Kumar Nilesh (Orcid ID: 0000-0001-7840-4097)

Impact of Nurses' Emotional Labor on Job Stress and Emotional Exhaustion amid COVID-19: The Role of Instrumental Support and Coaching Leadership

Authors; Name: Nilesh Kumar¹, Yanghua Jin^{1,2}

Affiliation: 1st School of Business Administration, Zhejiang Gongshang University, Hangzhou, Zhejiang, P.R. China, 310018

2nd Zhejiang Financial College, Hangzhou, Zhejiang, People's Republic of China

Correspondence: Dr. Nilesh Kumar nileshk@live.com nileshk@mail.zjgsu.edu.cn

Prof. Dr. Yanghua Jin jinyanghua@163.com

Nilesh's ORCID: 0000-0001-7840-4097

Yanghua's ORCID: 0000-0001-6902-720X

Conflict of Interest Statement: Authors declare no conflict of interest.

Data statement: The datasets used during the current study are available on reasonable request from first author (nileshk@live.com).

Acknowledgement: We thank Government of Sindh and Pakistan for supporting our research. We are grateful to Provincial and Federal Health ministers and hospital administration for providing resources to government hospitals and staff during emergencies.

Ethical Consideration: This study was approved by ethics committee of Zhejiang Gongshang University (Ref no. 202105/IRB/54) and conducted in line with Helsinki Declaration principles. All frontline nurses participated voluntarily with consent after assurance of data privacy.

Abstract

Aim: This study examines Pakistan nurses' emotional labor and stress in healthcare emergencies on their emotional exhaustion and availability of support at organizational and managerial levels to alleviate the effects.

Background: As COVID-19 pandemic has been declared a global outbreak and many countries have enacted medical emergencies, this has increased job demands and expected desired emotional expressions from frontline workers. Such high levels of job demand contribute to various stress reactions among employees.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1002/jonm.13818

This article is protected by copyright. All rights reserved.

Methodology: Authors applied a longitudinal design, using an experimental approach, to collect data from 319 nurses serving in 107 government hospitals in Pakistan. The authors surveyed nurses at twotime points with the interval of 3 months by using an online questionnaire tool. At one time, they asked nurses to report on emotional labor, stress, and exhaustion. In the second phase, after providing supports (during interval phase) at different levels, the authors repeated the same scales from same participants in addition to instrumental support and coaching leadership. Data were processed using SPSS-Amos for elementary analysis and Process-macro for robustness and hypotheses testing.

Results: Authors find that job stress fully mediates relationship between surface acting and emotional exhaustion in controlled phase and partially mediates in intervention phase. Furthermore, in intervention phase, authors find that instrumental support moderates and alleviate positive effects of emotional labor on job stress, and coaching leadership moderates and lessens positive effects of job stress on emotional exhaustion.

Conclusion: This research concludes that healthcare organizations can alleviate emotional exhaustion caused by emotional labor and job stress amid emergencies by providing support at different levels; organizational and managerial. However, the effectiveness of these supports depends on high to low levels.

Implications for Nursing Management: This study demonstrates that to handle and support emotional labor and job stress to avoid emotional exhaustion in healthcare emergencies, organizational supports matter. Support at organizational level can include instrumental support. At managerial level, holding a coaching leadership style can foster external facets of management while uplifting the internal support qualities of confidence and self-awareness that improve the individuals' ability to lead; work with paradox and uncertainty.

Keywords: Coaching Leadership; Emotional Exhaustion; Emotional Labor; Instrumental Support; Job Stress in Emergencies.

INTRODUCTION

After the World Health Organization-WHO (2020) confirmed the Novel Coronavirus (COVID-19) in March 2020 as a pandemic, many countries enacted medical emergency in hospitals to cope up with situation. This pandemic was a global shock for everyone, specifically for medical workers. The workload on medical workers in hospitals increased (no-days off, extra working hours, etc.). Although, a sympathetic attitude toward patients in hospitals is always emphasized, yet many frontline medical workers (doctors, nurses, paramedics) who interact with patients directly experience psychological pressure in such environment that leads them to perform emotional labor- to be visibly sympathetic in delivering service to patients. Emotional labor happens when people face circumstances in which they must direct their emotions (Grandey & Melloy, 2017). Consequently, constant interaction to psychological pressure because of severe emotional demands may trigger the person's stress system, containing the hypothalamic pituitary adrenal axis and the sympathetic nervous system. Given that nurses represent the major human resource part in the healthcare sector, their services are frequently those in utmost demand in such emergencies (Ahmad et al., 2020). Therefore, scholars have called for new HRM model to manage and support their emotional labor and stress during emergencies (Ahmad et al., 2020); because, COVID-19 pandemic is an environmental disruption that, by requiring excessive job demands (Abdel Hadi et al., 2021; Palese et al., 2021), façades a great risk to individuals' emotional well-being and causes emotional exhaustion.

Emotional exhaustion denotes to a reduction in one's emotional resources and to sense of being strained. It is associated to inferior health status, containing physiological disturbances and depression, also a threat to social life (Gabriel & Aguinis, 2022; Jeung et al., 2018). Emotional exhaustion is caused by emotional labor: surface acting (Jeung et al., 2018). Although, emotional labor has two components; surface acting and deep acting. Deep acting doesn't cause exhaustion as it relates to nurses' occupational calling under certain job demands, which they find easy to attain due to nature of job (Sawbridge & Hewison, 2013). However, surface acting triggers emotional exhaustion due to the energy required to overcome adverse emotions under excessive pressure and job demands (Gabriel et al., 2015). Specifically, Bakker and Demerouti (2007; 2018), based on JD-R model, posit that individuals experience emotional labor when they face high job demands and resources loss. Initially, it does not

immediately cause emotional exhaustion; rather, it leads to emotional exhaustion only in case when individual constantly loses his or her emotional abilities or resources while experiencing stress after suppressing emotions (surface acting). Per se, emotional labor (surface acting) affects emotional exhaustion through job stress due to job demands.

Given that COVID-19 pandemic has increased job demands of nurses and excessive demands require them to perform emotional labor (Grandey & Melloy, 2017). Therefore, the focus of this research is to examine how healthcare sector reacts to the pandemic affect changes in nurses' emotional labor, where emotional labor signifies to the point to which frontline nurses experience job stress and emotional exhaustion (Abdel Hadi et al., 2021; Jeung et al., 2018; Sohn et al., 2018). In other words, the main issue questioned in the current study is, what types of support and practices can be employed amid pandemic by healthcare sector to deal with nurses' emotional exhaustion and job stress caused by emotional laboring? This concern is specifically crucial as emergency situations have undesirable consequences for the frontline medical workers. In particular, Ererdi et al. (2020, p. 24) contend in a recent systematic literature review on international HRM in times of catastrophes and uncertainty, scholars require to develop a more detailed and thorough understanding of what organizations can do to safeguard frontline workers' mental state in such life-threatening situations. Therefore, authors in this research integrate Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007) and organizational support theory (Eisenberger et al., 2020) in the intense context on proposed model (see Figure 1) and argue that effect of emotional labor toward emotional exhaustion via job stress amid pandemic can be lessened if there is organizational support. On one hand, the JD-R model promotes the workers' well-being. The recommendations made by this model states that stress level among employees elevates through imbalance between job demands and availability of resources to overcome those demands (Xanthopoulou et al., 2018). On the other hand, organizational support theory assures that support from organization during environmental disruptions can alleviate emotional labor and job stress to avoid emotional exhaustion (Hur et al., 2020).

Followed by past studies, there can be different organizational forms of support (Grant et al., 2017; Hershkovich et al., 2016; Ollis & Shanahan, 2022); authors emphasize on instrumental support and coaching leadership to be distinctive approaches that could be used to handle emotional exhaustion amid environmental disruptions. Instrumental support signifies to the "organization's willingness to deliver material (i.e., PPE kit) and psychological resources (social distancing, disinfected wards) intended to build a person's capability to tackle demanding situation (Amason et al., 1999; Labrague, 2021)", and coaching is a leadership tool that "helps employees to level-up their capability to deal with change and provide them assistance in meeting the job demands (Theeboom et al., 2014)." Both forms of support have inadequate theoretical and empirical literature in the healthcare sector and in the extremely unreliable situation of the Novel Coronavirus pandemic (Caligiuri et al., 2020). This study, therefore, intends to fill these literature gaps by answering the calls by Caligiuri et al. (2020), Ererdi et al. (2020), Ahmad et al. (2020), and Pelaez Zuberbuhler et al. (2020). By considering these forms of support, authors provide a thorough understanding of the practices those could be incorporated to manage nurses' emotional labor and stress to avoid emotional exhaustion during environmental disruptions, for instance the COVID-19 pandemic.

Figure 1 Conceptual Framework

By examining these relationships, authors contribute to the literature in two main ways. First, based on JDR-model (Bakker & Demerouti, 2007) and organizational support theory (Eisenberger et al., 2020), authors expand understanding of frontline nurses' emotional exhaustion amid healthcare emergencies by designing a moderated-mediation and mediated-moderation framework of emotional labor and job stress in the pandemic (See Figure 1). This extension covers organizational behavior and human resource management fields to the nursing management by surveying nurses who took part in the medical emergency of COVID-19. Second, authors propose instrumental support and coaching leadership as specific supports (resources) to deal with high job demands at two different levels for frontline nurses, to help them to cope up emotional labor and stress for avoiding exhaustion amid healthcare emergency. Per se, if organization fails to supply instrumental support, leaders at stress-level stage can still assist nurses with coaching leadership style to avoid being exhausted in emergency situation. This contribution also improves the existing research methodologically where authors

examine the effect of emotional labor on stress and exhaustion without and with supports at organizational and managerial levels. From the practical side, it is evident that current pandemic has altered working arrangements and has wide-ranging implications for what employees feel. Thereby, this current research may specify a stronger understanding of how an organization can manage and support their frontline employees' emotions through forthcoming environmental disruptions (i.e., Monkeypox and SARS-CoV). Particularly, each country's health budget is limited which might diminish in times of uncertainty and crises. Hence, they require to uncover the optimal ways of using those funds and resources to ensure that their workforce could complete their duties without performing emotional labor.

THEORY AND HYPOTHESES DEVELOPMENT

Emotional Labor, Job Stress, and Emotional Exhaustion

Emotional exhaustion is abstracted as the psychological distress related with individual's participation in situations that impute to the feelings of emotional suppression (Kirk-Brown & Van Dijk, 2016). Consistent with Lee (2016), emotional exhaustion encompasses the reduction of one's emotional abilities. Khalil et al. (2017) assert that this reveals the individual's stress factor of burnout. In healthcare sector, emotional exhaustion is evident because the sector delivers services as its product. Frontline medical workers who deal with patients regularly direct their emotions and express suitable emotions towards patients. The process involved in emotion management could be tiring, such that if it is not regulated well, can lead to emotional exhaustion.

Studies have revealed that emotional exhaustion ascends from emotional labor (Jeung et al., 2018; Kong & Jeon, 2018). For emotional labor, this is particularly the case with surface acting (Lee, 2016; Saini & Singh, 2020; Simillidou et al., 2020). The reasoning behind this is that surface acting entails great effort and prolonged process while it also causes emotional dissonance (Kong & Jeon, 2018; Saini & Singh, 2020) and job stress (Sohn et al., 2018). Sohn et al. (2018) stated that health care workers are at especially high risk for facing the job stress caused by emotional labor (surface acting) which occurs due to nature of work and high job demands (Giusino et al., 2022; Meyer et al., 2021).

Job stress has been described as "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker" by the National Institute of Occupational Safety and Health (NIOSH, 2014). Job stress has been allied with employee's physical and mental health, and particularly with emotional exhaustion (Xu & Yang, 2021). Although, according to Xu and Yang (2021), job stress is deliberated to be highly allied with emotional exhaustion. Bakker and Demerouti (2007; 2018), based on JD-R model, posit that individuals experience emotional labor when they face high job demands and resources loss. Initially, it does not immediately cause emotional exhaustion; rather, it leads to emotional exhaustion only in case when individual constantly loses his or her emotional abilities or resources while experiencing stress after suppressing emotions (surface acting). Per se, emotional labor (surface acting) affects emotional exhaustion through job stress due to job demands. In particular, a recent study affirmed and showed, how continuous exposure to stress can result in emotional exhaustion (Xu & Yang, 2021). Therefore, based on these empirical evidences, the current study proposes;

Hypothesis 1a: Surface acting is positively related to job stress in emergency. *Hypothesis 1b:* Surface acting is positively related to emotional exhaustion. *Hypothesis 1c:* Surface acting is positively related to emotional exhaustion via job stress in emergency.

The Moderating Role of Instrumental Support

Social support is typically studied as the individual's belief that assistance would be available from others (e.g., organization) in stressful circumstances (Li et al., 2021; Mayo et al., 2012). It is deliberated as a form of organizational stress intervention as it engenders observations of emotional care and support by the administration and provides solutions to problems (Asumah et al., 2019). In particular, Oh et al. (2021) endorsed that support at workplace plays a significant role in day-to-day work behaviors, which aids employees to improve mental health, resolve job-relevant strains, and decrease exhaustion. Therefore, Beehr et al. (2000) advise examining the three types of social support (i.e., emotional, instrumental, and informational) independently to understand the effect better. This research, however,

takes into account the instrumental support, because instrumentally supportive acts by organizations may also be observed as emotionally and informationally supportive. Instrumental support is defined as 'delivering material and psychological resources' (Amason et al., 1999; Labrague, 2021) provided by organization to build a person's capability to tackle demanding situation.

Since COVID-19 has increased the workload on nurses in emergency, thus they are facing high levels of job demands and lacking resources to deal with demands. Notably, in this study's context, nurses are expected to demonstrate desired emotional expressions to balance the stress-level among general public regarding COVID-19 outbreak and no-days off due to shortage of labor force (demands). Also, they are not getting protective equipment (i.e., mask, gloves, glass-shield), sanitation, test kits, and social distancing inside the ward, and therefore, they're facing challenges to accomplish assigned tasks (lacking resources). Meanwhile, many might not possess their own equipment or be good at emotion-regulations. Authors contend that all these issues amid pandemic might cause emotional labor and stress at work and ultimately lead to emotional exhaustion.

However, regarding its solutions, instrumental support may alleviate the effect of emotional labor on job stress as it is highly relevant to following functions. First, it delivers material resources and services necessary to deal with high job demands. Second, it provides enough information to cope up with stressful situations. Finally, it serves as social companionship function that quenches the needs for having emotional support. Additionally, having support reassures individuals to use higher-level skills and fosters an intrinsic interest in the assignments (Eisenberger & Stinglhamber, 2011; Kumar et al., 2022). Consequently, such employees tend to perform deep acting by genuinely altering internal feelings to direct the emotions expected by the organization. On the contrary, followed by JD-R model, employees with low support or resources and high job demands are more likely to fake the desired emotions and suppress their emotions in terms of surface acting (Abdel Hadi et al., 2021; Giusino et al., 2022; Meyer et al., 2021). This justifies that low level of support can result in emotional labor which triggers stress at workplace, and eventually employees feel exhausted (Jiang et al., 2022). Therefore, building on the grounds, the authors propose;

Hypothesis 2: Instrumental support moderates the direct relationship between frontline nurse's surface acting and job stress in emergency. Such that, high level of IS lessens the relationship between surface acting and job stress in emergency.

Coaching Leadership as a Stress-Coping Strategy

Given that leadership is indispensable approach for employee well-being and job performance (Antonakis & Day, 2018; Dinh et al., 2014). For example, a recent study by Chemin (2021) demonstrated that high-ability and hard-working leaders help employees to deal with pressure, increase employee effort and their performance. Although, previous studies have concentrated on stress-coping strategies allied to dodging stress (see Bosak et al., 2021; Tummers & Bakker, 2021). Yet, an important difficulty to stress management, according to Gabriel and Agnuinis (2022), is the fact that various organizations seem reluctant to admit stress as an issue inside workplace and to apply suitable stress coping strategies. For instance, 1) functional support by the high authorities signifies prominence of stress management; 2) funding in long-term stress management solutions to encourage variations of work practices, attitudes, and habits; 3) the human caring aspect – meaning empathy; and 4) the requisite for a unified and holistic approach to managing stress. All these coping approaches resemble coaching leadership; but coaching leadership goes one step ahead by being quite specific and action-focused in terms of learning how to use particular leadership tools.

By definition, coaching leadership could be seen as "a human development process that involves structured, focused interaction and the use of appropriate strategies, tools and techniques to promote desirable and sustainable change for the benefit of the coachee and potentially for all stakeholders (p.1). (Cox & Jackson, 2010)". Likewise, coaching has been multifariously described as a practice for empowering employees (Gazelle et al., 2015), giving guidance, encouraging in the crisis, and supporting to improve performance (Grant et al., 2017; Ollis & Shanahan, 2022; Peláez Zuberbuhler et al., 2020). Effective coaching tackles peripheral change and development contemporarily with internal change and development (Hagen, 2012). It fosters the external facets of management while uplifting the internal support qualities of confidence and self-awareness that improves the individuals' ability to lead; work with paradox and uncertainty (Gazelle et al., 2015). Ellinger et al. (2003) validated in their

study that supervisory coaching behavior has significant impact on employee's job satisfaction and performance, and this behavior assists in psychological well-being.

According to Gormley and Van Nieuweburgh (2014), coaching culture creates more positive and supportive workplace environment for individual and organizational flourishing. They further added that coaching culture can be an effective leadership style to reduce and cope up with stress, and resolve conflict among employees. In other words, coaching leadership enhances feeling of social support in the organizational climates and improves communication. These factors later affect employee's skills in managing external and additional job pressure and demands (i.e., dealing with high job-demands and patience in emergency) (Giusino et al., 2022; Meyer et al., 2021; Tummers & Bakker, 2021). Besides, Hershkovich et al (2016) have also posited that coaching is an obligatory element of each medical workers' training, at its own and environment's peril. Such that, required capabilities and skills developed in times, help employees in times of emergency. Therefore, based on these rationales, the authors propose that;

Hypothesis 3: Coaching leadership moderates the direct relationship between job stress in emergency and emotional exhaustion. Such that, high level of coaching leadership lessens the relationship between job stress in emergency and emotional exhaustion.

RESEARCH METHODOLOGY

Sample and procedures

This research is experimental and the authors preferred longitudinal strategy to examine relations among study variables in two phases; controlled and intervention. Authors approached 900 participants using convenient sampling technique – out of which 640 agreed. Scholars have recommended that the least sample size should be equivalent to the ten times the largest number of formative indicators used to measure a single construct, or ten times largest number if structural paths directed at a specific construct in the structural model (Hair Jr et al., 2017, p. 20). Based on this rule, the minimum requirement of sample size for current study was 50 (5 constructs multiple by 10 times). While data collection, 319 participants gave consent and rest did not give consent. Hence, authors surveyed total 319 frontline nurses from 107 government hospitals in Pakistan.

Authors used and circulated online questionnaire survey for data collection using WhatsApp and Text Messages. Authors targeted nurses with 12 hours working time from 7am to 7pm, explained study objectives in-person and in online survey, and asked for consent prior to proceed with online survey questions. In phase one (July-2021), authors collected answers from 319 nurses on emotional labor (Morning), job stress in emergencies (Afternoon), and emotional exhaustion (Evening). In phase twothree months later (Nov-2021), after provision of resources to same 319 participants (instrumental support and coaching leadership style adapted by supervisor) during interval period, authors distributed questionnaire comprised of emotional labor and instrumental support (Day-1), supervisor's coaching leadership and job stress (Day-2), and emotional exhaustion (Day-3). Instrumental support included protective equipment (i.e., mask, gloves, glass-shield), sanitation, test kits, and social distancing inside the ward. Whereas, coaching leadership by direct supervisor was about creating more positive and supportive workplace environment for nurses and helping them to reduce and cope up with stress, and resolve conflict among staff. These two forms of organizational support were carried out under the supervision of volunteers whose job description was to maintain the same standards throughout the intervention phase (Jul-Nov, 2021). Specifically, instrumental support was provided with the help of governmental and non-governmental organizations, and coaching behavior was ensured to be available by direct supervisor(s) at the discretionary level. Later, both were evaluated systematically as per the survey design.

To reach the research objectives from the statistical point, authors used AMOS for model fitness and SPSS Process-Macro for reliability and validity check and hypotheses testing. Firstly, authors measured outer framework e.g., item's reliability, convergent and discriminant validity, and model fitness. Next, authors checked SEM via model no. 04 for mediation and model no. 21 for multiple moderated mediation (Hayes, 2017). Moreover, authors received equal responses in both phases as no participant skipped survey in intervention phase. Demographic details are demonstrated in Table 1.

Table 1 Demographic Profile of Nurses

Ethical Approval

This study was approved by research institution's ethics committee (Ref: 202105/IRB/54) and conducted in line with Helsinki Declaration principles. All frontline nurses in emergency ward participated voluntarily with consent after assurance of data privacy. As such, limited demographic information was sought to protect participants' identity and informed (online) consent was asked before continuing the research. The online questionnaire was shared to nurses using Microsoft forms (https://forms.office.com/), an online survey tool.

Measures

The authors used previously developed measurement scales and ensured reliability and validity for present study. Further, the authors applied seventh-point Likert scale (1= Strongly Disagree to 7= Strongly Agree) to get participants' answers.

Instrumental Support. To measure IS, authors considered measurement scale by Macdonald (1998). Exemplary item includes, "if I am short of equipment, my organization helps me out", "my organization shows that they care about my well-being". The reliability (Cronbach's alpha) for instrumental support in current study is .81.

Emotional labor. To measure surface acting, authors adapted three items from the Emotional Labor scale established by Brotheridge and Lee (2003) and customized it according to study's objective. For example, "I pretend to have emotions that I do not really have" to "I pretend to show positive emotions in emergency that I do not really feel while dealing with patients". The Cronbach's alpha for current study is .72 for both phases; controlled and intervention.

Job Stress in Emergency. To measure job stress in emergency, authors adapted job stress scale by Arslan et al. (2021) and revised it consistent with emergency at work and Likert scale. For example, "How often have you felt nervous and stressed due to the COVID pandemic?" to "I often feel nervous and stressed while dealing with patients in emergency (i.e., COVID pandemic)". The Cronbach's alpha for current study is .77 for intervention phase and .78 for controlled phase.

Emotional Exhaustion. To measure emotional exhaustion of frontline nurses in emergency, authors used certified instrument taken from Maslach et al. (1986). Exemplary items involve, "I feel frustrated on my job", "I feel emotionally drained at work", "working directly with people or COVID patients puts too much stress on me". The Cronbach's alpha for this construct for current study is .82 for intervention phase and .83 for controlled phase.

Coaching Leadership. To measure coaching leadership, authors adapted coaching behavior scale by Ellinger et al. (2003) and revised it for this study's context. For example, "my supervisor provides me with resources so I can perform my job more effectively" to "my supervisor provides me with resources so I can sustain my emotional states in emergency and perform my duty more effectively". The Cronbach's alpha for current study is .82.

Control variable. Authors considered gender, age, and tenure as our control variables. Authors measured tenure level on a five-point scale (1= "Less than one year," 2= "1-3 years", 3= "3-5 years", 4= "5-8 years", 5= "Above 8"), age level on a four-point scale (1= "24-28 years", 2= "29-33 years", 3= "34-38 years" 4= "39-Above") and gender as a dummy (1= woman and 2= man).

DATA ANALYSIS

Data were scrutinized in two segments; Firstly, authors ascertained elementary analysis of measurement model's data (e.g., item's reliability, convergent validity, discriminant validity, and model fitness). Secondly, after appropriate results, the authors gauged mediation effect of controlled phase through process-macro model no. 04 (see Table 4) and moderated-mediation and mediated-moderation effect of intervention phase through Model no. 21 (see Table 5).

Model Fitness Statistics

Authors ran confirmatory factor analysis (CFA) on both phases' constructs and verified the fit of three-factor (surface acting, job stress, and emotional exhaustion) and five-factor models (instrumental

support, surface acting, job stress, emotional exhaustion, and coaching leadership). Table 2 demonstrates satisfactory fit for three-factor controlled phase ($X^2(79) = 109.45$, p < .005; TLI = 0.96; CFI = .93, RMSEA = 0.06) and five-factor intervention phase ($X^2(80) = 111.74$, p < .005; TLI = 0.95; CFI = .95, RMSEA = 0.06). Moreover, all the factor loadings were considerable, supporting convergent validity in this study. Meanwhile, to identify the discriminant validity of our computation, the model fit of assumed five-factor model was assessed against the series of substitute simulations. As demonstrated in Table 2, five-factor model fits the data optimal, recommending support for individuality of the constructs.

Table 2 Model Fitness Statistics

Descriptive Statistics and Correlation Analysis

Means, standard deviations and correlations are exhibited in Table 3. The effects of intervention phase are as follows; surface acting on job stress (r=.251, p<.001) and emotional exhaustion (r=.256, p<.001), and job stress on emotional exhaustion (r=.564, p<.005). On the other side, the effects of controlled phase are as follows; surface acting on job stress (r=.298, p<.001) and emotional exhaustion (r=.227, p<.001), and job stress on emotional exhaustion (r=.548, p<.005). Additionally, control variables, except gender in intervention phase, were not significantly related to our dependent variable. Hence, to avert a pointless drop in statistical power mentioned by Becker (2005), the authors didn't consider control variables in hypotheses testing.

Table 3 Means, Standard Deviations and Correlations

Mediation Analysis (Controlled Phase)

Table 4 exhibits path analysis findings of controlled phase for hypotheses 1a to 1c. Results indicate that surface acting affects job stress (β = .353, t= 5.951, p< .01) and emotional exhaustion (β = .262, t= 4.113, p< .01) positively. This supports the hypotheses H1a and H1b. However, surface acting didn't affect emotional exhaustion (β = .059, t= 1.044, p> .05) after job stress mediated the relationship (β = .576, t= 11.186, p< .01). Its effect disappeared after the mediation of job stress. As such, surface acting found to have an indirect effect on emotional exhaustion via job stress. This indirect effect, as assumed, was significant (.203). Bootstrap outcomes shown in Table 4 with bootstrapped at 99% confidence interval around indirect effects are not containing zero for emotional exhaustion (.115, .300). As a result, hypothesis H1c received support for full mediation using controlled phase's data.

Table 4 Hypotheses Testing for Mediation Effects

Multiple Moderated Mediation (Intervention Phase)

According to Hayes (2017), the index of multiple moderated-mediation is significant if the 95% CI interval (β = 0.1, 95% CI [.00, .01]) does not contain zero. This proves that the conceptualized framework is robust. Particularly, surface acting led to one's job stress in emergency (β = .304, t= 4.611, p<.01) that supported hypothesis H1a using intervention phase's data. In line with hypothesis H1b and H2c, surface acting was significantly associated to emotional exhaustion (β = .325, t= 4.720, p<.01). However, after job stress mediated the relationship (β = .558, t= 11.230, p<.01), surface acting 's effect on emotional exhaustion decreases (β = .156, t= 2.581, p<.05). Per se, surface acting established an indirect effect on emotional exhaustion via job stress. This indirect effect, as assumed, was significant (.170). Bootstrap outcomes shown in Table 5 with bootstrapped at 99% confidence interval around indirect effects are not containing zero for emotional exhaustion (.080, .270). As a result, hypothesis H1c received support for partial mediation using intervention phase's data.

Moreover, as assumed in hypothesis H2, instrumental support significantly moderated the effect of surface acting on job stress in emergency (β = -.118, t= -2.227, p< .05). This outcome recommends that

when instrumental support increases, the effect of surface acting decreases on job stress (moderating effects of instrumental support: Control _{high} = .217, 95% CI [.070, .364]; Control _{low} = .413, (95% CI [.246, .581]). In line with hypothesis H3, coaching leadership significantly moderated the effect of job stress on emotional exhaustion (β = -.094, *t*= -2.020, *p*< .05). This outcome endorses that when coaching leadership is high, the effect of job stress drops down on emotional exhaustion (moderating effects of coaching leadership: Control _{high}= .664, 95% CI [.518, .809]; Control _{low} = .444, (95% CI [.302, .586]). Overall, given the pattern of moderations and mediation, nurse's emotional exhaustion was controlled when instrumental support and coaching leadership were high. The statistical findings of PROCESS macro are summarized in Table 5.

To completely support our Hypothesis 2 and Hypothesis 3, the authors employed conventional approaches for plotting simple slopes at one standard deviation above and below the means of instrumental support and coaching leadership measures (See Figures 2 and 3). The positive relationship between 'surface acting and job stress' and 'job stress and emotional exhaustion' decreased under high instrumental support and coaching leadership, respectively. Per se, both played equal role to lessen the effect of emotional labour and job stress on emotional exhaustion. Thereby, hypotheses H2 and H3 received statistical support for managing the assumed relationships.

Table 5 Multiple Moderated Mediation Analysis – Figure(s) 2 and 3

DISCUSSION

Theoretical Implications

The COVID-19 pandemic has sought research attention of organizational psychologists for understanding HRM theories in the context of environmental crisis (Kim et al., 2022). Therefore, this study featured more broad insights into the role of HR practices inside healthcare sector for nurses during emergencies i.e., COVID-19 pandemic. In the current study, authors used a moderated-mediation and mediated-moderation framework of emotional labor and job stress in the pandemic. Using the SPSS PROCESS macro-Model 4 for mediation effect of controlled phase's data and Model 21 for moderated-mediation and mediated-moderation effect of intervention phase's data, the analyses revealed evidence that significantly supported our hypotheses. Emotional labor (surface acting) had a positive indirect relationship with emotional exhaustion through job stress in emergency, using controlled and intervention phase's data. Instrumental support restrained and lowered the direct positive relationship of surface acting on job stress, and coaching leadership controlled and lessened the direct positive link of job stress on emotional exhaustion. These outcomes have theoretical implications.

First, based on job demands-resources (JD-R) model (Bakker & Demerouti, 2007), the authors advanced understanding that instrumental support by organization and coaching leadership style by direct supervisors, which are aimed at delivering material resources to deal with high job demands and providing enough information and emotional support to cope up with stressful situations, are crucial resources in decreasing the job pressure at work. The JD-R model promotes the workers' well-being. The recommendations made by this model states that stress level among employees elevates through imbalance between job demands and availability of resources to overcome those demands (Xanthopoulou et al., 2018). In particular, authors extend the nomological network on nurses' emotional labor and its association with job stress and emotional exhaustion under different levels of supports (resources to deal with high job demands), which have not been previously hypothesized. Authors also extend the research on nurses' emotional labor, job stress, exhaustion, social support, and coaching, which have focused mostly on regular work-settings (Creese et al., 2021; Gabriel & Aguinis, 2022; Gazelle et al., 2015; Giusino et al., 2022; Grant et al., 2017; Meyer et al., 2021; Sawbridge & Hewison, 2013; Yoon & Kim, 2013).

Second, these outcomes assist in understanding that how organizational support theory (Eisenberger et al., 2020) is applied in the extremely uncertain situations. Per se, the authors demonstrated statistical results of controlled and intervention phases, which confirmed that nurses without support in controlled phase had strong impact on job stress through emotional labor, which later led to emotional exhaustion. Whereas nurses in intervention phase, because of support at two different level, had less effectual

relationships. In other words, instrumental support and coaching found to be effective supports for healthcare sector amid environmental disruption to manage nurses emotional labor and stress to avoid exhaustion. Overall, this study adds to the literature on healthcare workers' emotional and psychological well-being (c.f. Ahmad et al., 2020; Bliese et al., 2017; Creese et al., 2021; Ererdi et al., 2020) by expanding research to critical circumstances (i.e., COVID-19 Pandemic) using longitudinal approach in Pakistan's context.

The challenge is Pakistan's weak public health system, where healthcare workers apart from risk of contracting the virus in COVID/isolation wards, are also experiencing a sense of anxiety and the exhaustion of their unending shifts, unavailability of materialistic support, and lack of social companionship from direct supervisor (Latif, 2020). As a result, this study verified the emotional labor, job stress, and emotional exhaustion of nurses working in Pakistan's government hospitals. Specifically, it examined the effects before and after supports at organizational (instrumental support) and managerial (coaching leadership) levels. Precisely, having these supports reassured nurses to use higher-level skills to tackle emotional demands and fostered an intrinsic interest in the assignments. Therefore, the current study aligns with past studies, which have focused on the importance of organizational support to sustain employee's empowerment, commitment, and performance (Giusino et al., 2022; Kumar et al., 2022; Meyer et al., 2021; Tummers & Bakker, 2021).

Finally, our findings respond to frequent calls of Risley and Cooper (2011), Gazelle et al. (2015), and Throgmorton et al. (2016) for employing coaching leadership as a key leadership tool in healthcare/medical setting for reducing nurses' emotional exhaustion. This study, therefore, filled this literature gap. Coaching leadership influenced nurses' skills in managing external and additional job pressure and demands (i.e., no-days off, extra working hours, dealing with patience in emergency, etc.). Particularly, by employing coaching leadership style, healthcare sector does not only manage to drop stress and exhaustion level, it can also improve performance, work engagement, psychological capital, and interaction level among employees (see Gazelle et al., 2015; Grant et al., 2017; Peláez Zuberbuhler et al., 2020).

Limitations and Directions

This research has various significant outcomes; however, these supposed to be deliberated in the light of the research's boundaries. Additionally, there are various necessary possibilities for future research. Firstly, although authors collected and considered single sourced longitudinal strategy when collecting data, and used time-lagged approach, this research can be improved by applying multi-sourced longitudinal strategy and daily dairy design. As Bliese et al. (2017, p. 399) suggest, since stress theories are fundamentally causal, it is desirable to apply methodologies that permit greater causal associations to be created.

Secondly, this study targeted same frontline nurses by surveying them into two phases; controlled and intervention. Future scholars may consider data collection from other frontline workers in the healthcare setting (i.e., paramedics, doctors, janitors, cleaners, etc.). This could be specifically interesting during healthcare emergency that whether they also experience same amount of emotional labor and stress and what types of support is available or could be practiced for them during healthcare emergency like the COVID-19 or Monkeypox pandemic.

Thirdly, while instrumental support and coaching leadership are obligatory organizational supports, other supports are also potentially essential in terms of how support sustains mental health of employees. Future scholars may explore additional organizational and managerial supports i.e., cognitive-behavioral training, financial and nonfinancial rewards, empathetic leadership, and self-care programs (Gabriel & Aguinis, 2022; Jiang et al., 2022; Labrague, 2021; Mastracci & Adams, 2019; Ollis & Shanahan, 2022), those are likely to control negative consequences of emotional labor and stress amid environmental disruption. Besides, researchers may also shed light on ways to improve supervisor's coaching leadership in healthcare setting.

Fourth, the authors have collected data from frontline nurses in the Pakistan's government hospitals, future studies may expand this line of research to private hospitals and other developing and developed countries. Particularly, future scholars may attempt to grasp the implication of model in different institutional and cultural contexts. As such, earlier studies demonstrated that the effectiveness of human resource practices differ among countries because of differences in labor laws, personality traits, and

how workers relate to their workplace, co-workers, and supervisors (Cogin et al., 2018; Mihalache & Mihalache, 2021).

Conclusion

This research identifies that healthcare organizations can alleviate emotional exhaustion caused by emotional labor and job stress amid emergency by providing support different levels; organizational and managerial. However, the effectiveness of these supports depends on the high to low levels. The authors hope that such outcomes will encourage healthcare sector to develop suitable support structures for frontline nurses during healthcare emergencies.

Implications for Nursing Management

Pakistan is a developing country and the challenge it faces to deal with pandemic is its weak public health system (Latif, 2020). Healthcare professionals apart from risk of contracting the virus or any contagious disease in COVID/isolation wards, are also facing a sense of anxiety and the exhaustion of their continuous shifts, unavailability of materialistic provision, and dearth of social companionship from direct supervisor. Thereby, this study demonstrates that to handle and support emotional labor and job stress to avoid emotional exhaustion in healthcare emergency in Pakistan, organizational supports matter. The study outcomes recommend that during emergency situation frontline nurses may experience adverse consequences, such as emotional labor and job stress, however organizations can counter these effects by putting in place support measures for nurses. Particularly, during healthcare emergencies at Pakistan's governmental hospitals, organizational support at different levels is related with reduction in emotional labor and stress. Essentially, support at organizational level can include instrumental support, for example, delivering materials (protective equipment, sanitation, test kits, and social distancing inside the ward), providing psychological resources (information to cope up with stressful situations and social companionship for having emotional support), and clarifying about the hospital's financial situation.

At the managerial level, person-in-charge can coach on stress management during healthcare emergency. Holding a coaching leadership style can enhance feeling of social support in the workplace climate. It can foster the external facets of management while uplifting the internal support qualities of confidence and self-awareness that improves the individuals' ability to lead; work with paradox and uncertainty. This implication is important for healthcare sector as it demonstrates that not all support systems are only to do with monetary resources. Per se, there are options to support workers by helping them to level-up their capability to deal with change and providing assistance in meeting the job demands. However, practicing this idea practically, organizations should lower other work expectations from leaders (i.e., ease administrative tasks and meetings or shift unimportant assignments to a later time) and train them to improve coaching leadership qualities. This will provide more time to leaders to interact with subordinates during healthcare emergencies. Along with this, organizations can fund in long-term stress management solutions to encourage changes of work practices, attitudes, and habits. In particular, Hershkovich et al (2016) have posited that coaching is an obligatory element of each healthcare workers' training, at its own and environment's peril. Such that, required capabilities and skills developed in times, help employees in times of emergency.

Overall, this study's outcomes amid emergency suggest that organizational support is essential as it may assist frontline nurses to deal with emotional exhaustion caused by emotional labor and stress. Moreover, organizations have inadequate funds and resources, which might diminish more in times of uncertainty and crises. These findings offer that they require to design support solutions in the best ways at different level using those funds and resources to ensure that their workforce could perform their duties without feeling any additional pressure.

REFERENCES

- Abdel Hadi, S., Bakker, A. B., & Häusser, J. A. (2021). The role of leisure crafting for emotional exhaustion in telework during the COVID-19 pandemic. *Anxiety, Stress and Coping*, 0(0), 1–15. https://doi.org/10.1080/10615806.2021.1903447
- Ahmad, Hisham, Amer, Lama, & Ahmad. (2020). Human Resource Management Models to Support Emotional Labor during Emergencies in Jordan. *International Journal of Economics and*

Business Administration, VIII(Special Issue 1), 310-324. https://doi.org/10.35808/ijeba/551

- Amason, P., Allen, M. W., & Holmes, S. A. (1999). Social support and acculturative stress in the multicultural workplace. *Journal of Applied Communication Research*, 27(4), 310–334. https://doi.org/10.1080/00909889909365543
- Antonakis, J., & Day, D. V. (2018). *The Nature of Leadership* (Third Edit). https://doi.org/10.4135/9781506395029
- Arslan, G., Yıldırım, M., Tanhan, A., Buluş, M., & Allen, K.-A. (2021). Coronavirus Stress, Optimism-Pessimism, Psychological Inflexibility, and Psychological Health: Psychometric Properties of the Coronavirus Stress Measure. *International Journal of Mental Health and Addiction*, 19(6), 2423–2439. https://doi.org/10.1007/s11469-020-00337-6
- Asumah, S., Agyapong, D., & Owusu, N. O. (2019). Emotional Labor and Job Satisfaction : Does Social Support Matter ? Emotional Labor and Job Satisfaction : Does Social Support. *Journal of African Business*, 20(4), 489–504. https://doi.org/10.1080/15228916.2019.1583976
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309–328. https://doi.org/10.1108/02683940710733115
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8(3), 274–289.
- Beehr, T. A., Jex, S. M., Stacy, B. A., & Murray, M. A. (2000). Work stressors and coworker support as predictors of individual strain and job performance. *Journal of Organizational Behavior*, 21(4), 391–405. https://doi.org/https://doi.org/10.1002/(SICI)1099-1379(200006)21:4<391::AID-JOB15>3.0.CO;2-9
- Bliese, P. D., Edwards, J. R., & Sonnentag, S. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology*, 102(3), 389.
- Bosak, J., Kilroy, S., Chênevert, D., & C Flood, P. (2021). Examining the role of transformational leadership and mission valence on burnout among hospital staff. *Journal of Organizational Effectiveness*, 8(2), 208–227. https://doi.org/10.1108/JOEPP-08-2020-0151
- Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the Emotional Labour Scale. In *Journal of Occupational and Organizational Psychology* (Vol. 76, Issue 3, pp. 365–379).
 British Psychological Society. https://doi.org/10.1348/096317903769647229
- Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. (2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of International Business Studies*, 51(5), 697–713. https://doi.org/10.1057/s41267-020-00335-9
- Chemin, M. (2021). Does appointing team leaders and shaping leadership styles increase effort? Evidence from a field experiment. *Journal of Economic Behavior & Organization*, 186, 12–32. https://doi.org/https://doi.org/10.1016/j.jebo.2021.02.014
- Cogin, J. A., Sanders, K., & Williamson, I. O. (2018). Work-life support practices and customer satisfaction: The role of TMT composition and country culture. *Human Resource Management*, 57(1), 279–291. https://doi.org/10.1002/hrm.21833
- Cox, E., & Jackson, P. (2010). Developmental coaching. *The Complete Handbook of Coaching*, 217–230.
- Creese, J., Byrne, J.-P., Conway, E., Barrett, E., Prihodova, L., & Humphries, N. (2021). "We All Really Need to just Take a Breath": Composite Narratives of Hospital Doctors' Well-Being during the COVID-19 Pandemic. In *International Journal of Environmental Research and Public Health* (Vol. 18, Issue 4). https://doi.org/10.3390/ijerph18042051
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25(1), 36–62. https://doi.org/https://doi.org/10.1016/j.leaqua.2013.11.005
- Eisenberger, R., Rhoades Shanock, L., & Wen, X. (2020). Perceived Organizational Support: Why Caring about Employees Counts. *Annual Review of Organizational Psychology and Organizational Behavior*, 7, 101–124. https://doi.org/10.1146/annurev-orgpsych-012119-044917

- Eisenberger, R., & Stinglhamber, F. (2011). *Perceived organizational support: Fostering enthusiastic* and productive employees. American Psychological Association.
- Ellinger, A. D., Ellinger, A. E., & Keller, S. B. (2003). Supervisory coaching behavior, employee satisfaction, and warehouse employee performance: A dyadic perspective in the distribution industry. *Human Resource Development Quarterly*, 14(4), 435–458. https://doi.org/10.1002/hrdq.1078
- Ererdi, C., Nurgabdeshov, A., Kozhakhmet, S., Rofcanin, Y., & Demirbag, M. (2020). International HRM in the context of uncertainty and crisis: a systematic review of literature (2000–2018). *International Journal of Human Resource Management*, 0(0), 1–39. https://doi.org/10.1080/09585192.2020.1863247
- Gabriel, A. S., Daniels, M. A., Diefendorff, J. M., & Greguras, G. J. (2015). Emotional labor actors: A latent profile analysis of emotional labor strategies. *Journal of Applied Psychology*, *100*(3), 863–879. https://doi.org/10.1037/a0037408
- Gabriel, K. P., & Aguinis, H. (2022). How to prevent and combat employee burnout and create healthier workplaces during crises and beyond. *Business Horizons*, 65(2), 183–192. https://doi.org/10.1016/j.bushor.2021.02.037
- Gazelle, G., Liebschutz, J. M., & Riess, H. (2015). Physician Burnout: Coaching a Way Out. *Journal* of General Internal Medicine, 30(4), 508–513. https://doi.org/10.1007/s11606-014-3144-y
- Giusino, D., De Angelis, M., Mazzetti, G., Christensen, M., Innstrand, S. T., Faiulo, I. R., & Chiesa, R. (2022). "We All Held Our Own": Job Demands and Resources at Individual, Leader, Group, and Organizational Levels During COVID-19 Outbreak in Health Care. A Multi-Source Qualitative Study. *Workplace Health and Safety*, 70(1), 6–16. https://doi.org/10.1177/21650799211038499
- Gormley, H., & van Nieuwerburgh, C. (2014). Developing coaching cultures: a review of the literature. *Coaching*, 7(2), 90–101. https://doi.org/10.1080/17521882.2014.915863
- Grandey, A. A., & Melloy, R. C. (2017). The state of the heart: Emotional labor as emotion regulation reviewed and revised. In *Journal of Occupational Health Psychology* (Vol. 22, Issue 3, pp. 407–422). Educational Publishing Foundation. https://doi.org/10.1037/ocp0000067
- Grant, A. M., Studholme, I., Verma, R., Kirkwood, L., Paton, B., & O'Connor, S. (2017). The impact of leadership coaching in an Australian healthcare setting. *Journal of Health, Organisation and Management*, *31*(2), 237–252. https://doi.org/10.1108/JHOM-09-2016-0187
- Hagen, M. S. (2012). Managerial coaching: A review of the literature. *Performance Improvement Quarterly*, 24(4), 17–39. https://doi.org/https://doi.org/10.1002/piq.20123
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, *1*(2), 107–123.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications.
- Hershkovich, O., Gilad, D., Zimlichman, E., & Kreiss, Y. (2016). Effective medical leadership in times of emergency: a perspective. *Disaster and Military Medicine*, 2(1), 1–5. https://doi.org/10.1186/s40696-016-0013-8
- Hur, W. M., Shin, Y., & Moon, T. W. (2020). Linking Motivation, Emotional Labor, and Service Performance From a Self-Determination Perspective. *Journal of Service Research*. https://doi.org/10.1177/1094670520975204
- Jeung, D. Y., Kim, C., & Chang, S. J. (2018). Emotional labor and burnout: A review of the literature. *Yonsei Medical Journal*, 59(2), 187–193. https://doi.org/10.3349/ymj.2018.59.2.187
- Jiang, Z., Wang, S., Shen, Z., Zhao, X., Wang, F., Chen, Y., Qiao, Y., Wei, T., Dong, P., Ding, S., & Yang, X. (2022). Nurses' experience of work stress related to COVID-19 regular prevention and control in China: A qualitative study. *Journal of Nursing Management*, 30(2), 375–383. https://doi.org/https://doi.org/10.1111/jonm.13528
- Khalil, A., Khan, M. M., Raza, M. A., & Mujtaba, B. G. (2017). Personality Traits, Burnout, and Emotional Labor Correlation among Teachers in Pakistan. *Journal of Service Science and Management*, 10(6), 482–496.
- Kim, S., Vaiman, V., & Sanders, K. (2022). Strategic human resource management in the era of environmental disruptions. *Human Resource Management*.

- Kirk-Brown, A., & Van Dijk, P. (2016). An examination of the role of psychological safety in the relationship between job resources, affective commitment and turnover intentions of Australian employees with chronic illness. *The International Journal of Human Resource Management*, 27(14), 1626–1641. https://doi.org/10.1080/09585192.2015.1053964
- Kong, H., & Jeon, J. (2018). Daily Emotional Labor, Negative Affect State, and Emotional Exhaustion: Cross-Level Moderators of Affective Commitment. https://doi.org/10.3390/su10061967
- Kumar, N., Liu, Z., & Jin, Y. (2022). Evaluation of Employee Empowerment on Taking Charge Behaviour: An Application of Perceived Organizational Support as a Moderator. *Psychology Research and Behavior Management*, 15(April), 1055–1066.
- Labrague, L. J. (2021). Psychological resilience, coping behaviours and social support among health care workers during the COVID-19 pandemic: A systematic review of quantitative studies. *Journal of Nursing Management*, 29(7), 1893–1905. https://doi.org/10.1111/jonm.13336
- Lee, O.-H. (2016). The Effect of Emotional Labor, Emotional Exhaustion, and Depression on Job-Related Attitudes Fashion Store Salespersons. *Journal of Fashion Business*, 20(1), 69–81.
- Li, X., Zhou, Y., & Xu, X. (2021). Factors associated with the psychological well-being among frontline nurses exposed to COVID-2019 in China: A predictive study. *Journal of Nursing Management*, 29(2), 240–249. https://doi.org/https://doi.org/10.1111/jonm.13146
- Macdonald, G. (1998). Development of a Social Support Scale: An Evaluation of Psychometric Properties. *Research on Social Work Practice*, 8(5), 564–576.
- https://doi.org/10.1177/104973159800800505
- Maslach, C. (1986). Stress, burnout, and workaholism.
- Mastracci, S., & Adams, I. (2019). Emotional Labor in Emergency: Gauging Effects of Training Protocols. *Annals of Emergency Dispatch and Response*, 7(3), 5–10.
- Mayo, M., Sanchez, J. I., Pastor, J. C., & Rodriguez, A. (2012). Supervisor and coworker support: a source congruence approach to buffering role conflict and physical stressors. *The International Journal of Human Resource Management*, 23(18), 3872–3889. https://doi.org/10.1080/09585192.2012.676930
- Meyer, B., Zill, A., Dilba, D., Gerlach, R., & Schumann, S. (2021). Employee psychological wellbeing during the COVID-19 pandemic in Germany: A longitudinal study of demands, resources, and exhaustion. *International Journal of Psychology*, 56(4), 532–550. https://doi.org/10.1002/ijop.12743
- Mihalache, M., & Mihalache, O. R. (2021). How workplace support for the COVID-19 pandemic and personality traits affect changes in employees' affective commitment to the organization and job-related well-being. *Human Resource Management*. https://doi.org/10.1002/hrm.22082
- Oh, J., Lee, S., Sim, J., Kim, S., Cho, A., Yun, B., & Yoon, J.-H. (2021). Association between Self-Perceived Social Support in the Workplace and the Presence of Depressive/Anxiety Symptoms. In *International Journal of Environmental Research and Public Health* (Vol. 18, Issue 19). https://doi.org/10.3390/ijerph181910330
- Ollis, L., & Shanahan, P. (2022). Stress, psychological distress and support in a health care organization during Covid-19: A cross-sectional study. *Journal of Nursing Management*, 30(2), 359–366. https://doi.org/10.1111/jonm.13526
- Palese, A., Papastavrou, E., & Sermeus, W. (2021). Challenges and opportunities in health care and nursing management research in times of COVID-19 outbreak. *Journal of Nursing Management*, 29(6), 1351–1355. https://doi.org/https://doi.org/10.1111/jonm.13299
- Peláez Zuberbuhler, M. J., Salanova, M., & Martínez, I. M. (2020). Coaching-Based Leadership Intervention Program: A Controlled Trial Study. *Frontiers in Psychology*, 10(January), 1–22. https://doi.org/10.3389/fpsyg.2019.03066
- Risley, K., & Cooper, H. (2011). Professional Coaching: An Innovative and Promising Leadership Development and Career Enhancement Approach for Public Health Professionals. *Health Promotion Practice*, 12(4), 497–501. https://doi.org/10.1177/1524839911413127
- Saini, D., & Singh, M. (2020). Emotional labour and its psychometric outcomes on the service providers of the hotel industry. *International Journal of Leisure and Tourism Marketing*, 7(1), 44–66.
- Sawbridge, Y., & Hewison, A. (2013). Thinking about the emotional labour of nursing supporting

nurses to care. *Journal of Health Organization and Management*, 27(1), 127–133. https://doi.org/10.1108/14777261311311834

- Simillidou, A., Christofi, M., Glyptis, L., Papatheodorou, A., & Vrontis, D. (2020). Engaging in emotional labour when facing customer mistreatment in hospitality. *Journal of Hospitality and Tourism Management*, 45, 429–443.
- Sohn, B. K., Park, S. M., Park, I. J., Hwang, J. Y., Choi, J. S., Lee, J. Y., & Jung, H. Y. (2018). The relationship between emotional labor and job stress among hospital workers. *Journal of Korean Medical Science*, 33(39), 1–10. https://doi.org/10.3346/jkms.2018.33.e246
- Theeboom, T., Beersma, B., & van Vianen, A. E. M. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9(1), 1–18. https://doi.org/10.1080/17439760.2013.837499
- The National Institute for Occupational Safety and Health (NIOSH). Stress at work (99-101). https://www.cdc.gov/niosh/docs/99-101/. Updated 1999. Accessed June 6, 2014.
- Throgmorton, C., Mitchell, T., Morley, T., & Snyder, M. (2016). Evaluating a physician leadership development program a mixed methods approach. *Journal of Health, Organisation and Management*, *30*(3), 390–407. https://doi.org/10.1108/JHOM-11-2014-0187
- Tummers, L. G., & Bakker, A. B. (2021). Leadership and Job Demands-Resources Theory: A Systematic Review. *Frontiers in Psychology*, 12(September), 1–13. https://doi.org/10.3389/fpsyg.2021.722080
- Xanthopoulou, D., Bakker, A. B., & Koszucka, M. (2018). Need for recovery after emotional labor : Differential effects of daily deep and surface acting. February 2016, 481–494. https://doi.org/10.1002/job.2245
- Xu, Z., & Yang, F. (2021). The impact of perceived organizational support on the relationship between job stress and burnout: a mediating or moderating role? *Current Psychology*, 40(1), 402–413. https://doi.org/10.1007/s12144-018-9941-4
- Yoon, S. L., & Kim, J.-H. (2013). Job-Related Stress, Emotional Labor, and Depressive Symptoms Among Korean Nurses. *Journal of Nursing Scholarship*, 45(2), 169–176. https://doi.org/https://doi.org/10.1111/jnu.12018
- World Health Organization. (2020). Coronavirus disease (COVID-19) pandemic: About the virus. Retrieved June 07, 2020, from http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov.

Accept

Variables	Response Category	Frequency	Percentage
Gender	Woman	133	41.7
	Man	186	58.3
Age	"24-28 years old"	236	74
	"29-33 years old"	46	14.4
	"34-38 years old"	14	4.4
	"39 and above"	23	7.2
Tenure	"Less than one year"	72	22.6
	"1-3 years"	135	42.3
	"3-5 years"	44	13.8
	"5-8 years"	37	11.6
	"Above 8"	31	9.7

Table 2 Model Fitness Statistics

Model	X^2	Df	X^2/Df	SRMR	RMSEA	TLI	CFI
Controlled Phase Three-factor model (Default model)	109.45	79	1.38	.06	.06	0.96	.93
Intervention Phase Five-factor model (Default model)	111.74	80	1.39	.07	.06	0.95	.95
Four-factor model ^a	302.58	84	3.60	.07	.15	0.64	.69
Three-factor model ^b	321.93	87	3.70	.15	.15	0.60	.66
Two-factor model ^c	376.96	89	4.23	.15	.16	0.47	.59
One-factor model ^d	492.86	90	5.47	.17	.19	0.33	.43

Note: CFI= Comparative fit index; RMSEA= Root mean square error of approximation; SRMR = Standard root mean residual

^a Instrumental support and surface acting were loaded on one factor; ^b instrumental support, surface acting, and job stress were loaded on one factor; ^c instrumental support, surface acting, job stress, emotional exhaustion were loaded on one factor; ^d All variables were loaded on one factor.



Variables	Mean	SD	1	2	3	4	5	6	7	8
Intervention Phase										
1. Gender ^a	1.58	.49	-							
2. Age	1.45	.88	.229**	-						
3. Tenure	2.44	1.23	.134*	.782**	-					
4. Surface acting (EL) D1	5.12	1.25	.039	129*	079	(.72)				
5. Job Stress D2	4.18	1.52	061	.045	066	.251**	(.77)			
6. Emotional Exhaustion ^{D3}	4.05	1.59	.119*	.005	001	.256**	.564*	(.82)		
7. Instrumental Support D1	2.90	0.95	.138*	.055	.136*	141*	095	176**	(.81)	
8. Coaching Leadership D2	3.22	.105	068	150**	137*	.003	044	163**	.084	(.82)
Controlled Phase										
1. Gender ^a	1.58	.49	-							
2. Age	1.45	.88	.226**	-						
3. Tenure	2.44	1.23	.129*	.777**	-					
4. Surface acting (EL) M	5.12	1.25	.019	083	054	(.72)				
5. Job Stress ^A	4.18	1.52	018	0.59	009	.298**	(.78)			
6. Emotional Exhaustion ^E	4.05	1.59	.133	.012	005	.227**	.548*	(.83)		

Table 3 Means, Standard Deviations and Correlations

Note: ns = 319 Nurses from 107 Government Hospitals. ^a Woman = 1, Man = 2 ^{D1} Day One, ^{D2} Day Two, ^{D3} Day Three. ^M Morning, ^A Afternoon, ^E Evening. * p < 0.05; ** p < 0.01.

Accepted

Table 4 Hypotheses	testing for m	nediation effect	(Controlled Phase)
--------------------	---------------	------------------	--------------------

Regression effects of simple mediation	В	SE	t Value	Sig.
Controlled Phase				
Surface Acting→ Job Stress	.353	.059	5.951	.000
Surface Acting Emotional Exhaustion	.262	.064	4.113	.000
Job Stress→ Emotional Exhaustion	.576	.052	11.186	.000
Surface Acting> Job Stress> Emotional Exhaustion	.059	.057	1.044	.297

	Effect	SE	Z	LL 99% CI	UL 99% CI
Job Stress (Controlled Phase)	.203	.047	4.920	.115	.300

Notes: Sample size = 319 (controlled phase) Nurses from 107 Government Hospitals; number of bootstraps resample = 5,000; SE = standard error; LL = lower limit; UL = upper limit; CI = confidence interval



Predicator	В	SE	t	р
Intervention Phase				
Surface Acting→ Job Stress	.304	.066	4.611	.000
Surface Acting→ Emotional Exhaustion	.325	.069	4.720	.000
Job Stress→ Emotional Exhaustion	.558	.049	11.230	.000
Surface Acting \dots Job Stress \dots Emotional				
Exhaustion	.156	.060	2.581	.010
Surface acting x Instrumental support on Job Stress	118	.053	-2.227	.027
Job stress x Coaching leadership on Em. Exhaustion	094	.047	-2.020	.044

Table 5 Multiple moderated-moderated mediation analysis and conditional effect of moderators

Bootstrap Results for Indirect Effect of Surface Acting on Emotional Exhaustion

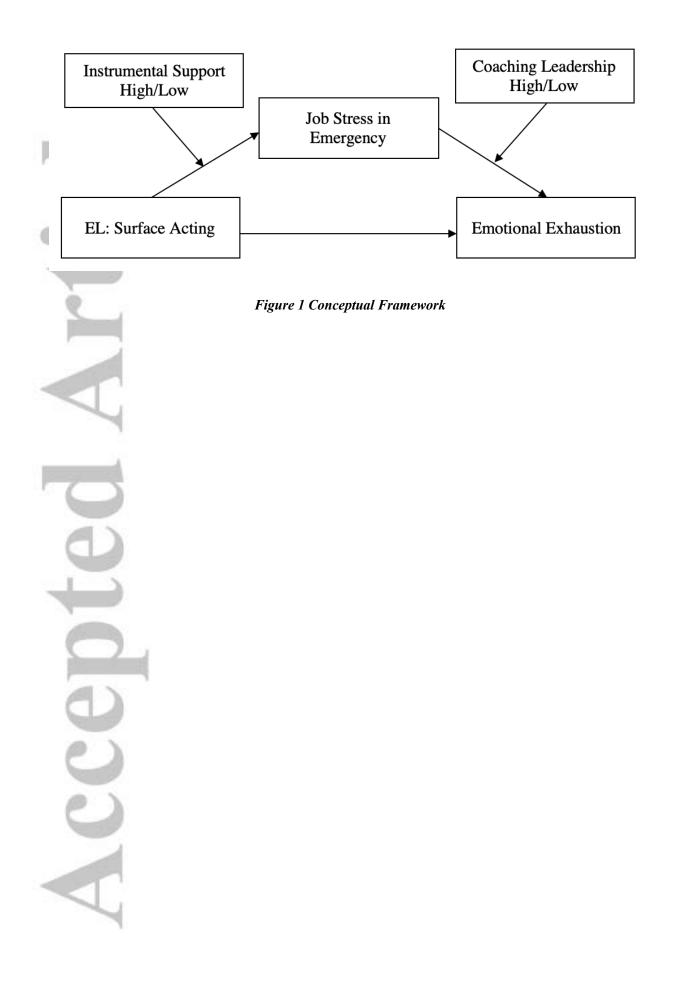
	Effect	SE	Z	LL 99% CI	UL 99% CI
Job Stress (Intervention Phase)	.170	.049	4.251	.080	.270

Conditional effects of the focal predictors at values of the moderator(s)

	-				
Moderators	Levels	Effect	SE	t	р
Instrumental Support (Job Stress)	Low	.413	.085	4.849	.000
	Mean	.296	.066	4.470	.000
	High	.217	.075	2.910	.039
Coaching Leadership (Emotional Exhaustion)	Low	.664	.074	8.951	.000
Exhlausholiy	Mean	.570	.050	11.459	.000
	High	.444	.072	6.167	.000

Notes: Sample size = 319 (intervention phase) Nurses from 107 Government Hospitals; number of bootstraps resample = 5,000; SE = standard error; LL = lower limit; UL = upper limit; CI = confidence interval





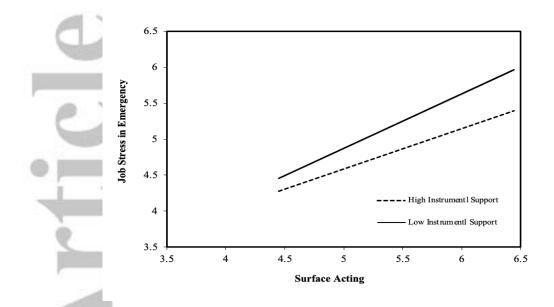


Figure 2 Moderation of the effect of surface acting on job stress at values of the moderator instrumental support

Accepted

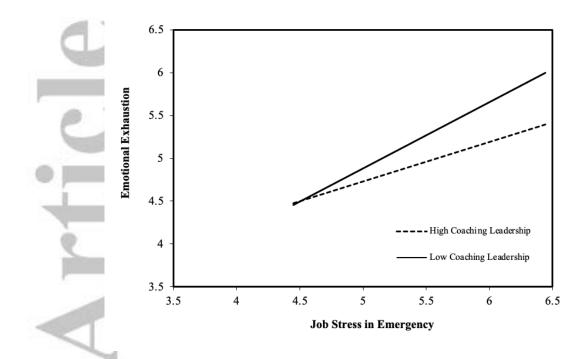


Figure 3 Moderation of the effect of job stress on emotional exhaustion at values of the moderator coaching leadership

Accepted