

## Original Article

## Role Overload and Job Performance among Nurses: Moderating Role of Mindfulness

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### Abstract

**Objective:** This study aimed to examine the impact of role overload on nurses' job performance and to investigate the moderating role of mindfulness in mitigating its negative effects

**Study Design:** A quantitative cross-sectional study was conducted.

**Place and duration of study:** Data were collected through convenience sampling from 310 nurses working in various hospitals.

**Material and Methods:** A quantitative, cross-sectional research design was employed. Data were collected through convenience sampling from 310 nurses working in various hospitals. Standardized instruments were used, including Reilly's Role Overload Scale ( $\alpha = .87$ ), the Mindful Attention Awareness Scale (MAAS) ( $\alpha = .79$ ), and the Individual Work Performance Questionnaire (IWPQ, version 1.0) ( $\alpha = .80$ ). All measures demonstrated satisfactory reliability.

**Results:** Findings revealed a significant negative relationship between role overload and job performance. Regression analysis indicated that mindfulness was positively associated with improved performance. Furthermore, mindfulness significantly moderated the relationship between role overload and both task and contextual performance. However, its moderating effect on counterproductive work behavior was not significant.

**Conclusion:** The results suggest that mindfulness acts as a valuable psychological resource that buffers the adverse effects of role overload on performance. The study highlights the importance of integrating mindfulness-based interventions in high-stress work environments to enhance employee well-being, resilience, and overall job performance.

**Keywords:** Mindfulness, Job Performance, Role Overload, Healthcare Sector, Nurses

### 1. Introduction

Emotions profoundly shape our experiences of the world. Positive emotions can help us create good experiences, resulting in better outcomes for individuals.<sup>(1)</sup> Conversely, negative emotions can sour even a relatively good day, transforming a manageable experience into a challenging one. Individuals suffering from psychological disorders often report that negative emotions can distort everyday experiences and make even the act of getting out of bed a chore.<sup>(2)</sup> Therefore, it is crucial to find ways to improve the emotional experiences of individuals to enhance their quality of life and overall well-being.

Nurses are among the highest-risk professions for developing psychological issues. Research indicates that nurses are at higher risk for suicide

and suffer from severe anxiety and depression as a result of their jobs.<sup>(3)</sup> Healthcare workers, including nurses, are at the forefront of providing essential care and managing community welfare. Thus, it is imperative to prioritize their psychological well-being to ensure the overall health of society.<sup>(4)</sup> Mindfulness has been proposed as a therapeutic intervention technique that strengthens the psychological health of practitioners. It improves focus on the present, removes the agency of unwanted distractions, and increases appreciation of previously unnoticed positive aspects of life.<sup>(5)</sup> Mindfulness is associated with decreased anxiety, reduced depression, and improved well-being.<sup>(6)</sup>

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Clinical trials and extensive experiments consistently show the benefits of mindfulness on the well-being of nurses .<sup>(7)</sup> As stressors are an unavoidable part of the nursing profession, it is prudent to accept them as such. Rather than solely focusing on strategies to reduce stressors, teaching techniques that help manage the effects of these stressors on nurses' well-being should take priority. Role overload, sometimes confused with work overload, has been a subject of great interest in high-performance, long-hour professions. Unlike work overload, which pertains solely to job responsibilities, role overload encompasses all the roles and responsibilities an individual performs, including those at home and among friends and relatives .<sup>(8)</sup> When individuals feel pressured by these roles encroaching on their limited time resources to the extent that they cannot fulfill their responsibilities adequately, they consider themselves victims of role overload. Researchers often define role overload as the experience of having too much to do in too little time.<sup>(9)</sup>

It is generally considered that stressors are a prerequisite to stress; however, multiple studies across various countries and cultures show that stressors are not necessarily synonymous with stress itself .<sup>(10)</sup> While stressors have the potential to cause stress, individual responses to these external stressors vary widely based on personal characteristics .<sup>(11)</sup> Research, however, does indicate that stressors often lead to stress among nurses which in turn is negatively related to wellbeing and performance .<sup>(12,13)</sup> Although conflicting findings on stressors like Mittal & Bhakar (2018) study on the positive effects of role overload on performance among bank employees, makes it less clear and more nuanced.

This highlights the importance of self-management strategies that improve individual responses to stressors. For instance, mindfulness helps mitigate the negative effects of stressors and may even highlight the positive aspects of stressors on performance .<sup>(14)</sup> Some studies suggest that under moderate levels of role overload, individuals tend to perform better as compared to those who are experiencing low role overload .<sup>(15)</sup>

## 2. Materials & Methods

### Conceptual Framework

Figure: Conceptual Model depicting Role Overload, Mindfulness, and Job Performance

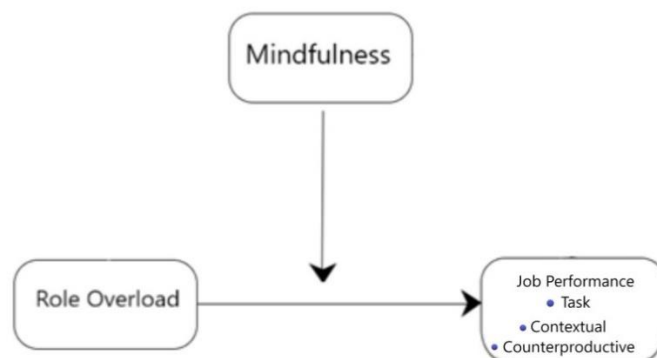


Figure: Conceptual Model depicting Role Overload, Mindfulness, and Job Performance

### Hypothesis

1. Mindfulness moderates the relationship between Role overload and Job Performance (Task Performance, Contextual Performance, Counterproductive Work Behavior) among nurses.

### Instruments

#### Role overload:

Role overload was evaluated using the revised version of Reilly's Role Overload Scale. This scale comprises 6 items, each rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Previous research has shown this scale to have high internal consistency, with Cronbach's alpha coefficients ranging from 0.87 to 0.92 .<sup>(16)</sup>

#### Job Performance

Job performance was measured using version 1.0 of the Individual Work Performance Questionnaire (IWPQ). The IWPQ includes three sub-scales: task performance, contextual performance, and

counterproductive work behavior, encompassing a total of 18 items. The IWPQ has been validated in various studies and is considered reliable (Jakada et al., 2020; Van der Vaart, 2021).<sup>(17)</sup>

**Mindfulness**

Dispositional mindfulness was measured using the Mindful Attention Awareness Scale (MAAS) by Brown and Ryan (2003). This scale consists of 15 items rated on a 6-point Likert scale (1 = Almost Always to 6 = Almost Never). The MAAS has been shown to be stable, reliable, and valid, with Cronbach's alpha coefficients ranging between 0.76 and 0.93 (Osman et al., 2016; MacKillop & Anderson, 2007; Black et al., 2012).

**Sampling**

Convenience sampling was employed to collect data from nurses working in both public and private hospitals.

**Procedure**

Data collection involved contacting the heads of nursing departments in hospitals to seek permission to approach nurses for participation. After obtaining approval, nurses with job experience were invited to participate and provided with consent forms detailing their rights and a brief overview of the study. Participants completed the questionnaires independently, either in person or through an online Google form, ensuring anonymity and the option to withdraw from the study at any time. Ethical guidelines were strictly followed throughout the data collection process.

**3. Result**

Table 1 Mindfulness moderates Between Role Overload and Task Performance (N = 310)

Variables	$\beta$	SE	<i>p</i>	95% CI
Role Overload	-.18	.04	.00	[ -.25    -.10]
Mindfulness	.14	.02	.00	[.11    .18]
RO x M	.01	.00	.00	[ .00    .02]

Model for the a-path  $R^2 = .19$ ,  $F(3, 306) = 23.33$ ,  $p < .001$ , RO = Role Overload, M = Mindfulness

The analysis showed a significant interaction between role overload and mindfulness on task performance ( $p < .001$ ), indicating a moderating effect. Role overload negatively affected task performance at low and moderate levels of mindfulness, but this effect became non-significant at high mindfulness, suggesting a buffering role. Additionally, role overload had a significant negative direct effect, while mindfulness had a significant positive effect on task performance. Bootstrap confidence intervals confirmed the significance of these relationships.

Table 2

Mindfulness moderates Between Role Overload and Contextual Performance (N = 310)

Variables	$\beta$	SE	<i>p</i>	95% CI
Role Overload	-.22	.07	.00	[-.36 -.07]
Mindfulness	.14	.03	.00	[.06 .21]
RO x M	.01	.01	.03	[.00 .03]

Variables	$\beta$	SE	<i>p</i>	95% CI
Role Overload	.19	.04	.00	[.11 .28]
Mindfulness	-.08	.02	.00	[-.12 -.04]
RO x M	.00	.00	.39	[.00 .01]

Model for the a-path  $R^2 = .08$ ,  $F(3, 306) = 9.09$ ,  $p < .001$

The results showed a significant interaction between role overload and mindfulness on contextual performance ( $p < .05$ ), indicating a moderating effect. Role overload negatively affected contextual performance at low and moderate levels of mindfulness, but this effect became non-significant at high levels of mindfulness, suggesting a buffering role. Additionally, role overload had a significant negative direct effect, while mindfulness had a significant positive effect on contextual performance. Bootstrap confidence intervals confirmed the significance of these relationships.

Table 3

Mindfulness moderates Between Role Overload and Counterproductive Work Behavior (N = 310)

Model for the a-path  $R^2 = .10$ ,  $F(3, 306) = 11.72$ ,  $p < .001$

The results showed no significant moderating effect of mindfulness on the relationship between role overload and counterproductive work behavior ( $p > .05$ ). However, role overload had a significant positive effect on counterproductive behavior, while mindfulness had a significant negative effect. This indicates that higher role overload increases counterproductive behaviors, whereas mindfulness helps reduce them. Bootstrap confidence intervals confirmed the significance of the direct relationships.

**4. Discussion**

The results of this study highlight the significant interaction between Role Overload and Mindfulness on Job Performance. These findings help us understand how psychological resilience factors, such as Mindfulness, can buffer the detrimental effects of stressors such as Role overload among nurses.

Table 1 shows that all the scales used in the study had acceptable reliability as shown in their alpha values. The three scales, Reilly's Role Overload Scale (Thiagarajan et al., 2006; Reilly, 1982) with Cronbach's alpha of .87, the Mindful Attention Awareness Scale (MAAS) <sup>(18)</sup> with Cronbach's alpha of .79, and the Individual Work Performance Questionnaire version 1.0 (IW PQ) (Koopmans, 2015) with a Cronbach's alpha of .80, .85 and .65 for the sub-scales of Task performance, Contextual performance and Counterproductive Work Behaviour.

The regression results demonstrate that Role Overload has a negative impact on Job Performance. This is consistent with existing literature, which has consistently shown that excessive demands and responsibilities can lead to decreased performance and higher levels of job-related stress . <sup>(19,20)</sup> The negative consequences of Role Overload can be attributed to the depletion of cognitive and emotional resources, leaving individuals less capable of effectively managing their work tasks . <sup>(21)</sup> Moreover, the strain resulting from Role Overload can lead to burnout, further exacerbating its adverse effects on performance . <sup>(22)</sup>

Results show that Mindfulness has a significant positive effect on Job Performance, which aligns with previous research suggesting that Mindfulness can enhance job performance by improving focus, reducing stress, and promoting emotional regulation. <sup>(23,24)</sup> Mindfulness practices help individuals remain present and attentive, reducing the impact of external stressors on their cognitive functions . <sup>(25)</sup> This is particularly relevant in high-stress professions, such as nursing, where the ability to manage stress effectively can significantly influence job performance and overall well-being (Li, 2021).

As shown in Tables 2 and 3, the significant interaction between Role Overload and Mindfulness indicates a buffering effect of Mindfulness on the negative impacts of Role Overload on Task and Contextual Performance. At lower and medium levels of Mindfulness, the effect of Role Overload is significantly diminished in Task and Contextual Performance; however, at higher levels

of Mindfulness, the moderating effect is not significant. This finding suggests that Mindfulness can serve as a crucial coping mechanism, enabling individuals to manage the stress and demands associated with Role Overload more effectively . <sup>(26)</sup> By fostering a mindful approach to daily tasks, individuals can create a psychological buffer and improve their focus, thereby diminishing the impact of excessive role demands on their job performance . <sup>(24)</sup>

The findings indicate that mindfulness did not significantly moderate the relationship between role overload and counterproductive work behavior (CWB), suggesting that higher levels of mindfulness do not buffer the negative impact of role overload on such behaviors. However, both role overload and mindfulness independently showed significant effects on CWB. One possible explanation is that CWB may be resistant to the protective effects of mindfulness. Prior research highlights that factors such as supervisor incivility, internal locus of control, and job resources (e.g., social job crafting) may play a more influential role in mitigating CWB than mindfulness alone. Additionally, CWB is often shaped by complex situational, personal, and sociocultural factors, making it difficult to address through a single psychological resource. These findings suggest that understanding and reducing CWB requires a broader, multi-factorial approach rather than relying solely on mindfulness.

### Conclusion:

In conclusion, this study contributes to the growing body of literature on the impact of Role Overload and the protective role of Mindfulness on Job Performance. These findings exemplify the importance of Mindfulness as a moderating factor that can buffer the negative effects of Role Overload on both Task and Contextual performance, implying that mindfulness not only is related to improved task performance but also to prosocial behaviours, as in contextual performance. Future research should explore the long-term benefits of Mindfulness interventions and their applicability across various professional settings. By integrating Mindfulness practices into

workplace wellness programs, organizations can create a more supportive environment that promotes both employee well-being and organizational success.

### Limitations

The study is limited by its cross-sectional design, which restricts causal interpretations. Reliance on self-reported data may introduce bias and affect the accuracy of findings. The use of a convenience sample limits generalizability across different contexts. Additionally, focusing only on mindfulness and not considering longitudinal effects or other variables limits the depth of understanding.

### Disclosure /Conflict of interest:

Authors declare no conflict of interest.

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