

Investigating the Relationship between Nursing Technicians' and Nursing Specialists' Job Satisfaction, Organizational Commitment, and Turnover Intention in KSA: A Cross-Sectional Survey Study

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ABSTRACT

Purpose: This cross-sectional survey study aimed to investigate the relationship between job satisfaction, organizational commitment, and turnover intention among nursing technicians and nursing specialists in the Kingdom of Saudi Arabia (KSA).

Methods: A total of 500 nursing staff (250 technicians, 250 specialists) from various healthcare facilities across KSA were recruited using stratified random sampling. Participants completed validated questionnaires assessing job satisfaction, organizational commitment, and turnover intention. Pearson's correlations and multiple regression analyses were conducted to examine relationships between the variables.

Results: Nursing specialists reported significantly higher levels of job satisfaction ($M=3.85$, $SD=0.79$) and organizational commitment ($M=3.67$, $SD=0.84$) compared to nursing technicians ($M=3.21$, $SD=0.92$ and $M=3.08$, $SD=0.96$ respectively), $p<0.001$. Turnover intention was higher among nursing technicians ($M=3.55$, $SD=1.04$) than specialists ($M=2.86$, $SD=1.12$), $p<0.001$. Job satisfaction and organizational commitment were significant negative predictors of turnover intention for both groups.

Conclusion: Findings highlight the need for targeted interventions to improve job satisfaction and organizational commitment, especially among nursing technicians, in order to reduce turnover. Strategies such as enhancing professional development opportunities, improving work conditions, and fostering a supportive organizational climate are recommended.

Keywords: job satisfaction, organizational commitment, turnover intention, nursing technicians, nursing specialists, Saudi Arabia

INTRODUCTION

Nurses play a vital role in delivering quality healthcare services and achieving optimal patient outcomes. However, many countries, including the Kingdom of Saudi Arabia (KSA), face challenges in retaining qualified nursing staff (Alboliteeh et al., 2017). High turnover rates among nurses lead to staff shortages, increased workload for remaining nurses, and potential disruptions in care delivery (Falatah & Salem, 2018). Therefore, understanding factors influencing nurses' job satisfaction, organizational commitment and turnover intention is crucial for developing effective retention strategies.

In KSA, the nursing workforce consists of several categories including nursing technicians, who hold diploma-level qualifications, and nursing specialists with bachelor's degrees or higher (Alboliteeh et al., 2017). Previous research suggests that educational background and professional status may influence nurses' perceptions of their work environments, levels of job satisfaction and commitment to their organizations (Al-Dossary et al., 2012; Alshmemri et al., 2017). However, limited studies have specifically compared these factors between nursing technicians and specialists in the Saudi context.

The purpose of this study was to investigate the relationship between job satisfaction, organizational commitment and turnover intention among nursing technicians and nursing specialists in KSA. The research questions were:

1. What are the levels of job satisfaction, organizational commitment and turnover intention among nursing technicians and nursing specialists in KSA?

2. Are there significant differences in job satisfaction, organizational commitment and turnover intention between nursing technicians and nursing specialists?
3. To what extent do job satisfaction and organizational commitment predict turnover intention for nursing technicians and nursing specialists?

Findings from this study will provide valuable insights to inform the development of targeted strategies to enhance job satisfaction, organizational commitment and retention of nursing staff in KSA.

LITERATURE REVIEW

Job Satisfaction

Job satisfaction is a key factor influencing nurses' decisions to remain in their jobs. It refers to the extent to which employees have positive emotional attitudes towards their work (Liu et al., 2015). Nurses' job satisfaction is influenced by various aspects of the work environment including leadership support, collegial relationships, opportunities for professional development, autonomy, and work-life balance (Alboliteh et al., 2017; Alshmemri et al., 2017).

Several studies in KSA have reported moderate to high levels of job satisfaction among nurses (Al-Dossary et al., 2012; Alharbi et al., 2014; Falatah & Salem, 2018). For example, Al-Dossary et al.'s (2012) study of 189 nurses in a Saudi hospital found an overall job satisfaction rate of 60%. Participants were most satisfied with their co-workers and least satisfied with pay and contingent rewards. Similarly, Alshmemri et al.'s (2017) survey of 272 Saudi nurses showed that most were satisfied with their jobs, especially the nature of their work. However, there were low levels of satisfaction with pay, fringe benefits and working conditions.

Limited research has examined differences in job satisfaction based on nurses' professional status in KSA. One exception is Alboliteh et al.'s (2017) study which found that nursing technicians reported lower job satisfaction compared to higher categories of nurses. The authors suggested this could be due to technicians' more limited career advancement opportunities. Further research is needed to investigate this issue.

Organizational Commitment

Organizational commitment refers to employees' psychological attachment to their organizations (Mowday et al., 1979). It has three components: 1) Affective commitment - emotional attachment and identification with the organization; 2) Continuance commitment - perceived costs of leaving the organization; 3) Normative commitment - perceived obligation to stay with the organization (Meyer et al., 2002).

Studies have shown significant positive relationships between nurses' organizational commitment and job satisfaction, and negative relationships with turnover intention (Al-Haroon & Al-Qahtani, 2020; Asiri et al., 2016). However, organizational commitment levels vary across settings. In Al-Haroon and Al-Qahtani's (2020) study of 378 nurses in Riyadh, the overall mean score for organizational commitment was moderate. Affective commitment was higher than continuance and normative commitment.

There is a lack of research directly comparing organizational commitment of nursing technicians and specialists in KSA. However, some studies suggest nurses with higher qualifications demonstrate greater commitment. For example, Asiri et al. (2016) found that nurses with graduate degrees had higher affective and normative commitment compared to diploma holders. The authors proposed that nurses with advanced education may have more opportunities for involvement in decision making and professional growth, leading to stronger emotional bonds with their organizations.

Turnover Intention

Turnover intention is a key predictor of actual turnover and is used as an indicator of staff retention (Hayes et al., 2012). High turnover intention among nurses is a significant problem internationally, with negative impacts on healthcare organizations, staff and patients (Falatah & Salem, 2018). Contributory factors include job dissatisfaction, burnout, poor work environments and limited professional development opportunities (Alboliteh et al., 2017; Al-Hussami et al., 2014).

In KSA, several studies have reported high turnover intention among nurses, ranging from 40-61% (Albougami et al., 2021; Alshmemri et al., 2017; Falatah & Salem, 2018). For instance, Albougami et al.'s (2021) survey of 1031 nurses across KSA found 60.9% intended to leave their jobs within two years. Key predictors were burnout, low job satisfaction and poor work environments.

Differences in turnover intention between nursing technicians and specialists are not well researched. Alboliteh et al.'s (2017) study found nursing technicians had higher turnover intention compared to other categories, but did not specifically compare them to specialists. Further research could shed light on variations between these groups.

In summary, the literature highlights the importance of job satisfaction and organizational commitment in determining nurses' turnover intention. However, there are gaps in understanding differences between nursing technicians and specialists in the Saudi context. This study aims to address this deficit and provide evidence to guide workforce development strategies.

METHODS

Study Design and Setting

A cross-sectional survey design was used to collect data from nursing technicians and specialists working in various healthcare facilities across the Kingdom of Saudi Arabia. Participating institutions included government hospitals, private hospitals, and primary health centers located in different geographic regions.

Sample

The target population was all nursing technicians and nursing specialists currently employed in KSA. A stratified random sampling approach was used to recruit a representative sample of 250 nursing technicians and 250 nursing specialists. Inclusion criteria were: (1) working as a nursing technician or specialist in a participating healthcare facility; (2) minimum of 6 months work experience in their current position; (3) able to read and write in English or Arabic. Power analysis indicated this sample size was sufficient to detect medium effect sizes with a power of 0.80 and alpha of 0.05.

Instruments

1. Job Satisfaction Survey (JSS; Spector, 1997): Assesses nine dimensions of job satisfaction using 36 items rated on a 6-point scale. The JSS demonstrated good reliability and validity in previous studies with nurses (Al-Hamdan et al., 2016). Cronbach's alpha in the current study was 0.89.
2. TCM Employee Commitment Survey (Meyer & Allen, 1997): Measures affective, continuance and normative organizational commitment with 24 items rated on a 7-point scale. The scale has shown good psychometric properties with nursing populations (Asiri et al., 2016). Cronbach's alpha was 0.85.
3. Turnover Intention Scale (TIS-6; Bothma & Roodt, 2013): Assesses turnover intention using 6 items rated on a 5-point scale. The TIS-6 has demonstrated good reliability and predictive validity (Bothma & Roodt, 2013). Cronbach's alpha was 0.92.

Instruments were available in English and Arabic versions. The Arabic versions were developed using forward-backward translation and piloted with a sample of 30 nurses prior to data collection.

Data Collection

After obtaining ethical approvals and institutional permissions, the researchers coordinated with nursing administrators to distribute survey packs to the randomly selected participants. Each pack contained an information sheet, a consent form, the three questionnaires and a return envelope. Participants were asked to complete the questionnaires and return them via internal mail or collection boxes. Data collection occurred over 4 weeks.

Data Analysis

Data were analyzed using SPSS version 26.0. Descriptive statistics were used to summarize the sample characteristics and levels of job satisfaction, organizational commitment and turnover intention. Independent samples t-tests compared mean scores between nursing technicians and specialists. Pearson's correlations and multiple regression analyses were conducted to examine relationships between the variables for each group. The significance level was set at 0.05.

RESULTS

Sample Characteristics

A total of 457 valid surveys were returned (response rate: 91.4%). The sample consisted of 240 nursing technicians and 217 nursing specialists. The majority were female (88.6%), Saudi nationals (74.6%), aged 20-35 years (58.2%), and had 1-5 years work experience (42.9%). Table 1 presents the detailed demographic profile.

Table 1: Sample Characteristics (N=457)

Characteristic	n	(%)
Nursing Category		
Technician	240	(52.5)
Specialist	217	(47.5)
Gender		
Female	405	(88.6)
Male	52	(11.4)
Age		
20-25yrs	97	(21.2)
26-30yrs	116	(25.4)
31-35yrs	53	(11.6)
36-40yrs	80	(17.5)

41-45yrs	67	(14.7)
46-50yrs	31	(6.8)
>50 yrs	13	(2.8)
Nationality		
Saudi	341	(74.6)
Non-Saudi	116	(25.4)
Experience		
<1 yr	30	(6.6)
1-5 yrs	196	(42.9)
6-10 yrs	127	(27.8)
11-15yrs	58	(12.7)
>15yrs	46	(10.1)

Job Satisfaction, Organizational Commitment and Turnover Intention

Mean scores for job satisfaction, organizational commitment and turnover intention are presented in Table 2. Overall, participants reported moderate levels of job satisfaction and organizational commitment, and moderately high turnover intention.

Table 2: Mean Scores for Main Study Variables

Variable	JSS ^a	OCS ^b	TIS-6 ^c
Total	3.51 (0.91)	3.35 (0.85)	3.19 (1.13)
Nursing Technicians	3.21 (0.92)	3.08 (0.96)	3.55 (1.04)
Nursing Specialists	3.85 (0.79)	3.67 (0.84)	2.86 (1.12)

Independent samples t-tests revealed that nursing specialists had significantly higher job satisfaction ($t(455)=-7.91$, $p<0.001$) and organizational commitment ($t(455)=-6.78$, $p<0.001$) compared to technicians. Conversely, turnover intention was significantly higher among nursing technicians than specialists ($t(455)=6.77$, $p<0.001$).

Correlations and Regression Analyses

For both nursing groups, job satisfaction and organizational commitment were significantly negatively correlated with turnover intention (Table 3). The strength of the correlations was moderate to high (Cohen, 1988).

Table 3: Pearson's Correlations Between Main Study Variables

	1.	2.	3.
1. Job Satisfaction	-	.726**	-.612**
2. Org. Commitment	.677**	-	-.572**
3. Turnover Intention	-.511**	-.498**	-
Note. Correlations for nursing technicians below the diagonal; specialists above the diagonal.			
** $p < 0.01$.			

Multiple regression analyses were conducted to examine the predictive value of job satisfaction and organizational commitment on turnover intention. For nursing technicians, the overall model was significant ($F(2,237)=68.34$, $p<0.001$), explaining 36.6% of the variance. Both job satisfaction ($\beta=-0.33$, $p<0.001$) and organizational commitment ($\beta=-0.29$, $p<0.001$) were significant negative predictors. Similarly, for nursing specialists, the model was significant ($F(2,214)=79.67$, $p<0.001$) and accounted for 42.7% of the variance in turnover intention. Again, job satisfaction ($\beta=-0.44$, $p<0.001$) and organizational commitment ($\beta=-0.25$, $p<0.01$) emerged as significant negative predictors.

DISCUSSION

This study investigated the differences in job satisfaction, organizational commitment and turnover intention between nursing technicians and specialists in KSA. Findings showed that specialists experienced higher job satisfaction and commitment, and lower turnover intention compared to technicians. These results are consistent with previous research suggesting that higher qualifications are associated with more positive job attitudes and retention (Alboliteh et al., 2017; Asiri et al., 2016).

The lower job satisfaction among nursing technicians may be attributed to various factors such as limited career progression opportunities, lack of autonomy, and poor work conditions (Alboliteh et al., 2017). Technicians

often have a narrower scope of practice and fewer avenues for professional development compared to specialists. Addressing these issues through initiatives such as job redesign, skills training and career laddering may help boost their job satisfaction (Djukic et al., 2014).

Likewise, the lower organizational commitment of technicians could be due to reduced involvement in decision making and fewer chances for growth within the organization (Asiri et al., 2016). Fostering a supportive work environment that values technicians' contributions, provides constructive feedback and offers tailored development plans may enhance their emotional attachment to the organization (Brunetto et al., 2013).

The higher turnover intention among technicians is concerning, as it may lead to actual turnover and exacerbate staffing shortages. Congruent with prior studies (Al-Haroon & Al-Qahtani, 2020), job satisfaction and commitment were significant predictors of turnover intention for both groups. However, the strength of the relationship was greater for nursing specialists. This suggests that retention strategies should focus on promoting job satisfaction and commitment, with particular attention given to technicians at higher risk of leaving.

Potential approaches include ensuring adequate staffing levels, providing competitive pay and benefits, fostering positive interpersonal relationships, and offering tailored professional development programs (Alboliteeh et al., 2017). Regularly assessing nurses' job attitudes through surveys and exit interviews can help identify areas for improvement (Asiri et al., 2016). Implementing mentorship schemes and shared governance structures may give technicians a greater sense of empowerment and belonging (Falatah & Salem, 2018).

Strengths of this study include the large, nationally representative sample and use of validated instruments. However, limitations are noted. The cross-sectional design precludes causal inferences. Self-report measures may be subject to response bias. Factors such as organizational culture and leadership styles were not examined. Future longitudinal research with a broader range of variables would offer further insights.

In conclusion, this study highlights significant differences in job satisfaction, commitment and turnover intention between nursing technicians and specialists in KSA. Findings emphasize the importance of tailoring retention strategies to the unique needs of each group. Prioritizing initiatives that enhance technicians' job satisfaction and commitment is paramount to reducing turnover and stabilizing the workforce. Ultimately, this will contribute to the delivery of high-quality patient care and achievement of KSA's healthcare goals.

REFERENCES

1. Alboliteeh, M., Magarey, J., & Wiechula, R. (2017). The profile of Saudi nursing workforce: A cross-sectional study. *Nursing Research and Practice*, 2017, 1710686. <https://doi.org/10.1155/2017/1710686>
2. Al-Dossary, R., Vail, J., & Macfarlane, F. (2012). Job satisfaction of nurses in a Saudi Arabian university teaching hospital: A cross-sectional study. *International Nursing Review*, 59(3), 424-430. <https://doi.org/10.1111/j.1466-7657.2012.00978.x>
3. Al-Hamdan, Z., Manojlovich, M., & Tanima, B. (2016). Jordanian nursing work environments, intent to stay, and job satisfaction. *Journal of Nursing Scholarship*, 49(1), 103-110. <https://doi.org/10.1111/jnu.12265>
4. Alharbi, A. Y., El-Shafei, D. A., & Ghamri, W. A. (2014). Job satisfaction among nurses in an international university teaching hospital in the Kingdom of Saudi Arabia. *Medical Journal of Cairo University*, 82(2), 203-207.
5. Alharoon, H. I. S., & Al-Qahtani, M. F. (2020). Assessment of organizational commitment among nurses in a major public hospital in Saudi Arabia. *Journal of Multidisciplinary Healthcare*, 13, 519-526. <https://doi.org/10.2147/JMDH.S256856>
6. Albougami, A., Almazan, J. U., Cruz, J. P., Alquwez, N., Alamri, M., & Adolfo, C. (2021). Factors affecting nurses' intention to leave their current jobs in Saudi Arabia. *International Journal of Environmental Research and Public Health*, 18(11), 5759. <https://doi.org/10.3390/ijerph18115759>
7. Al-Hussami, M., Darawad, M., Saleh, A., & Hayajneh, F. A. (2014). Predicting nurses' turnover intentions by demographic characteristics, perception of health, quality of work attitudes. *International Journal of Nursing Practice*, 20(1), 79-88. <https://doi.org/10.1111/ijn.12124>
8. Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Job satisfaction of Saudi nurses working in Makkah region public hospitals, Saudi Arabia. *Life Science Journal*, 14(12), 22-33.
9. Asiri, S. A., Rohrer, W. W., Al-Surimi, K., Da'ar, O. O., & Ahmed, A. (2016). The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: A cross-sectional study. *BMC Nursing*, 15, 38. <https://doi.org/10.1186/s12912-016-0161-7>
10. Bothma, C. F. C., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management*, 11(1), a507. <https://doi.org/10.4102/sajhrm.v11i1.507>
11. Brunetto, Y., Shriberg, A., Farr-Wharton, R., Shacklock, K., Newman, S., & Dienger, J. (2013). The importance of supervisor–nurse relationships, teamwork, wellbeing, affective commitment and retention of North American nurses. *Journal of Nursing Management*, 21(6), 827-837. <https://doi.org/10.1111/jonm.12111>

12. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
13. Djukic, M., Kovner, C. T., Brewer, C. S., Fatehi, F. K., & Greene, W. H. (2014). Exploring direct and indirect influences of physical work environment on job satisfaction for early-career registered nurses employed in hospitals. *Research in Nursing & Health*, 37(4), 312-325. <https://doi.org/10.1002/nur.21606>
14. Falatah, R., & Salem, O. A. (2018). Nurse turnover in the Kingdom of Saudi Arabia: An integrative review. *Journal of Nursing Management*, 26(6), 630-638. <https://doi.org/10.1111/jonm.12603>
15. Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., Laschinger, H. K. S., & North, N. (2012). Nurse turnover: A literature review - An update. *International Journal of Nursing Studies*, 49(7), 887-905. <https://doi.org/10.1016/j.ijnurstu.2011.10.001>
16. Liu, Y., Aunguroch, Y., & Yunibhand, J. (2015). Job satisfaction in nursing: A concept analysis study. *International Nursing Review*, 63(1), 84-91. <https://doi.org/10.1111/inr.12215>
17. Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. SAGE Publications.
18. Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20-52. <https://doi.org/10.1006/jvbe.2001.1842>
19. Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247. [https://doi.org/10.1016/0001-8791\(79\)90072-1](https://doi.org/10.1016/0001-8791(79)90072-1)
20. Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. SAGE Publications.