

Impact of occupational health and safety practices in COVID-19 on emotional exhaustion of hotel employees

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Abstract

Purpose: The study aimed to examine the impact of Occupational Health and Safety (OHS) practices during the COVID-19 pandemic on the emotional exhaustion of employees working in the hotel sector. Further, the study analyzed the mediation effect of job risks and organizational support on the influence of OHS on emotional exhaustion.

Design/Methodology: This study follows an explanatory research design based on a quantitative research approach. A proportionate survey (province-wise and at the hotel level) was conducted among the 1132 hotel employees. A parallel mediation model was used using Hayes' Process Macro Model 4 at a 95% level of significance and 10000 bootstrapping.

Findings: The research identified that hotel employees experienced high emotional exhaustion during the COVID-19 pandemic, caused by perceived job risks, while OHS significantly reduced it. The study revealed that the perceived organizational support significantly reduced emotional exhaustion and significantly increased the effect of OHS on controlling emotional exhaustion.

Implication: This study encourages organizations to maintain essential and advanced safety protocols around the clock, especially during critical circumstances. It also emphasizes enhancing employee trust in the organization so that they believe in proper safety protocols and support systems to rest from emotional exhaustion. This study contributes to the JD-R theory.

Originality/value: This study is unique in examining the effect of OHS practices incorporating job demand risks and perceived organization support in a parallel mediation model to examine the comprehensive impact on emotional exhaustion during a crisis. The originality of this approach is sure to pique the interest of academic researchers and OHS professionals. Furthermore, this study recommends scopes for future research, opening new avenues for exploration in this field.

Keywords: Occupational health and safety practices, Emotional exhaustion, Job risks, Perceived organizational support, JD-R theory

Jel Codes: M12, M54, O15

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1. Introduction

The COVID-19 pandemic has fundamentally transformed workplaces across the globe (Bennett & McWhorter, 2021; de Oliveira-Neto, Tucci, Filho, Lucato & da Silva, 2022; Howe, Chauhan, Soderberg & Buckley, 2020), prompting an unprecedented focus on occupational health and safety (OHS) practices (Chen, Hou, Zhang & Li, 2020; de Oliveira-Neto et al. 2022; Gautam & Gautam, 2024a; Nowacki, Grabowska & Lakomy, 2020) specially to the frontline employees working in hotels, hospitals, and security forces. Employees in the hotel sector gained essentially greater attention during the pandemic (Chowdhury, Kainth, Godlu, Farinas, Sikdar & Turin, 2022) and in the new normal of a pandemic because of the probable work exhaustion caused by psychological and ergonomic job risks (Adamopoulos, Lamnisis, Syrou & Boustras, 2022; Gautam & Gautam, 2024b; Sexton, Adair, Proulx, Profit, Cui, Bae et al., 2022). With the virus posing significant health risks, organizations swiftly implemented OHS measures to protect employees and maintain operational continuity following the WHO guidelines (Michaels & Wagner, 2020; O'Neill, 2020). Hotels adopted various OHS measures, including remote working arrangements, compulsive personal protective equipment (PPE), sanitation protocols, and social distancing guidelines (Deepthi, Masthi, Nirmala, Manjula, Vinothkumar, 2020; Ingram, Downey, Roe, Chen, Archibald, Kallas et al., 2021). Gradually, each organization followed the organization's basic and advanced occupational health and safety protocols as essential and discretionary health and safety measures. While these interventions were essential in mitigating the spread of COVID-19, they have also introduced new dimensions to the employees' psychological well-being, i.e., work exhaustion experience.

Employee exhaustion, characterized by chronic physical and emotional fatigue, can detrimentally affect productivity, job satisfaction, and overall mental health (Alenezi, McAndrew & Fallon, 2019; van Daalen, Willemsen, Sanders & van Veldhoven, 2009; Wang, Ding & Kong, 2023). The unique stressors introduced by pandemic-based work responsibilities, such as the blurring of work-life boundaries in work settings (Patanjali & Bhatta, 2022), heightened health anxieties (Chowdhury et al., 2022; Petrie, Smallwood, Pascoe & Willis, 2022), and increased workload due to staff shortages (Chowdhury et al., 2022) among employees caused a decrease in satisfaction (Adamopoulos et al., 2022; Gautam & Gautam, 2024a) and high work exhaustion, especially those working on frontline employees in the hotel sector (Chowdhury et al., 2022). The situation demanded practical health protocol training (Gautam, Gautam & Basnet, 2023). OHS protocols were introduced as personal protective measures of great importance (Shehab, Shuaibi, Qadhi & Alfadhli, 2021). This research investigates the impact of COVID-19-led OHS practices on employee exhaustion, a critical facet of occupational health.

The Constitution (2015), Article 35 of Nepal, recognizes the right to health as a fundamental right of all citizens. The World Health Organization (WHO), in partnership with the International Labour Organization (ILO), issued interim guidance on Occupational Health and Safety (OHS) for health workers (WHO, 2021 February) in the context of COVID-19. In the face of the global pandemic, organizations worldwide, including those in Nepal's hospitality sector, have demonstrated a commendable level of sensitivity toward the health and safety of their employees, customers, and other stakeholders (Sthapit, 2022). Hotel organizations have taken proactive steps by installing or conforming to occupational health and safety (OHS) measures to shield their employees from potential coronavirus infection (Gautam & Gautam, 2024b; Sthapit, 2022). This study examines these dynamics to provide a nuanced understanding of how COVID-19 OHS practices influenced employee work exhaustion. By leveraging quantitative and qualitative data, we seek to identify critical contributions of OHS practices to exhaustion and propose actionable strategies to strengthen OHS practices in new normal situations. The findings of this research offer valuable insights for organizational leaders, policymakers, and professionals striving to balance effective health and safety measures with the promotion of sustainable work environments during and beyond the crisis to foster a resilient and healthy workforce amidst ongoing global health challenges.

This study significantly advances the understanding of how effective OHS practices can alleviate employee exhaustion by providing empirical evidence and identifying the most impactful safety measures.

2. Review of Literature

Occupational health and safety issues have attracted adequate attention from researchers in management, psychology, and occupational health (e.g., Christian, Bradley, Wallace & Burke, 2009; Hofmann, Burke & Zohar, 2017; Pagell, Klassen, Johnston, Shevchenko & Sharma, 2015). With a long-term plan to proactively manage the hospitality sector and be cautious of potential health calamities like COVID-19, high-reliability organizations worked proactively to plan and apply robust safety procedures to ensure zero risk (Chassin & Loeb, 2013; Sutcliffe, 2011). The insights from such initiatives have been applied to improve safety systems and principles in various contexts, such as OHS in hospitality and healthcare workplaces (Stock, McFadden & Gowen, 2007; Vogus & Iacobucci, 2016).

Subromony, Golubovskaya, Keating, Solnet, Field and Witheriff (2022) discovered that implementing safety practices led to lower perceived risks among employees, making them confident about lower hazards during the pandemic. This resulted in higher work engagement and lower emotional exhaustion (Beckman, Monsey, Archer, Errett, Bostrom & Baker, 2021). Such OHS practices play an essential role in enhancing employee well-being through combined approaches to alleviate strain and boost job resources during crises like COVID-19 (Beckman et al., 2021; Subromony et al., 2022).

Employees' perceptions of workplace safety practices strongly influence their behaviors through an enhanced safety climate. Safety climate is employees' views on how important safe practices are in their work behaviors (Zohar, 1980; 2010), causing their work exhaustion (Subromony et al., 2022). They claimed that the workforce develops their perceptions by contrasting espoused versus applied policies by detecting their fellow employees' actions. Employee insights into safety procedures and measures (e.g., the abundance of safety examinations and equipment) differ and influence safety routines through employees' expertise, skills, and motives regarding workplace wellbeing (Mazlina-Zaira & Hadikusumo, 2017; Vinodkumar & Bhasi, 2010; Griffin & Neal, 2000). This study adopted a 'process-based approach.' This approach emphasizes employees' perceptions and interpretations of HR practices instead of those they propose to implement (Piening, Baluch & Ridder, 2014; Sanders & Yang, 2016). Employees in the research respond attitudinally based on their attributions toward management's objectives in applying the procedures (Nishii, Lepak & Schneider, 2008). The study has adopted two related OHS practices, i.e., essential OHS practices and discretionary OHS practices, in line with the taxonomy of the study of Subromony et al. (2022) that followed the Occupational Safety Health Administration (OSHA, 2020) guidelines.

- a) *Essential OHS practices*: Essential OHS practices are the minimum mandatory workplace compliance provisions. They are considered 'essential' to administering workplace well-being, as without these, the virus infection threat is likely to circulate among workers. During the COVID-19 pandemic, essential OHS practices involved implementing coronavirus infection prevention measures and identifying and isolating sick employees. These practices involve encouraging hand sanitization, advising employees to stay home when ill, maintaining proper physical distancing, supplying appropriate masks and gloves, and performing regular cleaning and disinfection.
- b) *Discretionary OHS practices*: Employees consider these OHS practices essential but are not commanded. These practices are primarily non-mandatory and suggested to develop, execute, and communicate workplace protections and flexibilities. They involve flexible policies that allow employees to stay home to care for a sick family member, shifting from in-person meetings to virtual ones, implementing telework, and offering employees current education and training.

By basing the two types of OHS practices on policy and best practices, the present study presents a theoretical explanation of these OHS practices within a JD-R outline for employees' occupational health and safety at workplaces, as posited by Nahrgang, Morgeson and Hofmann (2011), Radic, Arjona-Fuentes, Ariza-Montes, Han and Law (2020) and Schaufeli (2017).

OHS safety and Job Demands-Resources (JD-R) theory. Radic et al. (2020), Bakker and Demerouti (2017), and Demerouti, Bakker, Nachreiner and Schaufeli (2001) crystallized the JD-R theory, illustrating what job

demands and what job resources are made available by the organization. The present study, based on the JD-R theory, investigates (a) the perceived COVID-19 Risks (PCRs), i.e., job demand, and (b) perceived organizational supports (POSs), i.e., job resources in the context of the COVID-19-led safety, i.e., occupational health and safety practices in the hotel sector.

JD-R theory developed a preferential model for illuminating how job features affect employee well-being consequences, with significant experimental findings available in support of the twin procedures of emotional tension (strain) and motivation (Bakker & Demerouti, 2017; Nielsen, Nielsen, Ogbonnaya, Käsälä, Saari & Isaksson, 2017; Lesener, Gusy & Wolter, 2019). The JD-R theory maintains that employee health and well-being depend on balancing positive and negative job characteristics (resources) (demands). This concept suggests that demands and resources can impact employee health and well-being and can be adapted to various work environments (Schaufeli & Taris, 2014). JD-R theory is used in explaining white-collar settings (Bakker, Demerouti & Verbeke, 2004) as well as blue-collar (Bakker, Demerouti & Schaufeli, 2003) staff performances across the world (Hakanen, Bakker & Schaufeli, 2006; Hanses & Chmiel, 2010). Because of its widespread significance in multiple contexts, the present study has adopted the JD-R theory as a relevant framework for examining employee safety perceptions and well-being in the Nepalese hotel industry during the COVID-19 pandemic.

Job Demands-Resources (JD-R) theory and employee behavioral outcomes. The JD-R theory maintains that job demands (i.e., organizational, social, or physical aspects of the job that need prolonged mental or physical effort) (Demerouti et al., 2001) and job resources (i.e., job aspects such as - work goals, job demands associating psychological and physiological resources to promote personal development, learning, and growth opportunity) (Demerouti et al., 2001; Bakker & Demerouti, 2017). This theory suggests that job demands can impede employees' goal-directed behaviors when there are insufficient job resources. When resources are limited in the face of high demands, it can strain and fatigue (Bakker, 2015) and create obstacles to attaining employees' goal-directed behaviors.

Job demands, i.e., increased workload, quality pressure, and highly demanded interpersonal interactions, cause high strain and adverse behavioral outcomes such as exhaustion (Demerouti & Bakker, 2023; Knight, Keller & Parker, 2022; Bowling, Alarcon, Bragg & Hartman, 2015). Likewise, job resources autonomously impact employee motivation for positive behavioral consequences such as engagement at work (Schaufeli & Bakker, 2004), leading to a positive and satisfying work mindset marked by energy, commitment, and deep engagement (Schaufeli, Salanova, González-Romá & Bakker, 2002) and transfer their skills (Salamon, Blume, Tóth-Király, Nagy & Orosz, 2022). Supportiveness as an element of job resources develops the feeling of value, replenishing possessions and stimulating employees to be retained in their responsibilities (Dadoo, Surlenty & Al-Samarraie, 2023).

Professional efficiency during the pandemic, resulting in possible loss of life and infection, was considered a job demand. In the context of hotel industry sector employees during the COVID-19 pandemic, job demands (JD) would include expectations related to a sanitized workplace, maintaining masks in the working environment, enrolling customers with masks, maintaining physical distance, and engaging in handwashing frequently. Likewise, job resources (JR) would encompass the organization's assurance of easy availability of sanitizers, hand-washing facilities, availability of masks to both employees as well as customers, supervisor's psychological and resource support, safety preparation on delivering services, easy access to security equipment, and safe transportation and accommodation facilities.

Continuous exposure to job demands would deplete employees' mental, cognitive, and physical means, promoting exhaustion. It is also argued that perceived organization support (POS), working as a job resource (JS), decreases the threat of emotional exhaustion of employees. Chen and Eyoum (2021) reported that the frontline workers' emotional exhaustion was significantly reduced by POS committed to the safety and well-being of employees. Extending the work of Nahrgang et al. (2011), Chen and Eyoum (2021), and Curcuruto, Parker and Griffin (2019), this study proposes that OHS practices are determinants of job resources and safety-related job demands which mediate their influence on job exhaustion in the Nepalese hospitality industry context.

2.1. Research Framework and Hypotheses

Employees in the service sector, including the hospitality industry, are crucial due to their significant human and organizational impacts, particularly regarding health-related stress. Sönmez, Apostolopoulos, Lemke & Hsieh (2020) studied US hospitality workers, particularly immigrants, and found that the pandemic significantly increased their occupational stress, negatively impacting their mental and physical health. Occupational stress in employees was positively related to turnover intention during the pandemic (Gautam & Gautam, 2024a); stress over job safety is costly and widespread, leading to high employee replacement costs and decreased productivity (Eisen, Allen, Bollash & Pescatello, 2008), high anxiety and exhaustion among frontline workers globally (Gautam & Gautam, 2024a; Nabe-Nielsen, Nilsson, Juul-Madsen, Bredal, Hansen & Hansen, 2021; Sasaki, Asaoka, Kuroda, Tsuno, Imamura & Kawakami, 2021; Subromony et al., 2022; Tan, Kanneganti, Lim, Tan, Chua, Tan et al., 2020).

This study focuses on how COVID-19-related OHS practices affect employee well-being in the hospitality sector and evaluates the impact of these practices on emotional exhaustion (Figure 1). The study also explores whether job demands and resources mediate this relationship. During the pandemic, employees perceived significant workplace risks and hazards. According to the Job Demands-Resources (JD-R) theory (Demerouti et al., 2001), organizational support serves as a job resource that helps mitigate the loss of psychological resources depleted by job demands (Bakker & Demerouti, 2017).

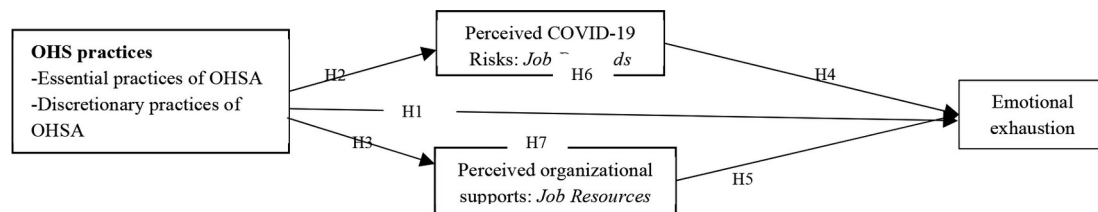


Figure 1. Research framework of the study

Based on the framework, the following hypotheses have been developed.

H₁: Organizational OHS practices significantly negatively influence perceived emotional exhaustion.

H₂: Employee perceptions of OHS practices negatively influence their perceived risks/hazards.

H₃: Employee perceptions of OHS practices positively influence their perceived organizational supports, i.e., job resources.

H₄: Employee perceptions of risks/hazards positively influence emotional exhaustion.

H₅: Perceived organizational supports, i.e., job resources, negatively influence the emotional exhaustion of employees.

H₆: Employee perceptions of COVID-19 risks/hazards significantly mediate the relationships between OHS practices and emotional exhaustion.

H₇: Perceived organizational supports significantly mediate the relationships between the OHS practices and emotional exhaustion.

3. Methodology

3.1. Research Design, Population, and Sample

This study used the quantitative research approach following the explanatory research design. It examined the impact of COVID-19-led OHS practices of Nepalese hospitality sector firms on employee well-being outcomes, i.e., emotional exhaustion. In this process, OHS practices of Nepalese hotels were identified as predictors of employee well-being, i.e., emotional exhaustion, with the mediated relationships of COVID-19-related risks (job demands) and organizational support (job resources). The study followed a parallel mediation model (Hayes' Process Macro, Model 4) to investigate hotels' OSH practices during the COVID-19 pandemic and their effect on employees' work engagement and exhaustion.

The study's population consisted of the total number of employees working in different-level hotels throughout Nepal (approx. 30,000); 1132 employees were selected proportionately from seven provinces as the sample respondents.

3.2. Measurement and Instruments

The constructs embedded with the items and scales required for investigating the impact of COVID-19-led safety were adapted from various validated questionnaires prepared and used by earlier research works. Later, the statements were contextualized and translated into the local language (Nepali) to provide the questionnaire items in English and Nepali. Questionnaires contained statements ensuring data secrecy and the voluntary participation of the respondents.

COVID-19-led OSHA practices. The construct items and scales for COVID-led OHS practices were adapted from Subramony et al. (2022), comprising essential and discretionary safety practices. The study developed scales that considered psychometric properties based on the OSHA guidelines (OSHA, 2020). The 'essential OHS practices' contained eleven items ($\alpha = 0.90$). Meanwhile, 'discretionary OHS practices' included seven items ($\alpha = 0.92$). A five-point Likert scale ranging from 'not at all agreed (1)' to 'totally agreed (5)' was used to examine the OSH practices and employees' agreement with them.

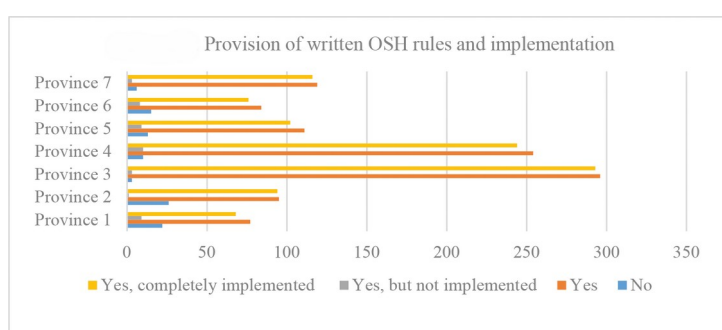
Perceived COVID risks/hazards (PCRs). Instruments developed by Pew Research Centre (2020) and validated by Kachanoff, Bigman, Kapsaskis and Gray (2021) and Subramony et al. (2022) were used to measure the perceived risks and hazards of the COVID-19 pandemic with 4-point Likert-type scale from 'not a threat' as 1 to 'major threat' as 4. The items were standardized to make them understandable to the respondents and translated into the local language.

Perceived organizational support (POS). Eight items with a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) were used developed by Eisenberger, Huntington, Hutchison and Sowa (1986) and revised by Caesens, Stinglhamber, Demoulin and De-Wilde (2017) and Subramony et al. (2022), after contextualizing to measure the job resources. Researchers asked the respondents to indicate their level of agreement with items such as "My organization cares about my general satisfaction at work."

Emotional exhaustion. Emotional exhaustion was measured with the items and scales developed based on the Shirom-Melamed Burnout Questionnaire or SMBQ (Shirom, 1989; Shirom & Melamed' 2006) because of its theoretic origins from the conservation of resources theory to measure employees' exhaustion across emotional, cognitive, and physical subscales (Shirom & Melamed' 2006; Shirom, 1989; Melamed, Kushnir & Shirom' 1992). More specifically, emotional exhaustion was measured into physical exhaustion (three statements), physical fatigue (five statements), and cognitive worries (six statements); a total of 14 statements with a 7-point Likert scale ("never/almost never" to "almost always/always). The representative items were "I had difficulty concentrating" and "I felt I was not focused on my thinking."

3.3. Demographic Profile of Respondents

The study objective was to examine OSH practices in hotels during the pandemic and evaluate their impact on employees' stress and emotional exhaustion the employees' emotional exhaustion. For this purpose, a survey included 1132 respondents from all seven provinces working in different job responsibilities in hotels (Table 1) proportionate to hotels and the number of employees in each province. Respondents from Province Three (26.41%) were followed by respondents from Province 4 (23.32%), Province Seven (11.05%), Province Five (10.95%), Province Two (10.77%), and Province One and Six (8.75% each). Out of the total respondents, a majority of 79.15% were male, while 20.69% were female.



Gender						
		Female	Male	Other	Total	Percentage of total
Province	1	17	81	1	99	8.75
	2	30	92	0	122	10.77
	3	71	228	0	299	26.41
	4	59	204	1	264	23.32
	5	15	109	0	124	10.95
	6	24	75	0	99	8.75
	7	18	107	0	125	11.05
Total		234	896	2	1132	100

Table 1. Province-wise respondents' profile

4. Results

Table 2 provides information regarding the status of written rules for protecting against COVID-19. Of 1132 respondents, 1036 reported that their organization had written a COVID-19 health protocol. Forty-three respondents reported not realizing that their organizations implemented OSH provisions; the majority, 993 (87.79%), reported implementing such provisions completely. The report shows that most hotels provisioned written documents of occupational safety and health assessment; however, few did not implement them completely.

OHS practices and employee satisfaction. This study intended to examine the essential and discretionary safety practices in hotels in Nepal during the pandemic (Table 2).

Findings suggest that the Nepalese hotels followed essential health safety measures during the pandemic compared to the discretionary practices. They provided employees with hand sanitizers and washing facilities to promote sanitizing and hand-washing habits. Hotels provisioned essential health-related safety practices, such as adapting respiratory etiquette, maintaining physical distance, using gloves, measuring body temperature frequently, discouraging unauthorized entry into isolation areas, frequently cleaning and disinfecting working areas, and isolating potentially infectious individuals.

Results (Table 3) revealed that emotional exhaustion was negatively associated with essential safety practices, discretionary safety provisions, and organizational support, while perceived risk hazards were associated positively with emotional exhaustion. Evidence provided a negative association between physical exhaustion and essential safety practices, discretionary safety provisions, and organizational support while positively associated with risk hazards. Similarly, cognitive worries remained high because of high-risk hazards, while organizational support was negatively associated. For the model fit analysis, the statements with cross-loading were discarded.

Model fit indices. Conformity Factor Analysis (CFA) was conducted to test the model fit indices. The result (Table 4) revealed a good fit as CMIN/DF (3.085, $p < 0.000$), NFI Delta (0.904), TLI Rho (0.928), CFI (0.933), PNFI (0.811 > 0.1), RMSEA (0.043) indicate the model fit as suggested by Hayes (2019) and Hair, Black, Babin and Anderson (2014). Results provide evidence of convergent validity of measurement instruments ($AVE > 0.50$, $CR > 0.70$, and $CR > AVE$) as suggested by Fornell and Larcker (1981) and Netemeyer, Bearden and Sharma (2003) as cited in Terglav, Ruzzier and Kase (2016). Further, $AVE > MSV$ suggests that the concern of discriminant validity is also fulfilled, which provides evidence that each construct discriminates against the other constructs to have a good model fit.

OHS Practices		Min.	Max.	Mean	Std. dev
Essential practices					
Es1	Availability of hand sanitizers and washing facilities.	1	5	4.66	0.688
Es2	Promoted frequent and thorough hand washing and hand sanitizing at the workplace.	1	5	4.58	0.752
Es3	Encouraged sick workers to stay home.	1	5	4.47	0.772
Es4	Encouraged etiquette respiratory.	1	5	4.29	0.888
Es5	Promoted appropriate physical distance between co-workers and guests.	1	5	4.48	0.758
Es6	Always provides suitable masks and gloves.	1	5	4.46	0.797
Es7	Monitoring of body temperature.	1	5	3.96	1.12
Es8	Discouraged workers from using others' equipment.	1	5	4.17	0.946
Es9	Restricted entry of unnecessary personnel.	1	5	4.32	0.864
Es10	Scheduled disinfecting of workplace and equipment.	1	5	4.36	0.809
Es11	Promptly identified and isolated potentially infectious individuals.	1	5	4.07	1.016
Discretionary practices					
Ds1	Developed sick leave policies.	1	5	3.80	1.137
Ds2	Ensured that sick leave policies were like government guidance.	1	5	4.01	0.968
Ds3	Communicated these policies with employees.	1	5	4.11	0.991
Ds4	Maintains policies to permit employees leave care sick family member.	1	5	4.02	1.009
Ds5	Addressed workers' concerns during the infection period.	1	5	4.08	0.966
Ds6	Developed emergency communications plans, including a forum for answering workers' concerns and internet-based communications.	1	5	3.75	1.148
Ds7	Minimized face-to-face meetings with virtual communications.	1	5	3.79	1.178

Table 2. Descriptives of the items related to employees' perception of OHS practices in Hotels during COVID-19 pandemic

	1	2	3	4	5	6	7
Essential safety (1)	1						
Discretionary safety (2)	.566**	1					
Risk hazards (3)	.238**	.075*	1				
Organizational support (4)	.545**	.534**	.201**	1			
Physical exhaustion (5)	-.123**	-0.055	.118**	-.130**	1		
Cognitive worries (6)	-0.05	.070*	.067*	-.110**	.626**	1	
Emotional exhaustion (7)	-.093**	-0.013	.101**	-.132**	.887**	.916**	1

** . Correlation is significant at 0.01 level (two-tailed); * . Correlation is significant at 0.05 level (two-tailed)

Table 3. Association between variables

	CR	AVE	MSV	MaxR(H)	1	2	3	4	5	6
Essential safety (1)	0.908	0.500	0.379	0.918	0.707					
Discretionary safety (2)	0.879	0.520	0.379	0.908	0.616	0.721				
Organizational Support (3)	0.927	0.645	0.366	0.929	0.605	0.598	0.803			
Physical exhaustion (4)	0.905	0.580	0.473	0.913	-0.139	-0.097	-0.139	0.761		
Risk hazards (5)	0.926	0.758	0.076	0.938	0.275	0.088	0.218	0.119	0.870	
Cognitive worries (6)	0.937	0.715	0.473	0.941	-0.068	0.015	-0.124	0.688	0.060	0.845

Table 4 Validity concern of the model (CR – Composite reliability, AVE – Average variance extracted, MSV – Maximum shared variance)

4.1. Test of Hypotheses

This study has seven hypotheses, with the general objective of evaluating the effect of OHS practices on employees' emotional exhaustion. The relationship is expected to be mediated by perceived risk hazards and organizational support. These hypotheses were tested using a parallel mediation model (Hayes 2019 Process Macro, Model 4) at a 95% significance level with bootstrapping 10000.

Results (Figure 2) showed that the total effect was significant, $R^2 = .0365$, $F(3, 1129) = 14.27$, $p < 0.001$. The direct effect of (a) OSH practices have a significant negative influence ($b = -.093$, $p < 0.001$) providing the evidence to support H₁, (b) OSH practices on the perceived risk hazards from job demands was negative and statistically significant ($a_1 = -0.2394$; < 0.001) supporting H₂, (c) the direct effect of OSH practices on perceived organizational support was positive and significant ($a_2 = 0.71$; < 0.001) increasing employees' perceived organizational support which supports to accept H₃, (d) the direct effect of perceived risk from job demand during the COVID-19 on emotional exhaustion is positive and statistically significant ($b_1 = .1412$; < 0.001) which supports to accept H₄, (e) the direct effect of perceived organizational support to emotional exhaustion was negative and significant ($b_2 = -0.2624$; < 0.001) supporting H₅. The result indicates that the higher effect of perceived job risk increased emotional exhaustion while higher perceived organizational support had a more significant role in decreasing employee emotional exhaustion. OSH practices significantly reduced the emotional exhaustion among the employees during the COVID-19 pandemic. These results support the hypothesis that the OSH practices of hotels during the COVID-19 pandemic significantly decreased employees' emotional exhaustion.

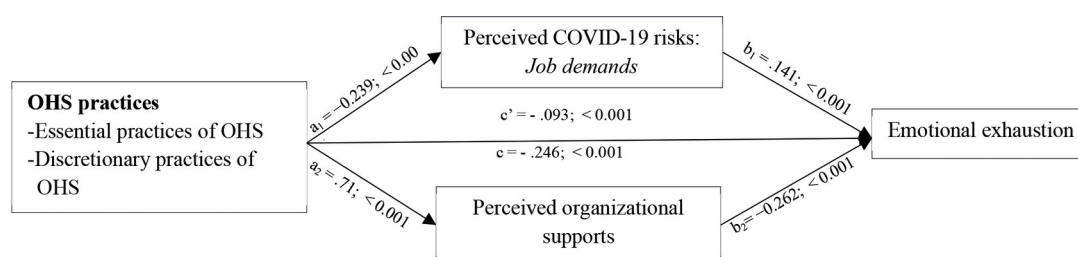


Figure 2. OSHA practices predicting emotional exhaustion with parallel mediation model

The total indirect effect of the perceived risk of job demand during the pandemic and perceived organizational support for the employees' emotional exhaustion was significantly negative ($\beta = -.1525$, $\text{BootSE} = .0426$, $\text{BootCI}[-.2361 - -.69]$, $\text{bootstrapping} = 10000$) while the indirect effect perceived job risk ($\beta = .0338$, $\text{BootSE} = .0113$, $\text{BootCI} [.0141 - .0582]$, $\text{bootstrapping} = 10000$) and perceived organization support ($\beta = -.1863$, $\text{BootSE} = .04$, $\text{BootCI}[-.2688 - -.1084]$, $\text{bootstrapping} = 10000$). During the pandemic, hotels' initiations of adapting to OSH practices were more significant, which was further strengthened with perceived organizational support to reduce emotional exhaustion, supporting hypotheses H₆ and H₇.

5. Discussion

In the wake of the outbreak of the COVID-19 pandemic, organizations became sensitive toward the health and safety of their employees, customers, and other stakeholders (Gautam & Gautam, 2024 a; Sthapit, 2022), transforming workplace practices (Bennett & McWhorter, 2021; de Oliveira Neto, 2022; Howe et al., 2020), specially to ensure the health and safety of employees (Chen et al., 2020; Nowacki et al., 2020; de Oliveira Neto, 2022) as the pandemic increased the employee exhaustion very hard (Sexton et al., 2022). The study examined the Nepalese hotel industry's occupational health and safety practices to protect employees and promote psychological well-being. The study revealed that the Nepalese hotels issued interim occupational health and safety guidance for workers (WHO, 2021) during the pandemic. Results revealed that Nepalese hotels provisioned both essential health practices as well as discretionary health practices. As essential health practices, Nepalese hotels enforced employees to use hand sanitizers regularly and hand-washing facilities to promote hand sanitizing and washing habits. They apprehended traditional workflow and safety practices to establish good practices recognized and recommended by WHO, such as adapting respiratory etiquette,

maintaining physical distance, using masks and gloves, measuring body temperature regularly, discouraging unnecessary and unidentified persons' entry into isolation areas, cleaning and disinfecting working areas, and isolating potentially infectious individuals. In addition, the result revealed good discretionary health practices in the organization.

OSH practices reduced infection anxiety, fear, worry, and psychological exhaustion, ultimately increasing employees' confidence, well-being, motivation, and work engagement (Gautam & Gautam, 2024b; Nabe-Nielsen et al., 2021; Sasaki et al., 2021; Tan et al., 2020). OSH practices became strong tools to make Nepalese hotels responsible and responsive to the pandemic and reduce workers' stress and emotional exhaustion, as Gautam and Gautam (2024b) and Nabe-Nielsen et al. (2021) reported.

This study followed the JD-R theory (Demerouti et al., 2001), advocating that the job risks/hazards experienced by employees as job demands sink their emotional sources. The study's findings revealed that the job demands (perceived COVID-19 risks) resulted in high emotional exhaustion during the pandemic. OHS practices significantly lowered the perceived risk level, increasing the employees' perception of increased organizational support. Organizational support (job resources) helped refill resource loss (Bakker & Demerouti, 2017) caused by the pandemic. During the pandemic, perceived organizational support became vital in reducing the perceived job risks and inducing work engagement (Gautam & Gautam, 2024b); increasing trust in organizations.

In addition, the study revealed that work exhaustion among hotel employees was high during the pandemic. The OSH practices of hotels during the pandemic significantly decreased employees' emotional exhaustion, similar to the findings of Adamopoulos, Syrou, Lamnisos and Boustras (2023) and Subromony et al. (2022). Further, the indirect effect of perceived risks of job demand during the pandemic and the perceived organizational support for the employees' emotional exhaustion was significant. This means that in addition to the OSH, the POS significantly negatively influenced creating work exhaustion. Perceived risk of job demand further increased the work exhaustion of employees while the organizational support decreased it, as supported by Gautam and Gautam (2024b) and Li, Mohamed, Mahomed and Khan (2022). The more significant effect of POS over the perceived job risk significantly justifies that organizations must increase employee trust and ensure that the organization best cares for them.

OSH practices supported work engagement among hotel employees, supporting Wilcox and Koontz's findings (2022). This study argues that perceived organizational support invokes social exchange processes—specifically, reciprocity—among employees, including work engagement. This supports the findings of Caesens and Stinglhamber (2014), Kurtessis, Eisenberger, Ford, Buffardi, Stewart and Adis (2017), and Subramony et al. (2022), which act as job resource (JS), as argued by Chen and Eyoum (2021).

6. Conclusion and Implication

The study investigated whether Nepalese hotels provisioned OSH and revealed that the Nepalese hotels followed essential measures and discretionary practices (OSH) from the beginning of the pandemic, as suggested by WHO. Results revealed a positive and statistically significant direct effect of perceived risk from job demand during COVID-19 resulting in high emotional exhaustion, while the negative and significant direct effect of perceived organizational support. The result indicates that organizational support has a higher and more significant effect on decreasing emotional exhaustion. In addition, the perceived organizational support strengthened the positive influence of OSH practices to reduce employees' emotional exhaustion during the crisis period. Further, the organizational support weakened the effect of perceived job risk to create emotional exhaustion. This study provided evidence for the integrated effect of the perceived organizational support and OSH practices in settling employees' emotional exhaustion created by job risk during the crisis.

The study's findings contribute to the JD-R theory, as it incorporates a mediated model. Further, the study supports establishing and maintaining safety protocols and support systems in organizations to boost employees' confidence and significantly reduce emotional exhaustion.

7. Limitations of the Study and Future Research Scope

This study used a cross-sectional survey; future researchers can adapt a longitudinal survey for further scrutiny. In addition, future researchers can conduct a comparative study on the same interest by comparing OHS practices and emotional exhaustion with other sector employees.

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Declaration of Conflicting Interests

The authors declare the absence of conflicts of interest in publishing this research as a mandatory funding agency requirement.

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References

- Adamopoulos, I., Lamnisis, D., Syrou, N., & Boustras, G. (2022). Public health and work safety pilot study: Inspection of job risks, burn out syndrome and job satisfaction of public health inspectors in Greece. *Safety Science*, 147, 105592. <https://doi.org/10.1016/j.ssci.2021.105592>
- Adamopoulos, I., Syrou, N., Lamnisis, D., & Boustras, G. (2023). Cross-sectional nationwide study in occupational safety & health: Inspection of job risks context, burn out syndrome and job satisfaction of public health Inspectors in the period of the COVID-19 pandemic in Greece. *Safety Science*, 158, 105960. <https://doi.org/10.1016/j.ssci.2022.105960>
- Alenezi, A., McAndrew, S., & Fallon, P. (2019). Burning out physical and emotional fatigue: Evaluating the effects of a programme aimed at reducing burnout among mental health nurses. *International Journal of Mental Health Nursing*, 28(5), 1045-1055. <https://doi.org/10.1111/inm.12608>
- Bakker, A.B. (2015). Towards a multilevel approach of employee well-being. *European Journal of Work and Organizational Psychology*, 24(6), 839-843. <https://doi.org/10.1080/1359432X.2015.1071423>
- Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2003). Dual processes at work in a call centre: An application of the job demands–resources model. *European Journal of Work and Organizational Psychology*, 12(4), 393-417. <https://doi.org/10.1080/13594320344000165>
- Bakker, A.B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104. <https://doi.org/10.1002/hrm.20004>
- Bakker, A.B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. <https://doi.org/10.1037/ocp0000056>
- Beckman, K.L., Monsey, L.M., Archer, M.M., Errett, N.A., Bostrom, A., & Baker, M.G. (2021). *Health and safety risk perceptions and needs of app-based drivers during COVID-19. American Journal of Industrial Medicine*, 64(11), 941-951. <https://doi.org/10.1002/ajim.23295>
- Bennett, E.E., & McWhorter, R.R. (2021). Virtual HRD's role in crisis and the post Covid-19 professional lifeworld: accelerating skills for digital transformation. *Advances in Developing Human Resources*, 23(1), 5-25. <https://doi.org/10.1177/1523422320973288>
- Bowling, N.A., Alarcon, G.M., Bragg, C.B., & Hartman, M.J. (2015). A meta-analytic examination of the potential correlates and consequences of workload. *Work & Stress*, 29(2), 95-113. <https://doi.org/10.1080/02678373.2015.1033037>

- Caesens, G., & Stinglhamber, F. (2014). The relationship between perceived organizational support and work engagement: The role of self-efficacy and its outcomes. *European Review of Applied Psychology*, 64(5), 259-267. <https://doi.org/10.1016/j.erap.2014.08.002>
- Caesens, G., Stinglhamber, F., Demoulin, S., & De-Wilde, M. (2017). Perceived organizational support and employees' well-being: The mediating role of organizational dehumanization, *European Journal of Work and Organizational Psychology*, 26(4), 527-540. <https://doi.org/10.1080/1359432X.2017.1319817>
- Chassin, M.R., & Loeb, J.M. (2013). High-reliability health care: Getting there from here. *Milbank Quarterly*, 91(3), 459-490. <https://doi.org/10.1111/1468-0009.12023>
- Chen, H., & Eyoun, K. (2021). Do mindfulness and perceived organizational support work? Fear of COVID-19 on restaurant frontline employees' job insecurity and emotional exhaustion. *International Journal of Hospitality Management*, 94, 102850. <https://doi.org/10.1016/j.ijhm.2020.102850>
- Chen, H., Hou, C., Zhang, L., & Li, S. (2020). Comparative study on the strands of research on the governance model of international occupational safety and health issues. *Safety Science*, 122, 104513. <https://doi.org/10.1016/j.ssci.2019.104513>
- Chowdhury, N., Kainth, A., Godlu, A., Farinas, H.A., Sikdar, S., & Turin, T.C. (2022). Mental health and well-being needs among non-health essential workers during recent epidemics and pandemics. *International Journal of Environmental Research and Public Health*, 19, 5961. <https://doi.org/10.3390/ijerph19105961>
- Christian, M.S., Bradley, J.C., Wallace, J.C., & Burke, M.J. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94(5), 1103-1127. <https://doi.org/10.1037/a0016172>
- Curcuruto, M., Parker, S. K., & Griffin, M.A. (2019). Proactivity towards workplace safety improvement: an investigation of its motivational drivers and organizational outcomes. *European Journal of Work and Organizational Psychology*, 28(2), 221-238. <https://doi.org/10.1080/1359432X.2019.1572115>
- de Oliveira-Neto, G.C., Tucci, H.N.P., Filho, M.G., Lucato, W.C., & da Silva, D. (2022). Moderating effect of OHS actions based on WHO recommendations to mitigate the effects of COVID-19 in multinational companies. *Process Safety and Environmental Protection*, 159, 652-661. <https://doi.org/10.1016/j.psep.2022.01.011>
- Deepthi, R., Masthi, R.N., Nirmala, C.J., Manjula, R., Vinothkumar, S. (2020). Personal protective equipments (PPE) –prerequisites, rationale, and challenges during COVID-19 pandemic. *Indian Journal of Common Health*, 32(2), 196-205. <https://doi.org/10.47203/IJCH.2020.v32i02SUPP005>
- Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The job demands resources model of burnout, *Journal of Applied Psychology*, 86(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Demerouti, E., & Bakker, A.B. (2023). Job demands-resources theory in times of crises: New propositions. *Organizational Psychology Review*, 13(3), 209-236. <https://doi.org/10.1177/20413866221135022>
- Dodoo, J.E., Surity, L., & Al-Samarraie, H. (2023). The influence of learning-oriented leadership for promoting future-directed workplace safety in the mining industry. *Safety Science*, 159, 106010. <https://doi.org/10.1016/j.ssci.2022.106010>.
- Eisen, K.P., Allen, G.J., Bollash, M., & Pescatello, L.S. (2008). Stress management in the workplace: A comparison of a computer-based and an in-person stress-management intervention, *Computers in Human Behavior*, 24(1), 486-496. <https://doi.org/10.1016/j.chb.2007.02.003>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507. Available at: <https://doi.org/10.1037/0021-9010.71.3.500>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Gautam, D.K., & Gautam, P.K. (2024a). Occupational stress for employee turnover intention: mediation effect of service climate and emotion regulation. *Asia-Pacific Journal of Business Administration*, 16(2), 233-255. <https://doi.org/10.1108/APJBA-02-2021-0056>

- Gautam, P.K., & Gautam, D.K. (2024b). Job insecurity and moral disengagement in frontline employees: A moderated mediation effect of perceived organizational support and occupational regret. *Intangible Capital*, 20(2), 412-424. <https://doi.org/10.3926/ic.2643>
- Gautam, P.K., Gautam, D.K., & Basnet, D. (2023). Social support for training effectiveness: mediating training transfer motivation and moderating transfer design. *FIIB Business Review*. <https://doi.org/10.1177/23197145231187487>
- Griffin, M.A., & Neal, A. (2000). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology*, 5(3), 347-358. <https://doi.org/10.1037/1076-8998.5.3.347>
- Hakanen, J.J., Bakker, A.B., & Schaufeli, W.B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495–513. <https://doi.org/10.1016/j.jsp.2005.11.001>
- Hansez, I., & Chmiel, N. (2010). Safety behavior: Job demands, job resources, and perceived management commitment to safety. *Journal of Occupational Health Psychology*, 15(3), 267-278. <https://doi.org/10.1037/a0019528>
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2014). *Multivariate data analysis* (7th ed.). Harlow, UK: Pearson Education.
- Hayes, A.F. (2019). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regress-Based Approach*. New York: The Guilford Press.
- Hofmann, D.A., Burke, M.J., & Zohar, D. (2017). 100 years of occupational safety research: From basic protections and work analysis to a multilevel view of workplace safety and risk. *Journal of Applied Psychology*, 102(3), 375-388. <https://doi.org/10.1037/apl0000114>
- Howe, D.C., Chauhan, R.S., Soderberg, A.T., & Buckley, M.R. (2020). Paradigm shifts caused by the COVID-19 pandemic. *Organizational Dynamics*, 100804. <https://doi.org/10.1016/j.orgdyn.2020.100804>
- Ingram, C., Downey, V., Roe, M., Chen, Y., Archibald, M., Kallas, K.A. et al. (2021). COVID-19 prevention and control measures in workplace settings: a rapid review and meta-analysis. *International Journal of Environmental Research and Public Health*, 18(15), 7847. <https://doi.org/10.3390/ijerph18157847>
- Kachanoff, F.J., Bigman, Y.E., Kapsaskis, K., & Gray, K. (2021). Measuring realistic and symbolic threats of COVID-19 and their unique impacts on well-being and adherence to public health behaviors. *Social Psychological and Personality Science*, 12(5), 603-616. <https://doi.org/10.1177/1948550620931634>
- Knight, C., Keller, A.C., & Parker, S.K. (2022). Job demands, not resources, predict worsening psychological distress during the early phase of the COVID-19 pandemic. *Work & Stress*, 37(1), 55-77. <https://doi.org/10.1080/02678373.2022.2117879>
- Kurtessis, J.N., Eisenberger, R., Ford, M.T., Buffardi, L.C., Stewart, K.A., & Adis, C.S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854-1884. <https://doi.org/10.1177/0149206315575554>
- Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, 33(1), 76-103. <https://doi.org/10.1080/02678373.2018.1529065>
- Li, Q., Mohamed, R., Mahomed, A. & Khan, H. (2022). The effect of perceived organizational support and employee care on turnover intention and work engagement: A mediated moderation model using age in the post pandemic period. *Sustainability*, 14, 9125. <https://doi.org/10.3390/su14159125>
- Mazlina-Zaira, M., & Hadikusumo, B.H.W. (2017). Structural equation model of integrated safety intervention practices affecting the safety behaviour of workers in the construction industry. *Safety Science*, 98, 124-135. <https://doi.org/10.1016/j.ssci.2017.06.007>
- Melamed' S.' Kushnir' T.' & Shirom' A. (1992). Burnout and risk factors for cardiovascular disease. *Behavioral Medicine*' 18' 53-60. <https://doi.org/10.1080/08964289.1992.9935172>

- Michaels, D., & Wagner, G.R. (2020). Occupational safety and health administration (OSHA) and worker safety during the COVID-19 pandemic. *Jama*, 324 (14), 1389-1390. <https://doi.org/10.1001/jama.2020.16343>
- Nabe-Nielsen, K., Nilsson, C.J., Juul-Madsen, M., Bredal, C., Hansen, L., & Hansen, Å.M. (2021). COVID-19 risk management at the workplace, fear of infection and fear of transmission of infection among frontline employees. *Occupational and Environmental Medicine*, 78(4), 248-254.
- Nahrgang, J.D., Morgeson, F.P., & Hofmann, D.A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71-94. <https://doi.org/10.1037/a0021484>
- Netemeyer, R.G., Bearden, W.O., & Sharma, S. (2003). *Scaling procedure: Issues and applications*. Sage Publications, Thousand Oaks. <https://doi.org/10.4135/9781412985772>
- Nielsen, K., Nielsen, M.B., Ogbonnaya, C., Kännsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress*, 31(2), 101-120. <https://doi.org/10.1080/02678373.2017.1304463>
- Nishii, L.H., Lepak, D.P., & Schneider, B. (2008). Employee attributions of the “why” of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61(3), 503-545. <https://doi.org/10.1111/j.1744-6570.2008.00121.x>
- Nowacki, K., Grabowska, S., & Łakomy, K. (2020). Activities of employers and OHS services during the developing COVID-19 epidemic in Poland. *Safety Science*, 131, 104935. <https://doi.org/10.1016/j.ssci.2020.104935>
- O’Neill, R. (2020). WHO knew. How the World Health Organization (WHO) became a dangerous interloper on workplace health and safety and COVID-19. *New solutions: A Journal of Environmental and Occupational Health Policy*. 30(3), 237-248. <https://doi.org/10.1177/1048291120961337>
- OSHA (2020). Protecting workers: Guidance on mitigating and preventing the spread of COVID-19 in the workplace. *Occupational Safety and Health Administration (OSHA)*. Retrieved from United States Department of Labour. Available at: <https://www.osha.gov/coronavirus/safework>
- Pagell, M., Klassen, R., Johnston, D., Shevchenko, A., & Sharma, S. (2015). Are safety and operational effectiveness contradictory requirements: The roles of routines and relational coordination. *Journal of Operations Management*, 36(1), 1-14. <https://doi.org/10.1016/j.jom.2015.02.002>
- Patanjali, S., & Bhatta, N.M.K. (2022). Work from Home During the Pandemic: The Impact of Organizational Factors on the Productivity of Employees in the IT Industry. *Vision*, 0(0). <https://doi.org/10.1177/09722629221074137>
- Petrie, K., Smallwood, N., Pascoe, A., & Willis, K. (2022). Mental health symptoms and workplace challenges among Australian paramedics during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*. 19, 1004. <https://doi.org/10.3390/ijerph19021004>
- Pew Research Center (2020). U.S. public sees multiple threats from the coronavirus – and concerns are growing. Available at: https://www.pewresearch.org/politics/wp-content/uploads/sites/4/2020/03/PP_2020.03.18_Coronavirus_Final-1.pdf
- Piening, E.P., Baluch, A.M., & Ridder, H.G. (2014). Mind the intended-implemented gap: Understanding employees’ perceptions of HRM. *Human Resource Management*, 53(4), 545-567. <https://doi.org/10.1002/hrm.21605>
- Radic, A., Arjona-Fuentes, J.M., Ariza-Montes, A., Han, H., & Law, R. (2020). Job demands–job resources (JD-R) model, work engagement, and well-being of cruise ship employees. *International Journal of Hospitality Management*, 88, 102518. <https://doi.org/10.1016/j.ijhm.2020.102518>
- Salamon, J., Blume, B.D., Tóth-Király, I., Nagy, T., & Orosz, G. (2022). The positive gain spiral of job resources, work engagement, opportunity and motivation on training transfer. *International Journal of Training and Development*, 26, 556-580. <https://doi.org/10.1111/ijtd.12277>

- Sanders, K., & Yang, H. (2016). The HRM process approach: The influence of employees' attribution to explain the HRM-performance relationship. *Human Resource Management*, 55(2), 201-217. <https://doi.org/10.1002/hrm.21661>
- Sasaki, N., Asaoka, H., Kuroda, R., Tsuno, K., Imamura, K., & Kawakami, N. (2021). Sustained poor mental health among healthcare workers in COVID-19 pandemic: A longitudinal analysis of the four-wave panel survey over 8 months in Japan. *Journal of Occupational Health*, 63(1), e12227. <https://doi.org/10.1002/1348-9585.12227>
- Schaufeli, W.B. (2017). Applying the job demands-resources model. *Organizational Dynamics*, 46(2), 120-132. <https://doi.org/10.1016/j.orgdyn.2017.04.008>
- Schaufeli, W.B., Salanova, M., González-Romá, V., & Bakker, A.B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92. <https://doi.org/10.1023/A:1015630930326>
- Schaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. <https://doi.org/10.1002/job.248>
- Schaufeli, W.B., & Taris, T.W. (2014). A Critical Review of the Job Demands-Resources Model: Implications for improving work and health. In Bauer, G.F., & Hämmig, O. (Eds.), *Bridging occupational, organizational and public health: A transdisciplinary approach* (43-68). Springer Science Business Media. https://doi.org/10.1007/978-94-007-5640-3_4
- Sexton, J.B., Adair, K.C., Proulx, J., Profit, J., Cui, X., Bae, J. et al. (2022). Emotional exhaustion among US healthcare workers before and during the COVID-19 pandemic, 2019-2021. *JAMA Network Open*. 5(9), e2232748. <https://doi.org/10.1001/jamanetworkopen.2022.32748>
- Shehab, M., Shuaibi, S., Qadhi, I., & Alfadhli, A. (2021). Effectiveness of inspectors' team in increasing compliance with personal protective equipment use and reducing COVID-19 infection spread among healthcare workers. *Infection Prevention in Practices*. 3(2), 100137. <https://doi.org/10.1016/j.infpip.2021.100137>
- Shirom' A. (1989). Burnout in work organizations. *International Review of Industrial and Organizational Psychology*' 4' 26-48.
- Shirom' A.' & Melamed' S. (2006). A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management*' 13(2)' 176-200. <https://doi.org/10.1037/1072-5245.13.2.176>
- Sönmez, S., Apostolopoulos, Y., Lemke, M.K., & Hsieh, Y.C. (2020). Understanding the effects of COVID-19 on the health and safety of immigrant hospitality workers in the United States. *Tourism Management Perspectives*, 35, 100717. <https://doi.org/10.1016/j.tmp.2020.100717>
- Subramony, M., Golubovskaya, M., Keating, B., Solnet, D., Field, J., & Witheriff, M. (2022). The influence of pandemic-related workplace safety practices on frontline service employee wellbeing outcomes. *Journal of Business Research*, 149(1), 363-374. <https://doi.org/10.1016/j.jbusres.2022.05.040>
- Sthapit, A. (2022). Endemicisation of COVID-19: Will it Salvage the Hospitality and Tourism Industry? *Nepalese Journal of Hospitality and Tourism Management*, 3(1), V-VI. <https://doi.org/10.3126/njhtm.v3i1.45538>
- Stock, G.N., McFadden, K.L., & Gowen, C.R., III (2007). Organizational culture, critical success factors, and the reduction of hospital errors. *International Journal of Production Economics*, 106(2), 368-392. <https://doi.org/10.1016/j.ijpe.2006.07.005>
- Sutcliffe, K.M. (2011). High-reliability organizations (HROs). *Best Practice & Research Clinical Anaesthesiology*, 25(2), 133-144. <https://doi.org/10.1016/j.bpa.2011.03.001>

- Tan, B.Y.Q., Kanneganti, A., Lim, L.J.H., Tan, M., Chua, Y.X., Tan, L., et al. (2020). Burnout and associated factors among health care workers in Singapore during the COVID-19 pandemic. *Journal of the American Medical Directors Association*, 21(12), 1751-1758.
- Terglav, K., Ruzzier, M.M., & Kase, R. (2016). International branding process: Exploring the role of mediators in top management's leadership-commitment relationship. *International Journal of Hospitality Management*, 54, 1-11. <https://doi.org/10.1016/j.ijhm.2015.12.007>
- The: Constitution of Nepal (2015) (2072.6.3), 20 September 2015. https://ag.gov.np/files/Constitution-of-Nepal_2072_Eng_www.moljpa.gov._npDate-72_11_16.pdf (Assessed: February 18, 2024).
- van Daalen, G., Willemsen, T.M., Sanders, K., & van Veldhoven, M.J.P.M. (2009). Emotional exhaustion and mental health problems among employees doing “people work”: the impact of job demands, job resources and family-to-work conflict. *International Archives of Occupational and Environmental Health*, 82, 291.303. <https://doi.org/10.1007/s00420-008-0334-0>
- Vinodkumar, M.N., & Bhasi, M. (2010). Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis & Prevention*, 42(6), 2082-2093. <https://doi.org/10.1016/j.aap.2010.06.021>
- Vogus, T.J., & Iacobucci, D. (2016). Creating highly reliable health care: How reliability-enhancing work practices affect patient safety in hospitals. *ILR Review*, 69(4), 911-938. <https://doi.org/10.1177/0019793916642759>
- Wang, H., Ding, H., & Kong, X. (2023). Understanding technostress and employee well-being in digital work: the roles of work exhaustion and workplace knowledge diversity. *International Journal of Manpower*, 44(2), 334-353. <https://doi.org/10.1108/IJM-08-2021-0480>
- WHO (2021). COVID-19: Occupational health and safety for health workers: Interim Guidelines. World Health Organization (WHO) and ILO. Available at: https://iris.who.int/bitstream/handle/10665/339151/WHO-2019-nCoV-HCW_advice-2021.1-eng.pdf?sequence=1
- Wilcox, A., & Koontz, A. (2022). Workplace well-being: Shifting from an individual to an organizational framework, *Sociology Compass*, 16(10), 1-18. <https://doi.org/10.1111/soc4.13035>
- Zohar, D. (1980). Safety climate in industrial organizations: Theoretical and applied implications. *Journal of Applied Psychology*, 65(1), 96-102. <https://doi.org/10.1037/0021-9010.65.1.96>
- Zohar, D. (2010). Thirty years of safety climate research: Reflections and future directions. *Accident Analysis & Prevention*, 42(5), 1517-1522. <https://doi.org/10.1016/j.aap.2009.12.019>

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