

# A Conceptual Model of Nurse Retention Integrating Quality of Work Life and Human Resource Management: The Case of Jordan

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### **Abstract**

Worldwide, the health sector faces a major challenge in retaining its staff. In Jordan, both public and university hospitals struggle with high turnover among nursing staff, which ultimately affects their overall performance. This study aims to discuss an integrated conceptual model that is developed based on the impact of quality of nursing work life (QNWL) and human resource management (HRM) practices on nursing staff retention. The model is drawn using the socio-technical system (STS) and social exchange (SET) theories to support the significance of QNWL and nurse retention. In addition, HRM practices involving training, compensation, performance appraisal, and recruitment were used. This framework contributes to research by combining the perspectives of QNWL and HRM to understand employee retention comprehensively. The practical insights derived from this model can be used to improve nurse retention strategies in the Jordanian healthcare system and as a foundation for future empirical research.

**Keywords:** nurse retention, quality of nursing work life, human resource practices, socio-technical theory, social exchange theory, Jordanian healthcare system



## 1. Introduction

Nurses retention is a critical challenge for healthcare organisations worldwide because of the high nursing turnover rates that impact performance and profitability (El Dahshan et al., 2018; Sija, 2022). In Jordan, high turnover is a serious concern, with higher rates in government hospitals than in private and university hospitals (Salahat & Al-Hamdan, 2022).

Although prior research has examined the relationship between QNWL and retention, the findings have been inconclusive (Maf'ula et al., 2020; Parveen et al., 2017). According to the existing literature, it was found that other factors related to HRM practices also play a significant role (Halid et al., 2020; Johari et al., 2012). To illustrate, the multidimensional QNWL scale covers work-life balance, work design, context, and the world (Brooks & Anderson, 2005). However, it does not directly capture satisfaction with key HRM practices such as training programs, performance appraisal, recruitment procedures, and compensation/benefits (Brooks et al., 2007). For instance, the QNWL scale items on communication and career advancement are general (Brooks et al., 2007). They do not specifically measure formal performance feedback (Kaddourah et al., 2018) or the availability of training programs (Ramaprasad et al., 2018).

Furthermore, the QNWL scale does not directly measure pay and benefit satisfaction (Bibi et al., 2018). However, dissatisfaction with compensation can lead nurses to find better opportunities elsewhere (Singh et al., 2020). Previous industry studies have found that compensation satisfaction reduces turnover and improves retention (Chan & Ao, 2019; Jannat et al., 2020; Singh & Loncar, 2010), while competitive pay in healthcare helps retain nurses (Chang et al., 2015). However, QNWL's lack of direct compensation measurement justifies its inclusion as a key retention predictor.

While covering technical and social aspects, the QNWL model lacks specific HRM practices such as training, performance management, recruitment, and compensation, which also drive retention (Blau, 2017; Nguyen, 2020). Thus, relying solely on the QNWL model of socio-technical systems theory overlooks how HRM practices influence nurses' retention, which is a gap in the literature (Biron & Boon, 2013; Harden et al., 2018). Consequently, we argue that incorporating SET provides a more comprehensive understanding, as it is widely applied in HRM research to explain employee turnover through cost-benefit analyses (Biron & Boon, 2013; Huang et al., 2016).

To deepen our understanding of nurses' retention, it is vital to incorporate SET and explore how HRM practices complement our understanding of factors affecting nurses' retention. Therefore, the primary aim of this study is to construct a comprehensive framework that integrates the various dimensions of QNWL and significant HRM practices to investigate their effect on nurse retention, particularly within the Jordanian healthcare system. This study endeavoured to provide a holistic understanding of the factors influencing nurse retention, contributing to the enhancement of nurses' job satisfaction and overall job experience. Thus, the study has two main objectives as follows.

1. To explore the role of QNWL in nurse retention: This study examined the impact of



work-life balance, work design, work context, and work world on the retention of nursing staff.

2. To assess the influence of HRM practices on nurse retention: The study aimed to evaluate how training, recruitment, performance appraisal, and compensation strategies affected nurses' retention.

This study is significant for several reasons. It introduces a unique integrated conceptual model that connects QNWL with crucial HRM practices that are lacking in traditional QNWL studies. This conceptual model deepens our understanding of the factors that contribute to nurse retention with more nuanced details. Furthermore, the study was customised to address the distinctive retention challenges in Jordanian healthcare, which represents a critical challenge to this important sector. This ensures that the insights derived from our study are relevant and can be tested empirically by interested parties. In essence, the fusion of STS and SET in our study allows for a holistic and multidimensional analysis, capturing the essence of the factors influencing nurse retention.

### 2. Research Method

Our study employed a conceptual framework methodology to investigate nurse retention in the Jordanian healthcare system, following the principles outlined by Meredith (1993) and drawing upon the works of Cohen and Winn (2007) and Hockerts and Wüstenhagen (2010). This approach is essential for linking theoretical aspects with practical phenomena, such as nurse retention, facilitating systematic progression from description to explanation and testing.

Conceptual research, despite criticisms regarding evidence or rigor, is vital for exploring complex phenomena, such as nurse retention (Whetten, 1989). Our model integrates concepts and frameworks that represent intricate factors influencing nurse retention, similar to Meredith (1993) methodology. This includes analysing the impact of QNWL and HRM practices on retention rates.

This study adopts both agency and systems perspectives, focusing on decision-makers such as healthcare administrators and the broader healthcare environment. This dual perspective aids in understanding the multifaceted nature of nurse retention and its dependence on socio-technical factors.

Our framework functions as a conceptual system, connecting nurse retention to QNWL and HRM and is used to structure the relationships between these elements, leading to the development of testable hypotheses. The empirical testing of these hypotheses, which will provide insights into the framework's efficacy, is a key area for future research.

### 3. Theoretical Background

The growing interest in QNWL and HRM practices in both academic and practical settings highlights the necessity for robust conceptual frameworks to guide empirical studies. It is crucial to delve into the theories that form the basis of QNWL and HRM practices and identify the most effective approaches to investigate them to improve nurse retention.



# 3.1 A Thorough Examination of Quality of Nurses' Work Life

Indeed, QNWL is a complex concept that profoundly influences organisational growth and profitability (Alharbi et al., 2019). It encompasses diverse elements, including job attitudes, active involvement in work activities, and fulfilling personal needs, all of which contribute to organisational objectives (Uysal & Sirgy, 2019). According to previous studies, elevating QNWL has numerous benefits, such as decreased burnout and strengthened organisational commitment, which consequently impacts nurses' dedication, job performance, and patient outcomes (Abbasi et al., 2017; Morsy & Sabra, 2015; Salahat & Al-Hamdan, 2022). Ultimately, prioritising QNWL is vital in ensuring optimal patient care and retaining nurses (Brooks et al., 2007; Parveen et al., 2017).

### 3.2 Insight into Human Resources Management Practices

Human Resource Management (HRM) primarily concerns effectively overseeing personnel within organisations, encompassing a wide range of employee-related processes beyond contractual relations (Paauwe & Boon, 2018). Key HRM activities, such as recruitment, training, performance appraisal, and compensation, not only contribute to maintaining an engaged workforce but also ensure compliance with legal and ethical standards (Boohene & Asuinura, 2011; Eyoun et al., 2020; Manzoor et al., 2019). It was found that prioritising HRM practices can significantly enhance organisational efficiency (N. Theriou & Chatzoglou, 2014). Adopting comprehensive HRM practices has been demonstrated to be pivotal in reducing employee turnover and enhancing employee retention (Elsafty & Ragheb, 2020).

### 4. Underpinning Theories

# 4.1 Socio-technical Theory as the Basis of the Quality of Nurses' Work Life

Since the 1950s, socio-technical theory has gained traction in fields such as healthcare and manufacturing, establishing itself as a well-established theory in organisational behaviour and management (Hirt et al., 2020; Li et al., 2020; Sony & Naik, 2020). The perspective provided by STS theory acknowledges the influence of both social and technical factors on organisations and their work systems to have effective and efficient work environments (Davoodi et al., 2020).

In the healthcare sector, STS is significant for measuring QNWL (Davoodi et al., 2020). O'Brien-Pallas and Baumann (1992) introduced a comprehensive conceptual framework encompassing various factors influencing QNWL. This framework focuses on four dimensions: work-life balance, work design, work context, and work world (O'Brien-Pallas et al., 1994). Brooks utilised this framework to develop a survey to assess QNWL, incorporating an examination of STS (Brooks & Anderson, 2005). The findings from this survey shed light on nursing experiences and suggest improvements in the work domain to enhance both nursing work life and organisational performance (Brooks et al., 2007; Davoodi et al., 2020).

According to STS, QNWL is influenced by the interplay between social factors, such as job satisfaction and technical factors, such as resource availability (Davoodi et al., 2020; Wang et



al., 2020). When these elements are in proper equilibrium, their work life thrives. However, imbalances can lead to dissatisfaction, increasing nurses' likelihood of leaving their positions (Salahat & Al-Hamdan, 2022). In light of this, Brooks and Anderson (2005) noted that QNWL encompasses four dimensions grounded in STS. These dimensions include work/home life balance, the essence of nursing care, the impact of clinical settings, and broader societal challenges. Overall, STS offers valuable insights into refining nurses' work life, leading to improved retention rates (Kaddourah et al., 2018).

However, it is important to note that while STS primarily focuses on technical and social aspects, it overlooks certain critical HRM practices. Consequently, in order to gain a comprehensive understanding of the employee retention problem, it is necessary to consider another underlying theory that can cover these practices. As a result, the next section explains the complementary role of SET theory in this study.

# 4.2 Social Exchange Theory (SET)

Social exchange theory (SET) suggests that reciprocal exchange of resources occurs between organisations and their employees, which depends on a careful evaluation of the costs and benefits involved (Cropanzano et al., 2017). Cook and Emerson (1978) emphasised the importance of both parties perceiving the benefits outweigh the costs for a relationship to endure. Expanding on this concept, numerous studies have highlighted the significant role employees' perceptions of HRM practices play in shaping their intention to leave the organisation (Almaaitah et al., 2017; Gould-Williams & Davies, 2005).

Specifically, research has shown that training and development initiatives can enhance employees' commitment to the organisation (Harden et al., 2018). Similarly, implementing a transparent and equitable performance appraisal system can help reduce turnover intentions (Memon et al., 2019), whereas compensation has emerged as a key factor in retention decisions (Johari et al., 2019). According to SET, both tangible resources, such as salary and intangible resources, such as respect and exchange between employers and employees, play a crucial role in the retention process (Ahmed et al., 2020). In the context of recruitment and selection, this implies the importance of ensuring employees feel valued and appreciated, thereby fostering increased commitment (Al Mamun & Hasan, 2017).

### 5. Propositions and Conceptual Model

### 5.1 The Direct Link Between Quality of Nurses' Work Life and Retention

The correlation between QNWL and employee retention is significant in the ever-evolving healthcare industry. This is not merely a challenge faced by organisations but also a pressing concern for the society at large. As proposed by STS theory, organisations that effectively nurture QNWL are more likely to achieve higher retention rates (Kim et al., 2020).

As Brooks and Anderson (2005) outlined, four essential dimensions encapsulate QNWL: work-life balance, work design, work context, and work world. Each dimension is closely intertwined with specific factors that play pivotal roles in determining whether nurses choose to remain in their positions or seek alternative opportunities.



Maintaining a harmonious equilibrium between professional commitments and personal responsibilities, commonly known as work-life/home-life balance, cannot be overstated. Numerous studies have shed light on the detrimental impact of rotating schedules, which disrupt the delicate balance between work and home (Almalki et al., 2012; Elshahat et al., 2019). Neglecting this balance leads to exhaustion and pushes nurses towards job abandonment. Interestingly, provisions, such as on-site childcare facilities, transcend their convenience status and become crucial determinants of QNWL (Davoodi et al., 2020). In this vein, Wardana et al. (2020) highlighted the domino effect, illustrating how conflicts between work and personal life elevate stress levels, diminish morale, and foster intentions of departure.

In turn, work design, which encompasses various elements, including the physical environment, workload, and job autonomy, has an immense impact. Overloaded work schedules impede nursing productivity and undermine service quality (Almalki et al., 2012). Conversely, autonomy serves as an equally significant driving force for retention. When nurses are free to make informed clinical decisions, their inclination to remain in their roles is greatly amplified (Agus & Selvaraj, 2020; Jedwab et al., 2022).

Furthermore, the work context, which encompasses management practices, peer relationships, and professional growth opportunities, has a substantial impact. Poor management practices and inadequate communication negatively impact nurses' well-being and job satisfaction (Begat et al., 2005; Mendis & Weerakkody, 2017). Likewise, the absence of avenues for professional development contributes to dissatisfaction and eventual intention to leave (Poku et al., 2022). Effective communication, growth prospects, and a conducive work atmosphere are paramount for retaining nurses (Decker & Shellenbarger, 2012).

Ultimately, the work world dimension, which represents factors like intrinsic motivation and job satisfaction, certainly plays a role in nurse retention. As nurses gain expertise and develop skills, they expect corresponding financial rewards (Agus & Selvaraj, 2020; Chenoweth et al., 2014). When these expectations are unmet, the attraction of better opportunities elsewhere is enhanced. In addition to wages, fringe benefits such as medical coverage and educational sponsorship significantly contribute to retention decisions (Almalki et al., 2012).

In conclusion, an undeniable connection between QNWL and retention was evident. A high QNWL correlates with job satisfaction and forms its foundation (Pio & Lengkong, 2020). Institutions prioritising QNWL are more likely to retain their nursing talent, whereas those perceived as having lower QNWL experience higher attrition rates (Zhao et al., 2012).

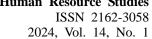
To summarise the discussion, the following hypothesis and sub-hypotheses were developed.

H1: QNWL significantly impacts nurses' retention.

H1.a: Nurse retention is directly and positively impacted by work-life/home-life balance.

H1.b: Work design directly enhances nurse retention.

H1.c: Nurse retention improves in a positive work context.





H1.d: A rewarding work world regarding compensation and benefits positively impacts nurses' retention.

# 5.2 Impact of HRM Practices on Nurses' Retention

Numerous studies have demonstrated the positive impact of Human Resource Management (HRM) practices on employee retention. These practices include training, recruitment, performance appraisal, and compensation. Albrecht et al. (2015) and Ramaprasad et al. (2018) have found that these practices contribute to higher employee retention rates. As we alluded to earlier, these HRM practices that are lacking in the QNWL model are training and development, recruitment and selection, performance appraisal and compensation and benefits. For instance, training and development is a crucial aspect of HRM. Research suggests that a robust training infrastructure fosters committed, skilled, and motivated employees (Dixit & Sinha, 2020). This commitment is closely linked to critical organisational outcomes, including enhanced job satisfaction, improved performance, and reduced turnover rates. Rawashdeh and Tamimi (2020) further emphasised that positive perceptions of organisational training contribute to increased commitment and decreased turnover.

In turn, recruitment and selection is another significant HRM practice, which serves as the foundation for sourcing and aligning candidates to suitable roles (Abdalla Hamza et al., 2021). The holistic and effective implementation of recruitment strategies can reduce turnover rates (Aman-Ullah et al., 2022; Gamage, 2014). For example, Abbasi et al. (2020) found that recruitment and selection processes significantly impact business growth in Pakistan. Therefore, business leaders should refine their recruitment strategies and address turnover factors through holistic implementation.

Apart from the above, performance appraisal functions as an evaluative feedback mechanism to enhance employee performance (Raihan, 2012). Grounded in the SET proposed by Blau (1968), employees' long-term commitment to organisations depends on their perception of fair performance evaluation. In this vein, Kalyanamitra et al. (2020) reaffirmed the pivotal role of performance appraisal in boosting retention.

Finally, compensation and benefits encompass the tangible and intangible rewards offered to employees as a recognition of their contributions. These rewards can range from monetary incentives to well-being initiatives designed to enhance employee satisfaction and commitment (Patiar & Wang, 2020). It was found that employees who perceive their compensation as fair tend to exhibit increased loyalty and dedication, as described in SET (Mossholder et al., 2005), which in turn leads to a reduction in their turnover rate. In this line, several studies have asserted these findings and the role of compensation in enhancing retention and reducing turnover (Aman-Ullah et al., 2020; Bibi et al., 2018).

In conclusion, the relationship between HRM practices and employee retention can be encapsulated in the following hypothesis and sub-hypotheses.

H2: Nurse retention is positively impacted by HRM practices.

H2.a: Training and development positively impact nurse retention.



- H2.b: Nurse retention is positively correlated with recruitment and selection.
- H2.c: Nurse retention is positively impacted by performance appraisal mechanisms.
- H2.d: Nurse retention is positively impacted by compensation and benefits strategies.

# 5.3 Conceptual Model

The conceptual model of this study was carefully constructed based on integrating two major theoretical frameworks: STS and SET (Harden et al., 2018; Huang et al., 2016). STS explores the relationship between QNWL quality and employee retention, whereas SET delves into the connection between HRM practices and retention (Almaaitah et al., 2017).

The main reason for this integration is that QNWL encompasses certain aspects of HRM; however, it fails to fully capture all its practices. A thorough literature review highlights the neglect of key HRM elements such as training, compensation, performance appraisal, and recruitment. By incorporating SET, our objective is to emphasise the importance of these practices (Cook et al., 2013). The empirical evidence underpins the relevance of SET in employee retention studies (Kim et al., 2020).

To visually depict the comprehensive conceptual model and interconnected constructs of this study, Figure 1 is presented.

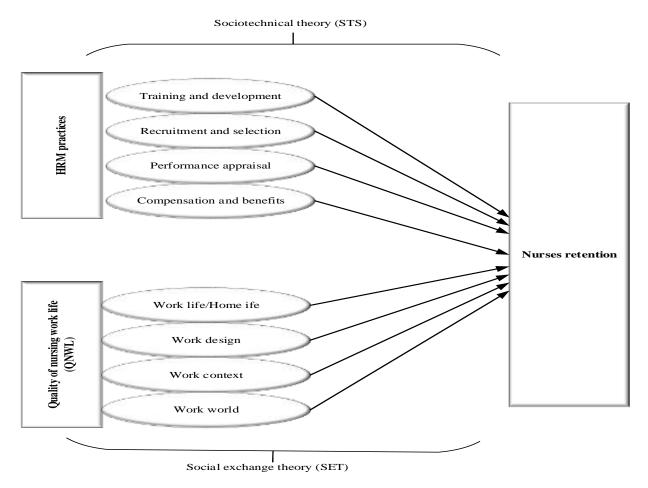


Figure 1. Conceptual model



### 6. Discussion

The current study addresses the problem of the high turnover rate among registered nurses in Jordan's public and university hospitals, leading to the reduced overall performance and profitability of these institutions. Our examination of the healthcare literature reveals that QNWL and HRM practices are critical elements that significantly impact nurse retention, which is consistent with hypotheses H1 and H2.

The impact of QNWL on nurse retention in the healthcare industry is of considerable importance (H1). This supports our sub-hypotheses H1.a, H1.b, H1.c, and H1.d, which posit that each dimension positively impacts retention. Work-life/home-life balance, for instance, affects nurses' retention directly and positively (H1.a), as conflicts between work and personal life elevate stress, diminishing morale, and fostering intentions of departure (Wardana et al., 2020). Similarly, work design (H1.b) has a significant impact on retention, where job autonomy amplifies nurses' inclination to remain (Agus & Selvaraj, 2020; Jedwab et al., 2022). However, it is essential to note that this model has limitations when addressing crucial managerial aspects effectively. The present study aims to mitigate this shortcoming by expanding the model's scope to encompass critical HRM practices which have been proven to affect employee retention according to management literature (Hassan, 2022; Zhao et al., 2022).

From a theoretical perspective, HRM practices have often been considered a universal solution for employee retention within an organisation (ALDamoe et al., 2012; Azeez, 2017). However, it is unclear how HRM practices improve retention (Raven et al., 2015). This study provides a fresh perspective for HR practitioners by examining the role of QNWL and the alignment of employee perceptions in the broader context of HRM practices. Regarding HRM practices (H2), these have been shown to positively impact employee retention, including training, recruitment, performance appraisal, and compensation. This confirms sub-hypotheses H2.a, H2.b, H2.c, and H2.d. Training and development (H2.a) fosters committed, skilled, and motivated employees, thereby reducing turnover rates (Dixit & Sinha, 2020). Effective recruitment and selection strategies (H2.b) align candidates into suitable roles and reduce turnover (Aman-Ullah et al., 2022). Performance appraisal (H2.c) acts as an evaluative feedback mechanism that enhances retention (Kalyanamitra et al., 2020). Finally, fair compensation and benefits (H2.d) lead to increased loyalty and dedication, reducing turnover rates (Bibi et al., 2018; Mossholder et al., 2005).

In conclusion, after a thorough review of the extant literature, the proposed model exhibits promising prospects for generating insightful discussions regarding strategies to improve nurse retention in public and university hospitals in Jordan. It has the potential to become an essential tool for healthcare administrators and policymakers, shedding light on efforts to strengthen nurses' retention. This will ultimately promote a higher healthcare quality.

# 7. Theoretical and Practical Implications

This paper introduces a unique conceptual model that integrates the disciplines of HRM and QNWL. This study attempts to fill a notable research gap by incorporating both of these



constructs. Moreover, the incorporation of STS and SET offers a holistic understanding of the influence of changes in independent variables, namely QNWL and HRM, on dependent variables.

There are various practical implications that can be derived from this study. This study focuses on the critical concern of the escalating rate of nurse turnover in Jordan, an aspect that has been relatively neglected despite its growing significance. The results of this study hold promise for the prospective improvement of healthcare management, policy-making, and nursing practises in the context of Jordan. The acquired insights have the potential to contribute to the formulation and execution of strategies intended to enhance the quality of nurses' work environments and their general satisfaction with their jobs.

Additionally, the healthcare institutions in Jordan can obtain substantial benefits from the findings of this study on the consequences of QNWL and HRM practices on the retention of nurses. This study highlights the necessity of implementing cohesive strategies aimed at improving multiple facets of the nursing profession, such as the work environment, recruitment practices, training opportunities, and compensations and benefits. By directing attention towards these specific domains, healthcare institutions have the ability to enhance the satisfaction of nurses and reinforce their ability to remain in their current positions.

In summary, this research paper introduces a thorough theoretical framework that integrates HRM and QNWL, thereby addressing a notable deficiency in the current body of scholarly work. The study's practical consequences have a wide-ranging impact on several stakeholders in the healthcare sector in Jordan, including healthcare managers, policymakers, and nurses. It provides significant insights that may be utilised to enhance nurse retention and improve the overall quality of the nursing profession.

### 8. Limitations and Future Suggestions

The limitations of this study primarily stem from its conceptual nature and narrow focus on specific groups of nurses in Jordanian public and university hospitals. Consequently, there is a need to test the hypotheses empirically using primary data by applying cross-sectional or longitudinal studies. Additionally, this study acknowledges the necessity for a more thorough investigation of the inconclusive evidence that the current body of knowledge presents concerning the link between QNWL and employee retention. As such, it is recommended that future studies incorporate additional theoretical perspectives. For instance, integrating interdisciplinary approaches, such as combining sociological and psychological theories, would significantly contribute to a more comprehensive understanding of employee retention. In addition, a more comprehensive exploration can be undertaken to delve deeper into the potential impact of workplace culture, employee happiness, satisfaction, and leadership style on nurse retention rates. There appears to be an opportunity to enhance the existing models by focusing on these factors. Furthermore, conducting comparative case studies across diverse healthcare systems, disciplines, and geographic locations could provide valuable insights into how these elements affect the relationship between QNWL and employee retention.



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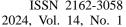
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