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Occupational Stress, Job Performance and Role Overload Among Nurses Working in the Healthcare Sector: A Mediational Model

Zafar Ahmad¹, Faiza Khalid², Hameeda Matooq Aljanabi³, Mohammed Mdawe R Alshahrani⁴, Ibtesam Jahlan⁵, Safiya Salem Bakarman⁶, Masoma Abdullah Kehlini⁷, Alya Matooq Aljanabi⁸, Sayed Shahbal^{9*}

Abstract

Extensive research in workplace psychology has explored the dynamics of role overload, occupational stress, and job performance. However, their complex interplay needs attention among nurses working in the healthcare sector. This study, involving 310 nurses in hospitals (2 Pakistani and 3 Saudi hospitals), employed three reliable questionnaires: Shortened Reilly's Role Overload Scale ($\alpha = 0.82$) to assess role overload, a six-item Job Stress Scale ($\alpha = 0.85$) for occupational stress, and the Individual Work Performance Questionnaire version 1.0, comprising task performance ($\alpha = 0.80$), contextual performance ($\alpha = 0.85$), and counterproductive work behavior ($\alpha = 0.65$) subscales for job performance. Findings revealed that role overload was associated with increased stress and negatively impacted task and contextual performance, as well as correlated with counterproductive work behavior. Elevated stress levels were linked to poorer task performance, reduced teamwork (contextual performance), and increased counterproductive work behavior. Improved task performance correlated positively with enhanced teamwork (contextual performance), and those excelling in either of these exhibited reduced counterproductive work behavior. Crucially, occupational stress mediated the connection between role overload and all aspects of job performance. This underscores the need to mitigate occupational stress among nurses, not only for their well-being but also for enhanced patient outcomes. Addressing occupational stress emerges as a vital strategy to foster a healthier work environment in healthcare settings.

Keywords: Occupational Stress, Job Performance, Work Overload, Nurses.

Introduction

In organizational settings, the focal point is employee well-being, a factor intricately tied to both individual and organizational outcomes. The concept of a "healthy organization" gains prominence, propelled by compelling research advocating for workplace interventions centered on health (Lowe, 2020). A robust body of evidence firmly links employee satisfaction with reduced turnover and heightened performance (Cole et al., 2021; Jia & Li, 2022), underscoring well-being's pivotal role in the retention of skilled and talented workers. (Almutairi et al., 2022)

¹Assistant Professor, National University of Modern Languages, Islamabad, Pakistan. ORCID: <https://orcid.org/0000-0003-2216-8317>

²National University of Modern Languages, Islamabad, Pakistan

³Dammam Health Network-Eastern Health Cluster

⁴King Faisal University, Saudi Arabia.

⁵Assistant Professor, Maternal and Child Health Nursing Department, King Saud University. ORCID number: 0000-0002-6189-7443

⁶Assistant Professor, Community and Mental Health Nursing Department, King Saud University. ORCID number: 0000-0001-7840-9218

⁷Dammam Health Network

⁸Dammam Health Network-Eastern Health Cluster

⁹National University of Modern Languages, Islamabad, Pakistan. ORCID: <https://orcid.org/0000-0002-5383-491X>, Email: Syedshahabal@gmail.com

Enduring challenges, such as employee stress, burnout, and work-life conflicts, can be detrimental and hurt the well-being of nurses (Foster et al., 2021). Workplace stress emerges as a disruptor that poses substantial risks to psychological, behavioral, and physical health (Keech et al., 2018; Maharaj, 2020). The World Health Organization (WHO) places emphasis on inadequate support, limited job control, and reward misalignment as key contributors to occupational stress (Psycho-social Risks and Mental Health, n.d.).

The far-reaching impact of workplace stress extends to employees' mental and physical well-being, often triggering negative coping mechanisms like anxiety, and depression (Ganster & Rosen, 2013; Mark & Smith, 2012; Tetrick & Winslow, 2015). Stress's direct link to major global causes of mortality, particularly cardiovascular disease (Quick et al., 2003; Vidrascu et al., 2019), emphasizes its gravity. This can be especially understood in the case of Japan, as the escalation of overwork-related disorders places emphasis on the urgency of addressing this issue (Yamauchi et al., 2017; Alruwaili et al., 2022).

Role overload, characterized by unmanageable demands surpassing available resources, emerges as a pivotal stressor (Truchot & Andela, 2018). Research consistently associates excessive demands with overwork-related disorders (Yamauchi et al., 2017) and impaired job performance (Ismail et al., 2015).

In the healthcare sector, particularly in nursing, intensified stress arises from a constant influx of patients, resulting in elevated nurse turnover rates (Duffield et al., 2014). Suicidal risks loom, triggered by perceived stressors at work and home (Zeng et al., 2019). The cumulative effect of occupational stress, along with recent increases in nursing care demands and role overload, poses threats to both job performance and overall health for working nurses (Zhang et al., 2022).

The connection between stress and job performance assumes critical significance for those experiencing role overload, as the sense of ineffectiveness stemming from an incapacity to fulfill one's perceived potential, induced by role overload, is exacerbated by job stress, which ultimately affects performance as well (Deniz et al., 2015). Likewise, absenteeism, driven by stress and overwork, surfaces as one of the many possible outcomes that result in subpar performance in the workplace (Zboril-Benson, 2002).

During public health crises like SARS-CoV, MERS-CoV, and H1N1 influenza pandemics, nurses grapple with burdensome workloads, jeopardizing healthcare efficiency and the well-being of both patients and nurses (Roychowdhury, 2019). The heightened contagiousness of the COVID-19 pandemic amplifies these challenges (Ahn et al., 2020).

Extended working hours, heavy workloads, and role overload significantly affect nurses' emotions and job performance. According to the Affective Events Theory (AET), overwork leads to negative attitudes, lower productivity, and reduced patient care quality (Harber et al., 1997). Role overload also results in sleep deprivation and heightened stress levels, which are associated with decreased commitment and suboptimal performance, as supported by research in Pakistan (Ahmed & Ramzan, 2013; Naru & Rehman, 2020).

Similarly, the Conservation of Resources (COR) theory brings focus to the role of stress in managing resources. Role overload, driven by excessive demands exceeding personal resources, triggers a stress and resource depletion effect. While this effect is amplified by job stress and a lack of support in the workplace (Molina-Mula et al., 2022) The Job Demands-Resources (JD-R) model also highlights that job demands, such as role overload, can lead to emotional exhaustion and burnout (Xanthopoulou et al., 2007). When viewed as a burdensome job demand, role overload may negatively affect well-being, while job stress will also deplete resources available to nurses, creating a vicious cycle of having low resources and perceiving high job demands.

The impact of role overload, however, exhibits nuances, oscillating between positive and negative effects. Comprehending the intricacies of role overload is imperative for understanding its repercussions on diverse organizational outcomes. In some cases, It can serve as a motivating challenge for high-performing individuals (LePine, 2005), while its association with job performance remains a subject of

mixed findings (Lin & Huang, 2021). Recent research in Pakistan shows the delicate balance where modest overload enhances performance while excessive overload triggers job stress, diminishes satisfaction, and hampers performance (Mittal & Bhakar, 2018). Some Pakistani studies also found supportive evidence for the mediating effects of job stress functioning to worsen the relationship between role ambiguity (Role stress) and job satisfaction (Khattak et al., 2011). As per the current situations of two countries like KSA and Pakistan is given below:

Pakistan

In the healthcare sector in Pakistan, nurses often face significant occupational stress due to various factors. The shortage of healthcare professionals, high patient loads, and limited resources contribute to a challenging work environment. Nurses in Pakistan may experience stress from long working hours, inadequate staffing levels, and the need to manage complex patient cases. Additionally, the socio-cultural context may influence stress levels, with societal expectations and cultural norms affecting the perception of the nursing profession. Despite these challenges, Pakistani nurses are known for their resilience and dedication to patient care. (Nazir et al., 2022)

The occupational stress experienced by nurses in Pakistan can have implications for job performance. High levels of stress may lead to burnout, affecting nurses' ability to provide optimal patient care. However, the commitment of nurses to their profession often drives them to overcome these challenges, highlighting their adaptability and commitment to delivering quality healthcare. Research into the specific stressors and coping mechanisms among Pakistani nurses is crucial for understanding the unique dynamics of the healthcare sector in the country and for developing targeted interventions to enhance job performance and well-being. (Nazir et al., 2016)

Saudi Arabia (KSA)

Nurses working in the healthcare sector in Saudi Arabia (Kingdom of Saudi Arabia - KSA) also contend with occupational stress, but the challenges and dynamics differ from those in Pakistan. The rapid development and modernization of the healthcare system in Saudi Arabia have resulted in an increased demand for healthcare services. Saudi nurses may face stressors related to the fast-paced growth, increased patient expectations, and adapting to evolving technologies. The cultural context and the diverse workforce in Saudi Arabia add another layer of complexity, influencing communication and teamwork among healthcare professionals. (Alotaibi et al., 2022; Shabbal et al., 2022)

Job performance among nurses in Saudi Arabia is influenced by the unique demands of the healthcare sector. The country's Vision 2030 initiative, emphasizing the importance of a thriving and efficient healthcare system, places added responsibility on nurses to meet rising healthcare standards. Balancing these expectations with the daily demands of patient care can lead to role overload. Saudi nurses, however, benefit from the country's investment in training and development programs, contributing to their professional growth. Understanding the interplay between occupational stress, job performance, and role overload is crucial for designing targeted interventions that support the well-being of nurses in the rapidly evolving healthcare landscape of Saudi Arabia. (Alsaedi et al., 2022; Sharahili et al., 2023)

In light of the compelling rationale behind exploring occupational stress, job performance, and role overload among nurses in the healthcare sectors of Pakistan and Saudi Arabia, our aim is to unravel the nuanced dynamics within these distinct settings. The identified stressors and challenges in each country contribute to the broader understanding of nursing practices, ultimately guiding the development of targeted interventions. By establishing a coherent link between the rationale and our aim, this study endeavors to provide valuable insights into the unique contextual factors shaping nurses' experiences and, in turn, inform strategies for enhancing their well-being and performance in diverse healthcare environments.

Rationale

Within this study a critical gap is covered in the existing literature by investigating the intricate relationship between role overload and occupational stress and their collective impact on nursing performance. While previous research has predominantly examined stress and role overload in isolation, this study seeks to unravel their interwoven effects, with a particular focus on the underexplored context of Pakistan.

By exploring the interconnected dynamics of role overload and stress, this research reveals role overload as a potent stressor capable of triggering a detrimental cycle that adversely affects nurses' mental health and job performance. Notably, it distinguishes role overload from conventional workplace stress, shedding light on its nuanced consequences.

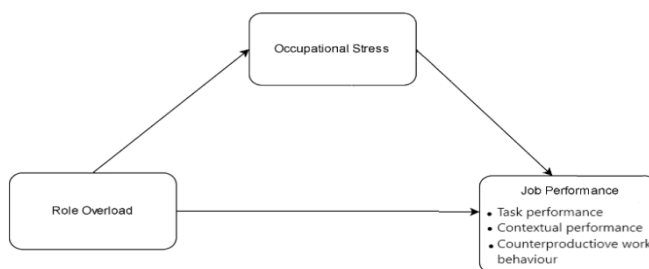
This research stands out as it pioneers the examination of the relationship between role overload and job performance within the Pakistani nursing population, a previously understudied area that has gained even greater relevance in the post-COVID era. Considering the heightened stress levels experienced by nurses, this study provides valuable insights into the unique challenges they face.

Given the distinctive socio-cultural and professional context of Pakistan, research on workplace stress and role overload assumes paramount significance. There is urgency for further investigations, particularly within the healthcare sector of Pakistan, to deepen our comprehension of how stress operates as a fundamental strain pathway capable of impairing both performance and overall well-being in high-role overload environments.

Moreover, this research illuminates the necessity for region-specific insights into the challenges faced by nurses in Pakistan. Such insights can inform tailored interventions, address culture-specific stressors, and ultimately enhance the well-being of healthcare professionals, thereby contributing to the betterment of both individuals and the nation's economic landscape.

In summation, this study emphasizes the importance of conducting research in Pakistan to foster healthier, more productive work environments for nurses. By bridging existing knowledge gaps and offering context-specific solutions, it paves the way for a more resilient and thriving nursing workforce in the country."

Conceptual Framework



Hypotheses

1. Role overload, Occupational stress, and Job performance will be significantly correlated.
2. Occupational/job Stress mediates the Role Overload-Job Performance link. i.e.
 - 2.1. Elevated scores in Occupational Stress will intensify the adverse impact of Role Overload on Task Performance.
 - 2.2. Elevated scores in Occupational Stress will intensify the adverse impact of Role Overload on Contextual performance.

2.3. Elevated scores in Occupational Stress will intensify the adverse impact of Role Overload on Counterproductive work behavior.

Sample and Sampling Technique

The study was conducted by approaching the sample through purposive convenience sampling. A sample size of approximately 310 for the present sample of nurses in working in Saudi and Pakistani Hospitals was calculated. As for this data was collected from Benazir Bhutto Hospital, Holy Family Hospital in Pakistan and King Saud Medical City Riyadh, King Faisal Hospital and Dammam Health Network, Eastern Health Cluster in Saudi Arabia was targeted. Non-probability sampling specifically targeted nurses within targeted hospitals as participants in the research. The sample included nurses who had been actively working in their respective roles for a minimum of six months.

Instruments/Tools for data collection

Informed Consent form

A form detailing the minimum required information for the study and a detailed consent form was provided to participants to inform them of their rights within the study and to obtain their consent through online google forms.

Role overload

A revised version of Reilly's Role Overload Scale was used to measure role overload. This updated scale comprises six items, each rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) and has demonstrated strong internal consistency. The scale has shown to be reliable; the Cronbach's alpha coefficients for the scale have been assessed to range between 0.87 to 0.92 (Thiagarajan et al., 2006; Reilly, 1982).

Occupational stress

To measure occupational or job stress, a five-item Job Stress Scale was used which was developed by Lambert and his colleagues (2006). The scale is assessed on a Likert format with five responses ranging from strongly agree to strongly disagree. It is a unifactorial measure and has shown good model fit and reliability, with an alpha coefficient (α) of 0.82.

Job Performance

Individual Work Performance Questionnaire was used to measure the performance of nurses, it is (IWPQ) Version 1.0. This questionnaire consists of three sub-scales: task performance, contextual performance, and counterproductive work behavior. The IWPQ comprises 18 items and was originally developed in the Netherlands by Koopmans (2014). These concise scales demonstrate strong fit and meet essential measurement criteria, with (PSI) of 0.81, 0.85, and 0.74, respectively, similar to Cronbach's alpha, indicating their reliability.

Research Design

This research employed a quantitative research design. Data collected from the questionnaires were analyzed using SPSS version 27. To assess the relationships between the study variables, a Pearson correlation analysis was conducted. Additionally, Andrew Hayes' Process Macro Model 4 (version 4.0, 2013) was employed to assess mediation. Differences in responses related to certain demographic variables were evaluated using t-tests.

Procedure

Data collection in Pakistani hospitals followed a strict protocol. The nursing departments at each

hospital were asked for permission to approach nurses for inclusion in the study. Formal request letters and applications were provided to them. Eligible nurses, with a minimum of six months of experience, were then asked for informed consent.

Participants who agreed received a detailed consent form explaining their rights and the study. They also received the full set of questionnaires for data collection. Besides traditional paper-based questionnaires, an online form using Google Forms was created and shared via WhatsApp groups and direct messages for added convenience.

Ethical Concerns

This study prioritized ethical considerations throughout the research process. All participants were assured of the confidentiality of their responses, and they were explicitly informed of their right to withdraw their participation at any point during the study without consequences. Data collection procedures adhered to ethical guidelines and standards, ensuring the participants' rights and privacy.

Results

Table 1: Correlation Between Role Overload Occupational Stress and Job Performance (Task Performance, Contextual Performance, Counterproductive Work Behaviour) (N = 310).

	1	2	3	4	5
1 Role Overload	-	.23**	-.18**	-.14**	.23**
2 Occupational Stress	-	-	-.49**	-.38**	-.01
3 Task Performance	-	-	-	.29**	-.31**
4 Contextual Performance	-	-	-	-	-.23**
5 CWP	-	-	-	-	-

** Correlation is significant at the 0.01 level (2-tailed).

According to Table 1 significant correlations showed that: an increase in Role overload correlated with an increased Occupational Stress and Counterproductive Work Behavior while a decrease in Task and Contextual Performance. Occupational Stress is also negatively correlated to Task and Contextual performance. An Increase in Task Performance is correlated to an increase in Contextual Performance and a decrease in Counterproductive Work Behavior. At the same time, an increase in Contextual Performance is linked to a decrease in Counterproductive Work Behavior.

Table 2: Mediation of Occupational Stress from Role Overload to Task Performance (N = 310).

Path	Coefficient (b)	SE	t-value	p-value	95% CI
a (RO -> JS)	.20	.05	4.16	.00	[.11, .30]
b (JS -> TP)	-.40	.04	-9.22	.00	[-.48, -.32]
c' (RO -> TP)	-.06	.04	-1.47	.14	[-.13, .01]
c (Total Effect)	-.14	.04	-3.27	.00	—
Indirect Effect	-.08	—	—	—	[-.12, -.05]

Model for the a-path $R^2 = .05$, $F(1, 308) = 17.29$, $p < .001$, Model for b and c'-path $R^2 = .24$, $F(2, 307) = 49.31$, $p < .001$, Model for c-path $R^2 = .03$, $F(1, 308) = 10.71$, $p < .001$

According to table 2, results show that there is significant mediation of job stress between role overload and task performance link, as path (a) was significant ($p < .001$) from RO to OS as well as path (b) ($p < .001$) from OS to TP. Only the direct effect was not significant ($p > .05$) on the path (c') from RO to TP. The presence of a significant indirect effect on the path (c) RO on TP through OS in the absence of a direct effect implies a full mediation. The bias-corrected 95% confidence intervals for the significant paths also confirm the absence of a zero confirming the validity of the results.

Table 3: Mediation of Occupational Stress from Role Overload to Contextual Performance (N = 310).

Path	Coefficient (b)	SE(HC4)	t-value	p-value	95% CI
a (RO -> JS)	.20	.05	4.16	.00	[.11, .29]
b (JS -> CP)	-.51	.08	-6.72	.00	[-.65, -.37]
c' (RO -> CP)	-.08	.07	-1.13	.26	[-.22, .07]
c (Total Effect)	-.18	.07	-2.57	.01	—
Indirect Effect	-.10	—	—	—	[-.16, -.06]

Model for the a-path $R^2 = .05$, $F(1, 308) = 17.29$, $p < .001$, *Model for b and c'-path* $R^2 = .15$, $F(2, 307) = 26.34$, $p < .001$, *Model for c-path* $R^2 = .02$, $F(1, 308) = 6.63$, $p < .05$

According to table 3, results show that there is significant mediation of job stress between role overload and contextual performance link, as path (a) was significant ($p < .001$) from RO to OS as well as path (b) ($p < .001$) from OS to CP. Only the direct effect was not significant ($p > .05$) on path (c') from RO to CP. The presence of a significant indirect effect on path (c) RO on CP through OS in the absence of a direct effect implies a full mediation. The bias corrected 95% confidence intervals for the significant paths also confirm the absence of a zero confirming validity of results.

Table 4: Mediation of Occupational Stress from Role Overload to Counterproductive work Behavior (N = 310).

Path	Coefficient (b)	SE(HC4)	t-value	p-value	95% CI
a (RO -> JS)	.20	.05	4.16	.00	[.11, .29]
b (JS -> CWP)	.14	.05	2.98	.00	[.05, .23]
c' (RO -> CWP)	.14	.04	3.37	.00	[.05, .23]
c (Total Effect)	.17	.04	4.23	.00	—
Indirect Effect	.03	—	—	—	[.01, .05]

Model for the a-path $R^2 = .05$, $F(1, 308) = 17.29$, $p < .001$, *Model for b and c'-path* $R^2 = .08$, $F(2, 307) = 13.62$, $p < .001$, *Model for c-path* $R^2 = .05$, $F(1, 308) = 17.87$, $p < .001$

According to Table 4, results show that there is significant mediation of job stress between role overload and counterproductive work behavior link, as path (a) was significant ($p < .001$) from RO to OS as well as path (b) ($p < .001$) from OS to CWB. The direct effect was also significant ($p > .05$) on the path (c') from RO to CWB. The presence of a significant indirect effect on the path (c) RO on CWB through OS in the presence of a significant direct effect implies partial mediation. The bias-corrected 95% confidence intervals for the significant paths also confirm the absence of a zero confirming the validity of the results.

Discussion

Within this study, the primary aim was to understand the complicated nature of the relationship between nurses feeling role overload i.e. excessive role tasks to perform, occupational stress; feelings of stress experienced because of work, and their job performance within the context of nursing in hospitals. The findings shed light on several critical aspects of these phenomena and have implications for both healthcare practitioners and organizational leaders.

This research revealed an informative interplay between role overload, occupational stress, and job performance. Role overload, characterized by excessive demands exceeding available resources, emerged as a significant stressor, consistent with previous research (Truchot & Andela, 2018). It was associated with reduced task and contextual performance, aligning with the literature on the adverse effects of role overload on employee outcomes (Ismail et al., 2015). However, the positive link between role overload and counterproductive work behavior was a notable finding, suggesting that employees overwhelmed with responsibilities may resort to counterproductive actions as a coping mechanism, echoing previous research on stress-related maladaptive behaviors (Quick et al., 2003).

Occupational stress, as assessed by the Job Stress Scale, exhibited a negative relationship with task and contextual performance, confirming the detrimental impact of stress on job-related functions (Schlotz et al., 2004). The positive connection between occupational stress and counterproductive work behavior puts emphasis on the role of stress in influencing negative workplace behaviors, consistent with the literature on stress-related outcomes (Ganster & Rosen, 2013).

This study identifies occupational stress as a crucial mediator in the relationship between role overload and job performance. These results can further be supported by the theories of Conservation of Resources (COR) and the Job Demands-Resources (JD-R) model, such that stress plays a crucial role in resource depletion and emotional exhaustion (Xanthopoulou et al., 2007). In this context, role overload acted as an initial stressor, depleting personal resources, while occupational stress caused even greater burden and an inability to recover any resources, thus triggering a cascade effect that negatively impacted job performance. Understanding this mediation effect is vital for designing targeted interventions to alleviate stress and enhance performance among nursing professionals. As such, we can accept the hypothesis, that there is a significant mediation effect of occupational stress between role overload and job performance link. Findings reveal full mediation for two of the three performance dimensions i.e. task performance and contextual performance, while partial mediation for counterproductive work behavior. Based on the findings it can be understood that the level of occupational stress experienced by nurses directly affects how role overload will influence tasks and contextual performance however the link between role overload and counterproductive work behavior is mediated partially, meaning that occupational stress does not solely define the link between them. This means that as occupational stress increases the detrimental effect of role overload on job performance also increases.

Role overload does not exert a significant direct influence on task and contextual performance as such full mediation is observed, this finding is supported by a body of literature, with numerous studies demonstrating that work stress frequently acts as a mediator in the relationship between stressors, such as role overload or work overload, and adverse outcomes among professionals (Jia & Li, 2022; khader Alrabbe & Alwagfi, 2020; Naru & Rehman, 2020). In a similar vein, research conducted by Abbasi & Janjua (2016) within Pakistan's banking sector revealed that job stress plays a crucial mediating role in the connection between work overload and performance. Similar research by (Akkoç et al., 2021) suggests that occupational stress may serve as a mediator, potentially exerting a negative impact on the link between stressors and performance.

Likewise, job stress is found to be a partial mediator in the role overload-counterproductive work behavior link. This implies that the transition of role overload into counterproductive work behavior can be partially understood through the influence of occupation-related stress on this relationship. In other words, as stress levels in the job increase, the link between stressors and detrimental workplace outcomes becomes more pronounced (Nugroho et al., 2020; Purba & Demou, 2019). Moreover, according to postulates of the Affective Events Theory, feelings of negativity and emotions associated with occupational stress can lead to counterproductive behaviors that are detrimental to organizational well-being (Dai et al., 2021; Naru & Rehman, 2020). Nevertheless, it is important to note that there is still a direct impact of role overload on nurses' work behavior that is counterproductive, indicating that the perception of role overload can impact such work behaviors independently of the perception of job stress. Zhang et al.(2019) also suggest that increased levels of perceived role overload can lead to negative affect and higher levels of irritability, often resistant to moderation by an individual's proactive traits.

Implications

The implications of this research are particularly relevant for healthcare organizations and management. The elevated stress levels experienced by nursing staff are exacerbated by factors such as patient influx, role overload, and the shortage of full-time nurses. To foster a healthier and more productive work environment, organizations should prioritize strategies for stress reduction and resource management. Interventions that provide support, improve job control, and align rewards with demands, as recommended by the World Health Organization (Psycho-social Risks and Mental Health, n.d.), can mitigate occupational stress.

Furthermore, these findings emphasize the need for tailored interventions in the healthcare sector. Culturally sensitive approaches that address region-specific stressors can be instrumental in enhancing the well-being of healthcare professionals. These interventions not only benefit individuals but also contribute to the overall economic landscape by retaining skilled and motivated nursing staff.

Conclusion

In conclusion, this research shows that Occupational stress mediates the role overload-job performance link and unveils the relevance of mitigating work stress in healthcare settings; not only to promote the work performance of nurses but also to improve patient outcomes. By addressing the intricate interplay between role overload, stress, and performance, healthcare organizations and beyond can create a more resilient and thriving nursing workforce, ultimately benefiting both individuals and the broader healthcare system.

Limitations and Recommendations

While the current study aimed to gather clear and in-depth information, certain limitations and gaps could be addressed, one potential suggestion for further research can be to collect additional information on the stressors that are aggravating occupational stress, these can range from health conditions of nurses themselves to specific environmental stressors in their home and work environment, which could then be controlled for when running analysis. This inclusion would also prove valuable in pinpointing stress origins within and outside the work environment when developing preventive measures.

In this study, most of the participating nurses were contacted during their work hours. Consequently, the questionnaires had to be concise and direct to respect the nurses' time and maintain their full attention. This approach enhanced the reliability and validity of the responses. However, using longer

and more detailed questionnaires with sub-factors could provide a more comprehensive understanding of the subject. Unfortunately, due to nurses' limited attention due to their demanding jobs, this was not feasible in this study.

One other shortcomings of this also found that, due to limited resources, this study was unable to find a compare model between the two samples of KSA and Pakistan, thus it is recommended for further researches to perform this cross-cultural based comparison as well.

Future researchers might benefit from adopting a mixed-method approach. This approach could involve selecting a smaller, more willing, volunteer, or incentivized sample. By combining interviews and qualitative analysis with quantitative methods, researchers can gain a deeper understanding of the role overload phenomenon as a 'mixed stressor,' as described by Huang and his colleagues (2021). Additionally, this approach would allow for a broader collection of potential control variables to minimize intervening variables in the study.

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