Index” And Participants’ Job Satisfaction.****Multiple Regression Analysis Predicting Job Satisfaction from Nursing Practice Environment**

Variables	B	SE	t	p	95% CI
(Constant)	1.270	0.152	8.357	.000	[0.970, 1.570]
Nursing Practice Environment (m1)	0.630	0.042	14.848	.000	[0.548, 0.712]

The multiple regression analysis results demonstrate that the nursing practice environment, as measured by the "Practice Environment Scale of the Nursing Work Index," significantly predicts participants' present job satisfaction. The model summary shows a R-squared value of 0.371, indicating that approximately 37.1% of the variance in job satisfaction can be explained by the nursing practice environment. The ANOVA results confirm that the model is statistically significant ( $F = 220.451$ ,  $p < 0.001$ ), suggesting that the nursing practice environment is a strong predictor of job satisfaction. The unstandardized coefficient for the nursing practice environment variable ( $B = 0.630$ ) and the standardized coefficient (Beta = 0.609) indicate a positive and significant relationship between the two variables. This means that for every unit increase in the perceived quality of the nursing practice environment, there is a corresponding increase in job satisfaction, with  $p < 0.001$  confirming the significance of this relationship.

**Discussion**

This study aimed to explore the relationship between the work environment and nurses' job satisfaction in Saudi Arabia. Overall, the results suggest that nurses are relatively satisfied with their work environments, with the highest satisfaction ratings observed in the Nursing Foundations for Quality of Care and Collegial Nurse–Physician Relations categories. A majority of respondents (53% and 51%, respectively) expressed satisfaction in these areas, highlighting the importance of a supportive and collaborative work environment in promoting job satisfaction. These findings are consistent with previous research that emphasizes the role of strong nurse–physician collaboration in enhancing job satisfaction and improving patient care outcomes. For instance, Alotaibi (2024) found that positive relationships between nurses and physicians were strongly correlated with higher job satisfaction and better organizational outcomes.

In contrast, the Staffing and Resource Adequacy category received the lowest mean score (3.4), with 18% of respondents expressing dissatisfaction. These finding echoes widespread concerns about inadequate staffing levels and resource shortages in healthcare facilities. Research by Nantsupawat A et al. (2022) has shown that insufficient staffing is one of the leading factors contributing to nurses' dissatisfaction with their work environments, leading to burnout and increased turnover rates. The current study's results reinforce the idea that staffing challenges remain a critical issue in healthcare settings, not only in Saudi Arabia but globally.

Additionally, the Nurse Participation in Hospital Affairs and Nurse Manager Ability, Leadership, and Support of Nurses categories both yielded moderate satisfaction scores, indicating that while nurses feel somewhat supported and involved in decision-making processes, there is still room for improvement. Previous studies have highlighted that nurse participation in hospital affairs is vital for enhancing job satisfaction and overall morale. For example, a study by Smith et al. (2018) found that when nurses are involved in decision-making processes, they report higher job satisfaction and better engagement at work. Similarly, research by Alsadaan et al. (2023) suggests that effective leadership and managerial support are key drivers of nurse job satisfaction, contributing to improved retention and performance.

The findings from this study reveal that nurses in Saudi Arabia report generally high job satisfaction, with the majority expressing satisfaction in three categories: intrinsic satisfaction, extrinsic satisfaction, and general satisfaction. Intrinsic satisfaction, which reflects fulfillment from the nature of the work, showed the highest percentage of "satisfied" responses (51%) and a mean score of 3.5, consistent with previous research highlighting the importance of meaningful work in driving job satisfaction (Al-Haroon et al., 2019). General satisfaction also had a mean score of 3.5, with 52% of participants indicating satisfaction, aligning

with studies that suggest overall job fulfillment contributes to better performance and lower burnout (Kurtović et al., 2023). While extrinsic satisfaction, including factors like pay and benefits, had a slightly lower mean of 3.4, with 51% satisfaction, it remains relatively high but indicates areas for improvement. Studies have shown that although intrinsic factors are more impactful, extrinsic factors such as compensation and working conditions still play a significant role in nurse satisfaction and retention (Al-Haroon et al., 2019; Al Anazi, 2021; Aldhafeeri, 2022). Overall, the findings suggest that while nurses are content with their work, enhancing extrinsic factors could further improve job satisfaction and reduce turnover.

The findings of the One-Way ANOVA analysis highlight that gender, educational qualification, and monthly income significantly influence nurses' perceptions of their work environment, while factors like region, age, marital status, working experience, job title, and job type showed no significant effect. Previous studies support these results, with Sibuea et al. (2024) noting that male and female nurses often have different perceptions, potentially due to gender-specific experiences and support in the workplace. Similarly, BowenXue et al. (2024) found that nurses with higher education levels tend to have a more critical view of their work environment, likely due to greater awareness of best practices and higher expectations. The influence of income on work environment perceptions aligns with Zhenjing et al. (2022), who identified that higher wages are associated with greater job satisfaction, as higher-income nurses may feel more valued and supported. In contrast, the lack of significant differences based on factors like region and job type contrasts with findings from Al-Haroon et al. (2019), who reported that demographic factors such as age and job role affect job satisfaction. Overall, the study suggests that interventions to improve nurses' work environments should focus on gender, education, and income disparities to enhance job satisfaction and create a more supportive and positive work environment.

The One-Way ANOVA results indicate that gender, nationality, qualification, and working experience significantly affect participants' job satisfaction, while region, marital status, job title, job type, and monthly income do not. Gender differences reveal that female participants generally report more positive job satisfaction compared to their male counterparts, a finding that aligns with previous research suggesting that women often report higher job satisfaction due to factors such as better interpersonal relationships and supportive work environments (Sibuea et al., 2024). Nationality also plays a role, with participants from various regions, such as Middle Eastern, South Asian, and Southeast Asian backgrounds, expressing differing levels of job satisfaction. This could be due to cultural differences in work expectations, work-life balance, or perceptions of leadership, as noted in studies by Almansour et al. (2020). The level of qualification further influences job satisfaction, with participants holding higher qualifications, such as MSc or PhD, displaying distinct job satisfaction compared to those with a diploma, which supports findings from Al-Haroon et al. (2019), who observed that highly educated nurses tend to have more critical perceptions of their work environments due to their advanced understanding of best practices and work expectations. Working experience also significantly affects job satisfaction, with those having 5-10 years of experience reporting different satisfaction compared to those with less or more experience, which may reflect changes in job expectations and coping strategies over time (Pacheco et al., 2023). However, no significant differences were found based on region, marital status, job title, job type, or monthly income, suggesting that these factors do not significantly alter participants' job satisfaction. This suggests that while certain demographic factors shape job satisfaction, others, such as income and job title, may not have as strong an influence in this particular setting.

## Conclusion

In conclusion, this study highlights that while nurses in Saudi Arabia express satisfaction with certain aspects of their work, challenges persist in areas such as staffing, resources, and extrinsic factors like compensation and working conditions. The findings emphasize the importance of nurse-physician collaboration, strong managerial support, and improved staffing to foster a positive work environment. Additionally, demographic factors such as gender, education, and income play a significant role in shaping nurses' perceptions, suggesting that targeted interventions addressing these factors can further enhance job satisfaction, reduce turnover, and improve the overall work environment for nurses.

## Study Implications

The implications of this study suggest that healthcare institutions in Saudi Arabia should focus on improving staffing levels and resource allocation to address challenges related to workload and burnout, thereby enhancing job satisfaction. Promoting stronger nurse-physician collaboration and fostering supportive leadership through managerial training can further improve work environments. Additionally, attention to extrinsic factors such as compensation and working conditions is essential to boost satisfaction and reduce turnover. Interventions should also be tailored to demographic factors like gender, education, and income, ensuring that nurses receive targeted support. Policymakers should consider these findings when designing strategies to improve nurse retention, while future research should explore the long-term effects of these interventions.

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