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RESEARCH PAPER

Effect of Workload on Burnout among Healthcare Workers: Moderated by Perceived Organizational Support

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ABSTRACT

The study aimed to investigate the relationship between workload and burnout, as well as perceived organizational support (POS), in healthcare workers in Islamabad, Pakistan. A total of 340 healthcare workers volunteered as participants in the study using a convenience sampling method. The variables of workload, burnout, and perceived organizational support were measured using self-report standardized measures (NASA Workload Inventory, Copenhagen Burnout Inventory, Survey of Perceived Organizational Support). The results from the Pearson correlations and multiple regression indicated that perceived workload significantly positively predicted burnout; perceived organizational support was significantly negatively correlated to burnout; and perceived organizational support significantly moderated the relationship between workload and burnout, with the value that the negative impact of workload was weaker in workers who perceived they had higher organizational support. The results of the study provide a dual-pronged aspect to combating burnout in that both work demands and an organizations climate can be addressed. Future recommendations incorporated that healthcare organizations should aim to support staff well-being through managerial support, NEAR equal voluntarily shared workload, acknowledgment of employee contribution, and curricular approaches that foster resilience.

KEYWORDS Burnout, Workload, Perceived Organizational Support, Healthcare Workers, Stress Management

Introduction

Workload can be defined as both the quantity of work or responsibilities assigned to who gets assigned to a task over a given time period, and the intensity of the responsibilities and tasks themselves. In healthcare, workload is conceptualized as multidimensional. Often, conceptualizing workload includes not only the number of patients a provider cares for, but also the complexity of care, time pressure, administrative responsibilities, and emotional involvement (Yulita et al., 2023). Healthcare professionals are often subject to both quantitative workload (too much work, too little time) and qualitative workload (difficult or complex work). These demands are further heightened in hospital environments where unreasonable caseloads and under-staffing result in a chronic imbalance of workload and available resources (Zhang et al., 2022).

Healthcare is widely accepted as one of the most demanding professions in the world. Although many factors contribute to perceived stress levels, workload remains one of the highest recognized stressors (World Health Organization [WHO],2022). Long shifts, long days without breaks, unpredictable emergencies, and short recovery times are common in nursing, medicine, and paramedicine (Mason et al., 2022). Although working in high stress environments can be physically exhausting, the emotional fatigue that is

often associated is equally, if not more draining, adding to conditions for cumulative fatigue and stress. In recent studies, health care workers reported feelings of being overwhelmed, especially during the early crisis periods of COVID-19. Workloads significantly increased due to staff shortages, and rising patient admissions across populations (Ali et al., 2021; Dall'Ora et al., 2020).

High workload is directly linked to negative psychological outcomes including anxiety, irritability, decreased job satisfaction, and emotional exhaustion (Kim & Kim, 2023). Continuous and prolonged exposure to heavy workload can impair coping capacities, increase chronic stress and cognitive overload. In turn, failure to cope with workload stress could multiply challenges for the worker creating a downward spiral which affects concentration, decision-making, and mental well-being. In particular, excessive workload is correlated with early signs of burnout experienced by healthcare workers such as depersonalization and emotional exhaustion (Galanis et al., 2021).

Load is detrimental to the mental health of healthcare workers and their outcomes in work. When healthcare workers feel overwhelmed by their load, i.e. job demands, they are unable to provide safe quality of care, which creates clinical errors, decreased empathy towards patients (Liu et al., 2022). Not only do these experiences of load have negative consequences for the provider but also the safety and outcomes of the patients receiving care. In this sense, performance strain to the provider underscores excessive workload as a psychological and organizational risk factor in health systems globally (Adriaenssens et al., 2023).

It must be acknowledged that perceived workload is contextual, as a result of staffing ratios, cultural expectations, and modes of organizing health systems and practices. For example, health workers in low-and middle-income countries, such as Pakistan, report and experience excessive workloads due to significant systemic and structural deficiencies, including underfunding of healthcare systems, poor infrastructure and systems of professional accountability, and warped health sector governance (Rehman et al., 2023). Also, cultural norms that dissuade people from seeking psychological support and or prioritizing work-life balance exacerbate these issues. Therefore, it is crucial to recognize and understand these contextual factors when exploring the psychological outcomes related to workload in diverse health system settings.

The psychological impacts of workload are often modeled theoretically using the Job Demands–Resources (JD-R) model. In this model, high job demands such as high workload deplete physical and psychological resources, particularly if the demands are not compensated for by adequate levels of resources (Bakker & Demerouti, 2017). When workload is high, and protective factors (e.g., organizational support, staffing) are unavailable, then the stress from work overload can result in both personal and work-related burnout. Accordingly, it is vitally important that we understand workload not only as a task-based variable, but as a psychological stressor that is embedded in the work context to effectively address the health and well-being of health care workers.

Burnout

Burnout is a psychological syndrome that occurs with chronic workplace stress; it is especially prevalent among healthcare professionals. Burnout typically has three dimensions: emotional exhaustion, depersonalization, and general feelings of ineffectiveness (Maslach & Leiter, 2016). Emotional exhaustion is characterized as feeling depleted and exhausted from one's work, depersonalization is regarded as a cynical or detached response to patients, and personal accomplishment is related to feelings of

ineffectiveness. Healthcare workers are at increased risk of burnout compared to other sectors because of the intense emotional and physical demands that accompany their work, especially within emergency departments and intensive care units (Salvagioni et al., 2023).

The World Health Organization recognized burnout among healthcare workers as a global occupational health issue (WHO, 2019), and has even classified it as an occupational phenomenon in the ICD-11. The COVID-19 pandemic exacerbated burnout among healthcare professionals around the world, while increasing workload, emotional strain, and fear of infection (Sampaio et al., 2022). These stressors tend to induce emotional exhaustion and disengagement over time, which typically leads to compromised performance and increased turnover rates. The current evidence suggests that burnout is not only a mental health issue; it is a growing concern for patient safety and the effectiveness of health systems. (Aiken et al., 2021).

Burnout represents more than just tiredness or stress; it has widespread effects. Psychologically, it is related to anxiety, depression, irritability, and cognitive impairment. Physiologically, chronic stress resulting from burnout results in sleep interruptions, cardiovascular disease, gastrointestinal disease, and reduced immunity (Salvagioni et al., 2023). Burnout can also result in lack of inspiration and lost empathy - both essential skills for patient-centered care. Prolonged burnout can ultimately create substance use, absenteeism, and increased risk of suicide in healthcare professionals (Rotenstein et al., 2018).

Numerous studies reveal that burnout is tragically common among health workers, with discrepancies depending on role, department, and region. A meta analysis by Woo et al. (2020) demonstrated that upwards of 45% of nurses and 50% of physicians suffer from moderate to severe symptoms of burnout. In low-resource settings, such as Pakistan, this figure may be even higher, with resource-depleted staffing capabilities, limited mental health services, and the stigma of stress and emotional fatigue (Naseem & Maqsood, 2023). Such figures provide an acute case for institutional solutions to reduce burnout risk.

Burnout compromises not only healthcare workers' wellness, but patient care and health care delivery as well. Burnout healthcare professionals are also more likely to make medical errors, have poor patient participation, and lead to lower patient satisfaction (Dyrbye et al., 2020). In addition, burnout also leads to attrition in the workforce, as many talented professionals getting out of the field early. This is problematic, as it creates a further shortage of staff and increased burden on the remaining healthcare professionals in care systems, as new professionals leaving the field perpetuates burnout in healthcare organizations (Montgomery et al., 2021).

Theoretically, burnout can be explained using models such as Conservation of Resources (COR). COR theory posits that when demands are excessive (in this case workload) and resources (time, energy, support, etc.) are scarce, emotional exhaustion and disengagement emerge because resources have become depleted without alternatives being replenished (Hobfoll et al., 2018). This model has some overlap, to varying degrees, in the real worlds of healthcare settings (i.e. leveraging theoretical models of burnout in healthcare settings). By understanding how burnout develops using a theoretical model, researchers and policymaker can be more prescriptive in their attempts to design targeted (more effective) interventions.

Perceived Organizational Support

Perceived Organizational Support (POS) relates to an individual's perception of how much the organization values their contributions to the organization and how much it cares for their well-being (Eisenberger et al., 1986). We should point out that POS is not simply the extrinsic financial or other material benefit derived from the organization but also includes extrinsic emotional acknowledgment and the organization's equity or fairness (to the employee), supervisor support and consideration, and consideration of employees' psychological needs as human beings and not just "working units." This is especially important in healthcare, where employees are continuously faced with stressors related to their work. POS can positively impact morale, how employees cope with stressful situations, and job satisfaction (Bergman et al., 2021). An employee's perception that the organization "has their back" can be a contributing factor to how the employee experiences and responds to job stressors such as workload.

There is growing evidence suggesting that POS mitigates the detrimental effects of occupational stressors, including extreme workload. When healthcare professionals perceive that their organization is supportive (e.g., acknowledgment, autonomy, fair treatment, and supportive leadership) they can cope with their required job demands without becoming completely burnt out (Shirin et al., 2023). High levels of POS create a sense of belonging and trust in the organization which creates resilience and decreases exhaustion. Conversely, low valued levels of POS may increase strain created from extreme workloads creating feelings of neglect and psychological withdrawal.

The Job Demands–Resources (JD-R) model posits that job resources (e.g., POS) can lessen the negative influences of job demands (e.g., workload) on employee outcomes (Bakker & Demerouti, 2017). POS as a job resource boosts employee motivation and engagement, including under stressful circumstances. When perceived support is high, employees may not perceive the same level of workload as burning out because employees feel emotionally supported and supported by the organization to manage it (Hu et al., 2022). Therefore, POS acts as a moderation variable creating a weaker negative pathway from workload to burnout.

Recent empirical research has consistently confirmed POS is a moderator of the workload – burnout relationship. For example, Karimi and Alipour (2022) found that nurses indicated high workloads but significant organizational support, experience significant lower levels of burnout than nurses indicating low POS. Another study conducted with frontline healthcare workers during the COVID-19 pandemic indicated POS contributed significantly to decrease emotional exhaustion and disengagement even considering extreme work demands, (Kim and Kim, 2023). These moderating effects on burnout pathway has been documented as factors for both of these roles as well as other healthcare roles including nurses, physicians, and administrators.

The extent and interpretation of organizational support may differ by culture and institution. For example, in collectivist cultures such as Pakistan, interpersonal relationships and hierarchically-based support systems may shape the experience of organizational support (Saleem et al., 2021). In systems where resources are limited, such as the health-care settings mentioned above, perceptions of physical support (e.g., staffing, flexible shifts, and protective equipment) will be given more weight than symbols of support. Thus, the meaning of POS must be understood in context, considering both institutional limitations and culture-informed expectations concerning organizational responsibility and organizational care.

Social Exchange Theory (Blau, 1964), which applies to POS, argues that when organizations are caring and fair, employees will reciprocate with loyalty, performance, and resilience. In the context of stressful work environments, this reciprocity is particularly salient. When health-care providers perceive significant organizational support, employees are likely to maintain commitment to the organization and remain psychologically resilient despite work overload. This means that POS is not merely an indirect variable but rather a crucial mechanism that we might utilize, for example, as we develop organizational level interventions to minimize burnout or enhance organizational commitment and retention.

Literature Review

HCWs face a unique, high-stress environment, where physical, emotional, and cognitive demands are ever-present. Long shifts, emotional engagement with patients, and administrative overload put HCWs at increased risk for occupational stress and burnout (WHO, 2022). Evidence shows that there are now more pronounced psychological effects on professionals across all healthcare systems as we come out of COVID-19, which have been resulting in an increased patient workload with insufficient professional licencing and adequate institutional preparation (Sampaio et al., 2022). Workload is among the central contributors of occupational stress, and one of the strongest predictors of burnout.

Workload is typically defined as the intensity, amount, and complexity of tasks assigned to an employee over a specified duration (Yulita et al., 2023). HCWs experience both quantitative (amount of work), and qualitative (complexity or difficulty of tasks), work overload associated with negative psychological outcomes such as emotional exhaustion, and cognitive fatigue (Liu et al., 2022). Work overload can impair decision-making ability, attention capture, and emotional regulation, components that are essential for patient safety, and quality care (Kim & Kim, 2023). HCWs that continually work long hours without recovery are experiencing cognitive, emotional, or physical stress which is likely to lead to serious psychological problems such as anxiety, irritability, burnout, (Ali et al., 2021).

Burnout is a psychological syndrome caused by chronic stress resulting from repeated exposures to stressors in the workplace, where we can measure burnout most frequently as emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach & Leiter, 2016). Individuals working in the field of healthcare may experience burnout for various reasons, including based on the severity of the responsibilities they hold, the extent of emotional labor, physical fatigue, and ethical dilemmas (Dyrbye et al., 2020).The literature indicates that burnout is detrimental to an individual, increases absenteeism, creates errors in patient care, and degrades job performance (Montgomery et al., 2021). Woo et al. (2020) completed a meta-analysis examining burnout among nurses (n=37 studies) and indicated approximately 45-50% of all nurses experience moderate to high levels of burnout globally.

There is much empirical evidence to support the positive relationship between workload and burnout in healthcare workers. For instance, in a study by Galanis et al. (2021), as workloads for nurses increased, the impact to report emotional exhaustion and diminished work engagement were significantly higher. Likewise, Zhang et al. (2022) in a large-scale study in China, concluded that workload was a significant predictor in the three dimensions of burnout. These findings support the JD-R model, which suggests that high job demands (i.e. workload) deplete essential psychological resources. If job demands are not counterbalanced with adequate resources, the likelihood of burnout increases (Bakker & Demerouti, 2017).

Perceived Organizational Support (POS) is an employee's belief that the employee or organization values their contributions and cares about their well-being (Eisenberger et al., 1986). High POS can increase resilience, lessen emotional burden and can create a sense of belonging and job satisfaction (Bergman et al., 2021). For healthcare workers, POS has been found to lower stress responses and protect from burnout, particularly under heavy workloads. A recent study (Karimi and Alipour, 2022) reported that nurses with high POS boards exhibit substantially lower levels of burnout symptoms while still maintaining high levels of job demands. POS and moderation with high workloads may act as a protective factor for employees and could therefore provide potential aspects of moderation in the workload-burnout relationship.

Recent studies have demonstrated the moderation aspect of POS in the relationship between workload an burnout. Hu et al., (2022) have shown that employees with high perceived organizational support had a significantly reduced relationship between emotional exhaustion that exists when faced with a heavy workload. Furthermore, Kim and Kim (2023) established that in the healthcare sector, with high organizational support, the negative job stressors exhibit reduced impact on burnout, which emphasizes the potential importance of POS with healthcare management. This moderation is correlated with the Social Exchange Theory (Blau, 1964) which discusses how organizations that accept responsibility and invest in employee well-being give back to organizations (e.g., loyalty/resilience) even under extreme work pressures.

Although the connection between workload and burnout is well-documented in Western contexts, the need for localized study is evident in low- and middle-income countries like Pakistan, where organizational structures of support may not yet be fully developed. Evidence shows that healthcare professionals in South Asia are dealing with disproportionate workloads with little to no support due to systemic constraints like staffing shortages and lack of mental health policies (Rehman et al., 2023). Moreover, cultural expectations can predispose one to the interpretation and valuing of POS, especially if one's workplace culture is hierarchical or collectivist (Saleem et al., 2021). Therefore, it is both timely and important to study this model in the context of Pakistan to inform policy interventions grounded in evidence.

Hypotheses

1-There is significant positive association between workload and burnout among healthcare workers.

2-There is significant negative association between perceived organizational support and burnout among healthcare workers.

3-There is substantial impact of workload and perceived organizational support on burnout among healthcare workers.

4-Perceived organizational support moderates the association between workload and burnout among healthcare workers.

Conceptual Framework

The conceptual framework for present study is as follows:

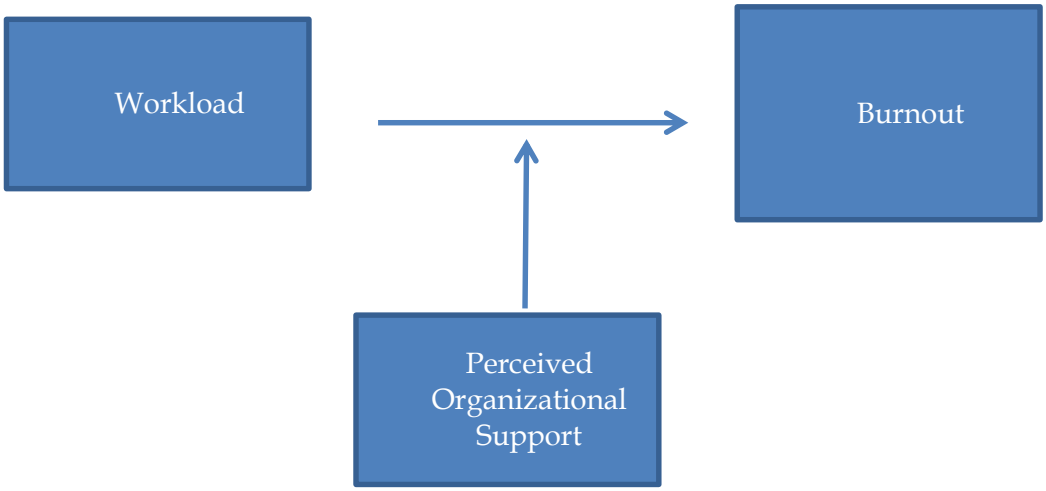

Figure 1: Conceptual Framework of Study

Material and Methods

Sample and Sampling Technique

Three hundred and forty health care workers were recruited from Islamabad via convenient sampling.

Research Design

Cross-sectional research design was used in the present study.

Data Analysis Technique

Descriptive and reliability analysis, correlation analysis, regression analysis and moderation analysis were carried out using SPSS process macro.

Instruments

Workload - NASA Task Load Index (NASA-TLX)

Workload in the study may be assessed via the NASA Task Load Index (NASA-TLX), which was created by Hart and Staveland (1988). The NASA-TLX is a widely-administered self-report instrument containing 6 items, which have been developed to measure workload on 6 dimensions, namely: mental demand, physical demand, temporal demand, performance, effort, and frustration. The purpose of the scale is to quantify subjective workload in a variety of professional contexts and settings, such as the healthcare field. The NASA-TLX has established excellent metrics of internal consistency with a prevalence of Cronbach's alpha values that are typically reported above .80 (Rubio et al., 2004). Validity studies have confirmed its construct and criterion validity across diverse contexts in which health professionals work, including nursing and emergency medical services (Byers et al., 2022). Its sensitivity to situational demand and ability for cross-task comparisons makes it suitable for capturing healthcare workers' workload in a consistent method under varying conditions.

Burnout

The way the present study will assess burnout is by using the Copenhagen Burnout Inventory (CBI), which was developed by Kristensen, Borritz, Villadsen, and Christensen

(2005). The CBI is a free open access measure specifically designed to assess burnout in human service jobs, including health service jobs. The CBI is in the public domain, unlike the Maslach Burnout Inventory, which is protected and thus requires licensing, so within a university context, the CBI is available for scholarly use without obtaining more formal permission. The CBI consists of 19 items that are divided into three subscales: personal burnout (six items), work-related burnout (seven items), and client-related burnout (six items). Respondents are asked to identify how frequently/intensely they have experienced the symptoms of burnout by using a five-point Likert scale, and researchers often report the CBI as a score from 0 to 100 for ease of interpretation. The CBI has strong psychometric properties (i.e., internal consistency, Cronbach's alpha values ranged from .85 to .92), and reports strong construct and criterion validity in studies across a variety of professions and cultures. The CBI has been utilized extensively in health care systems, therefore, it is appropriate for emotional exhaustion and stress among health care workers. With open-access, strong reliability, and always agrees with all individuals in the target population of the study, the CBI would be a good psychometric and practical choice to assess burnout.

Perceived Organizational Support – Survey of Perceived Organizational Support (SPOS)

The Survey of Perceived Organizational Support (SPOS) developed by Eisenberger et al. (1986), measures Perceived Organizational Support. The SPOS originally contained 36 items, but it is now common in research to use shorter validated versions (e.g. 8-item or 16-item forms). The scale assesses the extent to which employees believe their organization values their contributions and cares about their well-being. SPOS has been shown to have excellent internal consistency, often having a Cronbach's alpha greater than .90 (Rhoades & Eisenberger, 2002) and has demonstrated validity through positive correlations with organizational commitment, job satisfaction, and decreased stress. The scale has been widely adapted and validated in health settings, therefore it is especially relevant for studies with nurses, doctors, and allied health staff.

Results and Discussion

Table 1
Descriptive Characteristics of the Study Sample (N=340)

Variable			n	%
Gender				
	Men		160	46.67
	Women		180	53.33
Family Structure				
	Joint		150	43.33
	Nuclear		190	56.67
Residence				
	Urban		140	40.00
	Rural		200	60.00
VAR	M	SD	Min	Max
Age	30.42	5.21	19	37

As indicated in Table 1, the sample consisted of healthcare professionals from almost all of the identified demographic characteristics. The sample had men and women with a slightly higher frequency of women. The sample contained a mix of family structures including joint families and nuclear families. The sample included people from urban and rural settings with even more rural participants than urban participants. The participants were characterized as being young to middle-age adults with the mean being closer to that of early adulthood. Overall, the sample included a variation and

representation of healthcare professional which potentially added to the generalizability of the study findings, and so decreasing the possibility of confounding influences within the assignment of the DAP.

Table 2
Psychometric Properties of Study Variables (N=340)

Scale	K	α	*M*	*SD*	Range		Skewnes	Kurtosis
					Actual	Potential		
NASA- WI	6	.73	12.21	3.32	6-30	8-29	.65	.92
CBI	19	.84	19.45	6.72	19-95	25-87	1.43	1.02
SPOS	16	.80	15.23	4.21	16-80	19-75	..89	.76

Note. K= no of items; NASA-WI= NASA Workload Inventory; CBI= Copenhagen Burnout Inventory: SPOS= Survey of Perceived Organizational Support

Table 2 displays the psychometric properties of the study variables including workload, burnout, and perceived organizational support. Each construct was measured using standard self-report scales with acceptable internal-consistency levels, as indicated by the Cronbach's alpha values. The scales had acceptable mean values and standard deviations, indicating there was an acceptable distribution of responses in our sample. Actual score ranges were similar to potential ranges with no noticeable floor or ceiling effects. All three scales had acceptable skewness and kurtosis values for their distributions providing further support for the assumption of normality. These psychometric indicators give evidence of the reliability and appropriateness of the instruments used to assess the constructs originally in this sample of health care professionals.

Table 3
Correlation Among Study Variables (N= 300)

VAR	1	2	3
1 NASA-WI	-		
2 CBI	.81**	-	
3 SPOS	-.26**	-.31**	-

Note: NASA-WI= NASA Workload Inventory; CBI= Copenhagen Burnout Inventory: SPOS= Survey of Perceived Organizational Support *$p < .05$, **$p < .01$.

Table 3 displays the Pearson correlation coefficient among each of workload, burnout, and perceived organizational support. A strong positive relationship between workload and burnout was identified, indicating that as perceived workload increased, so too did burnout levels among healthcare workers. The perceived organizational support construct showed a significant negative correlation to workload, indicating that as organizational support increased, the perceived workload decreases. While perceived organizational support was negatively correlated with burnout, the relationship was moderate, suggesting higher organizational support was associated with lower burnout levels. Since all correlations were statistically significant at the $p < .01$, the original hypotheses of relationships among the study variables were supported. The data suggests that organizational support may buffer against burnout associated with workload.

Table 4
Multiple Linear Regression predicting Burnout (N=340)

Predictor	B	SE	β	t	p
Constant	*32.09***	2.47		12.98	.00
NASA-WI	.62***	.08	.48	7.45	.00
SPOS	-.21***	.02	-.36	-10.92	.00
R^2	.17***				
F	44.87***				

Note. NASA-WI= NASA Workload Inventory; SPOS= Survey of Perceived Organizational Support

Table 4 summarizes the findings of the multiple linear regression analysis examining the effects of workload and perceived organizational support on burnout for healthcare workers. The overall model was statistically significant, and thus both predictors had substantial meaning in explaining burnout. The workload variable positively predicted burnout, meaning as healthcare workers face greater work demands, their burnout symptoms simultaneously increase. The perceived organizational support variable was found to negatively predict burnout, meaning employees who felt they receive support from their organizations reflect lower levels of burnout. These results further highlight the role of job demands and job resources in influencing healthcare worker's psycho-social well-being and factor managers must address regarding burnout management.

Table 5
Moderating role of Perceived Organizational Support between Workload and Burnout

				95% Cl		
Variables	*B*	*SE*	*T*	*LL*	*UL*	*p*
Constant	*32.09***	4.45	7.21	23.38	40.80	.00
NASA-WI	.82*	.15	5.52	.53	1.11	.01
SPOS	-.54***	.11	-4.76	-.76	-.32	.00
NASA-WI x SPOS	.27*	.08	3.43	.11	.43	.01
R^2	.16					
ΔR	.10					

Note. NASA-WI= NASA Workload Inventory; SPOS= Survey of Perceived Organizational Support; B = Standard Coefficient, SE = Standard Error, Cl = Confidence Interval, LL = Lower Limit, UL = Upper Limit

The moderation analysis results presented in Table 5 assess whether perceived organizational support moderates the relationship between workload and burnout among healthcare workers. The overall model was statistically significant, and explained a substantial amount of variance in burnout. Load276 significantly and positively predicted burnout, indicating that increased levels of perceived workload were associated with greater burnout symptoms. Perceived organizational support negatively predicted burnout, indicating employees who perceived increased support from their organization exhibited lower levels of burnout. The interaction term of workload and perceived support was statistically significant, suggesting perceived organizational support moderated the relationship between workload and burnout. The positive relationship of workload on burnout was reduced for individuals who reported increased support from their organization. These findings support organizational safeguard that help reduce the impact of heavy workload on healthcare workers' mental health.

Discussion

This study investigated the effect of workload on burnout with healthcare workers and whether perceived organizational support (POS) moderated this relationship. Considering the high stakes and high-paced environments of healthcare, where excessive job demands and little or no institutional support can exacerbate potential burnout in the form of emotional exhaustion, physical fatigue, and depersonalization among employees.

In the present study, 340 healthcare workers took place, and were recruited using convenience sampling which is common in applied psychology when trying to obtain accessible populations given time constraints (Etikan et al., 2016). The demographic

makeup of the study included participants from different genders and families, residing in various locations to enhance the representativeness of the results. The age grouping as predominantly young to middle-age adults, is consistent with the key working population involved in full-time clinical work in or full-time clinical work at hospitals. (Lee et al., 2021).

Three well-validated measures were used in the study and they all exhibited good internal reliability for the current sample. Subjective workload was examined with the NASA Workload Inventory (Hart & Staveland, 1988), symptoms of burnout were examined with the Copenhagen Burnout Inventory (Kristensen et al., 2005), and perceived organizational support was examined with the Survey of Perceived Organizational Support (Eisenberger et al., 1986). Cronbach's alpha for the instruments ranged from .73-.84 therefore they exhibited psychometric validity within Pakistan's healthcare context. Additionally, the bivariate distribution of responses did not indicate any problems with skewness or kurtosis, thus justifying parametric statistical analysis and confirming the dataset's validity.

The results supported the first hypothesis by showing a significant and positive relationship between workload and burnout. Greater levels of burnout symptoms were reported as workload levels increased, which follows the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2017). In this model, job demands (having too much workload, excessive time pressure and having to think too much) will either deplete an employee's mental and emotional resources and eventually lead to exhaustion and disengagement. The amount of literature proposing a relationship between high task loads and emotional exhaustion and psycho-social issues among healthcare workers in a range of cultural and organizational contexts (West et al., 2018; Zaki et al., 2022) strengthens this finding. In low-resource environments, such as for many of the developing countries included in this study, the relationship between workload and burnout may be more pronounced due to workforce decrements and deficits in infrastructure.

As predicted in the second hypothesis, perceived organizational support was significantly and negatively related to burnout, indicating healthcare workers were less likely to experience emotional exhaustion when they feel that their organizations support and value them. This relationship fits the Conservation of Resources (COR) theory, which emphasizes being surrounded by and able to use available resources as a protective factor against stress in the workplace (Hobfoll, 2001). Examples of POS can include management support, psychological safety, flexible work scheduling, and utilizing an employee's contributions and successes. Positive organizational practices related to morale and climate help the emotional component of high intensity jobs. This study contributes to the previous evidence that has identified POS as a protective factor against burnout across various professional groups that included teachers, nurses and physicians (Rhoades & Eisenberger, 2002; Benevene et al., 2020).

In accordance with the third hypothesis, multiple regression findings suggest that both workload and perceived organizational support were significant predictors of burnout, accounting for a substantive amount of variance together, which demonstrates that burnout is a multidimensional phenomenon that arises from the interaction of job demands and job resources. While workload is a concerning factor for health professionals, workload alone is not necessarily the greatest risk if the job has the support structures needed to mitigate these demands. These findings reaffirm the core premise behind the JD-R model: job resources are essential in counteracting the negative influence of job demands, as well as facilitating employees' motivation and positivity toward work (Schaufeli & Taris,

2014). In practice, health-care organizations must work to limit unnecessary overwork and simultaneously implement adequate support structures.

The fourth hypothesis centered on the moderating effect of perceived organizational support on the pathway from workload to burnout. The interaction term of workload and POS was significant, establishing that POS moderates the relationship between workload and burnout. Specifically, in this study, those who believed they had occupied a very supportive organization showed a weaker relationship between workload and burnout. While we support the buffering hypothesis by Cohen and Wills (1985) which suggests that social and organizational resources can reduce the experience of psychological strain due to stressors, we find that organizational support was a critical buffer in reducing the strength of the relationship between workload and burnout. This is an important finding for healthcare administrators and policy makers because it suggests that even in cases where workload cannot be mitigated, a supportive work environment can reduce the impact and harm of burnout for employees.

In conclusion, the research provides strong and credible evidence that burnout in healthcare staff is not just about the high demands placed on workers but about how workers perceive the organizational support provided to them. These conclusions have practical implications for healthcare management. Simply focusing on workload reduction will likely not suffice; additional initiatives must support the improvement of organizational climate which involves staff developing skills, organizational transparency, feedback to employees, and acknowledgement of employees' contributions. Collectively, these findings solidify a robust and expanding body of evidence demonstrating the importance of organizational culture in protecting the mental health of healthcare workers operating in stressful and unpredictable environments.

Conclusion

The current study provides valuable insights about the psycho-social context for health care workers regarding workload and burnout. The findings confirmed the relationship between workload and burnout in the healthcare context that as workload increased so did the symptoms of burnout. The study also found that perceived organizational support not only serves as a protective factor, but also moderates the relationship between workload and burnout. This meant that when health care workers with high workload and who feel they have greater perceived organizational support had less burnout symptoms. Therefore the study adds support to the Job demands-resources framework, and the conservation of Resources theories in terms of the balance between the demands of work and the resources available to support them. Given these findings, it is clear that both structural and relational changes need to be made to the healthcare system to support the well-being of employees and quality of care.

Recommendations

A multi-level intervention strategy is suggested to combat and decrease burnout in the health care workforce. The health care organizations should focus on supportive management behavior at the organizational level in these settings. These would include giving employees adequate attention via appropriate communication and respect for employees' contributions. Implementation of flexible scheduling and emotional support strategies would provide employees with appropriate recognition. Providing staff development opportunities, wellness training, and counselling services that can affect resilience will build skills in employees that can contribute to reduced stress work environments. There should be adequate workforce planning that optimizes workload by

managing it level; interventions should also look at how to manage workload components such as appropriate redistribution of tasks with fellow staff or maintaining adequate staffing levels to avoid excess workload and chronic overload. Future investigations may consider longitudinal and mixed-method designs wherein to describe the process over time and study the evolution of burnout and organizational mechanisms of support over time.

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