

Well-being among contract healthcare workers: Balancing job demands and personal resources



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Orientation: Contract-based healthcare workers often face disproportionate challenges, such as job insecurity, limited career advancement opportunities and unequal pay, despite performing similar duties to permanent staff.

Research purpose: This study investigates the moderating role of personal resources in the relationship between job demands and employee well-being among contract healthcare workers.

Motivation for the study: Given the rising reliance on contract healthcare staff, it is crucial to understand how their well-being can be protected and sustained under high-demand working conditions.

Research approach/design and method: Data were collected from 221 contract healthcare workers in a public hospital using structured questionnaires. Moderated regression analysis was employed to test both direct and interaction effects of job demands and personal resources on well-being.

Main findings: Job demands negatively predicted well-being, while personal resources had a significant positive effect. Furthermore, personal resources buffered the adverse effects of high job demands, confirming their moderating role.

Practical/managerial implications: Human resource strategies should not only manage job demands but also strengthen personal resources through resilience training, psychological coaching and self-efficacy development. Such initiatives can enhance psychological safety and support workforce sustainability.

Contribution/value-add: This study extends the Job Demands–Resources and Conservation of Resources frameworks by providing empirical evidence of the moderating role of personal resources. It offers actionable insights for improving well-being among contract healthcare workers operating under demanding conditions.

Keywords: contract healthcare workers; employee well-being; JD-R model; job demands; personal resources.

Introduction

Ensuring employee well-being is a critical priority for organisations, particularly in high-pressure sectors such as healthcare. A supportive work environment characterised by adequate facilities, psychological safety and fair treatment plays a central role in sustaining psychological and physical well-being (Zulkarnain et al., 2024a). Prior research highlights that comfortable workspace, access to appropriate technologies, supportive supervision and equitable policies serve as essential foundations of a healthy workplace (Bakker & Demerouti, 2017). Such conditions foster satisfaction, resilience and productivity while reducing stress and withdrawal behaviours.

A positive organisational culture that emphasises inclusivity, open communication and recognition further strengthens employees' sense of belonging and engagement. Supportive interpersonal relationships, including collegial support and high-quality teamwork, have been shown to buffer stress and improve job satisfaction (Edmondson & Lei, 2014; Tetrick & Peiró, 2012). Organisations that invest in psychological safety and transparent communication typically benefit from higher performance, reduced turnover and stronger organisational commitment (Frazier et al., 2017; Zulkarnain et al., 2025).

In contrast, unfavourable working conditions such as excessive workloads, role ambiguity and weak supervisory support undermine employee well-being (Aprilia et al., 2025). These conditions

contribute to emotional exhaustion, lower motivation and diminished performance (Maslach & Leiter, 2016; Zulkarnain et al., 2023b). Employment disparities further complicate this issue. Permanent employees generally enjoy job security, benefits and career development opportunities, whereas contract staff often face job insecurity, irregular compensation and limited formal recognition (Mauno et al., 2012). These inequalities are pronounced in healthcare, where contract workers are essential to service delivery, yet experience heightened structural and psychological burdens.

Although contract and permanent healthcare workers often perform similar tasks, contract staff typically have fewer opportunities for advancement, less predictable pay and weaker formal recognition (Virtanen et al., 2003). Such disparities increase stress and reduce commitment, especially when job resources such as social support or professional development are limited (Schaufeli & Taris, 2014). While some evidence suggests that contract employees can show similar loyalty and participation to permanent workers (Paramita, 2008), differences in compensation and recognition remain significant concerns. For instance, contract workers frequently receive irregular honorariums that are considerably lower than the stable salaries and bonuses of permanent staff, leading to financial strain and prolonged stress (Devi et al., 2017).

Job demands form a central element influencing employee well-being, particularly among contract workers. These demands involve sustained physical or emotional effort, heavy workloads and strict deadlines (Bakker & Demerouti, 2017). When demands are not balanced with adequate resources or recovery opportunities, they contribute to burnout and poor health (Kristensen et al., 2004). Although job demands are not inherently negative, they only become motivating when employees possess sufficient internal and external resources (LePine et al., 2005).

The Job Demands–Resources (JD-R) model provides a comprehensive framework for understanding this balance. The model posits that employee well-being depends on the interplay between job demands and job resources, with resources acting to buffer the negative effects of demands (Bakker & Demerouti, 2017). Without adequate support, high demands lead to chronic stress, disengagement and burnout (Bakker et al., 2014). Interventions such as fair task allocation, stress management training and recovery-supportive practices can help mitigate these risks (Bakker & De Vries, 2021).

Within the JD-R perspective, personal resources form an essential component of employees' capacity to cope with challenges. These psychological assets, such as self-efficacy, optimism, resilience and a sense of control, help individuals manage stress and maintain well-being (Gagné & Deci, 2005; Luthans et al., 2007). Employees with strong personal resources typically view challenges as opportunities, maintain motivation and remain engaged even in demanding contexts (Ryan & Deci, 2000). Empirical evidence supports

this view: individuals high in personal resources show greater responsibility, proactivity and initiative (Mastenbroek et al., 2014), and they are more effective at managing demands, reducing burnout and sustaining engagement (Hobfoll et al., 2018).

Recent studies reinforce the importance of personal resources in modern organisations. Xanthopoulou et al. (2012) found that self-efficacy, optimism and resilience reduce stress and strengthen work engagement. Similarly, Kostova and Dick (2021) reported that hope, efficacy, resilience and optimism enhance well-being and performance even under pressure. These findings align with the positive organisational behaviour literature, which emphasises psychological strengths as crucial for adaptive coping, sustained performance and long-term motivation (Avey et al., 2011).

The research problem

Contract healthcare workers face structural disadvantages, such as job insecurity, limited career progression and unequal compensation, despite performing similar duties to permanent staff. These conditions expose them to elevated job demands that threaten their physical, psychological and social well-being, particularly when organisational support is lacking. Personal resources, including self-efficacy, optimism, resilience and hope, may buffer these negative effects by enabling individuals to manage stress and sustain motivation. Yet, empirical evidence on the moderating role of personal resources in this context remains scarce, especially within contract-based healthcare settings. To address this gap, the present study examines how personal resources interact with job demands to shape the well-being of contract healthcare workers in hospitals.

Theoretical framework integration

Employee well-being has become a central concern in organisational management due to its strong influence on productivity, absenteeism, satisfaction and health-related costs. Maintaining well-being is both a moral imperative and a strategic necessity, as it reduces expenses associated with illness, occupational stress and healthcare utilisation (Danna & Griffin, 1999). In modern workplaces, employees face multiple and simultaneous job demands such as heavy workloads, strict deadlines and emotional labour (Bezuidenhout & Cilliers, 2010). If unmanaged, these demands impose significant psychological and physical strain.

Bakker et al. (2014) argue that elevated job demands consume employees' psychological and physical resources, leading to exhaustion and reduced coping ability. Schaufeli and Taris (2014) similarly note that prolonged exposure to persistent demands contributes to chronic stress, burnout and diminished organisational commitment. Managing job demands is therefore central to promoting sustainable well-being and long-term organisational performance.

Job demands include physical, psychological, social and organisational aspects of work that require continuous effort and are associated with significant costs when sustained (Bakker & Demerouti, 2017). These may include workload, time pressure, role ambiguity, emotional labour and interpersonal conflict. While demands are not inherently harmful and may at times motivate employees, excessive or chronic exposure, particularly without adequate job resources, heightens risks of anxiety, depression, exhaustion and fatigue (Olivier & Rothmann, 2007).

From a resource-based perspective, job demands are conceptualised as processes that consume or drain personal energy. When employees are exposed to high workloads and are unable to engage in effective recovery (Zulkarnain et al., 2023a), whether through rest, supportive environments or resource replenishment, their energy reserves diminish, resulting in a state of physical and emotional fatigue (Demerouti et al., 2001). Roe (1999) emphasised that effective job performance relies heavily on sustained cognitive, physical and emotional energy. If this energy is consistently depleted without adequate recovery, it leads to a decline in both performance and well-being. Extending this argument, Hockey (1997) proposed that when individuals attempt to maintain their performance under conditions of fatigue, they must exert additional compensatory effort. While this effort may help preserve short-term output, it often accelerates long-term health deterioration and undermines psychological resilience. Over time, this dynamic contributes to chronic stress, burnout and reduced organisational functioning.

Job and workplace characteristics strongly shape well-being, with job demands playing a decisive role (Bryson et al., 2014). High workloads, time pressure and emotional intensity drain psychological resources, particularly in the absence of job-related support (Aprilia et al., 2025). These strains disrupt emotional regulation, which is critical for coping with stress and sustaining interpersonal functioning. When regulation breaks down, employees experience heightened strain and reduced satisfaction (Fouquereau et al., 2018).

Previous empirical research supports this relationship. Bakker and Demerouti (2017) demonstrated that high job demands, particularly in labour-intensive and service-based sectors, are significantly associated with reduced employee well-being. These demands not only contribute to emotional exhaustion but also decrease work engagement and organisational commitment (Zulkarnain et al., 2024b). Further, Demerouti et al. (2001) emphasised that persistent exposure to heavy workloads and emotional pressure contributes to chronic exhaustion and burnout, two of the most severe outcomes of sustained occupational stress. These findings are consistent with the JD-R model, which posits that excessive demands, when not met with sufficient resources, will result in strain and impaired well-being (Bakker & Demerouti, 2017).

The relationship of job demands and employee well-being has been thoroughly investigated through the lens of the JD-R model (Bakker & Demerouti, 2017). According to this

framework, job demands encompass the physical, psychological, social or organisational components of work that necessitate continuous effort and are therefore linked to psychological and physiological costs, including stress, emotional exhaustion and burnout (Demerouti et al., 2001). Although such demands are inherent in most occupational roles, their impact on well-being is not uniform across individuals or work settings. This variability can be attributed to the presence or lack of job and personal resources, which act as moderators in the relationship between demands and well-being, either amplifying or mitigating their effects (Schaufeli & Taris, 2014). Thus, the hypothesis (H1) is that job demands negatively affect employee well-being.

While job demands often lead to strain, outcomes are not uniform. Personal resources such as self-efficacy, optimism, resilience and perceived control play a protective role (Xanthopoulou et al., 2012). Employees with strong personal resources appraise demanding situations more constructively and employ adaptive coping strategies. Thus, the impact of job demands on well-being depends not only on the intensity of demands but also on employees' psychological capacities.

Both the Conservation of Resources (COR) theory (Hobfoll et al., 2018) and the JD-R model (Bakker & Demerouti, 2017) provide frameworks for understanding this buffering effect. Conservation of Resources theory suggests that individuals are motivated to acquire and preserve valuable resources, and stress arises when resources are threatened or lost. Within the JD-R framework, personal resources are positioned as moderators that enhance coping with high demands. Employees with stronger resources sustain well-being and engagement despite workload intensification, while those with weaker resources are more vulnerable to stress and dissatisfaction (Tims et al., 2013). Personal resources influence how employees interpret and respond to stressors. Individuals with high self-efficacy tackle tasks proactively, while optimism helps reframe challenges as manageable rather than threatening (Carver et al., 2010; Luthans et al., 2007). These characteristics act as cognitive and emotional filters, reducing the negative effects of workload, time pressure and interpersonal conflict.

An increasing amount of empirical evidence has provided strong evidence of the moderating role of personal resources in the relationship between job demands and employee well-being. Xanthopoulou et al. (2012) demonstrated that personal resources have the capacity to weaken the adverse effects of job demands on burnout. Sweetman and Luthans (2010) emphasised that personal resources significantly contribute to psychological well-being by lowering the risk of emotional exhaustion, anxiety and reduced work motivation. Individuals with strong personal resources, such as adaptive personality traits and confidence in their abilities, are better equipped to cope with job-related pressure, particularly in high-stakes contexts (Zulkarnain et al., 2026). Furthermore, Hobfoll et al. (2018) noted that individuals with greater reserves of personal resources exhibit higher levels of

psychological resilience. These individuals are not only better equipped to cope with resource loss but also show a stronger ability to maintain mental health and emotional stability under high-stress working conditions.

The moderating role of personal resources is particularly critical in high-pressure sectors such as healthcare, where employees often face chronic workload, emotional intensity and limited recovery time (Kristensen et al., 2004). In contexts where job resources may be constrained, such as among contract workers or frontline staff, personal resources may serve as the primary defence mechanism against burnout and emotional fatigue (Mauno et al., 2012; Virtanen et al., 2003). By supporting emotional regulation, perseverance and adaptive coping, personal resources enable employees to sustain their well-being even in resource-depleted environments.

Combining insights from the JD-R model and COR theory highlights that personal resources are essential moderators that influence how job demands impact well-being. Strengthening personal resources is thus a strategic investment in employee health and effectiveness under pressure. Thus, the hypothesis (H2) is that personal resources moderate the relationship between job demands and employee well-being.

Rationale for the study

Employee well-being is a growing concern in organisational research, particularly in high-stress sectors like healthcare. As workplaces impose increasing demands such as heavy workloads, time pressure and emotional labour, it is vital to understand their impact on well-being and identify factors that can buffer these effects. This issue is especially pressing for contract-based healthcare workers in public hospitals, where job demands are compounded by limited resources, staffing shortages and emotionally intense care duties. Although the JD-R model (Bakker & Demerouti, 2017) has traditionally emphasised the importance of job resources in mitigating workplace stress, recent advancements, alongside insights from the COR theory (Hobfoll et al., 2018), highlight the equally critical function of personal resources. Personal resources, including self-efficacy, resilience, optimism and perceived control, play a crucial role in enabling individuals to manage stress and preserve well-being. While prior research has established the detrimental effects of high job demands and the protective influence of organisational support, limited empirical attention has been given to the moderating effects of personal resources, particularly in low- and middle-income healthcare settings. This is a critical gap, given the unique pressures faced by contract workers in Indonesian public hospitals, where formal support is often lacking. The findings aim to inform practical strategies for healthcare leaders and policymakers to strengthen workforce resilience and mental health through better job design, targeted support and resource allocation.

Research design

Participants

Data were collected using structured questionnaires distributed to contract-based healthcare workers at a public hospital in Banda Aceh, Indonesia. A total of 221 responses were obtained using purposive sampling. This approach was chosen to ensure that all participants had direct and relevant experience working in public healthcare service delivery, which was essential for addressing the aims of the study. Purposive sampling allowed the researchers to target contract-based healthcare workers who were knowledgeable about the working conditions, job demands and organisational practices being examined. The final sample consisted of staff from various professional groups to provide a broad and accurate representation of the healthcare workforce. The majority were from Nursing and Midwifery ($n = 144$, 65.16%), followed by Administrative Staff ($n = 25$, 11.31%), Allied Health Professionals ($n = 22$, 9.95%), Pharmaceutical Personnel ($n = 20$, 9.05%) and Medical Personnel, including physicians and dentists ($n = 10$, 4.52%). Full details are provided in Table 1.

Instruments

All instruments in this study used a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The instruments were adapted for the Indonesian context through a structured translation and cultural adaptation process. The original items were translated into Indonesian by two bilingual translators, reviewed by experts for clarity and cultural relevance and then back-translated into English to ensure that the meaning remained consistent with the original versions. After the translation process, the instruments were pilot-tested with contract-based healthcare workers in a public hospital to evaluate whether the items were easy to understand and suitable for their work context. Confirmatory factor analysis (CFA) was then conducted during the main study to verify that each instrument accurately reflected its intended theoretical construct. This process ensured that the adapted measures were valid and suitable for use in the Indonesian healthcare setting.

Employee well-being was measured using the multidimensional scale developed by Zheng et al. (2015), which was designed to capture the complexity of individual well-being within an organisational context. To ensure construct validity and theoretical integrity of the measurement instrument, CFA was conducted to assess the alignment of the factor structure with the proposed theoretical model.

TABLE 1: Respondent classifications.

No.	Healthcare classification	Frequency	Percentage
1.	Medical personnel	10	4.52
2.	Nursing and midwifery	144	65.16
3.	Pharmaceutical personnel	20	9.05
4.	Allied health professionals	22	9.95
5.	Administrative staff	25	11.31
Total	-	221	100

This analysis ensures that each indicator within the scale accurately reflects the intended dimension. In addition, a reliability analysis using Cronbach's alpha coefficient was performed to evaluate the internal consistency of the scale items. The results are presented in Table 2.

Job demands in this study were measured using a scale based on the job demands model developed by Bakker and Demerouti (2017), which is widely used to assess Job Demands. To ensure that the instrument accurately measures the intended construct, a CFA was conducted. The results of this analysis are presented in Table 3.

Personal resources were measured using a scale designed based on the three main dimensions proposed by Xanthopoulou et al. (2012). To ensure that the instrument accurately represents the intended construct, a CFA was conducted. The results of this analysis are presented in Table 4.

Ethical considerations

Ethical clearance to conduct this study was obtained from the Universitas Sumatera Utara Ethics Committee (Ref. No.: 12/ Komet/FPsi/2025).

Results

The findings of this study empirically confirm that job demands have a significant negative impact on employee well-being ($\beta = -0.29, p = 0.002$). This indicates that higher levels of job demands are associated with lower levels of employee well-being. Conversely, personal resources have a significant positive effect on employee well-being ($\beta = 0.48, p < 0.001$), suggesting that individuals with higher levels of personal resources tend to experience greater well-being. Notably, the interaction between personal resources and job demands is also significant ($\beta = -0.21, p = 0.003$). This interaction demonstrates a moderating effect, wherein

TABLE 2: Confirmatory factor analysis and reliability for the employee well-being scale.

No.	Dimensions	Loading factor	Criteria goodness of fit
1.	Life well-being	0.510 – 0.760	CFI: 0.981
2.	Workplace well-being	0.560 – 0.710	TLI: 0.973
3.	Psychological well-being	0.590 – 0.740	SRMR: 0.034 RMSEA: 0.053 GFI: 0.965

Note: Cronbach's alpha = 0.810.

CFI, comparative fit index; TLI, Tucker-Lewis index; SRMR, standardised root mean-square residual; RMSEA, root mean-square error of approximation; GFI, goodness of fit index.

TABLE 3: Confirmatory factor analysis and reliability for the job demands scale.

No.	Dimensions	Loading factor	Criteria goodness of fit
1.	Work overload	0.590 – 0.820	CFI: 0.985
2.	Emotional load	0.501 – 0.780	TLI: 0.917
3.	Cognitive load	0.640 – 0.810	SRMR: 0.038
-	-	-	RMSEA: 0.059
-	-	-	GFI: 0.971

Note: Cronbach's alpha = 0.880.

CFI, comparative fit index; TLI, Tucker-Lewis index; SRMR, standardised root mean-square residual; RMSEA, root mean-square error of approximation; GFI, goodness of fit index.

personal resources serve as a buffer against the negative impact of job demands on employee well-being. The results are presented in Table 5.

The interaction plot illustrates a moderation effect of personal resources on the relationship between job demands and employee well-being. When personal resources are low (dotted line), the slope of the relationship between job demands and well-being is sharply negative. This indicates that employees with fewer personal resources experience a stronger decline in well-being as job demands increase. In other words, individuals who lack sufficient personal coping mechanisms or support are more adversely affected by rising job demands. Conversely, when personal resources are high (solid line), the negative association between job demands and well-being is less pronounced. The flatter slope in this condition suggests that employees with ample personal resources are better equipped to maintain their well-being, even in the face of increasing job demands. This buffering effect emphasises the protective role of personal resources in stressful work environments. This interaction pattern reflects a statistically significant moderation effect, as indicated by the interaction term in the regression model ($\beta = -0.210, t = -3.00, p = 0.003$). These findings support the notion that personal resources mitigate the detrimental effects of job demands on well-being. Notably, this aligns with theoretical expectations that employees with greater internal or external coping resources are more resilient under pressure. A graphical representation of this interaction is presented in Figure 1.

Discussion

This study demonstrates that job demands have a significant negative impact on employee well-being, a relationship that is particularly pronounced among contract employees in the healthcare sector. Contract healthcare workers often face heightened job demands such as excessive workloads,

TABLE 4: Confirmatory factor analysis and reliability for the personal resources scale.

No.	Dimensions	Loading factor	Criteria goodness of fit
1.	Self-efficacy	0.890 – 0.950	CFI: 0.997
2.	Organisation-based self-esteem	0.800 – 0.920	TLI: 0.971
3.	Optimism	0.870 – 0.940	SRMR: 0.036 RMSEA: 0.055 GFI: 0.963

Note: Cronbach's alpha = 0.984.

CFI, comparative fit index; TLI, Tucker-Lewis index; SRMR, standardised root mean-square residual; RMSEA, root mean-square error of approximation; GFI, goodness of fit index.

TABLE 5: Result of moderated regression analysis.

Relationships between variables	Unstandardised coefficient (B)	SE	Standardised coefficient (β)	t
Job Demands → Employee Well-being	-0.220	0.070	-0.290	-3.140*
Personal Resources → Employee Well-being	0.450	0.080	0.480	5.630*
Job Demands X Personal Resources → Employee Well-being (Moderation)	-0.015	0.005	-0.210	-3.002*

SE, standard error.

*, $p < 0.01$.

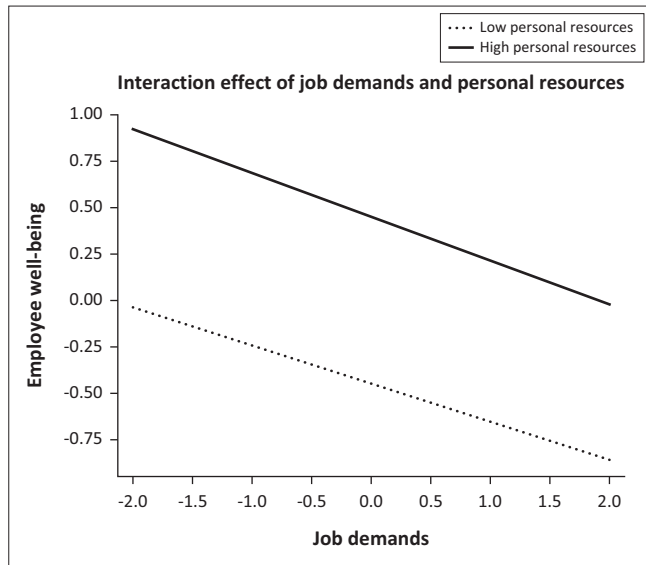


FIGURE 1: The interaction plots.

time pressure, emotional exhaustion and shift irregularities. These demands are frequently coupled with job insecurity, limited access to organisational resources and fewer opportunities for support and professional development compared to permanent staff, making them more vulnerable to reduced well-being. Within the JD-R framework, excessive job demands, when not sufficiently balanced by job resources, increase the risk of stress, burnout and impaired psychological well-being (Bakker & Demerouti, 2017). This effect is especially critical in healthcare settings, where emotional labour and physical strain are prevalent. Contract employees, who often lack stable employment terms and benefits, are less equipped to cope with such pressures and therefore experience a steeper decline in well-being.

Virtanen et al. (2003) observed that contract-based employees are more vulnerable to psychological strain and negative health consequences than permanent staff, especially in demanding fields like healthcare. Mauno et al. (2012) demonstrated that perceived job insecurity exacerbates the negative effects of job demands on employees' well-being and job satisfaction. Lestari and Zamralita (2017) also found that healthcare workers burdened by high job demands are considerably more likely to suffer from emotional fatigue and mental health problems, especially when working under temporary or insecure employment arrangements. These findings emphasise the need for healthcare organisations to recognise contract employees as a high-risk group in terms of occupational well-being.

The findings demonstrate a statistically significant moderating effect, indicating that personal resources buffer the negative impact of job demands on employee well-being. Specifically, the interaction shows that the nature and strength of the relationship between job demands and well-being depend on the level of personal resources an individual possesses. In other words, although elevated job demands are generally linked to reduced well-being, this harmful effect is less

pronounced among employees with higher levels of personal resources. These findings are consistent with the JD-R model proposed by Bakker and Demerouti (2017), which offers a comprehensive theoretical framework for understanding occupational stress and employee motivation across diverse organisational contexts. Within this model, job demands such as workload, emotional pressure and time constraints are identified as key predictors of psychological strain, particularly when they exceed an individual's capacity to cope. Equally important, the JD-R model emphasises the protective role of both job resources and personal resources in mitigating the adverse effects of these demands.

Further conceptual support for the buffering function of personal resources is provided by the COR theory (Hobfoll et al., 2018), which posits that individuals are motivated to acquire, preserve and safeguard resources they perceive as valuable. According to COR theory, stress arises when these resources are threatened, depleted or insufficiently restored following their expenditure. In this framework, personal resources are regarded both as intrinsic assets and as instrumental tools for securing additional resources. Consequently, individuals with higher levels of personal resources are better equipped to appraise stressors positively, maintain work engagement and preserve psychological well-being even in demanding work environments. Conversely, those with limited resources are more vulnerable to resource loss cycles, which may ultimately lead to emotional exhaustion, burnout and disengagement. Thus, the present findings reinforce the central propositions of both the JD-R model and COR theory, suggesting that resource-rich individuals demonstrate greater resilience under pressure and are less susceptible to declines in well-being when confronted with elevated job demands.

Xanthopoulou et al. (2012) found that personal resources not only contribute directly to enhancing work engagement, a positive psychological state characterised by vigour, dedication and absorption but also play a crucial buffering role in mitigating the harmful effects of high job demands, particularly in relation to job burnout. In this context, personal resources serve as internal protective mechanisms that strengthen individuals' capacity to cope with pressure by enabling them to interpret stressors more adaptively and exert greater self-regulation in challenging work environments. Furthermore, in the healthcare sector, which is particularly vulnerable to emotional strain and excessive workload, Lara-Cabrera et al. (2021) demonstrated that professionals with strong personal resources were better able to maintain their psychological well-being. Psychological well-being emphasises personal development and a sense of fulfilment from engaging in positive and meaningful activities (Zulkarnain et al., 2020), suggesting that individuals who possess stronger internal resources are more capable of sustaining emotional stability and functional psychological states. This implies that even in physically and emotionally demanding work environments, employees with higher levels of personal resources are more likely to remain resilient,

emotionally balanced and psychologically functional. The alignment of these two studies with the current research reinforces the argument that personal resources are not merely supplementary but rather essential within the framework of occupational stress management. These resources enable individuals to navigate stressors using more effective coping strategies, sustain work motivation, and prevent declines in well-being. In the context of the relationship between stressors and psychological strain, personal resources function as internal regulatory mechanisms that help individuals maintain emotional balance and adaptive functioning, even under high-pressure conditions.

This study strengthens existing literature by highlighting the vital role of personal resources in high-pressure environments such as healthcare, where job demands are chronic and intense. Contract-based healthcare workers often face heavy workloads, job insecurity and limited organisational support, making personal resources essential for coping and maintaining psychological well-being. The moderation effect found in this study underscores the need for organisational initiatives that build these resources. Interventions like resilience training, mindfulness programmes and strengths-based coaching can help cultivate internal capacities, promoting resilience, reducing burnout and supporting long-term employee well-being.

Conclusion

This study demonstrates the strong effect of job demands on employee well-being, especially among contract healthcare workers facing job insecurity, limited organisational support and high emotional labour. Aligned with the JD-R model and COR theory, the findings show that excessive demands without sufficient resources significantly undermine psychological well-being. The study contributes theoretically by reinforcing the JD-R and COR frameworks through evidence of the moderating role of personal resources. Practically, it underscores the need for HR strategies that not only manage job demands but also actively develop personal resources. Interventions such as resilience training, psychological coaching and wellness programmes help equip employees to cope with high-pressure environments. By combining efforts to reduce environmental stressors and strengthen individual psychological capacities, healthcare organisations can more effectively protect well-being, reduce burnout and support workforce sustainability, particularly for contract-based staff.

Practical implications

The findings highlight the importance of enhancing personal resources to buffer the adverse effects of job demands on employee well-being, particularly among contract healthcare workers. In high-pressure clinical environments, contract employees often lack structural support and face heightened uncertainty, making them more vulnerable to stress and burnout. To address this, Human Resource Management (HRM) should prioritise the integration of resilience-building initiatives, including stress management training, emotional

coping strategies and self-efficacy development. These interventions not only strengthen individual capacity but also promote a culture of psychological safety.

Limitations of study

This study has several limitations. Firstly, its cross-sectional design prevents causal conclusions about the relationships among job demands, personal resources and well-being; longitudinal or experimental studies are needed to clarify temporal direction. Secondly, the sample consisted solely of contract healthcare workers in a specific setting, limiting generalisability to other sectors or regions. Future research should use broader, more diverse samples and incorporate objective or multi-source data to enhance validity and applicability.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

CRedit authorship contribution

Zulkarnain Zulkarnain: Conceptualisation, Methodology, Project administration, Supervision, Writing – original draft, Writing – review & editing. Ferry Novliadi: Investigation, Project administration, Resources, Validation. Ari Widiyanta: Data curation, Funding acquisition, Software, Validation. Cut A. Riadhah: Conceptualisation, Data curation, Project administration, Software. Sofya Nartova-Bochaver: Formal analysis, Supervision, Writing – review & editing. All authors reviewed the article, contributed to the discussion of results, approved the final version for submission and publication and take responsibility for the integrity of its findings.

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Data availability

The data that support the findings of this study are not openly available due to reasons of sensitivity and are available from the corresponding author, Zulkarnain Zulkarnain, upon reasonable request.

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