High-Performance Work Systems and Coping Strategies in Regulating Burnout and Safety Workarounds in the Healthcare Sector

SAGE Open Nursing Volume 9: 1–14 © The Author(s) 2023 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/23779608231162058 journals.sagepub.com/home/son

Hassan Waqar, MS¹, Asif Mahmood, PhD² o and Muhammad Ali, MS³

Abstract

The healthcare sector is essential for any country because it indirectly affects its economy. The productivity of land will increase if there is a healthy workforce, and it will enhance its economy, which will, in return, lead to the human welfare of the country. The present quantitative study has investigated the relationship between high-performance work systems (HPWS) on safety workarounds through the role of burnout as mediation, and explored coping strategies as a moderator between burnout and safety workarounds. These constructs play a vital role in efficiently managing different organizational activities to generate better productivity and employee performance, and educate employees about rules that can be used and adopted to ensure a healthy work-life. The data were collected from 550 nurses through a questionnaire in the healthcare sector of Lahore, Punjab (Pakistan). AMOS and SPSS were used to test the direct relationships between the constructs, and analyze the moderation of coping strategies and the mediation effect of burnout. The results have demonstrated the strong moderated mediation of coping strategies and burnout between existing HPWS and safety workarounds. The study of coping strategies would help managers and employees handle job stress and alleviate burnout in the healthcare sector through safety workarounds to increase effectiveness and efficiency.

Keywords

high-performance work system (HPWS), burnout, emotional exhaustion, cognitive weariness, physical fatigue, coping strategies, and safety workarounds

Received 27 October 2022; revised 5 February 2023; accepted 17 February 2023

Introduction

Greater high-performance work systems (HPWS) and innovative work behavior can produce enhanced benefits for the employees compared to the less intensity of HPWS (Caniëls & Veld, 2019). As employees in the hospital industry are confronted with heavy workloads and low resources, they lose their valuable assets, including energy, time, and sentiments (Mansour & Commeiras, 2015), leading to enhanced burnout and then quitting (Mansour & Tremblay, 2016). Moreover, coping strategies generally encourage adjustment to life stressors after some time and conspicuous utilization of avoidant coping strategies will generally hinder adjustment and mental well-being. Cherry et al. (2017) stated that most people take part in both constructive and avoidant coping systems following significant life stressors (Jensen et al., 2015). Healthcare workers believe that patient safety and performance can be improved by developing inconsistent and idiosyncratic work patterns (Wheeler et al., 2012).

Work in the medical industry is considered wellstructured routine and ultra-safe practices but through unbalanced, irregular, and damaging requests. Practitioners need to

Corresponding Author:

Asif Mahmood, Department of Innovation and Technology Management, College of Graduate Studies, Arabian Gulf University, Manama, Kingdom of Bahrain.

Email: mahmood.engineer@gmail.com

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access page (https://us.sagepub.com/enus/nam/open-access-at-sage).

¹Institute of Business & Management, University of Engineering and Technology, Lahore, Pakistan

²Department of Innovation and Technology Management, College of Graduate Studies, Arabian Gulf University, Manama, Kingdom of Bahrain ³Department of Management Sciences, Bharia University, Islamabad, Pakistan

study at work simultaneously to show proficient self-rule (Debono et al., 2013). This medical industry attributes lead to employees' work practices, behavior, and clinical practices demand (Debono et al., 2013). So, the complicated rules and unsafe behaviors of nurses affect the safety workaround practices (Mansour & Tremblay, 2019). Therefore, workaround practices may be seen as rewards or dangerous, influencing patients' superiority and security (Lalley, 2013).

Human capital is becoming more important to organizations in order to achieve a competitive edge and enhance their overall performance. Human resources (HR) have developed into an essential component. Management researchers have been more interested in the ways in which HR may be used to enhance the performance of organizations as a result of their recognition of the practical significance of this topic. Implementing HPWS often consists of techniques such as comprehensive training, selective hiring, clear job descriptions, results-oriented assessments, and engagement is one specific method that may be used. These techniques are intended to increase organizational performance and maintain a competitive edge for as long as possible. Previous studies have shown apparently a favorable connection between HPWS and organizational performance (Korneeva et al., 2022).

Many studies, using a variety of methodologies and examining a broad range of sectors and organizations, have shown that HPWS are associated with progressive business and workforce results. When it comes to patient care, nothing is more important than having a competent team on the job. Evidence-based management practices (also called highperformance work practices), such as organized human resource induction and incentive compensation, may represent a necessary and underutilized policy for improving the quality of patient care and patient safety, and research from other industries suggests this. Employee outcomes (such as turnover and increased satisfaction/engagement) were shown to be related to HPWPs, and HPWPs were shown to contribute significantly to the system- and organization-level outcomes (e.g., enhanced recruitment, better ability to address safety concerns, and lower turnover). How the systematic use of highperformance work practices might affect healthcare quality and safety is an area of study that may lead to enhanced organizational performance (Audiana, 2022).

Choi et al. (2019) suggested that future practitioners should discover whether coping strategies play an alleviator role in other sectors working in a highly pressurized environment. Due to the lack of research in this area, a significant gap has been created that needs research and progress (Choi et al., 2019). The authors suggested that the researchers need to explore workaround with dimensions of burnout in the healthcare industry, leading to more efficiency and effectiveness (Mansour & Tremblay, 2019). On the other hand, another author said that in the future, it is suggested to investigate unexplored outcomes of HPWS in the public and private sectors, for example, the healthcare industry (Jyoti & Rani, 2019). Practically this study will help employees manage their workload, workaround policies, procedures, and organization practices to help employee safety. It will also help improve employees' performance and productivity in organizational operations and allow managers to educate employees on healthy work life. As the HPWS has been widely talked over in the human resource management literature, see, for example, Shin and Konrad (2017), it is sufficient to restate here that its main objective is the achievement of higher employees results (Ananthram et al., 2018).

Thus, the first objective of the current study is to make a framework that develops the relationship between HPWSs and safety workarounds. The second purpose is to inspect the mediation role of burnout and the moderating role of coping strategies. In developing countries, the healthcare sector in the current era faces many challenges like weak health policies, irregular, complicated rules, and harmful demands that directly affect human welfare. Regrettably, with the possibility of uncertain and alarming results from workarounds in medical practice, academic researchers on the subject do far more than simply document its existence. Especially in Pakistan, the healthcare sector safety workarounds practices are not working much according to their perspective.

The healthcare sector in Pakistan faces safety workarounds problems due to complicated rules, inconsistent work patterns, and unsafe behavior of employees. This study of coping strategies would help managers and employees in similar contexts handle job stress and alleviate burnout in the healthcare sector through safety workarounds to increase effectiveness and efficiency.

Literature Review and Hypotheses Development

HPWS and Burnout

Gulza et al. (2014) showed that HPWS connect with burnout in a way that leads to burnout by encouraging the workers to do their best for the organization. But Fan et al. (2014) uncovered that workers' burnout is oppositely related to the HPWSs and harms it. Kilroy et al. (2016) revealed that when we involve diverse work practices highly, it also negatively impacts emotional exhaustion and burnout components, significantly known as depersonalization.

According to Al-Qudah et al. (2022), the capacity of an organization to react and adapt to changes imposed by both the environment and the competitive marketplace has increased as a direct result of the increased importance of organizational change as an activity essential to the maintenance of that organization's efficiency. High-performance work practices are followed consistently to improve workers' capabilities, level of involvement in decision-making, and level of incentive to put out their best effort. They consist of, among other things, stringently selected personnel practices, rigorous training and development,

performance-based evaluations, communication, and incentive compensations contribution (Al-Qudah et al., 2022).

In the same way, Harley et al. (2010) demonstrated that work practices and execution supervision adversely affect emotional exhaustion. Jyoti et al. (2015) experimentally demonstrated that massive high-performance human asset practices negatively influence emotional exhaustion. When management makes sure to provide a highly cooperative environment and carries more social assets, HPWS minimizes work stress (Van De Voorde & Beijer, 2015). In HPWS, management usually pays attention to motivating workers by providing special prizes. It also lessens the stress factor in workers (Torre, 2012). Preceding scholars on HPWS have been divided into two paths: secure presentation and worker consequences. A recognized arrangement of studies encouraging the application of HPWS practices leads to a high-performing culture and outcomes in a win-win condition for both the worker and the organization (Van De Voorde & Beijer, 2015). One more perception backings the opinion that HPWS is an instrument in the hands of an organization that results in work escalation, causing career pressure between workers. In fact, in the situation of basically driven unrestricted hard work from workers, the procedure might be unsuccessful in resulting in the welfare of workers (Kaufman, 2010).

HPWS is known as a necessary aspect affecting performance-related results. Organizations spend considerably raising such organizations to increase presentation (Combs et al., 2006). Current literature shows the association between HPWS and performance, though these variables' technique is still uncertain (Demirbag et al., 2014). There is a necessity to recognize issues that reinforce this relationship. The bundle of human resource practices cannot do miracles unaided. With respect to achieving performance outcomes results, the assistances prepared by certain, skilled and established over such practices are significant. Enhanced performance is of great significance for organizations; therefore, they are reforming their policies to improve HR (Harpan & Draghici, 2014). Human capital methodology accepts that organizations implement HPWS, which benefits the human capital establishment, therefore causing improved performance (Wright et al., 2001).

The plan of taking HPWSs invented from and originated in the past century during the US industrial revolution (Imran & Atiya, 2020). Throughout this era, it was recognized that the level of universal rivalry was strong, and it was necessary to reconsider trustworthy procedures. On the other hand, it is claimed that HPWS has its origins in HR practices with the Japanese systems (Chaudhuri, 2009). Regardless of these diverse viewpoints, the key impression of HPWS is to have an active organization that has involved, dedicated, and empowered employees (Tomer, 2001).

According to previous studies, we can summarize it as a HPWS that lessens the degree of burnout in an organization by providing a work-friendly environment (in terms of rewards, acknowledgment, working practices, autonomy, and empowerment).

H1: HPWS has a significant impact on physical fatigue burnout.

H2: HPWS has a significant impact on cognitive weariness burnout.

H3: HPWS has a significant impact on emotional exhaustion burnout.

Burnout and Safety Workarounds

Job burnout represents mental and emotional exhaustion physically caused by work pressure or relapse (Lizano & Barak, 2015). According to the experience of the hotel managers, less intensity of burnout in case of more straightforward coping strategies application. Factors like career development, higher studies continuation, enhancement in salary, and designation promotion cause disappointment in the managers; therefore, they are virtually vulnerable to emotional exhaustion ('Sunny' et al., 2010). Safety workarounds are considered a common discussion which shows a significant improper arrangement between "work as ideate" as specified in pharmacy methods and actual "work as done" in daily performance (Hollnagel et al., 2015). Conservation of resources theory recommends that compassion fatigue, or "feelings of being overreached and exhausted of one's emotive and corporeal means" (Maslach & Leiter, 2008) is expected to happen below source damage circumstances known a person's improved compassion to source damage (Hobfoll, 2001). Conservation of resources theory describes why we suppose an unintended consequence over emotional exhaustion. Workers who practice FRD take fewer regulators of exertion-life demands and observe they have fewer capitals to accomplish exertionlifetime fight. The need for assets produced by production with an uncooperative manager generates emotional exhaustion. In turn, an advanced level of emotional exhaustion is expected to obstruct the non-work field, delay non-work accountabilities (Greenhaus & Beutell, 1985), and eventually end in an augmented work-life fight (Dickson, 2008).

Once forefront service workers have additional means to react to workloads, they practice less emotional exhaustion. Proceeding the conflict to defend their assets, forefront service workers facing little work pleasure will take accomplishment to stop additional source reduction (Halbesleben, 2010). Therefore, they have less accessible means to contract emotional exhaustion. Concurrently, the outcome of organizational embeddedness on emotional exhaustion will decline (Zhou et al., 2020). They are noble at consuming organizational means to reply to exertion requirements, resulting in less emotional exhaustion. The advanced level of job contentment is vital to organizational embeddedness in the association amid moral management and workers' emotional exhaustion (Zhou et al., 2020). However, according to a scoping review of workarounds by Debono et al. (2013), the workaround behavior of nurses is still the primary focus, according to a few peer-reviewed studies (Debono et al., 2013). Workarounds are considered resourceful and capable of providing results and making work more manageable. The negative impact of workarounds is the potential and probability of adverse consequences. Security concerns drive an enormous portion of today's research on workarounds (Jordan, 2015).

By keeping in view the above discussion, the following hypotheses are developed:

H4: Physical fatigue burnout has a significant impact on safety workarounds.

H5: Cognitive weariness burnout has a significant impact on safety workarounds.

H6: Emotional exhaustion has a significant impact on safety workarounds.

Mediation Effect of Burnout Between HPWS and Safety Workarounds

Tran Huy (2022) stated it had been shown that HPWS benefits the results of both organizations and individuals. In contrast, this study adopts an opposing viewpoint of HPWS to investigate the influence that perception of HPWS has on the act of information hoarding. In addition, it is expected that the competitive atmosphere will be a mediator between the two factors. A violation of the psychological contract between HPWS and knowledge hoarding will act as a moderator of the connection between the two. The competitive atmosphere acts as a partial mediator between the notion that HPWS encourages information hoarding and the reality of the situation. The breaking of the HPWS psychological contract makes the connection more intense. Employees need to be motivated to improve their knowledge, skills, and abilities. Management needs to empower workers by delegating authority and giving them more say over their work in order to decrease the negative effects of highpressure work situations (HPWS), such as burnout, interpersonal tension, and anxiety (Tran Huy, 2022).

Job burnout has been studied extensively over prior decades, resulting in numerous achievements (Dreison et al., 2018). This research aimed to examine potential mediators of burnout for extreme stress in the form of cognitive weariness, physical fatigue, emotional exhaustion, and burnout, using an active psychological cure as a comparator and establishing essential process objectives to acquire symptom decline. Burnout has been utilized to state the end stage of a stress course, an adaptive collapse, with increasing handling problems (Schaufeli et al., 2009). It is observed that exhaustion is a core component in most concept definitions (Maslach & Leiter, 2016). The theoretical research from the past 20 years has revealed that the habit of absence from work was minimized by using HPWS (Zatzick & Iverson, 2011). It is consequently significant to pay additional consideration to professional bodily and psychological dangers and cognitive weariness and examine the possible risks in command to make maintainable exertion conditions for the call center managers (CABRERA, 2019). Cognitive weariness is theorized as an exclusive letdown to preserve and enhance recital above critical nevertheless constant cognitive energy subsequent in an act that is lesser and extra flexible than the person's finest skill (CABRERA, 2019). One of the signs involved in describing burnout is CW, which denotes the sensation of being sluggish or taking compact psychological nimbleness (Melamed et al., 2006).

Burnout develops over a period and can remain operationalized like a procedure using several constituents persuading individually (Taris et al., 2005). Provision of assets by HPWS practices (e.g., job independence, participation, better career-building opportunities, and work feedback) minimizes workers' absence by avoiding stressful situations (Boon et al., 2014). Emotional exhaustion is considered the most experimented and researched indicator of burnout, mainly dependent on the lack of activity (Skaalvik & Skaalvik, 2011). Likewise, Jyoti et al. (2015) also conducted several experiments to demonstrate that great highperformance human resource practices undesirably affected sentimental exhaustion. The work stress could be minimized or its potential could be reduced if management provides a highly cooperative environment with further social assets (Van De Voorde & Beijer, 2015). Pugh et al. (2011) demonstrated that the center of attention of training is to increase and modify the talents of the workers, which helps to minimize emotional weariness. The stress level of the workers can be minimized by managing HPWS with a focus on motivating workers by giving them intrinsic rewards (Torre, 2012).

Given the above discussion, the following hypotheses have been developed:

H7: Physical fatigue burnout mediates the relation between the HPWS and safety workarounds.

H8: Cognitive weariness burnout mediates the relation between the HPWS and safety workarounds.

H9: Emotional exhaustion burnout mediates the relation between the HPWS and safety workarounds.

Moderator Effect of Coping Strategies Between Burnout and Safety Workarounds

Zhang et al. (2022) analyzed the impact of undergoing several HPWS on the organizational citizenship behaviors of workers. The self-regulation and self-identity orientation theories were both used as theoretical foundations for this investigation. In the first place, emotional weariness served as a mediator in the connection between helping/voice and performance-oriented and maintenance-oriented human resource systems. Second, the association between performance-oriented HR systems and

emotional weariness was mediated by both relational identity and communal identity. Thirdly, relational and collective identities both had a role in moderating the indirect influence that performance-oriented HR systems had on assisting with getting past emotional weariness. In the fourth place, relational identification and collective identity helped to limit the influence that performance-oriented HR systems had on voice indirectly via emotional weariness. Fifth, an individual's identity is a controlling factor in terms of the connection between emotional exhaustion and a helping voice. Afterward, a sense of identity may be a controlling factor to determine the indirect effect of performance-oriented HR systems on helping voice through emotional tiredness. The HR systems and results evaluated effect explain that fundamental processes that correlate these factors give a balanced picture that HPWS influences worker performance.

Bodys-Cupak et al. (2016) stated a connection between coping strategies and stress intensity among nursing students. That is why coping strategies moderate the link between nursing work practices and stress from discourteous behavior among nursing students (Kim, 2018). A model has been introduced that proposed mitigating stress among students' powerful emotional rules and self-motivation/leadership did not practically check this model (Maykrantz & Houghton, 2020). Thus, burnout leads them to leave their jobs. Therefore, mediation methods should highlight increasing the use of direct working coping skills. These coping strategies work as mitigation techniques or training of intellectual and behavioral practices that help expand direct action on resolving the circumstances. Often utilization of this factor may result in a reduced number of managers affected by burnout ('Sunny'Hu & Cheng, 2010). Research conducted for the nurses explains that the PWB was formulated to be inclined by stress, and the option of stress coping strategies was the finest analysis of mental health (Chang et al., 2006). Healy and McKay (2000) Recommendations show that many stress-managing strategies for nurses have different effects on nurse job completion and managing their temper. However, approach-oriented strategies are very helpful and encouraged as well. These strategies can manage life stressors, and difficult and negative behavior efforts (Labrague et al., 2018). On the side of the scenario, avoidance to take these coping strategies was also evaluated. A study of 129 nurses in Australia reveals that avoidance is mainly due to attitude disorder (Healy & McKay, 2000). Comparing this with another study of 72 nurses in United Kingdom showed that implementation of these avoidance coping strategies is related to mental health (Tyler & Cushway, 1992).

Positive stress-handling approaches decrease the probability of more work stress and negative consequences (Li et al., 2017). Several studies depict that an optimistic approach toward stress handling strategies positively affects nurses' quality of life (Cruz et al., 2018), and a decline in symptoms of burnout is observed. Chang and Chan (2015) proposed that proper planning is needed for active coping. Furthermore, social support greatly influences the quality of life (Sun et al., 2017). Better understanding and social support from family, including friends, coworkers, and higher authorities, enhances the quality of nurse life (Kowitlawkul et al., 2019). Proper reorganization and support from the organization enhance the mental health of the nurses as well (Smith et al., 2017). Stressful environments increase nurses' risk of burnout and stress-related illness (Brennan, 2017). According to research, stress increases the chance of burnout and other health issues in nurses (Khamisa et al., 2017). So, effective coping with stress is needed. Research shows that nurses' work-related stress is moderate to high and their approach toward stress management is different (Hasan et al., 2018). Laranjeira (2012) commented that the most used coping strategies in nurses are self-control, problem-solving approach, and seeking social support. The authors built the following hypothesis to verify moderation influence of coping strategy between JST and burnout (Choi et al., 2019). This research gives additional help to this proof, tying the advancement of dynamic adapting procedures in this examination to protecting from misery like conduct after constant pressure found in different studies (Kim et al., 2018).

Considering the discussion above, we propose the following hypotheses:

H10: Coping strategies moderate the relation between physical fatigue burnout and safety workarounds.

H11: Coping strategies moderate the relation between cognitive weariness burnout and safety workarounds.

H12: Coping strategies moderate the relation between emotional exhaustion burnout and safety workarounds (Figure 1).

Methodology

Sample and Procedure

This research has used the deductive approach to test the relationships between HPWS and safety workarounds with the mediation role of burnout and the moderating role of coping strategies.

A structured questionnaire was adopted and utilized as a measuring method for the data collection on model validation and hypothesis testing to obtain answers on a 5-point Likert scale, that is, strongly disagree = 1 to strongly agree = 5. The sources of the questionnaire and the reported reliability values are mentioned in Table 1.

It was divided into the responders' demographic profiles and the measures' scale. The primary data were gathered from the healthcare sector employees (nurses). Moreover, the data were collected from public and private hospitals in Lahore. Private hospitals' understudy had at least 10 doctors on the panel or more than 50 employees working in the hospital. This study used a quota sampling technique



Figure 1. Theoretical framework.

Table 1. Sources of Measures.

Variables	No. of items	Reported reliability	Sub-constructs	Sources
High-performance work system	21	0.81		(Amirkhan, 1990)
Burnout	16	0.86	Physical fatigueCognitive wearinessEmotional exhaustion	(Melamed et al., 2009)
Safety workarounds	5	0.79		(Halbesleben, et al., 2008)
Coping strategies	15	0.77	 Active coping Avoidant coping Seeking support 	(Lazarus & Folkman, 1984)

and divided the questionnaires equally into public and private healthcare sectors. Before starting the data analysis process, the focal persons of the hospitals were contacted to request their support and consent for collecting the data from their employees. Additionally, the authors agreed with the ethical guidelines of these healthcare organizations to uphold moral norms during the data collection process. Additionally, each respondent gave the authors their free and informed consent before participating in the study.

Unfortunately, the extensive COVID-19 pandemic prevented the authors from directly obtaining the data from hospital employees. Because the majority of hospitals' administrations did not permit the authors to remain at a hospital for several hours to collect the data, the questionnaire was distributed through the focal persons. A total of 1000 surveys were distributed, and 550 were received as complete, with a reasonable response rate of about 55%. The procedure of gathering the data was finished in January and February 2022.

As shown in Table 2, 90 (16.4%) were male and 460 (83.6%) were female. On the other hand, 276 (50.2%) respondents belonged to public healthcare sectors/hospitals,

while 274 (49.8%) were working in private hospitals. Furthermore, 382 (69.5%) of respondents possessed less than or equal to 10 years of experience, 106 (19.3%) had 11-20 years of experience, whereas 62 (11.3%) of the respondents had 21 years or above experience.

Analysis and Results

Data Analysis

For data analysis, we used two software: SPSS and AMOS. In AMOS, we performed confirmatory factor analysis (CFA) and path analysis while we measured descriptive statistics as well as moderation through process macro.

The descriptive statistics include minimum and maximum values, mean values, sample size, skewness, and standard deviations of HPWS, physical fatigue, cognitive weariness, emotional exhaustion, coping strategies, and safety work-arounds, as shown in Table 3.

Mean values show the concentration of responses; overall, the variables have magnitudes above the midpoint (2.5). Moreover, the skewness and kurtosis values were found within the normality range, that is, -1.0 to +1.0 for skewness, and for kurtosis, -3 to +3 (Kline, 2010). Table 3 shows the skewness values range from -1.593 to -.041 and the kurtosis values range from -1.096 to 1.575; therefore, the data were distributed normally.

Results

Measurement Model. Researchers need CFA to describe all aspects of the model (Zhao et al., 2016). It is the most widely used measurement model for loading the development-factor scale (object pattern) and significant amounts of underlying measurements of one size factor (Brown, 2015). In essence, it is used in research to show whether factors imply good data fitness (model fitness) (Scott et al., 2018), and whether reliability & validity are satisfactory (Troester & Van Quaquebeke, 2020). The graphic representation of the CFA has been depicted in Figure 2.

For the best of model fit indices, values recommended by researchers such as Kline (1998) are: chi-square/degree of freedom (χ^2 /df) < 5 3. CFI should be greater than or equal to 0.95. Similarly, in standardized root mean square residual (SRMR), the values are less than 0.10 or 0.08 and the root mean square error of approximation (RMESA) should be less than 0.05 (Bentler, 1990). The CFA model achieved χ^2 /df = 2.893, the value of CFI = 0.934, whereas SRMR = 0.034 and RMSEA = 0.059. These values demonstrated that the results were satisfactory and an indicator of the fit model.

Validity is the criterion for assessing the goodness of a measure. It is established through face validity, convergent validity, and discriminant validity. Since all the measures were

Table 2.	Demographics	of the	Respondents.
----------	--------------	--------	--------------

		Frequency	Percent
Gender	Male	90	16.4
	Female	460	83.6
	Total	550	100.0
Experience	Less than and equal to 10 years	382	69.5
•	II to 20 years	106	19.3
	21 years and above	62	11.3
	Total	550	100.0
Sector	Public	276	50.2
	Private	274	49.8
	Total	550	100.0

Table 3. Descriptive Statistics.

adopted from previous studies, it establishes face validity. The convergent validity was confirmed through factor loadings and average variations of extracted (AVE) values with minimum cutoff criteria of 0.7 and 0.5, respectively (Al-Refaie, 2015). The CFA results in Figure 2 indicate that all the loading values were above 0.70. Likewise, the AVE values of all constructs were beyond 0.5 (see Table 4), thereby supporting convergent validity. Discriminant validity specifies the degree to which the measurements of different latent variables vary. The shared AVE of the square root of the respective inter-construct correlation estimates of the latent structure was calculated. Table 4 shows that AVE's square roots are more than their corresponding inter-constructive relations in all constructs in the diagonal. Therefore, there is better discrimination in the proposed measurement model (Henseler et al., 2015).

On the other hand, Cronbach's alpha is used to assess the reliability or internal consistency of a set of scale or test items. The reliability values in Table 4 show that Cronbach's alpha values are between 0.903 and 0.966, which are considered excellent values (Al-Refaie, 2015). The highest value of Cronbach's alpha is for coping strategies, while the lowest values are for physical fatigue and emotional exhaustion.

Structural Model

The next step is to analyze whether the direction, the degree of correlations, and the meaning among the variables are negative or positive. The graphical representation of the structural model drawn in AMOS software has been provided in Figure 3.

Table 5 summarizes the structural model by showing that some estimates (path coefficients) are positive and negative, while p-values below 0.05 imply significant relationships.

The results from Table 5 corroborated that a HPWS negatively impacts physical fatigue, cognitive weariness, and emotional exhaustion burnouts (β =.-274, p<.001; β = -.299, p<.001; β =-.344, p<.001, respectively). In turn, these burnouts significantly impact safety workarounds (β = .224, p<.001; β =.159, p<.001; β =.328, p<.001). Similarly, physical fatigue, cognitive weariness, and emotional exhaustion burnouts mediate the relation between the HPWS and safety workarounds (β =-0.061, p<.001; β = -0.098, p<.001; β =-0.055, p<.001, respectively).

	Ν	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis
HPWS	550	1.00	5.00	2.7424	1.12714	-0.041	-1.096
Physical fatigue	550	1.00	5.00	3.4833	0.98597	-0.793	-0.110
Cognitive weariness	550	1.00	5.00	3.4371	0.99847	-0.480	-0.829
Emotional exhaustion	550	1.00	5.00	3.8933	0.98107	-1.593	1.575
Safety workarounds	550	1.00	5.00	3.9764	0.81932	-0.996	1.354
Coping strategies	550	1.00	5.00	3.9645	0.72657	-0.635	0.488



Figure 2. Conformity factor analysis.

•		,	•				
Reliability	AVE	HPWS	PF	CW	EE	SWA	CS
0.953	0.857	0.926					
0.903	0.612	-0.369***	0.783				
0.933	0.722	-0.355***	0.220***	0.850			
0.903	0.759	-0.406***	0.315***	0.394***	0.871		
0.952	0.790	-0.525***	0.452***	0.561***	0.491***	0.889	
0.966	0.656	-0.189***	0.110*	0.249***	0.097*	0.279***	0.810
	0.953 0.903 0.933 0.903 0.903 0.952	0.953 0.857 0.903 0.612 0.933 0.722 0.903 0.759 0.952 0.790	0.953 0.857 0.926 0.903 0.612 -0.369*** 0.933 0.722 -0.355*** 0.903 0.759 -0.406*** 0.952 0.790 -0.525***	0.953 0.857 0.926 0.903 0.612 -0.369*** 0.783 0.933 0.722 -0.355*** 0.220*** 0.903 0.759 -0.406*** 0.315*** 0.952 0.790 -0.525*** 0.452***	0.953 0.857 0.926 0.903 0.612 -0.369*** 0.783 0.933 0.722 -0.355*** 0.220*** 0.850 0.903 0.759 -0.406*** 0.315*** 0.394*** 0.952 0.790 -0.525*** 0.452*** 0.561***	0.953 0.857 0.926 0.903 0.612 -0.369*** 0.783 0.933 0.722 -0.355*** 0.220*** 0.850 0.903 0.759 -0.406*** 0.315*** 0.394*** 0.871 0.952 0.790 -0.525*** 0.452*** 0.561*** 0.491***	0.953 0.857 0.926 0.903 0.612 -0.369*** 0.783 0.933 0.722 -0.355*** 0.220*** 0.850 0.903 0.759 -0.406*** 0.315*** 0.394*** 0.871 0.952 0.790 -0.525*** 0.452*** 0.561*** 0.491*** 0.889

Table 4. Average Variance Extracted (AVE) and Discriminant Validity.

*** p ≤ .001





Table 6 presents the results of moderating effects of coping strategies. Coping strategies moderate the relation between physical fatigue, cognitive weariness, and emotional exhaustion, burnouts, and safety workarounds ($\beta = .1017, p < .001, R^2 = .2551; \beta = .4292, p < .001, R^2 = .4292; \beta = .2357, p < .001, R^2 = .3206, respectively).$

Discussion

The results indicate that a HPWS has a negative impact on physical fatigue burnout, emotional exhaustion burnout, and cognitive weariness burnouts ($\beta = -.274$, p < .05; $\beta = -.344$ and p < .001; $\beta = -.299$, p < .001). It means that HPWS supports employees in achieving the necessary resources to meet job demands that reduce burnout (Kilroy et al., 2016). Similar to the previous studies (Mansour & Tremblay, 2019; Ishaq & Mahmood, 2017), the results of the current research have also shown that the dimensions of burnout (physical fatigue, cognitive weariness, and emotional exhaustion) have positive and significant effects on safety workarounds (β = .224, *p* < .001; β = .159, *p* < .001; β = .328, *p* < .001).

The mediating effect analysis was also performed, and the results revealed the significant effects of mediation between HPWS and safety workarounds. The first

Table 5. Path Analysis.

			Estimate	S.E.	C.R.	Р
PF	<	HPWS	-0.274	0.034	-8.069	***
CW	<	HPWS	-0.299	0.035	-8.535	***
EE	<	HPWS	-0.344	0.037	-9.400	***
SWA	<	PF	0.224	0.037	6.133	***
SWA	<	EE	0.159	0.031	5.067	***
SWA	<	CW	0.328	0.034	9.638	***
SWA	<	PF <— HPWS	-0.06 I	-0.088		***
SWA	<	CW < HPWS	-0.098	-0.140		***
SWA	<	EE <— HPWS	-0.055	-0.078		***

^{****}p≤.001

Table 6. Moderating Effects.

Predictor	β	R ²	ΔR^2	p-value
PF x CS —> SWA	.1017	.2551	.5050	.000
CW x CS —> SWA	.3674	.4292	.655 I	.000
EE x CS —> SWA	.2357	.3206	.5662	.000

dimension of burnout (physical fatigue) has shown mediation impact as $(\beta = -.061, p < .001)$, while the second dimension of (cognitive weariness) has shown results ($\beta =$ -.098, p < .001) and the third dimension (emotional exhaustion) has a value of mediation effect is ($\beta = -.055$, p < .001). Moreover, it needs to be clear which burnout effectively reduces the personnel's safety workarounds with the help of coping strategies (Choi et al., 2019). Therefore, the authors built the following hypothesis to verify the moderation influence of coping strategy between burnout and safety workarounds. According to moderation results, coping strategies have a significant moderation between the dimensions of burnout (physical fatigue, cognitive weariness, and emotional exhaustion) and safety workarounds $(\beta = .1017, p < .05, R^2 = .255; \beta = .3674, p < .05; R^2 =$.4292; $\beta = .2357$, p < .05, $R^2 = .3206$). That is, a HPWS helps maintain an organizational context that develops equality in the skills among employees. It contains various human resource practices that build an organizational context to benefit the capabilities and incentives of employees (Garaus et al., 2016), and further advancement opportunities are created (Fu et al., 2015). Furthermore, it has been observed that safety workarounds that cause mishaps, perils, or injuries are avoided or perceived as unnecessary when workers see that rules and procedures are built to help their safe working environment practices (Nixon et al., 2015).

Implications

The current research would be valued by medical practitioners as well as researchers. The practical suggestions established in this study lead us to the results discussed henceforth. HPWS emphasizes high performance by effectively organizing diverse organizational activities and improving worker performance and output. The grounding for the similar must commence from the appointment phase of workers. With respect to graciously performing HPWS, a proper person-role combination in command is required. This procedure must begin from the selection phase itself. The selection procedure must be performance-oriented over the appropriate assessment of requisite skills to do work. In this perspective, numerous assessments (cognitive, interest, and creativity thinking tests) must be handled to assess workers' skills properly. Thus, they are capable of displaying requisite work performance after settlement. It is concluded that healthcare practitioners can carry safety workaround rules, practices, and techniques applied by the institute to shield patients' and employees' security. As our study was completed in healthcare sectors in Lahore city of Pakistan, these outcomes are significant in terms of practical implications.

This study will help the employees understand safety workarounds, policies, procedures, and practices. It will also enable employees to handle their workload by decreasing burnout efficiently and focusing on a HPWS to increase workers' performance and patient safety. Coping strategies are also a helpful and valuable tool for managers and employees to handle job stress and alleviate burnout in the healthcare sector through safety workarounds practice to increase effectiveness and efficiency.

Conclusion

This study has shown strong moderated mediation of coping strategies and burnout between actual HPWS and safety workarounds. The results show that coping strategies and burnout play an essential role in the perceived relationship between HPWS and safety workarounds by allowing employees to communicate with their coworkers in an open and friendly manner to express frustration, express tension, or negative job emotions, and sharing work tips and advice to relieve stress and burnout at work. This expressly specified the varying organizational and environmental improvements of the current healthcare structure in various nations. The results obtained in this study are in line with the previous studies (e.g., Kilroy et al., 2016; Choi et al., 2019).

This study would provide a better comprehension of this concept of safety workarounds to the managers of the hospitals. Considerate associations among healthcare centers that try to order excellence of care and protect patients' reactions to these challenges are essential for the HRM functions inside the hospital. Interest in the current perspective of decreased public health expenditure and organizational improvements in today's healthcare systems in numerous countries, seeing the significant influences and threats our study has emphasized. The study has certain limitations because it was conducted in a specific region, culture, and cross-sectional data were collected on a closed scale.

Limitations and Future Direction

Initially, the results were built on the healthcare sector in Lahore, Pakistan. Thus, assured industry features or cultural issues can impact the conclusions and implications of this study. Therefore, future researchers can extend the study to other cultural or country situations. The alternative restraint of this study is that it simply observes three kinds of burnout as mediators in the association between HPWS and safety workarounds while testing additional burnout types. Finally, accepting a cross-sectional design is limited to the study where the main information was assembled at a definite point in the phase because of availability concerns. Therefore, an additional route for upcoming research is accepting a longitudinal approach. Future research can consider the use of further methods and data sources to improve our understanding of workarounds. Researchers should interview nurses on a confidential and engaging basis to thoroughly investigate and detect the essence, background, and implications of workarounds. It will also be essential to explore why senior managers in the healthcare sector continue to facilitate workarounds because it can lead to future quality and efficiency changes.

Data Availability Statement

The dataset used in this research is available upon request from the corresponding author.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Statement

The Institution's Ethical Evaluation Committee (IB&M-ERC/2021-02) provided ethical review and approval for this study on human subjects. Furthermore, informed consent was obtained from all participants involved in the study.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Asif Mahmood D https://orcid.org/0000-0003-1416-0390

References

- Al-Qudah, A. A., Al-Okaily, M., & Alqudah, H. (2022). The relationship between social entrepreneurship and sustainable development from economic growth perspective: 15 'RCEP' countries. *Journal of Sustainable Finance & Investment*, 12(1), 44–61.
- Al-Refaie, A. (2015). Effects of human resource management on hotel performance using structural equation modeling. *Computers in Human Behavior*, 43(1) 293–303. https://doi.org/10.1016/j.chb. 2014.11.016

- Amirkhan, J. H. (1990). A factor analytically derived measure of coping: The Coping Strategy Indicator. *Journal of Personality* and Social Psychology, 59(5), 1066.
- Ananthram, S., Xerri, M. J., Teo, S. T., & Connell, J. (2018). High-performance work systems and employee outcomes in Indian call centres: a mediation approach. *Personnel Review*, 47(4), 931–950. https://doi.org/10.1108/PR-09-2016-0239
- Audiana, A. (2022). The mediating role of perceived organizational support in the relationship between high performance work system and employee well-being at XYZ Hospital, South Jakarta. Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 5(2), 8679–8689.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238.
- Bodys-Cupak, I., Majda, A., Zalewska-Puchała, J., & Kamińska, A. (2016). The impact of a sense of self-efficacy on the level of stress and the ways of coping with difficult situations in Polish nursing students. *Nurse Education Today*, 45(1), 102–107. https://doi.org/10.1016/j.nedt.2016.07.004
- Boon, C., Belschak, F. D., Den Hartog, D. N., & Pijnenburg, M. (2014). Perceived human resource management practices: Their effect on employee absenteeism and time allocation at work. *Journal of Personnel Psychology*, 13(1), 21–33. https:// doi.org/10.1027/1866-5888/a000101
- Brennan, E. J. (2017). Towards resilience and wellbeing in nurses. *British Journal of Nursing*, 26(1), 43–47. https://doi.org/10. 12968/bjon.2017.26.1.43
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. Guilford publications.
- Cabrera, A. P. (2019). Occupational, physical and mental hazards and cognitive weariness of call center agents in selected business process outsourcing companies in cavite. Cavite State University-Main.
- Caniëls, M. C., & Veld, M. (2019). Employee ambidexterity, high performance work systems and innovative work behaviour: How much balance do we need? *The International Journal of Human Resource Management*, 30(4), 565–585. https://doi. org/10.1080/09585192.2016.1216881
- Chang, E. M., Daly, J. W., Hancock, K. M., Bidewell, J., Johnson, A., Lambert, V. A., & Lambert, C. E. (2006). The relationships among workplace stressors, coping methods, demographic characteristics, and health in Australian nurses. *Journal of Professional Nursing*, 22(1), 30–38. https://doi.org/10.1016/j. profnurs.2005.12.002
- Chang, Y., & Chan, H. J. (2015). Optimism and proactive coping in relation to burnout among nurses. *Journal of Nursing Management*, 23(3), 401–408. https://doi.org/10.1111/jonm. 12148
- Chaudhuri, K. (2009). A discussion on HPWS perception and employee behavior. *Global Business & Management Research*, 1(2) p27-42.
- Cherry, K. E., Lyon, B. A., Sampson, L., Galea, S., Nezat, P. F., & Marks, L. D. (2017). Prior hurricane and other lifetime trauma predict coping style in older commercial fishers after the BP Deepwater Horizon oil spill. *Journal of Applied Biobehavioral Research*, 22(2), e12058. https://doi.org/10.1111/jabr.12058
- Choi, H.-M., Mohammad, A. A., & Kim, W. G. (2019). Understanding hotel frontline employees' emotional intelligence, emotional labor, job stress, coping strategies and burnout. *International Journal of*

Hospitality Management, 82(1),(2019) 199–208. https://doi.org/10. 1016/j.ijhm.2019.05.002

- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501–528. https://doi.org/10.1111/j.1744-6570.2006.00045.x
- Cruz, J. P., Cabrera, D. N. C., Hufana, O. D., Alquwez, N., & Almazan, J. (2018). Optimism, proactive coping and quality of life among nurses: A cross-sectional study. *Journal of Clinical Nursing*, 27(9–10), 2098–2108. https://doi.org/10.1111/jocn. 14363
- Debono, D. S., Greenfield, D., Travaglia, J. F., Long, J. C., Black, D., Johnson, J., & Braithwaite, J. (2013). Nurses' workarounds in acute healthcare settings: A scoping review. *BMC Health Services Research*, 13(1), 1–16. https://doi.org/10.1186/1472-6963-13-175
- Demirbag, M., Collings, D. G., Tatoglu, E., Mellahi, K., & Wood, G. (2014). High-performance work systems and organizational performance in emerging economies: Evidence from MNEs in Turkey. *Management International Review*, 54(3), 325–359. https://doi.org/10.1007/s11575-014-0204-9
- Dickson, C. E. (2008). Antecedents and consequences of perceived family responsibilities discrimination in the workplace. *The Psychologist-Manager Journal*, *11*(1), 113–140. https://doi.org/10.1080/10887150801967399
- Dreison, K. C., Luther, L., Bonfils, K. A., Sliter, M. T., McGrew, J. H., & Salyers, M. P. (2018). Job burnout in mental health providers: A meta-analysis of 35 years of intervention research. *Journal of Occupational Health Psychology*, 23(1), 18. https:// psycnet.apa.org/doi/10.1037/ocp0000047
- Fan, D., Cui, L., Zhang, M. M., Zhu, C. J., Härtel, C. E., & Nyland, C. (2014). Influence of high performance work systems on employee subjective well-being and job burnout: Empirical evidence from the Chinese healthcare sector. *The International Journal of Human Resource Management*, 25(7), 931–950. https://doi.org/10.1080/09585192.2014.876740
- Fu, N., Ma, Q., Bosak, J., & Flood, P. (2015). Exploring the relationships between HPWS, organizational ambidexterity and firm performance in Chinese professional service firms. *Journal of Chinese Human Resource Management*, 6(1). https://doi.org/10.1108/JCHRM-09-2014-0029
- Garaus, C., Güttel, W. H., Konlechner, S., Koprax, I., Lackner, H., Link, K., & Müller, B. (2016). Bridging knowledge in ambidextrous HRM systems: Empirical evidence from hidden champions. *The International Journal of Human Resource Management*, 27(3), 355–381. https://doi.org/10.1080/09585192. 2015.1045007
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of Management Review, 10(1), 76–88. https://doi.org/10.5465/amr.1985. 4277352
- Gulza, S., Moon, M. A., Attiq, S., & Azam, R. I. (2014). The darker side of high performance work systems: Examining employee psychological outcomes and counterproductive work behavior. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 8(3), 715–732. http://hdl.handle.net/ 10419/188165
- Halbesleben, J. R. (2010). The role of exhaustion and workarounds in predicting occupational injuries: A cross-lagged panel study

of health care professionals. Journal of Occupational Health Psychology, 15(1), 1.

- Halbesleben, J.R., Wakefield, D.S., & Wakefield, B. J. (2008). Work-arounds in health care settings: literature review and research agenda, *Health Care Management Review*, 33(1), 2– 12. https://doi.org/10.1097/01.HMR.0000304495.95522.ca
- Harley, B., Sargent, L., & Allen, B. (2010). Employee responses to 'high performance work system'practices: An empirical test of the disciplined worker thesis. *Work, Employment* and Society, 24(4), 740–760. https://doi.org/10.1177/ 0950017010380638
- Harpan, I., & Draghici, A. (2014). Debate on the multilevel model of the human capital measurement. *Procedia-Social and Behavioral Sciences*, 124(1), 170–177. https://doi.org/10.1016/ j.sbspro.2014.02.474
- Hasan, A. A., Elsayed, S., & Tumah, H. (2018). Occupational stress, coping strategies, and psychological-related outcomes of nurses working in psychiatric hospitals. *Perspectives in Psychiatric Care*, 54(4), 514–522. https://doi.org/10.1111/ppc.12262
- Healy, C. M., & McKay, M. F. (2000). Nursing stress: The effects of coping strategies and job satisfaction in a sample of Australian nurses. *Journal of Advanced Nursing*, 31(3), 681–688. https:// doi.org/10.1046/j.1365-2648.2000.01323.x
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of The Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421. https:// doi.org/10.1111/1464-0597.00062
- Hollnagel, E., Wears, R. L., & Braithwaite, J. (2015). From Safety-I to Safety-II: a white paper. *The resilient health care net: published simultaneously by the University of Southern Denmark, University of Florida, USA, and Macquarie University, Australia.*
- Imran, R., & Atiya, T. M. S. (2020). The role of high-performance work system and human capital in enhancing job performance. World Journal of Entrepreneurship, Management and Sustainable Development, 16(3), 195–206. https://doi.org/10. 1108/WJEMSD-09-2019-0074
- Ishaq, R., & Mahmood, A. (2017). Relationship between job stress and employee burnout – the moderating role of self-efficacy for university teachers. *Journal of Research & Reflections in Education (JRRE)*, 11(2), 100–112.
- Jensen, T. K., Thoresen, S., & Dyb, G. (2015). Coping responses in the midst of terror: The July 22 terror attack at Utøya Island in Norway. *Scandinavian Journal of Psychology*, 56(1), 45–52. https://doi.org/10.1111/sjop.12182
- Jordan, C. E. (2015). *Nurses' Perception of Workaround Use*. Trinity Western University.
- Jyoti, J., & Rani, A. (2019). Role of burnout and mentoring between high performance work system and intention to leave: Moderated mediation model. *Journal of Business Research*, 98, 166–176.
- Jyoti, J., Rani, R., & Gandotra, R. (2015). The impact of bundled high performance human resource practices on intention to leave. *International Journal of Educational Management*, 98(29), 166–176. https://doi.org/10.1016/j.jbusres.2018.12.068

- Kaufman, B. E. (2010). A theory of the firm's demand for HRM practices. *The International Journal of Human Resource Management*, 21(5), 615–636. https://doi.org/10.1080/ 09585191003658797
- Khamisa, N., Peltzer, K., Ilic, D., & Oldenburg, B. (2017). Effect of personal and work stress on burnout, job satisfaction and general health of hospital nurses in South Africa. *Health sa Gesondheid*, 22(1), 252–258. DOI: 10.1016/j.hsag.2016.10.001
- Kilroy, S., Flood, P. C., Bosak, J., & Chênevert, D. (2016). Perceptions of high-involvement work practices and burnout: The mediating role of job demands. *Human Resource Management Journal*, 26(4), 408–424. https://doi.org/10.1111/ 1748-8583.12112
- Kim, C. S., Brager, D. H., & Johnston, D. (2018). Perisomatic changes in h-channels regulate depressive behaviors following chronic unpredictable stress. *Molecular Psychiatry*, 23(4), 892–903. https://doi.org/10.1038/mp.2017.28
- Kim, J.-S. (2018). Relationship between incivility experiences and nursing professional values among nursing students: Moderating effects of coping strategies. *Nurse Education Today*, 65(1), 187–191. https://doi.org/10.1016/j.nedt.2018.03. 007
- Kline, R. B. (1998). Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, 16(4), 343–364. https://doi. org/10.1177/073428299801600407
- Kline, R. B. (2010). Principles and Practice of Structural Equation Modeling, Series Editor's Note by Todd D. The Guilford press.
- Korneeva, Y., Simonova, N., & Shadrina, N. (2022). The psychosocial risk factors evaluation and management of shift personnel at forest harvesting. *Forests*, 13(9), 1447.
- Kowitlawkul, Y., Yap, S., Makabe, S., Chan, S., Takagai, J., Tam, W., & Nurumal, M. (2019). Investigating nurses' quality of life and work-life balance statuses in Singapore. *International Nursing Review*, 66(1), 61–69. https://doi.org/ 10.1111/inr.12457
- Labrague, L. J., McEnroe-Petitte, D. M., Leocadio, M. C., Van Bogaert, P., & Cummings, G. G. (2018). Stress and ways of coping among nurse managers: An integrative review. *Journal* of Clinical Nursing, 27(7–8), 1346–1359. https://doi.org/10. 1111/jocn.14165
- Lalley, C. (2013). Work-arounds: A matter of perception. *Nurse Leader*, *11*(2), 36–40. https://doi.org/10.1016/j.mnl.2012.12. 005
- Laranjeira, C. A. (2012). The effects of perceived stress and ways of coping in a sample of Portuguese health workers. *Journal of Clinical Nursing*, 21(11-12), 1755–1762. https://doi.org/10. 1111/j.1365-2702.2011.03948.x
- Li, L., Ai, H., Gao, L., Zhou, H., Liu, X., & Zhang, Z., . . L. Fan (2017). Moderating effects of coping on work stress and job performance for nurses in tertiary hospitals: A cross-sectional survey in China. *BMC Health Services Research*, 17(1), 1–8. https://doi.org/10.1186/s12913-017-2348-3
- Lizano, E. L., & Barak, M. M. (2015). Job burnout and affective wellbeing: A longitudinal study of burnout and job satisfaction among public child welfare workers. *Children and Youth Services Review*, 55(1), 18–28. https://doi.org/10.1016/j. childyouth.2015.05.005
- Mansour, S., & Commeiras, N. (2015). Le conflit travail-famille médiatise-t-il les effets des conditions de travail sur le stress

professionnel? Une étude auprès du personnel en contact dans le secteur hôtelier. *Revue De Gestion Des Ressources Humaines*, (1), 3–25. https://doi.org/10.3917/grhu.095.0003

- Mansour, S., & Tremblay, D.-G. (2016). Workload, generic and work– family specific social supports and job stress. *International Journal* of Contemporary Hospitality Management, 28(8). https://doi.org/ 10.1108/IJCHM-11-2014-0607
- Mansour, S., & Tremblay, D.-G. (2019). How can we decrease burnout and safety workaround behaviors in health care organizations? The role of psychosocial safety climate. *Personnel Review*.48(2), 474–493
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498– 512. https://psycnet.apa.org/doi/10.1037/0021-9010.93.3.498
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103–111. https://doi.org/10.1002/ wps.20311
- Maykrantz, S. A., & Houghton, J. D. (2020). Self-leadership and stress among college students: Examining the moderating role of coping skills. *Journal of American College Health*, 68(1), 89–96. https://doi.org/10.1080/07448481.2018.1515759
- Melamed, S., Shirom, A., Toker, S., Berliner, S., & Shapira, I. (2006). Burnout and risk of cardiovascular disease: Evidence, possible causal paths, and promising research directions. *Psychological Bulletin*, 132(3), 327–353. https://psycnet.apa. org/doi/10.1037/0033-2909.132.3.327
- Melamed, N., Yogev, Y., Meizner, I., Mashiach, R., Bardin, R. and Ben-Haroush, A. (2009). Sonographic fetal weight estimation: which model should be used? *Journal of Ultrasound in Medicine*, 28(5), 617–629. https://doi.org/10.7863/jum.2009.28.5.617
- Nixon, B., Stanger, S. J., Mihalas, B. P., Reilly, J. N., Anderson, A. L., Tyagi, S., Holt, J. E., & McLaughlin, E. A. (2015). The microRNA signature of mouse spermatozoa is substantially modified during epididymal maturation. *Biology of Reproduction*, 93(4), 91.
- Pugh, S. D., Groth, M., & Hennig-Thurau, T. (2011). Willing and able to fake emotions: A closer examination of the link between emotional dissonance and employee well-being. *Journal of Applied Psychology*, 96(2), 377. https://psycnet.apa. org/doi/10.1037/a0021395
- Schaufeli, W., Leiter, M., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, 14(3).
- Scott, B. A., Matta, F. K., & Koopman, J. (2018). Within-person approaches to the study of organizational citizenship behavior: Antecedents, consequences, and boundary conditions. In P. Podsakoff, S. B. Mackenzie, & N. P. Podsakoff (Eds.), The Oxford handbook of f organizational citizenship behavior (pp. 417–434). New York, NY: Oxford University Press..
- Shin, D., & Konrad, A. M. (2017). Causality between highperformance work systems and organizational performance. *Journal of Management*, 43(4), 973–997. https://doi.org/10. 1177/0149206314544746
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching And Teacher Education*, 27(6), 1029–1038. https:// doi.org/10.1016/j.tate.2011.04.001
- Smith, Z., Leslie, G., & Wynaden, D. (2017). Coping and caring: Support resources integral to perioperative nurses during the

process of organ procurement surgery. *Journal of Clinical Nursing*, 26(21–22), 3305–3317. https://doi.org/10.1111/jocn. 13676

- Sun, N., Lv, D. M., Man, J., Wang, X. y., Cheng, Q., & Fang, H. I., . . Q. h Wu. (2017). The correlation between quality of life and social support in female nurses. *Journal of Clinical Nursing*, 26(7–8), 1005–1010. https://doi.org/10.1111/jocn.13393
- 'Sunny'Hu, H.-H., & Cheng, C.-W. (2010). Job stress, coping strategies, and burnout among hotel industry supervisors in Taiwan. *The International Journal of Human Resource Management*, 21(8), 1337–1350. https://doi.org/10.1080/09585192.2010. 483867
- Taris, T. W., Le Blanc, P. M., Schaufeli, W. B., & Schreurs, P. J. (2005). Are there causal relationships between the dimensions of the Maslach burnout inventory? A review and two longitudinal tests. Work & Stress, 19(3), 238–255. https://doi.org/10. 1080/02678370500270453
- Tomer, J. F. (2001). Tomer, J. (2007). Understanding high performance work systems: The joint contribution of economics and human resource management. In Renaissance in Behavioral Economics (pp. 162-175). Routledge
- Torre, E. D. (2012). High performance work systems and workers' well-being: A sceptical view. *International Journal of Work Innovation*, 1(1), 7–23. https://doi.org/10.1504/IJWI.2012.047974
- Tran Huy, P. (2022). High-performance work system and knowledge hoarding: the mediating role of competitive climate and the moderating role of high-performance work system psychological contract breach. *International Journal of Manpower*. https://doi.org/10.1108/ijm-06-2021-0331
- Troester, C., & Van Quaquebeke, N. (2020). When victims help their abusive supervisors: The role of LMX, self-blame, and guilt. Academy of Management journal, 64(6), 1793–1815. https://doi.org/10.5465/amj.2019.0559
- Tyler, P., & Cushway, D. (1992). Stress, coping and mental wellbeing in hospital nurses. *Stress Medicine*, 8(2), 91–98. https:// doi.org/10.1002/smi.2460080206

- Van De Voorde, K., & Beijer, S. (2015). The role of employee HR attributions in the relationship between high-performance work systems and employee outcomes. *Human Resource Management Journal*, 25(1), 62–78. https://doi.org/10.1111/ 1748-8583.12062
- Wheeler, A. R., Halbesleben, J. R., & Harris, K. J. (2012). How job-level HRM effectiveness influences employee intent to turnover and workarounds in hospitals. *Journal of Business Research*, 65(4), 547–554. https://doi.org/10.1016/j.jbusres. 2011.02.020
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27(6), 701–721. https://doi.org/10.1177/ 014920630102700607
- Zatzick, C. D., & Iverson, R. D. (2011). Putting employee involvement in context: A cross-level model examining job satisfaction and absenteeism in high-involvement work systems. *The International Journal of Human Resource Management*, 22(17), 3462–3476. https://doi.org/10.1080/09585192.2011. 561016
- Zhang, G., Peng, K., & Chen, S. (2022). The double-edged sword effect of high-performance work systems: investigating when and why high-performance work systems promote versus inhibit employee organizational citizenship behaviors. Asia Pacific Journal of Human Resources, 61(1), 168–195. https:// doi.org/10.1111/1744-7941.12326
- Zhao, H. H., Seibert, S. E., Taylor, M. S., Lee, C., & Lam, W. (2016). Not even the past: The joint influence of former leader and new leader during leader succession in the midst of organizational change. *Journal of Applied Psychology*, 101(12), 1730. https://psycnet.apa.org/doi/10.1037/ap10000149
- Zhou, H., Sheng, X., He, Y., & Qian, X. (2020). Ethical leadership as the reliever of frontline service employees' emotional exhaustion: A moderated mediation model. *International Journal of Environmental Research and Public Health*, 17(3), 976. https://doi.org/10.3390/ijerph17030976