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Abstract

The COVID-19 pandemic has hit the hospitality industry hard globally, resulting in millions of employees being laid off. Drawing upon the conservation of resources theory, this study aims to empirically examine how and when COVID-19-induced layoff influences employees' in-role and extra-role performance in the hospitality industry. We tested this model by using field data collected from 302 employees and their supervisors in China across two waves. Results revealed that COVID-19-induced layoff increases survivors' COVID-19-related stress, which in turn leads to decreased in-role and extra-role performance. The strength of these indirect effects was mitigated by perceived family support against COVID-19. Unexpectedly, perceived organizational support against COVID-19 intensifies these indirect effects. The theoretical and practical implications of this study are further discussed.

Keywords: COVID-19-induced layoff; COVID-19-related stress; job performance; social support

Introduction

The world is living in the shadow of COVID-19. Globally, up to late January, 2021, more than 99 million confirmed cases of COVID-19, including over 2 million deaths, had been reported to the World Health Organization (<https://covid19.who.int/>). There is no doubt that human beings are facing the most severe public health crisis (Van Bavel et al., 2020). The public health crisis has triggered a socio-economic crisis. The global economy is in an

extraordinarily difficult situation in which hundreds of thousands of firms have been forced to downsize and millions of employees have lost their jobs (Blustein et al., 2020; ILO, 2020; Nicola et al., 2020). As the hospitality industry relies heavily on human contact, it has been hit the hardest by the devastating impact of COVID-19 (Alonso et al., 2020; ILO, 2020). The World Travel and Tourism Council has estimated that nearly 50 million jobs worldwide in the hospitality industry are highly threatened by COVID-19. COVID-19-induced layoff (hereafter referred to as COV-layoff) has become a serious socio-economic problem that influences employee well-being and organization survival.

The present study focuses on the hospitality industry and aims to examine the process whereby COV-layoff has a negative indirect effect on survivors' (remaining employees') job performance through COVID-19-related stress (hereafter referred to as COV-stress). We define COV-layoff as the extent to which survivors observe that their social contacts (e.g., coworkers, acquaintances, friends) in the company have been laid off due to COVID-19 (Moore et al., 2004). COVID-19 has caused employees to witness an unpredictable downsizing, with their important contacts losing their jobs even though they themselves have survived in this crisis. COV-layoff, a subjective and varied perception regarding to the layoff caused by COVID-19 among survivors, would affect survivor psychological and behavioral pattern in the post-downsizing time. COV-stress refers to a psychophysiological reaction caused by the overtaxing of employees' valued resources due to COVID-19 (Morelli and Cunningham, 2012). On the basis of the conservation of resources (COR) theory (Hobfoll, 1989), we propose that COV-layoff will decrease survivors' job performance by increasing COV-stress.

Social support is becoming more salient in helping survivors reduce the negative effect of

COV-layoff. We focus on two forms of social support, namely perceived organizational support (POS) against COVID-19 (hereafter referred to as POS-COV) and perceived family support (PFS) against COVID-19 (hereafter referred to as PFS-COV). POS-COV refers to the extent to which an organization cares about employees' well-being and values their contributions in confronting COVID-19 (Eisenberger et al., 1986). Because COVID-19 makes work in the hospitality industry more dangerous, employees expect the organization to provide more specific and targeted support in the COVID-19 era, therefore POS-COV is a contextual POS in the context of COVID-19. PFS-COV refers to the instrumental and emotional support employees receive from family members in confronting COVID-19 (Zimet et al., 1988). Support from family members is valuable for employees to work under the risk of COVID-19. PFS-COV is a contextual PFS, concerning how family members instrumentally and emotionally support employees in fighting against COVID-19. Comparing with the general POS and PFS, POS-COV and PFS-COV are context-specific in the COVID-19 pandemic. We propose that both POS-COV and PFS-COV are particularly important to attenuate the impact of COV-layoff on survivors' COV-stress and job performance. Figure 1 presents the research model.

Insert Figure 1 about here

In general, this study responds to the call that “urgent action is needed to mitigate the potentially devastating effects of COVID-19, action that can be supported by the behavioral and social sciences” (Van Bavel et al., 2020, p. 467). Specifically, it contributes to existing studies in the following three ways. First, this study empirically examines how COV-layoff influences employees' in-role and extra-role performance via COV-stress. This paper is among

the first attempts to explore how COV-layoff reduces employees' in-role and extra-role performance in the context of COVID-19. This is especially critical for hospitality firms, which have been heavily hit by COVID-19 and many of them have adopted the strategy of downsizing (Mao et al., 2020). Our study will provide implications for those firms in understanding and managing survivors' reactions to downsizing.

Second, based on COR theory, this study unpacks the mechanism underlying COV-layoff and job performance. Existing studies have mainly used justice-related theories to understand how and when layoff influences survivors' responses (Allen et al., 2001; Brockner et al., 1993; Kim and Choi, 2010; Konovsky and Folger, 1991). However, as resources are vital for survivors in the layoff situation (Hammond et al., 2019), COR theory represents a critical yet unexamined theoretical lens to understand how COV-layoff influences in-role and extra-role performance through COV-stress.

Third, this study examines the moderating effects of POS-COV and PFS-COV in the association between COV-layoff and employees' subsequent psychological and behavioral consequences. Employees instinctively preserve, maintain and utilize social support to cope against uncertainties such as layoffs (Cotter and Fouad, 2013). However, how social support reduces the detrimental effect of layoff remains unknown, especially in the COVID-19 context. This study adds to the literature by investigating the moderating roles of POS-COV and PFS-COV in mitigating the detrimental effect of COV-layoff.

Theory and Hypotheses

COR Theory

COR theory is one of the most dominant theories explaining human stress and well-being

(Halbesleben et al., 2014; Hobfoll et al., 2018). According to Hobfoll (1989), the central tenet of COR is to “strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources” (p. 516). Resources refers to anything that helps individuals achieve goals (Halbesleben et al., 2014), and it includes four forms: objects; personal characteristics; conditions; and energies (Hobfoll, 1989). People conserve resources by increasing resource gain and reducing resource loss, and resource loss is more harmful than resource acquisition (Halbesleben et al., 2014; Hobfoll, 2002). When people retain, gain, and build resources, they feel relaxed and safe; in contrast, they feel stressed and anxious when they lose resources or face a threatened resource loss (Halbesleben et al., 2014; Hobfoll et al., 2018).

COR theory is the theoretical foundation of this study. COV-layoff is a job stressor that indicates resource loss. POS-COV and PFS-COV are social resources that employees could mobilize from their organizations and families, respectively. COR theory posits that stress occurs “(a) when central or key resources are threatened with loss, (b) when central or key resources are lost, or (c) when there is a failure to gain central or key resources following significant effort” (Hobfoll et al., 2018, p. 104). Therefore, stress is especially likely to emerge when employees lack resource gain and, at the same time, encounter resource expenditure (Menges et al., 2017). As such, stress is a psychological response to the interplay between resource loss (COV-layoff) and resource gain (POS-COV and PFS-COV), which may influence one’s further resource investment into in-role and extra-role performance.

The Mediating Role of COV-stress

In line with COR theory (Hobfoll, 1989), we propose that COV-stress mediates the

relationship between COV-layoff and employee in-role and extra-role performances in the hospitality industry. Due to the COVID-19 pandemic, COV-layoff has occurred in many organizations, and employees are witnessing their contacts being laid off. COV-layoff is a stressor triggering survivors' COV-stress because it increases actual resource loss or resource loss threat (Hobfoll et al., 2018; Moore et al., 2004). First, COV-layoff triggers employees' uncertainty and anxiety and threatens their job security. In particular, COV-layoff is unpredictable and uncontrollable, which aggravates the resource loss. Second, COV-layoff increases the workload and responsibilities for surviving employees (Mishra and Spreitzer, 1998; Mujtaba and Senathip, 2020), and the additional work will further deplete resources (Brockner et al., 2004; Moore et al., 2004). Third, COV-layoff threatens social resources for remaining employees, resulting in the disruption of social relationships for survivors (Grunberg et al., 2001). The absence of contact with close colleagues/friends means survivors lack a channel to social benefits (Brockner et al., 2004; Van Dierendonck and Jacobs, 2012). Thus, COV-layoff increases COV-stress by consuming their valued resources.

COV-layoff increases employees' COV-stress, and subsequently reduces employees' in-role and extra-role performance. In-role performance refers to the accomplishment of formal job tasks in the job description (Williams and Anderson, 1991). Extra-role performance refers to the accomplishment of work beyond formal requirements, which is beneficial for coworkers and organizations (Williams and Anderson, 1991). Low levels of in-role and extra-role job performance indicate an escape from job stressors. According to COR theory, resource scarcity induces preventive coping to conserve the remaining resources (Halbesleben et al., 2014). COV-stress indicates that employees have insufficient resources to devote to work roles. In

addition, decreased in-role and extra-role performance provide employees a buffer from COV-stress to protect retained resources and avoid further resource loss (ten Brummelhuis and Bakker, 2012; Lin et al., 2019; McCarthy et al., 2016). Previous studies have established the association between exhaustion on decreased job performance (Wright and Cropanzano, 1998) and increased work withdrawal (Chong et al., 2020). We propose that COV-stress exerts effects on in-role and extra-role performance in the hospitality industry during the COVID-19 pandemic. Accordingly, we propose the following hypothesis.

Hypothesis 1. COV-layoff has a negative indirect effect on in-role performance (H1a) and extra-role performance (H1b) via COV-stress.

The Moderating Role of POS-COV

Gaining resources is critical for employees to cope with COV-stress. The *gain paradox principle* of COR theory argues that gaining resources becomes more salient in a situation of resource loss. In other words, resources are more valuable when the resource loss environment is high (Hobfoll et al., 2018). COV-layoff is a severe stressor that profoundly threatens or causes resource loss, so gaining resources from organizations is critical for employees in the current tough time. Social support is as a key resource for supplementing employees' resources pool and thus buffering the effect of stressor on stress (Carlson & Perrewé, 1999). According to the classic definition of POS (Eisenberger et al., 1986), POS-COV means that employees are concerned, their well-being is valued and their contributions are recognized by organizations in the face of COVID-19. For example, organizations recognize employees' contributions without the fear of COVID-19, organizations show their consideration during COVID-19, and organizations provide personal protection equipment to improve employees'

safety and well-being. POS-COV is a valuable and critical resource for employees in the hospitality industry to manage the influence of COV-layoff on their stressful response and work behaviors.

First, the toxic effects of COV-layoff on COV-stress can be relieved when POS-COV provides instrumental supportive resources to replenish employees' personal resources and help them cope with layoff (Chen and Eyoun, 2021; Hobfoll et al., 2018). These resources provided by organizations, such as funding, equipment, physical assistance, function as a resources caravan for survivors (Hobfoll et al., 2018). For example, a layoff means changes to organizational structure and job content. Organizations could provide employees with new job guidelines and training courses to help them adapt to new jobs and situations (Wayne et al., 1997). As a result, employees can gain motivation, a positive mindset, and a sense of control (Chen and Eyoun, 2021; Li et al, 2019), alleviating the COV-stress triggered by COV-layoff. These instrumentally supportive resources from POS-COV could neutralize the deconstructive impact of COV-layoff on COV-stress. Existing research has identified POS as a buffer between the stressor–stress process (Stamper and Johlke, 2003). Extending this finding, we propose that POS-COV would buffer the impact of COV-layoff on COV-stress.

Second, POS-COV provides emotionally supportive resources to help employees to counteract the negative effect of COV-layoff on COV-stress. Survivors are emotionally damaged, manifested in the form of guilt, anxiety, fear, and depression when their contacts are laid off (Grunberg et al., 2001; Mishra and Spreitzer, 1998). For example, employees may be in a great panic during the COVID-19 pandemic; they fear about the infection of virus and the loss of their own jobs and their important contacts. It is critical to alleviate employees' tension

and increase their confidence in being well treated, well valued and well recognized. POS-COV signals that organizations take care of employees' well-being and appreciate their effort (Rhoades and Eisenberger, 2002) in fighting against COVID-19 and COV-layoff. As a result, they have more emotional energies to cope with COV-layoff in the COVID-19 context. Therefore, through an emotional support channel, POS-COV buffers the detrimental influence of COV-layoff on survivors' COV-stress. In sum, we propose the following hypothesis:

Hypothesis 2. POS-COV negatively moderates the relationship between COV-layoff and COV-stress such that the relationship is weaker when the POS-COV is higher.

The Moderating Role of PFS-COV

PFS includes instrumental help and emotional support from family members (Zimet et al., 1988). PFS is critical for employees to work, and the existing studies show that PFS buffers the relationship between the external stressor and stress (Carlson and Perrewé, 1999; Lim and Lee, 2011; Viswesvaran et al., 1999). Because COVID-19 is highly contagious, employees working in the hospitality industry as well as their family members face a high risk of being infected and PFS-COV is a very important support to motivate employees to continue to work in the hospitality industry. Therefore, this study highlights PFS-COV and proposes that PFS-COV, serving as a social resource from intimate family members, relieves the negative effect that COV-layoff has on COV-stress.

First, PFS-COV provides instrumentally supportive resources for buffering the negative influence of COV-layoff on COV-stress. Employees and their family members are significantly impacted by COVID-19. As layoff requires survivors to take on a higher workload and more work responsibilities, family members may consequently bear more family responsibility,

sharing more trivial housework, and coordinating family activities to enable survivors to accommodate a new work schedule (Booth-LeDoux et al., 2020; King et al., 1995). In this way, employees who gain instrumental resources from their families can better cope with the demanding work environment (Booth-LeDoux et al., 2020). These resources are critical for employees to complement the resources threatened or actually lost through COV-layoff and thus suppress its negative effect on employee COV-stress.

Second, PFS-COV provides emotionally supportive resources that attenuate the relationship between COV-layoff and COV-stress. The emotional energies provided by the intimate family members will be of great importance for those survivors who experience negative emotions. Family members can decrease employees' anxiety and insecurity by displaying concern, consideration, and understanding (Halbesleben et al., 2010; King et al., 1995). Furthermore, the emotional support from family members can complement the insufficient social resources due to COV-layoff, so employees can share their feelings with family members and rely on them to help them pull through (Ferguson et al., 2016). As a result, the influence of COV-layoff on COV-stress is alleviated. Based on these arguments, we propose the following hypothesis:

Hypothesis 3. PFS-COV negatively moderates the relationship between COV-layoff and COV-stress such that the relationship is weaker when the PFS-COV is higher.

The Moderated Mediation Model

Combining the preceding rationale of mediation in Hypotheses 1a and 1b, and the arguments of moderation in Hypotheses 2 and 3, we further posit that POS-COV and PFS-COV moderate the negative indirect effects that COV-layoff has on in-role performance and extra-

role performance via COV-stress. When POS-COV and PFS-COV are at a higher level, the resource-gaining process is activated, which can mitigate the negative impact of COV-layoff on job performance via COV-stress. In contrast, indirect effects will be strengthened when POS-COV and PFS-COV are at a lower level.

Hypothesis 4. POS-COV negatively moderates the indirect effects of COV-layoff on in-role performance (H4a) and extra-role performance (H4b) through COV-stress such that these indirect effects are weaker when POS-COV is higher.

Hypothesis 5. PFS-COV negatively moderates the indirect effects of COV-layoff on in-role performance (H5a) and extra-role performance (H5b) through COV-stress such that these indirect effects are weaker when PFS-COV is higher.

Method

Procedures and Sample

This study was approved by the IRB of the first author's institution (Protocol # EM200006). Data were collected in a theme park promoting Chinese traditional cultures to tourists in Hubei province in Mainland China. It was a relatively new theme park yet had a strong market performance prior to the COVID-19 pandemic. The company business was suspended from late January 2020, when the Chinese government imposed a lockdown in Wuhan and other cities in Hubei province, to the middle of April 2020, when the lockdown order was released. To survive from the downturn in the hospitality and touring market, the company was forced to downsize in order to cut staffing costs (Hao et al., 2020). As a result, many employees were laid off.

The survey was conducted after the completion of the layoff, so all the participants were

survivors. With the consent of top managers of the company, we collected the list of names of employees and front-line supervisors who were willing to take part in this survey. Finally, 335 employees and their 44 supervisors agreed to participate. The survey was conducted through a two-stage process. In the first stage, employees completed the employee surveys, including the measures of COV-layoff, COV-stress, POS-COV, and PFS-COV. In the second stage, which was one week later, supervisors were required to finish the supervisory survey, including the measures of employees' in-role and extra-role performance.

All the participants received an envelope including a consent letter and a paper-pencil survey. The consent letter explained the research purpose and procedure, and guaranteed the confidentiality of the response. The participants were encouraged to finish the survey with the cash as an incentive (1.5–3 dollars) attached to the envelopes. Participants filled in the survey during work hours and returned it to the research assistant in a sealed envelope.

After the distribution–return process of the surveys, we obtained a sample of 302 employees (90.15%) and 42 supervisors (95.45%) who provided complete and valid answers. Among the employee sample, 55% were male, ages ranged from 20 to 58 years with an average of 33.20 years ($SD = 7.66$), and the length of education ranged from 9 years (i.e., middle-school level) to 16 years (i.e., bachelor level) with an average of 13.23 years ($SD = 2.17$).

Measurement

The survey was in Chinese, and the translation and back-translation procedure was adopted to translate the English scale. Two managers in the theme park were invited to review the surveys to make sure that the participants in their company could easily understand and answer the response items. All the items were rated on a 7-point Likert scale ranging from (1)

“strongly disagree” to (7) “strongly agree.”

COV-layoff. Four items from Moore et al. (2004) were adopted to measure employees’ COV-layoff. Moore et al (2004) asked respondents to rate whether their indirect but important contacts experienced layoff in past five years, this original measure is not an observed layoff in a specific situation, so it is not fully suitable for measuring the COV-layoff in this study. To measure this construct, we slightly modified the item wording to reflect the meaning and definition of this variable in this study. A sample item is: “COVID-19 caused my close friends in the company to be laid off.” The Cronbach’s α of this scale was .95.

COV-stress. Three items from Menges et al. (2017) were used to measure COV-stress. We slightly modified the item wording to reflect the COVID-19 situation. A sample item is: “Due to COVID-19, I feel stressed.” The Cronbach’s α of this scale was .96.

POS-COV. A short version of the POS scale, including six items, was used in this study (Shanock and Eisenberger, 2006). We also slightly changed the item wording to fit the COVID-19 situation. A sample item is “During COVID-19, my organization is willing to help me when I need a special favor.” The Cronbach’s α of the scale was .94.

PFS-COV. A scale with four items developed by Zimet et al. (1988) was used to measure PFS-COV (Cronbach’s $\alpha = .897$). A sample item is “I get the emotional help and support I need from my family during COVID-19.” The Cronbach’s α of this scale was .90.

In-role performance. Five items from Eisenberger et al. (2010) were used to measure in-role performance in the recent month. A sample item is “This employee meets the formal performance requirements of the job.” The Cronbach’s α of this scale was .95.

Extra-role performance. Five items from Lee et al. (2006) were used to measure extra-

role performance in the recent month. A sample item is “This employee frequently goes out of their way to help a coworker.” The Cronbach’s α of this scale was .95.

Results

Descriptive Statistics and Confirmatory Factor Analysis

Confirmatory factor analysis was employed to examine the discriminant validity of our measurements. The results are summarized in Table 1 and show that the proposed six-factor model had a better model fit to the data ($\chi^2 = 895.091$, $df = 309$, comparative fit index [CFI] = .928, goodness of fit index [GFI] = .918, standardized root mean square residual [SRMR] = .052, root mean square error of approximation [RMSEA] = .079) than any other alternative models. Therefore, we found evidence of the discriminant validity of the measurements.

Table 2 presents the means, standard deviations, and correlations of studied variables.

Insert Tables 1 and 2 about here

Testing the Hypotheses

A multilevel analysis is needed to account for the nested structure of our data (one supervisor evaluated about eight employees). Following the suggestion by Preacher et al. (2010), we used the multilevel structural equation modeling approach to analyze the data with Mplus 7.0 (Muthén and Muthén, 2010). To test the significance of the mediating role of COV-stress, we created confidence intervals (CIs) for the indirect effect via the Monte Carlo simulation procedure with R software (Preacher et al., 2010).

Table 3 shows that COV-layoff was positively related to COV-stress ($\beta = .304$, $p < .01$), which in turn was negatively related to both in-role performance ($\beta = -.059$, $p < .01$) and extra-role performance ($\beta = -.082$, $p < .01$). With 50,000 Monte Carlo repetitions, we found that the

indirect effects of COV-layoff on in-role performance (estimate = $-.018$; 95% CI $[-.035, -.004]$) and extra-role performance (estimate = $-.025$; 95% CI $[-.048, -.006]$) via COV-stress were both significant. Thus, these results supported Hypotheses 1a and 1b.

As shown in Table 4, the interactive term of COV-layoff and POS-COV was positively related to COV-stress ($\beta = .128, p < .05$). The moderation effect is plotted in Figure 2, indicating that the relationship between COV-layoff and COV-stress was strengthened ($\beta = .449, p < .001$) when POS-COV was high (one standard deviation above the mean), yet weakened ($\beta = .193, p < .10$) when POS-COV was low (one standard deviation below the mean), which was opposite to Hypothesis 2.

The interactive term of COV-layoff and PFS-COV was negatively related to COV-stress ($\beta = -.077, p < .05$) and the moderation effect is plotted in Figure 3, indicating that the relationship between COV-layoff and COV-stress was stronger ($\beta = .381, p < .01$) when PFS-COV was low, and weaker ($\beta = .228, p < .05$) when PFS-COV was high, which supported Hypothesis 3.

We have summarized the results of the conditional indirect effects in Table 5. Monte Carlo simulation analyses showed that the indirect effects of COV-layoff on both types of job performance via COV-stress were significant at high levels of POS-COV or low levels of PFS-COV, but not significant at low levels of POS-COV or high levels of PFS-COV. These results supported Hypothesis 5 (both H5a and H5b) but did not support Hypothesis 4 (neither H4a nor H4b), suggesting high PFS-COV buffers the negative impact of COV-layoff on survivors' COV-stress and job performance, yet high POS-COV augments this negative influence. We discuss this finding more thoroughly in the following sections.

Insert Tables 3, 4, and 5, Figures 2 and 3 about here

Post Hoc Analyses

Three sets of post hoc analyses were conducted to increase the robustness of the results. First, we controlled the curvilinear effects of COV-stress on performance when examining Hypothesis 1. The results show that the square term of COV-stress was not related to either in-role performance ($\beta = -.014, n.s$) or extra-role performance ($\beta = -.025, n.s$). Second, we examined the full moderation model of POS-COV and PFS-COV in the mediation model proposed in Hypothesis 1. Results show that the second-stage moderation and direct-effect moderation were not supported. Third, we examined the possibility that three-way interaction between COV-layoff, POS-COV, and PFS-COV predicted COV-stress. The results showed that this three-way interaction was not related to COV-stress ($\beta = -.011, n.s$).

Discussion

Chang et al. (2020) stated: “COVID-19 has changed the world forever in every imaginable respect and has impacted heavily on all individuals and on every industry, including the international travel, tourism demand, and hospitality industry” (p.1). Unfortunately, we know little about how COVID-19 affects employees and organizations in the hospitality industry. Through the lens of COR theory, this study unpacks *whether, how* and *when* COV-layoff influenced surviving employees’ in-role and extra-role performance in the hospitality industry.

Theoretical Implications

This study contributed to the literature in three ways. First, in the context of COVID-19, we focused on the hospitality industry and examined the psychological and behavioral consequences of COV-layoff for survivors. A large number of hospitality companies have been

restricting businesses and downsizing in order to survive in the COVID-19 pandemic (ILO, 2020; Mao et al., 2020; Hao et al., 2020), and millions of employees in the hospitality industry have been laid-off. It is therefore urgent, indeed vital, to know whether and how COV-layoff influences employee outcomes. This study is among the first attempts to examine how survivors react to COV-layoff. We found that COV-layoff increased employees' COV-stress, and subsequently reduced in-role and extra-role performance. Our findings corroborate the "survivor syndrome," where survivors experience lower well-being and lower performance (De Vries and Balazs, 1997; Kivimäki et al., 2003; Parker et al., 1997). These findings show us that even though downsizing is an urgent action in the COVID-19, it has costs in terms of stress increase and performance reduction in remaining employees.

Second, on the basis of COR theory, this study revealed a stress process whereby COV-layoff is negatively associated with job performance. The majority of prior studies has examined the effects of layoff on employees' job performance through a justice perspective. (Konovsky and Folger, 1991; Mellor, 1992; Saad and Elshaer, 2017; Skarlicki et al., 1998). Without denying the valuable implications of the justice perspective, we argue that resources play an essential role for understanding employee stress in the layoff situation. This study grounded on COR theory highlights the mechanism underlying COV-layoff and job performance during the COVID-19 pandemic. We found that COV-layoff, a resource loss situation for individuals, induced survivors' COV-stress that was detrimental to both in-role and extra-role performance. Our findings are consistent with the COR proposition regarding how to cope with situations characterized by a lack of resources (Halbesleben et al. 2014). Exposure to the threatening event (COV-layoff) worsens personal psychological resources

(causing COV-stress) and further leads employees to adopt defensive attempts to conserve resources in terms of withdrawing the in-role and extra-role performance level.

Third, we found that PFS-COV buffered the negative effect of COV-layoff on employees' psychological and behavioral outcomes. PFS-COV is essential to cope with the pandemic situation. The threat of COV-layoff impacts not only employees but also their families. COV-layoff may heighten employees' concerns about job security and threaten their families. Gaining understanding and support from family members is helpful in this job-threatening situation. Our results suggest that high social support from family members may help survivors get through this tough time, reducing their COV-stress and maintaining their performance. The importance of PFS in coping with traumatic life events has been demonstrated in previous studies grounded on COR theory (e.g., Hobfoll, 2001). Our study highlighted the significant role of PFS-COV as a social resource in alleviating the harmful effect of COV-layoff on job performance through increasing COV-stress.

Unexpectedly, POS-COV augmented (rather than buffered) the positive relationship between COV-layoff and COV-stress. In other words, survivors tend to be more stressed and perform even worse when perceiving higher (vs. lower) POS-COV. This finding seems to go against the notion of COR that individuals with more resources (e.g., POS) can better complement resource loss and prevent future resource loss. We speculate that employees may believe that COV-layoff is not their organization's fault, and they blame the external shock (i.e., COVID-19) when POS-COV is high, (Folger and Skarlicki, 1998). Employees recognize that the firm has endeavored to do its utmost and that COV-layoff is inevitable, so they may turn to blaming COVID-19 for inducing the layoff and, thus, the negative effect of COV-layoff on

COV-stress is thus strengthened. This issue certainly needs more investigation in future studies, and we also call for more attentions on POS in the post-layoff situation.

Practical Implications

This study has several practical implications for management in the hospitality industry. First, managers should realize the double-edged sword effect of COV-layoff. Downsizing is a survival strategy for organizations in responding to COVID-19. However, downsizing, in itself, does have costs. Our findings found a performance impairment process underlying COV-layoff. Managers should be highly aware that COV-layoff has a negative impact on survivors' in-role and extra-role performance via increasing COV-stress. Helping survivors to maintain productivity should be a key issue in the post-layoff period.

Second, faced with COVID-19 and COV-layoff, employees are inevitably feeling stressed, and reducing employees' stress should be on the organization's agenda. Though we found that POS-COV did not attenuate the negative effect of COV-layoff on COV-stress, we are by no means implying that organizations should not implement support-related practices; rather, we suggest that managers should develop a specific employee assistance program that is tailored to help employees cope with the public health and socio-economic crisis.

Third, our findings suggest that PFS-COV alleviates the negative effect of COV-layoff on COV-stress. On the organizational side, managers may consider, for instance, writing letters to employees' family members, informing them of the downsizing situation in the hospitality industry and the company. Organizations could also encourage employees to seek PFS-COV to better adapt to tough times. By engaging in these activities, the company strengthens employees' communication with their families, and they are likely to gain understanding and

support from these families. On the employee side, they should be more open in sharing their feelings about the stressful situation with their family members to obtain their help and support.

Limitations and Future Research Directions

Limitations and future directions should be highlighted. First, although we separated employee surveys from supervisor surveys with a one-week time interval, this is not a longitudinal design. We call for future research employing a longitudinal design to replicate our findings. Second, although this study explored the passive response to COV-layoff, Mishra and Spreitzer (1998) propose that survivors may have a positive response to layoff. This study did not explore the potential positive response to COV-layoff; for example, COV-layoff may invoke family motivation, and consequently enhance employees' job performance. Third, our results suggest that the moderating effect of POS-COV in the relationship between COV-layoff and COV-stress is more complex and needs to be further explored. Fourth, our sample is from the hospitality industry in China. The external validity of our findings in other industries/countries needs to be further examined.

Conclusions

On the basis of COR theory, we investigated the influence of COV-layoff on survivors' performance in the hospitality industry. Two-wave and two-source data were collected from a sample of 302 employees and their supervisors. Results showed that during the COVID-19 pandemic, COV-layoff was associated with higher levels of COV-stress, which in turn related to decreased in-role and extra-role performance rated by supervisors. Employees who received higher PFS-COV tended to experience lower COV-stress invoked by COV-layoff, and their performance did not deteriorate. Contrary to our expectation, employees who perceived higher

(rather than lower) POS-COV reported higher COV-stress associated with COV-layoff, and their performance declined significantly.

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Table 1. The results of confirmatory factor analysis

Models	χ^2	<i>df</i>	CFI	TLI	SRMR	RMSEA
Six-factor model (baseline model)	895.091	309	.928	.918	.052	.079
Five-factor model ^a	1291.490	314	.88	.865	.075	.102
Five-factor model ^b	2150.78	314	.774	.747	.109	.139
Five-factor model ^c	1530.549	314	.85	.833	.081	.113
Five-factor model ^d	1205.264	351	.89	.877	.056	.097

Note: *n*=302.

Six-factor model is baseline model with six measures.

Five-factor model ^a combines COV-layoff and COV-stress on the basis of baseline model.

Five-factor model ^b combines COV-layoff and POS-COV on the basis of baseline model.

Five-factor model ^c combines PFS-COV and POS-COV on the basis of baseline model.

Five-factor model ^d combines in-role performance and extra-role performance on the basis of baseline model.

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Table 2 Means, standard deviations and correlations

Variable	M	SD	1	2	3	4	5	6	7	8
1. Gender(T1)	.55	.50								
2. Age (T1)	33.2	7.66	-.03							
3. Education(T1)	13.23	2.17	.18*	-.55***						
4. COV-layoff (T1)	4.76	1.41	.13*	-.20***	.16**					
5. COV-stress (T1)	3.96	1.43	-.05	-.16**	-.01	.29***				
6. POS-COV (T1)	4.69	1.16	.01	.21***	-.16**	-.34***	-.14*			
7. PFS-COV (T1)	5.39	1.13	.12	.15**	-.15**	.03	-.06	.52***		
8. In-role performance (T2)	5.87	.77	-.27***	-.10	-.09	-.08	-.06	.13*	.02	
9. Extra-role performance (T2)	5.45	.96	-.22***	-.17**	-.06	-.02	-.05	.05	-.02	.81***

Note: $n=302$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$ (two-tailed).

Table 3 Indirect effects of COV-stress between COV-layoff and in-role and extra-role performance

Variable	COV-stress	In-role performance	Extra-role performance
	(T1)	(T2)	(T2)
	β (S.E)	β (S.E)	β (S.E)
Intercept	3.978(.102)**	5.119 (1.653)***	3.92 (2.169)*
Gender (T1)	.359(.246)	.047(.089)	.106(.118)
Age (T1)	-.002(.015)	-.002(.005)	-.001(.007)
Education(T1)	-.096(.055)	-.005(.02)	.011(.026)
COV-layoff (T1)	.304(.065)**	-.007(.024)	.007(.032)
COV-stress (T1)		-.059(.022)**	-.082(.03)**
R^2	.092**	.031	.035
IND1	-.018 (95% CI [-.035, -.004])		
IND2	-.025 (95% CI [-.048, -.006])		

Note: $n=302$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$ (two-tailed). IND1 means indirect effect of COV-layoff on in-role performance via COV-stress; IND2 means indirect effect of COV-layoff on extra-role performance via COV-stress.

Table 4 Moderation of POS-COV and PFS-COV on the relationship between COV-layoff and COV-stress

Variable	COV-stress (T2)	COV-stress (T2)
	β (S.E)	β (S.E)
Intercept	3.705 (.161)***	3.964 (.383)***
Gender (T1)	.357(.255)	.379(.254)
Age (T1)	-.001(.009)	-.002(.009)
Education (T1)	-.102(.063)	-.097(.062)
COV-layoff (T1)	.321(.091)***	.305(.107)**
POS-COV (T1)	-.024(.109)	
PFS-COV (T1)		-.048(.122)
COV-layoff \times POS-COV	.128(.058)*	
COV-layoff \times PFS-COV		-.077(.036)*
R^2	.134*	.107 ⁺

Note: $n=302$, ⁺ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$ (two-tailed).

Table 5 Conditional indirect effects of COV-stress at different levels of moderators

Mediation model	Level of moderator	Indirect effect
COV-layoff → COV-stress → In-role performance	Low POS-COV	-.011 (95% CI[-.027, .002])
	High POS-COV	-.025 (95% CI[-.053, -.006])
	Difference	-.015 (95% CI[-.040, -.001])
COV-layoff → COV-stress → Extra-role performance	Low POS-COV	-.016 (95% CI[-.039, .003])
	High POS-COV	-.036 (95% CI[-.075, -.009])
	Difference	-.021 (95% CI[-.057, -.002])
COV-layoff → COV-stress → In-role performance	Low PFS-COV	-.023 (95% CI[-.048, -.005])
	High PFS-COV	-.013 (95% CI[-.033, .001])
	Difference	.009 (95% CI[.001, .025])
COV-layoff → COV-stress → Extra-role performance	Low PFS-COV	-.033 (95% CI[-.068, -.008])
	High PFS-COV	-.019 (95% CI[-.046, .001])
	Difference	.013 (95% CI[.001, .036])

Note: $n=302$, Bootstrap $n=50000$.

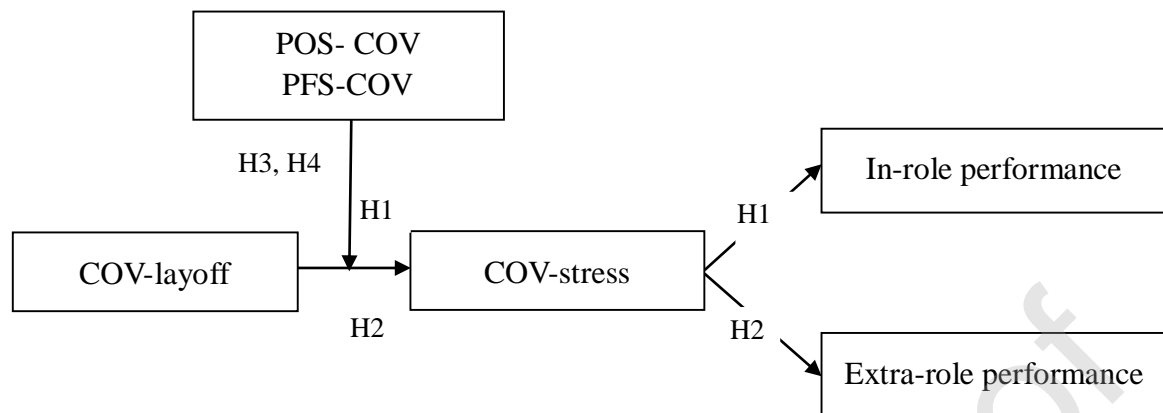


Fig. 1. Research model

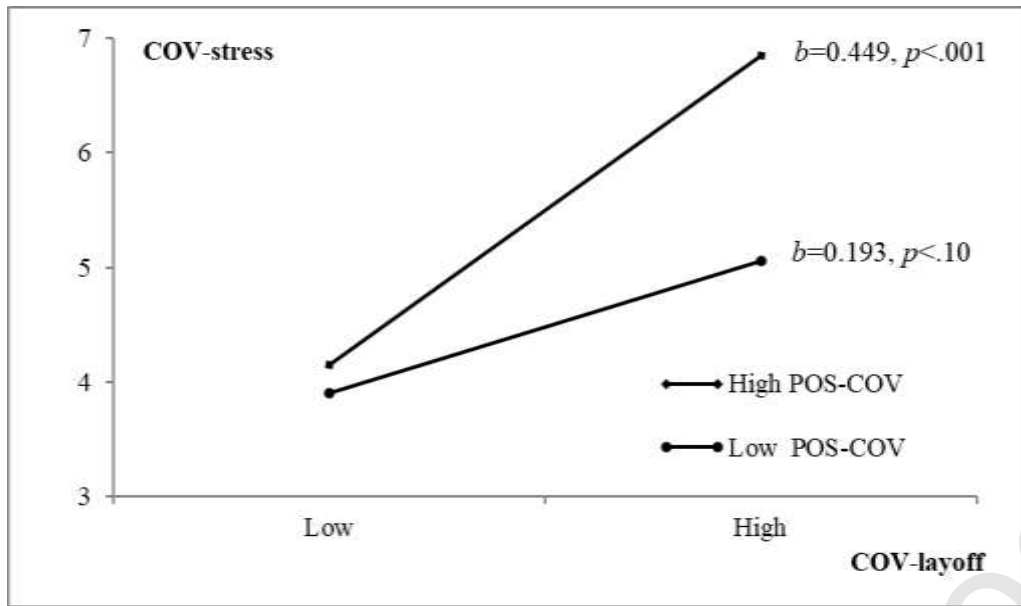


Fig. 2. Moderating effect of POS-COV in the relationship between COV-layoff and COV-stress

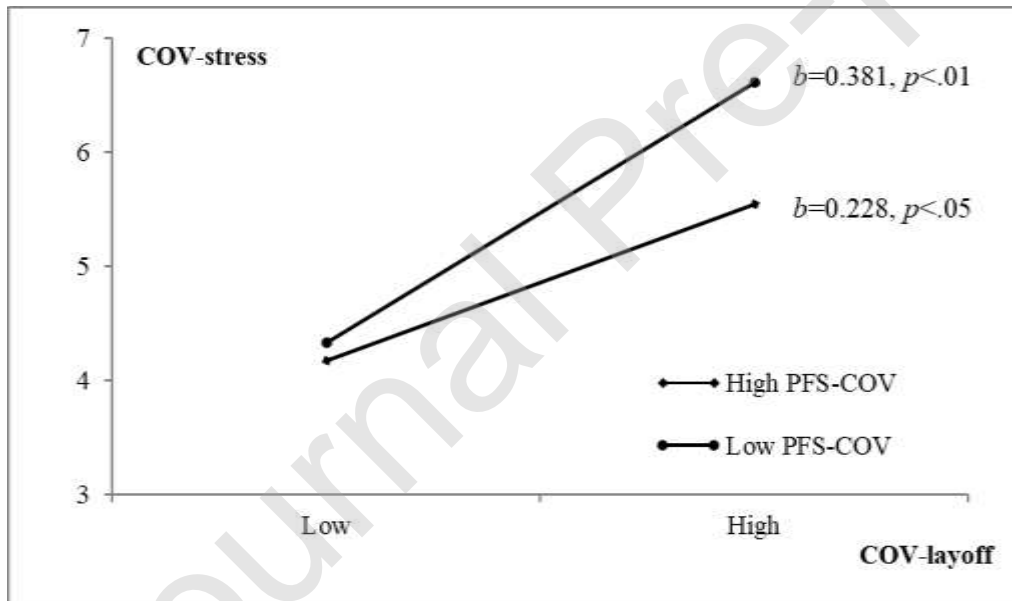


Fig. 3. Moderating effect of PFS-COV in the relationship between COV-layoff and COV-stress