

The Psychological Implications of COVID-19 on Employee Job Insecurity and its Consequences: The Mitigating Role of Organization Adaptive Practices

Weipeng Lin¹, Yiduo Shao², Guiquan Li³, Yirong Guo⁴, and Xiaojun Zhan⁵

¹ School of Management, Shandong University

² Department of Management, Warrington College of Business, University of Florida

³ Management and Organization Department, Rennes School of Business

⁴ Department of Leadership and Organization Management, School of Economics and Management, Tsinghua University

⁵ School of Business Administration, Jiangxi University of Finance & Economics

The current study aims to understand the detrimental effects of COVID-19 pandemic on employee job insecurity and its downstream outcomes, as well as how organizations could help alleviate such harmful effects. Drawing on event system theory and literature on job insecurity, we conceptualize COVID-19 as an event relevant to employees' work, and propose that event strength (i.e., novelty, disruption, and criticality) of COVID-19 influences employee job insecurity, which in turn affects employee work and non-work outcomes. We also identified important organization adaptive practices responding to COVID-19 based on a preliminary interview study, and examined its role in mitigating the undesired effects of COVID-19 event strength. Results from a two-wave lagged survey study indicated that employees' perceived COVID-19 event novelty and disruption (but not criticality) were positively related to their job insecurity, which in turn was positively related to their emotional exhaustion, organizational deviance, and saving behavior. Moreover, organization adaptive practices mitigated the effects of COVID-19 event novelty and criticality (but not disruption) on job insecurity. Theoretical and practical implications are discussed.

Keywords: COVID-19, job insecurity, event system theory, event strength, organizational practice

Supplemental materials: <https://doi.org/10.1037/apl0000896.supp>

The outbreak of the novel coronavirus (COVID-19), which has been classified as a global pandemic by World Health Organization (2020a), rocked the world severely. As the infectious disease continued to spread, many countries adopted social distancing and lockdown policies, and many businesses and services were closed or suspended, which resulted in historic numbers of furloughs and layoffs worldwide (Fouad, 2020; Hamouche, 2020; Restubog et al., 2020; Sergeant & Stajkovic, 2020). According to recent estimates by International Labor Organization (2020), up to 340 million people around the globe may lose their jobs in the second half of 2020 due to the COVID-19 pandemic. This indicates that the COVID-19 brings about enormous employment uncertainty for employees, highlighting the sore need to understand the implications of COVID-19 on employees' job insecurity and its downstream outcomes, as well as how organizations could help

employees cope with the pandemic (Akkermans et al., 2020; Blustein et al., 2020; Grote & Pfrombeck, 2020; Moen et al., 2020; Probst et al., 2020; Spurr & Straub, 2020; Wilson et al., 2020). Nevertheless, little scholarly attention has been paid to exploring this important research question.

Although not empirically investigated, the implications of COVID-19 on employees' job insecurity have been discussed in mass media, focusing on how the slump in economy caused by COVID-19 (e.g., economic downturn, financial loss) might lead to employment uncertainty and job insecurity (e.g., Brennan, 2020; Nebel & Mutikani, 2020). However, as job insecurity is a psychological concept that reflects the subjectively perceived threat to the continuity and stability of employment (Shoss, 2017), it is conceivable that one's perception of job insecurity is not solely influenced by economic contexts, and these discussions centering on the economic consideration may not be able to fully unpack the psychological implications of COVID-19 on job insecurity. Indeed, even when facing the same job-threatening event that signals financial constraints, individuals' psychological perceptions of this event may vary substantially, rendering different levels of job insecurity (e.g., Chen et al., 2020; Shoss, 2017). Thus, in the context of COVID-19 outbreak, we argue that how individuals psychologically approach COVID-19 may play a crucial role in shaping their levels of perceived job insecurity.

To understand how COVID-19 engenders psychological impacts on one's job insecurity and its downstream outcomes, we draw on event system theory (Morgeson et al., 2015) and conceptualize the COVID-19 pandemic as an event closely related to employees' work. According to event system theory (Morgeson et al., 2015), the

Weipeng Lin  <https://orcid.org/0000-0001-5362-6638>

This work was supported in part by the Young Scientists Fund of the Ministry of Education of Humanities and Social Sciences Project in China (Grant No. 20YJC630077) and the National Natural Science Foundation of China (Grant Nos. 71532005, 71732004, and 71502086).

Correspondence concerning this article should be addressed to Weipeng Lin, School of Management, Shandong University, 27 Shanda South Road, Jinan 250100, China. Email: linweipeng@sdu.edu.cn and Xiaojun Zhan, School of Business Administration, Jiangxi University of Finance & Economics, 169 East Shuanggang Road, Nanchang 330013, China xjzhan@163.com

impact of an event (referred to as event strength) is determined by its degrees of novelty, disruption, and criticality; the more an event is perceived as novel, disruptive, and critical, the more likely it impacts individual's beliefs, attitudes, and behaviors in response. In line with this perspective, we argue that employees' perceptions of COVID-19 event strength may shape the extent to which they feel insecure about their jobs, which in turn affects their psychological and behavioral reactions. In particular, we focus on employees' emotional exhaustion, organizational deviance, and saving behavior as key outcomes so as to comprehensively gauge how perceived COVID-19 event strength and the resulted job insecurity engender poor work-related wellbeing, dysfunctional work behavior, and extra-organizational coping behaviors, respectively (Shoss, 2017). Moreover, given the undesirable impacts of COVID-19, another important question worth exploring concerns how organizations can help alleviate such negative impacts. To this end, we identified *organization adaptive practices responding to COVID-19* based on a preliminary interview study, and examined its moderating effects. Figure 1 presents the overall research model.

The current study contributes to the literature in several ways. First, drawing on event system theory, the current study sheds light on how employees psychologically approach COVID-19 as a key work-related event by gauging employee perceptions of event novelty, disruption, and criticality, offering a unique lens to uncover the psychological implications of this ongoing global crisis. Second, in so doing, our study also adds to the literature on job insecurity by expanding its antecedents, because previous research examining environmental shocks (e.g., economic recession, organizational change) as antecedents of job insecurity mainly focused on either macro-economic indices (e.g., unemployment rate, Gross Domestic Product [GDP]) or meso-organizational contexts (e.g., occurrence of organizational downsizing or workplace reorganization), neglecting psychological antecedents regarding how persons conceive a largescale crisis event (Lee et al., 2018; Shoss, 2017). Third, by examining the indirect effects of COVID-19 event strength on employee outcomes (i.e., emotional exhaustion, organizational deviance, and saving behavior) via job insecurity, we provide empirical insights into the potential linkage of COVID-19 to a comprehensive array of employee responses, including psychological and behavioral reactions at both work and non-work domains. Fourth, by identifying organization adaptive practices responding to

COVID-19 and demonstrating the buffering effects of such practices, the current study not only offers a more nuanced picture depicting the contingent effects of COVID-19 event strength, but also provides timely practical implications for organizational decision makers regarding how to manage employees' concerns of job insecurity under the global crisis.

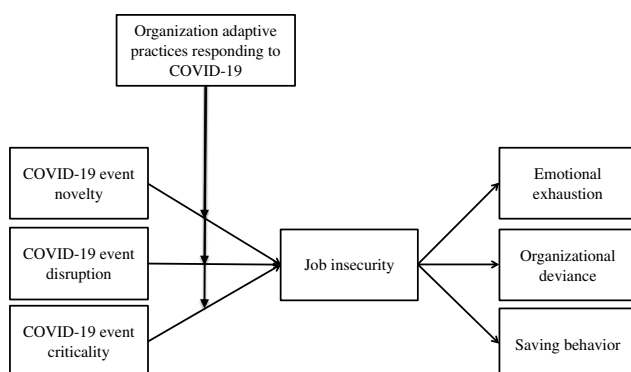
Literature Review and Hypothesis Development

The COVID-19 Event Strength, Perceived Job Insecurity, and Downstream Outcomes

According to event system theory (Morgeson et al., 2015), event strength, indicating the extent to which an event is meaningful and impactful, is quantified by three event characteristics: novelty, disruption, and criticality. As it stands, an event becomes salient and impactful when it is perceived as novel, disruptive, and critical (Morgeson et al., 2015). Based on event system theory (Morgeson et al., 2015), we define *COVID-19 event novelty* as the extent to which the COVID-19 pandemic is different and unexpected compared to previous events in that there are no clear and established procedures and guidelines to direct employees' behaviors at work, *COVID-19 event disruption* as the degree of changes that employees experience in the way they work (e.g., work activities, procedures, and/or routines) or complete their jobs due to the COVID-19 pandemic, and *COVID-19 event criticality* as the degree to which the COVID-19 pandemic hinders employees' long-term success at work. These definitions match the original theorizing of the constructs well (e.g., Chen et al., 2020; Morgeson et al., 2015), as the construct of event novelty focuses on perceptions about the lack of clear procedures guiding employees in the workplace, event disruption focuses on perceptions about interferences with one's in-role task completion, and event criticality entails a long-term connotation and emphasizes that the pandemic is perceived as "a threat to future success" of employees at work (Chen et al., 2020, p. 5). According to Morgeson et al. (2015), these three event characteristics are conceptually distinct from each other. For example, an employee who believes that there is a clear procedure to follow at work during the pandemic (i.e., low novelty) may still feel disrupted by the pandemic and have to change the way he/she works (i.e., high disruption). In addition, an employee who feels that his/her work routine changes due to the pandemic (i.e., high disruption) may not necessarily think that the pandemic would hinder his/her attainment of long-term career success (i.e., low criticality). Although the COVID-19 pandemic is a single event occurring worldwide, as suggested by event system theory and related studies (e.g., Chen et al., 2020; Matusik et al., 2019), people may psychologically approach that same event in different ways, and thus results in different interpretations and reactions to it.

In light of the mass layoffs during the COVID-19 outbreak, we argue that an important implication of employees' perceptions of COVID-19 event strength is job insecurity. Job insecurity refers to employees' subjective perceptions of threats to the continuity and stability of their current employment (Shoss, 2017), which is influenced by environmental threat, such as economic fluctuations, industry decline, and organizational change (e.g., Burke, 1998; Debus et al., 2014; Jiang et al., 2020; Lee et al., 2018; Paulsen et al., 2005; Shoss, 2017; Sverke & Hellgren, 2002). In the current study, taking a psychological lens, we particularly focus on how

Figure 1
Hypothesized Research Model



individuals conceive the COVID-19 outbreak and argue that employees who perceive higher levels of COVID-19 event novelty, disruption, and criticality would be more concerned about job insecurity.

Specifically, COVID-19 event novelty reflects the unexpectedness of the COVID-19 outbreak, representing a lack of clear processes and procedures established at work to guide employee behaviors (Morgeson et al., 2015). When employees perceive a high level of COVID-19 event novelty, they feel that COVID-19 is unique and unexpected, with no clear and known procedures or guidelines directing their behaviors at work amid this crisis (Chen et al., 2020; Morgeson, 2005). Such unexpectedness and uniqueness at work may reflect organization's limited experience dealing with a similar crisis situation, and send a signal to employees that their organizations are ill-prepared to deal with COVID-19 effectively (Morgeson et al., 2015). As such, this may raise employees' concerns about the business continuity and survival of their organizations, induce their expectations of future organization downsizing, and provide danger signs that their jobs are at risk, rendering job insecurity perceptions (Akkermans et al., 2020; Ashford et al., 1989; Burke, 1998; Debus et al., 2014; Ito & Brotheridge, 2007; Paulsen et al., 2005; Sverke & Hellgren, 2002). In contrast, when employees perceive the COVID-19 event as less novel, they are more likely to interpret that their organizations deal with the pandemic well and their employment should be secure, which results in lower levels of perceived job insecurity.

COVID-19 event disruption reflects changes or discontinuity in the work environment, representing the degree to which the COVID-19 pandemic changes employees' work activities, procedures, and/or routines (Hoffman & Ocasio, 2001; Morgeson et al., 2015). When employees perceive COVID-19 as disruptive, they feel that COVID-19 disrupts their usual work activities and they can hardly fulfill their jobs in the same way as it used to be prior to the pandemic (McFarland et al., 2020; Morgeson et al., 2015). For example, due to the COVID-19 and its related containment measures (e.g., lockdown, quarantine, social distancing, and travel restrictions) and possible health risks (e.g., illness and hospitalization), their ongoing work routines may be altered (e.g., cannot work in the office or have face-to-face interaction with colleagues or clients as usual) and their abilities to complete work tasks may be hampered (e.g., difficult to get access to important work-related information and resources, difficult to engage in teamwork, or difficult to sell products and services to clients; Brooks et al., 2020; Chong et al., 2020; Gasparro et al., 2020; Truxillo et al., 2020). As such, employees who are highly disrupted by COVID-19 may find it difficult to get work done and fulfill job responsibility, which could put them at risk of losing their jobs, leading to higher levels of perceived job insecurity (Akkermans et al., 2020; Erlinghagen, 2007; Shoss, 2017). In contrast, employees who perceive the COVID-19 as less disruptive feel that their ways of doing work do not change much and their capability of accomplishing work tasks is not undermined by the pandemic, resulting in less concerns about job insecurity.

COVID-19 event criticality represents the extent to which the COVID-19 event affects employees' long-term success at work (Chen et al., 2020; Morgeson & DeRue, 2006; Morgeson et al., 2015). While event disruption indicates the extent to which the

COVID-19 pandemic changes employees' current work routines and processes, event criticality reflects the degree to which COVID-19 curtails employees' attainment of long-term success of their working lives or careers (Morgeson & DeRue, 2006; Morgeson et al., 2015). Employees experiencing high levels of COVID-19 event criticality would feel that the COVID-19 event is severely affecting their long-term career planning and prospect, which creates uncertainty for their future work and reduces their sense of control over their working lives (Akkermans et al., 2020; Morgeson & DeRue, 2006; Sinclair et al., 2020). All of these would magnify employees' concerns of job insecurity (Ashford et al., 1989; Lee et al., 2018; Shoss, 2017; Sverke & Hellgren, 2002). For example, an employee may have made career plans (e.g., planned to engage in training, further education) to master knowledge and skills required for his/her job and maintain competitive and stable in his/her work position. However, such plans may fall apart due to the pandemic (e.g., training was canceled, school was closed), which makes the employee sense a loss of control over and uncertainty about stability of his/her job and career (e.g., worrying about whether he/she can keep the job in the future), increasing his/her concerns of job insecurity. In contrast, for employees who perceive low levels of event criticality, their long-term career planning is less affected by COVID-19 and thus they are less likely to experience uncertainty and lack of control, which renders less concerns about job insecurity. Thus, we propose:

Hypothesis 1: COVID-19 event (a) novelty, (b) disruption, and (c) criticality are positively related to perceived job insecurity.

Consistent with the job insecurity literature (Shoss, 2017), we focus on the effects of job insecurity on three key psychological and behavioral reactions: emotional exhaustion, organizational deviance, and saving behavior. Specifically, job insecurity implies a threat to employees' valuable resources, such as potential loss of job, valuable job features, personal status, and income. Dealing with such threat is highly stressful and may lead to psychological strain, of which a predominant manifestation is emotional exhaustion (Jiang & Lavaysse, 2018; Shoss, 2017). In addition, the stressful experience associated with job insecurity may undermine employees' self-regulation abilities, rendering increased organizational deviance (Jiang & Lavaysse, 2018; Kooij, 2020). Moreover, as job insecurity indicates potential loss of job and salary, to cope with such potential loss ahead of time, employees with high levels of job insecurity may engage in saving behavior and reduce unnecessary expenditure (Lozza et al., 2013; Shoss, 2017; van Dalen & Henkens, 2020). In short, job insecurity is positively related to employees' emotional exhaustion, organizational deviance, and saving behavior.

Taken together, we further expect that event strength may have indirect effects on these outcomes through job insecurity, such that employees who perceive the COVID-19 event as more novel, disruptive, or critical would interpret their job as more insecure, which in turn results in higher levels of emotional exhaustion, organizational deviance, and saving behavior. Such prediction is consistent with event system theory's notion that event strength affects entity (e.g., employee) responses through an interpretive process in analyzing and understanding the meaning of the event (Morgeson et al., 2015). Thus, we posit:

Hypothesis 2: COVID-19 event (a) novelty, (b) disruption, and (c) criticality have indirect effects on employee outcomes via perceived job insecurity.

The Moderating Role of Organization Adaptive Practices Responding to COVID-19

In the current study, we also aim to explore what organizational practices could help mitigate the detrimental effects of COVID-19 event strength. Based on our preliminary interviews with 20 employees working in various industry sectors, we identified four organizational practices that were most commonly viewed as effectively helping employees cope with the COVID-19 pandemic: (a) offering epidemic prevention materials, (b) flexible work hours, (c) telework, and (d) paid leave, which we termed as organization adaptive practices responding to COVID-19 (hereinafter referred to as *organization adaptive practices*). We also conceptually and empirically differentiated our measure of organization adaptive practices from other existing relevant constructs, such as perceived organizational support and so on. In the online [Supplemental Material A](#), we present more details about how we identified items for the construct of adaptive practices from the preliminary interviews and how this construct differs from other relevant constructs conceptually and empirically.

Based on our preliminary interviews and literature on job insecurity (e.g., [Lee et al., 2018](#)), we argue that organization adaptive practices may attenuate the harmful effects of COVID-19 event novelty, disruption, and criticality for employees. First, by implementing more adaptive practices in response to the COVID-19 pandemic, such as offering flexible work options and paid leave, organizations send more positive signals to employees that they are making effort to deal with the pandemic and ensure business continuity ([Carnevale & Hatak, 2020](#)), which may alleviate the effect of COVID-19 event novelty on employees' job insecurity concerns. Second, by adopting more flexible work practices including flexible working hours and telework, organizations could help employees better fulfill family obligations (e.g., childcare) and complete their jobs more effectively during the pandemic ([Carnevale & Hatak, 2020](#); [Hammer et al., 2005](#); [Sinclair et al., 2020](#)). As such, the effect of COVID-19 event disruption on employees' concerns of job insecurity is likely mitigated. Third, by adopting more adaptive practices, organizations provide more resources (e.g., autonomy and flexibility generated from flexible work practices) for employees to better adjust their career planning and cope with career shock during the pandemic, which help employees replenish their sense of control over the long-term success of their work, and reduce the uncertainty for their future job stability and continuity ([Huang et al., 2012](#); [Keim et al., 2014](#); [Kurtessis et al., 2017](#); [Rhoades & Eisenberger, 2002](#); [Thompson & Prottas, 2006](#)). This may attenuate the effect of COVID-19 event criticality on employees' concerns of job insecurity. In sum, we argue that organization adaptive practices may alleviate the detrimental effects of COVID-19 event strength on employees' job insecurity concerns.

Hypothesis 3: Organization adaptive practices moderate the effects of COVID-19 event (a) novelty, (b) disruption, and (c) criticality on perceived job insecurity, such that the effects

become weaker (vs. stronger) when organizations adopt more (vs. fewer) adaptive practices to COVID-19.

Combining these arguments and our theorizing regarding the job insecurity-employee outcomes relationships, we further propose the following moderated mediation hypotheses:

Hypothesis 4: Organization adaptive practices moderate the indirect effects of COVID-19 event (a) novelty, (b) disruption, and (c) criticality on employee outcomes through perceived job insecurity, such that the indirect effects become weaker (vs. stronger) when organizations adopt more (vs. fewer) adaptive practices to COVID-19.

Methods

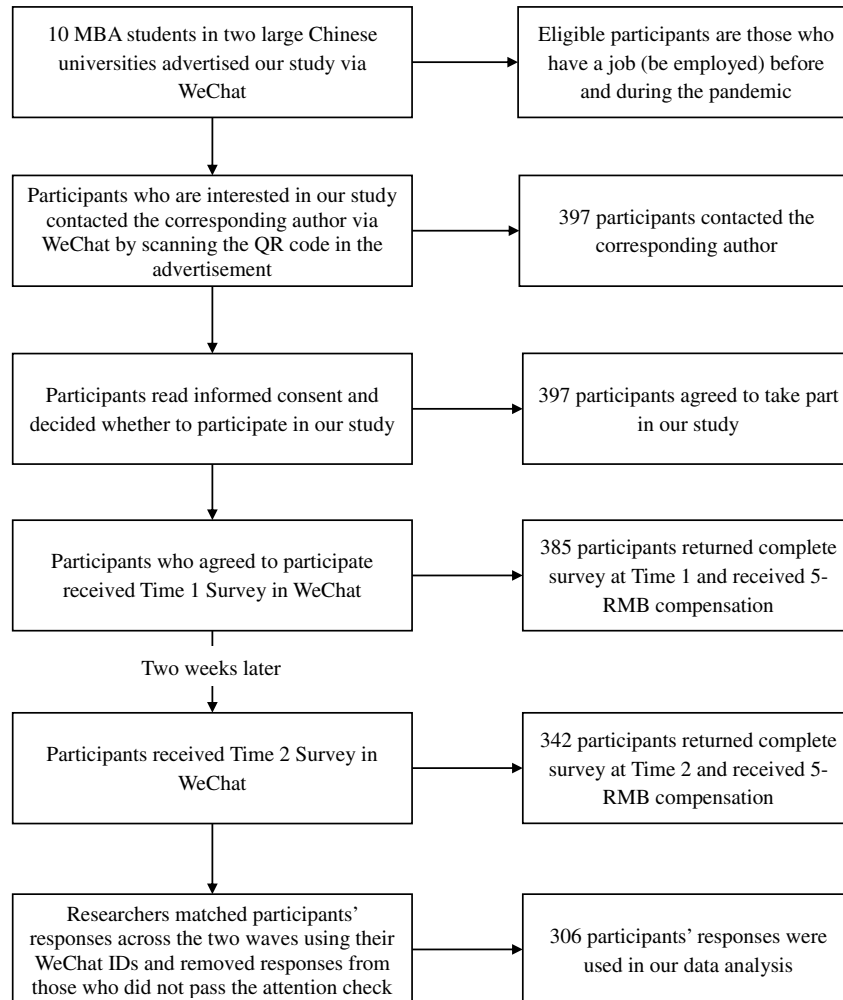
Participants and Procedure

We used snowball sampling approach¹ to recruit participants across different industries, occupations, organizations, and locations in China. The data collection process commenced in April 2020 and ended in May 2020. We asked 10 MBA students in two large universities in China to help advertise the study and invite participants to take part in our study via WeChat (a widely used social application in China). To facilitate the recruiting process, we provided MBA students with a recruiting advertisement which articulated the study purpose, and people who had a job (i.e., be employed) before and during the COVID-19 pandemic were eligible for participating in our study. In the advertisement, we also ensured voluntary participation and response confidentiality, and stated that participants who completed each wave of survey would receive 5 RMB compensation (about \$0.74 U.S.). MBA students then posted the advertisement in a number of chat groups in WeChat. They also asked their friends to help further spread the advertisement. Participants who were interested in our study contacted the corresponding author via WeChat by scanning the QR code in the advertisement, and received an informed consent after doing so. In the informed consent, we again assured voluntary participation and response confidentiality.

We then distributed surveys at two time points to 397 eligible participants who agreed to take part in our study via WeChat, with which participants can respond directly using smartphone. At Time 1, 385 participants provided demographic information and rated COVID-19 event strength (i.e., novelty, disruption, and criticality), organization adaptive practices, and baseline levels of emotional exhaustion, organizational deviance, and saving behavior. At Time 2 (two weeks after the Time 1 survey), 342 participants provided ratings on perceived job insecurity, emotional exhaustion,

¹ The snowball sampling approach allowed us to collect a more heterogeneous sample and enhance the external validity of the findings. Although there are other ways to acquire a sample across organizations that might result in better generalizability, such as using crowdsourcing, there is no established crowdsourcing platform recognized for research use in China. Therefore, we used snowball sampling to obtain a more heterogeneous sample. All data used in this study were collected by Weipeng Lin and Xiaojun Zhan. Research ethics committees such as institutional review board (IRB) are not available in the institutions with which they are affiliated. It is noted that the APA requirements regarding the treatment and protection of human participants were strictly followed during the data collection process.

Figure 2
Critical Steps in Data Collection



organizational deviance, and saving behavior. Follow-up reminders were sent to participants who did not complete the survey within 3 days after receiving it. Moreover, to ensure data quality, we used participants' unique WeChat ID to match the two waves of surveys and avoid repetitive participation. We also used attention check (e.g., "For this item, please select '6' and move on to the next item") to detect and exclude inattentive respondents. After removing mismatch surveys and inattentive data, the final sample size was 306, resulting in an overall response rate of 77.1%. The 306 participants filled out all survey questions with no missing data. Key steps involved in the procedure are summarized in Figure 2.

The 306 participants were from 17 provinces or municipalities in China, covering 9 industry sectors based on the Global Industry Classification Standard² (GICS), including industrials (5.6%), consumer discretionary (21.6%), consumer staples (2.0%), health care (12.4%), financials (38.9%), information technology (3.9%), communication services (5.9%), utilities (7.2%), and real estate (2.6%); 60.1% were female; the average age was 32.6 years ($SD = 7.6$); the average job tenure was 9.6 years ($SD = 7.9$); 80.7% of them had a bachelor's degree or above; they mainly worked in sales (18.6%),

clerical (16.0%), managerial (13.1%), technical/professional (9.2%), educational (5.2%), and R&D (4.6%) job positions.

Measures

We used Brislin's (1980) back-translation approach to translate English items into Chinese. Specifically, English scales were translated into Chinese by the first and the third authors who are fluent in both English and Chinese. The Chinese-version scales were then translated back into English by the second author and a subject matter expert fluent in both languages. The four translators then discussed and resolved discrepancies in the two English versions. Participants rated the extent to which they agree with each item on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). All items are listed in the Appendix.

² The Global Industry Classification Standard (GICS; S&P Global Market Intelligence, 2018) offers a prominent industry classification scheme (e.g., Crossland et al., 2014), which include sectors of energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, communication services, utilities, and real estate.

COVID-19 Event Strength

COVID-19 event strength, including novelty, disruption, and criticality, was measured at Time 1. The scales measuring event novelty (four items) and event disruption (four items) were both taken from Morgeson (2005), while the measure of event criticality (three items) was taken from Morgeson and DeRue (2006). Items were adapted to the COVID-19 context. The Cronbach's alphas were .95, .77, and .76 for novelty, disruption, and criticality, respectively. We also examined the content validity of these three measures using two separate samples. Results showed that participants were able to conceptually differentiate between COVID-19 event novelty, disruption, and criticality, supporting the content validity of our measures (see online Supplemental Material B).

Organization Adaptive Practices

We identified four items to measure organization adaptive practices based on a preliminary interview study (see online Supplemental Material A). Consistent with the way that previous research measured organizational practices (e.g., Frye & Breugh, 2004; Ngo et al., 2009), we used a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*) to measure this variable.³ The Cronbach's alpha was .74.

Job Insecurity

Job insecurity was measured at Time 2 using the five-item scale from Wang et al. (2014). The Cronbach's alpha was .92.

Emotional Exhaustion

Emotional exhaustion was measured at both Time 1 and Time 2 using Watkins et al.'s (2015) three-item scale. The Cronbach's alphas at Time 1 and Time 2 were .94 and .93, respectively.

Organizational Deviance

We measured organizational deviance at both Time 1 and Time 2 using a three-item scale from DeCelles et al. (2012). The Cronbach's alphas at Time 1 and Time 2 were both .95.

Saving Behavior

We developed a three-item scale based on Lozza et al.'s (2013) study to measure saving behavior at both Time 1 and Time 2. The Cronbach's alphas at Time 1 and Time 2 were .94 and .92, respectively.

Control Variables

As the mediator (i.e., job insecurity) and outcomes (i.e., emotional exhaustion, organizational deviance, and saving behavior) were measured at the same time (i.e., Time 2), we controlled for the baseline levels of outcomes (Time 1) to help alleviate concerns regarding common method bias (Finkel, 1995; Podsakoff et al., 2003). We also ran robustness checks by further controlling for the effects of several covariates (i.e., age, gender, education, job tenure, negative affectivity, and financial security), because they have been suggested by prior research to impact job insecurity and its related outcomes (e.g., Erlinghagen, 2007; Jiang & Lavaysse, 2018; Keim et al., 2014; Lee et al., 2018; Shoss, 2017). In particular, beyond the demographic covariates, we controlled for negative affectivity and financial security

to account for the confounding effects of employees' personality trait and the economic factor associated with the pandemic. Negative affectivity ($\alpha = .89$) was measured at Time 1 using Wright and Cropanzano's (1998) five-item scale. Financial security ($\alpha = .89$) was measured at Time 2 using Munyon et al.'s (2020) five-item scale. Analyses showed that the result pattern remained the same regardless of whether we controlled for these covariates or not. Thus, to enhance transparency while remaining concise, we report these covariates' means, SDs, and correlations with study variables in Table 1 and report main findings without these covariates.

Results

Table 1 presents the descriptive statistics. Given that our data were nested in nine industry sectors, employees working in same industry sectors might experience and react to the COVID-19 pandemic similarly. To account for the potential industry-level clustering effects, following previous research (e.g., Lin et al., 2020; Liu et al., 2015), we used the sandwich estimator in Mplus 8.4 (Muthén & Muthén, 2017) in the following analyses.⁴

We first conducted a series of confirmatory factor analyses (CFA) to examine the validities of our measures. Results indicated that the hypothesized 11-factor (i.e., single measure of novelty, disruption, criticality, organization adaptive practices, and job insecurity, as well as repeated measures of emotional exhaustion, organizational deviance, and saving behavior) measurement model fitted the data well: $\chi^2(df = 610) = 1,324.82$, $p < .001$, CFI = .92, RMSEA = .06, SRMR = .05. All scale items loaded on their intended factors significantly ($p < .001$). Factor loadings for each item are provided in the Appendix. We then compared the 11-factor model with 55 alternative 10-factor models, where any two of the 11 factors were combined. Results showed that the 11-factor model fit the data significantly better than any 10-factor models ($\Delta\chi^2s [\Delta df = 10]$ ranged from 123.78 to 1,229.81, $p < .001$). These results suggest that the measures used in our study captured distinct constructs.

We conducted path modeling to test our hypotheses.⁵ To test Hypotheses 1 and 2, we first specified a mediation model (Model 1).

³ As a robustness check, we recoded the measure of organization adaptive practices into a count variable and tested its moderation effect. Specifically, for each organization adaptive practice item, a score of 5 (*somewhat agree*), 6 (*agree*), and 7 (*strongly agree*) was recoded into 1, while others were recoded into 0. We then summed up the four items to form a count variable of organization adaptive practices ranging from 0 to 4. Correlation analysis showed that the recoded organization adaptive practice was highly correlated ($r = .91$, $p < .001$) with the original Likert scale version, which was computed by averaging the four items. Additionally, we tested the moderating effects of the recoded organization adaptive practices, and analyses demonstrated the same result pattern as those using the original Likert version, such that the recoded organization adaptive practices significantly mitigated the relationships event novelty and criticality (but not disruption) had with job insecurity. These results support the robustness of our findings. All robustness checks results are available upon request.

⁴ As a robustness check, we also tested our hypotheses by creating eight dummy variables to represent our nine industry sectors, and controlling for their effects on job insecurity and outcomes (i.e., emotional exhaustion, organizational deviance, and saving behavior). When doing so, the result pattern remained the same.

⁵ The Mplus syntax and key results of the path analyses for Model 1 and Model 2, as well as example R codes for testing indirect effect, moderated mediation effect, and conditional indirect effects can be found in the online supplemental material (see Supplemental Materials C, D, and E, respectively).

Table 1
Descriptive Statistics, Reliabilities, and Intercorrelations

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Gender-T1	1.60	.49									
2. Age-T1	32.55	7.59	-.09								
3. Education-T1	2.99	.77	.00	-.27***							
4. Job tenure-T1	9.60	7.89	-.09	.89***	-.19**						
5. Financial security-T1	4.64	1.19	.02	.23***	-.02	.25***	(.89)				
6. Negative affectivity-T1	4.07	1.41	.07	-.10	.00	-.12*	-.12*	(.89)			
7. Event novelty-T1 (N)	2.31	1.22	-.10	.03	-.02	.03	.01	.18**	(.95)		
8. Event disruption-T1 (D)	4.33	1.32	-.05	.11	.02	.09	.00	.26***	.27***	(.77)	
9. Event criticality-T1 (C)	4.38	1.36	-.11	.14*	-.11	.11*	.02	.20***	.26***	.46***	(.76)
10. OAP-T1	4.87	1.29	-.09	.09	-.03	.05	.10	-.12*	-.09	.08	.01
11. N × OAP	-.14	1.65	-.03	.04	.06	.04	.03	.11	.06	.08	.08
12. D × OAP	.14	1.82	.01	-.01	.06	-.02	-.05	.14*	.07	.01	.06
13. C × OAP	.01	1.93	.01	.07	.01	.02	.08	.05	.08	.05	.12*
14. Emotional exhaustion-T1	3.42	1.55	.03	-.05	-.05	-.10	-.05	.52***	.16**	.38***	.20***
15. Organizational deviance-T1	2.16	1.29	-.17**	-.05	.01	-.07	-.11	.24***	.06	.18**	.02
16. Saving behavior-T1	5.13	1.47	-.09	.00	-.16**	-.02	.00	.08	.04	.23***	.16**
17. Job insecurity-T2	3.51	1.57	.01	-.05	-.21***	-.03	-.17**	.19**	.26***	.22***	.20***
18. Emotional exhaustion-T2	3.61	1.49	.00	-.03	.02	-.04	-.05	.31***	.19***	.17**	.10
19. Organizational deviance-T2	2.29	1.34	-.11	.05	-.05	.05	.05	.16**	.13*	.10	.01
20. Saving behavior-T2	4.89	1.31	-.11*	.04	-.25***	.03	.08	.05	.02	.16**	.08
10	11	12	13	14	15	16	17	18	19	20	
10. OAP-T1	(.74)										
11. N × OAP	-.09										
12. D × OAP	-.16**	.35***									
13. C × OAP	-.09	.32***	.57***								
14. Emotional exhaustion-T1	-.07	.08	.10	.08	(.94)						
15. Organizational deviance-T1	.12*	.05	-.06	-.01	.31***	(.95)					
16. Saving behavior-T1	.16**	-.08	.09	.08	.21***	.05	(.94)				
17. Job insecurity-T2	-.05	-.16**	-.17**	-.20***	.25***	.19***	.15**	(.92)			
18. Emotional exhaustion-T2	-.08	.03	.10	.07	.49***	.20***	.09	.28***	(.93)		
19. Organizational deviance-T2	.03	.02	-.08	-.08	.17**	.42***	-.01	.26***	.26***	(.95)	
20. Saving behavior-T2	.15**	.00	-.04	-.01	.13*	.05	.52***	.23***	.07	.07	(.92)

Note. *N* = 306. T1 = Time 1; T2 = Time 2; OAP = organization adaptive practices. Gender was coded "1" for "male" and "2" for "female." Education was coded "1" for "high school or below," "2" for "associate degree," "3" for "bachelor's degree," "4" for "master's degree," and "5" for "doctoral degree." For brevity, gender, age, education, job tenure, financial security, and negative affectivity were not included in further analyses, but our results remained virtually the same regardless of whether they were controlled for or not. Cronbach's alphas are reported in parentheses along the diagonal.

* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).

In particular, we specified the effect of three event strength characteristics (i.e., novelty, disruption, and criticality) and organization adaptive practices on job insecurity and outcomes (i.e., emotional exhaustion, organizational deviance, and saving behavior). We also specified the effects of job insecurity on outcomes, and controlled for the baseline level of each outcome variable. This path model fit the data well ($\chi^2[df = 9] = 21.57, p = .010, CFI = .96, RMSEA = .07, SRMR = .04$). Results (see Table 2) demonstrated that perceived event novelty ($\gamma = .25, p = .004$) and disruption ($\gamma = .16, p = .046$) were positively related to job insecurity, while the relationship between event criticality and job insecurity was not significant ($\gamma = .10, p = .279$). Thus, Hypotheses 1a and 1b were supported but Hypothesis 1c was not supported. Moreover, job insecurity was positively related to emotional exhaustion ($\gamma = .15, p < .001$), organizational deviance ($\gamma = .15, p < .001$), and saving behavior ($\gamma = .14, p < .001$).

To account for the asymmetric distribution of indirect effects (Preacher et al., 2010), confidence intervals for the indirect effects were obtained with the Monte Carlo procedure in open-source software *R* (www.r-project.org). As presented in Table 4, with 20,000 Monte Carlo replications, results showed that both event novelty and disruption had significant indirect effects on emotional exhaustion, organizational deviance, and saving behavior through

job insecurity, whereas the indirect effects of event criticality were not significant. Thus, these results offered support to Hypotheses 2a and 2b but not Hypothesis 2c.

On the basis of Model 1, we specified Model 2 wherein we added interaction terms between event characteristics (i.e., novelty, disruption, and criticality) and organization adaptive practices into the model to test the moderation and moderated mediation hypotheses (i.e., Hypotheses 3 and 4). Model 2 also fit the data well ($\chi^2[df = 9] = 24.96, p = .003, CFI = .95, RMSEA = .08, SRMR = .04$). Results (Table 3) showed that organization adaptive practices moderated the effects of event novelty ($\gamma = -.12, p = .006$) and event criticality ($\gamma = -.14, p = .001$) on job insecurity (see Figures 3 and 4). Simple slope tests demonstrated that the relationship between event novelty and job insecurity was positive and significant when the level of organization adaptive practices was low (1 *SD* below the mean; $\gamma = .42, p < .001$), but was not significant when the level of organization adaptive practices was high (1 *SD* above the mean; $\gamma = .11, p = .278$). Similarly, the relationship between event criticality and job insecurity was positive and significant when the level of organization adaptive practices was low ($\gamma = .32, p < .001$) but was not significant when the level of organization adaptive practices was high ($\gamma = -.05, p = .571$). However, the moderating effect of organization adaptive practices on the relationship

Table 2
Results of Path Analysis for Model 1

	Job insecurity-T2				Emotional exhaustion-T2				Organizational deviance-T2				Saving behavior-T2			
	γ	SE	t	p	γ	SE	t	p	γ	SE	t	p	γ	SE	t	p
Constant	3.51***	.10	35.66	.000	1.59***	.22	7.33	.000	.90***	.17	5.36	.000	2.20***	.28	7.87	.000
<i>Control variables</i>																
Emotional exhaustion-T1					.44***	.06	7.96	.000								
Organizational deviance-T1									.39***	.02	19.95	.000				
Saving behavior-T1													.43***	.03	13.93	.000
<i>Predictors</i>																
Event novelty-T1	.25**	.09	2.85	.004	.12	.06	1.81	.070	.08	.04	1.82	.069	-.04	.05	-.89	.374
Event disruption-T1	.16*	.08	1.99	.046	-.04	.06	-.69	.492	.00	.03	.07	.944	.03	.05	.63	.530
Event criticality-T1	.10	.09	1.08	.279	-.04	.04	-.99	.325	-.05	.09	-.60	.549	-.03	.04	-.77	.441
OAP-T1	-.05	.03	-1.89	.059	-.03	.03	-.78	.437	.00	.07	.02	.981	.08	.05	1.75	.081
<i>Mediator</i>																
Job insecurity-T2					.15***	.03	4.55	.000	.15***	.03	4.98	.000	.14***	.03	4.24	.000
R ²		.10***				.26***				.20***				.29***		

Note. $N = 306$. SE = standard error. T1 = Time 1; T2 = Time 2; OAP = organization adaptive practices. Unstandardized coefficients are presented.
* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).

between event disruption and job insecurity was not significant. Thus, Hypotheses 3a and 3c were supported while Hypothesis 3b was not.

We then tested the moderated mediation hypotheses (i.e., Hypotheses 4a, 4b, and 4c). With 20,000 Monte Carlo replications, results (see Table 4) showed that organization adaptive practices moderated the indirect effects of both event novelty and criticality on emotional exhaustion, organizational deviance, and saving behavior through job insecurity. Specifically, the indirect effects of event novelty and criticality were significant when the level of organization adaptive practices was low but was not significant when the level of organization adaptive practices was high. However, the moderating effects of organization adaptive practices on the indirect relationship between event disruption and outcomes

were not significant. These findings offer support to Hypotheses 4a and 4c but not Hypothesis 4b.

Discussion

As the COVID-19 pandemic continues to spread globally and causes a great turmoil in employees' work, it is of vital importance to understand the psychological implications of COVID-19 on employees' work-related outcomes (Mo & Shi, 2020), and how organizations could help employees cope with such unfavorable situation. Drawing on event system theory, we found that COVID-19 event novelty and disruption were positively related to employees' perceived job insecurity, which in turn was positively related to

Table 3
Results of Path Analysis for Model 2

	Job insecurity-T2				Emotional exhaustion-T2				Organizational deviance-T2				Saving behavior-T2			
	γ	SE	t	p	γ	SE	t	p	γ	SE	t	p	γ	SE	t	p
Constant	3.50***	.10	36.05	.000	1.55***	.24	6.33	.000	.94***	.13	7.07	.000	2.13***	.27	7.76	.000
<i>Control variables</i>																
Emotional exhaustion-T1					.43***	.05	8.46	.000								
Organizational deviance-T1									.39***	.02	17.01	.000				
Saving behavior-T1													.44***	.02	18.76	.000
<i>Predictors</i>																
Event novelty-T1 (N)	.27***	.07	3.64	.000	.11	.06	1.90	.058	.08	.04	1.96	.050	-.04	.03	-1.39	.166
Event disruption-T1 (D)	.16*	.07	2.29	.022	-.04	.06	-.68	.499	.00	.03	.01	.995	.02	.06	.30	.765
Event criticality-T1 (C)	.13*	.06	2.14	.032	-.05	.04	-1.16	.244	-.05	.09	-.54	.590	-.03	.04	-.77	.442
OAP-T1	-.10**	.03	-2.82	.005	-.01	.04	-.31	.758	-.00	.06	-.01	.989	.08	.05	1.46	.144
<i>Interaction terms</i>																
N \times OAP	-.12**	.04	-2.72	.006	-.01	.11	-.08	.939	.04	.06	.70	.486	.08	.05	1.63	.104
D \times OAP	-.05	.05	-.96	.335	.06	.03	1.64	.101	-.02	.05	-.31	.759	-.06	.04	-1.47	.143
C \times OAP	-.14***	.04	-3.43	.001	.02	.03	.75	.452	-.03	.05	-.65	.518	.01	.06	.13	.900
<i>Mediator</i>																
Job insecurity-T2					.17***	.04	4.68	.000	.15***	.03	5.98	.000	.14***	.03	4.38	.000
R ²		.17***				.26***				.20***				.30***		

Note. $N = 306$. SE = standard error. T1 = Time 1; T2 = Time 2; OAP = organization adaptive practices. Unstandardized coefficients are presented.
* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).

Table 4
Indirect Effects Based on 20,000 Monte Carlo Replications

	Emotional exhaustion		Organizational deviance		Saving behavior	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
Event novelty						
Indirect effect	.038*	[.010, .073]	.038*	[.009, .081]	.035*	[.013, .053]
Moderated mediation effect	-.020*	[-.032, -.007]	-.018*	[-.033, -.005]	-.017*	[-.037, -.003]
High OAP (+1 SD)	.019	[-.013, .067]	.017	[-.014, .048]	.016	[-.017, .035]
Low OAP (-1 SD)	.072*	[.041, .106]	.062*	[.035, .094]	.060*	[.035, .087]
Event disruption						
Indirect effect	.023*	[.001, .055]	.024*	[.001, .061]	.021*	[.001, .039]
Moderated mediation effect	-.009	[-.027, .010]	-.008	[-.024, .008]	-.007	[-.025, .008]
High OAP (+1 SD)	.016	[-.013, .065]	.014	[-.013, .051]	.014	[-.016, .040]
Low OAP (-1 SD)	.039*	[.005, .087]	.034*	[.005, .074]	.033*	[.005, .063]
Event criticality						
Indirect effect	.015	[-.014, .039]	.015	[-.013, .045]	.014	[-.014, .032]
Moderated mediation effect	-.024*	[-.044, -.009]	-.021*	[-.036, -.008]	-.020*	[-.038, -.007]
High OAP (+1 SD)	-.008	[-.044, .017]	-.008	[-.038, .014]	-.007	[-.037, .015]
Low OAP (-1 SD)	.054*	[.028, .082]	.047*	[.026, .066]	.045*	[.020, .076]

Note. $N = 306$. CI = confidence interval; OAP = organization adaptive practices.

* Indirect effect was significant if the confidence interval did not contain zero.

their emotional exhaustion, organizational deviance, and saving behavior. Moreover, organization adaptive practices mitigated the detrimental effects of COVID-19 event novelty and criticality on job insecurity. Our study thus offers important and timely implications for both theories and practices.

Theoretical and Practical Implications

Our research has several theoretical implications. First, our research is among the first to empirically investigate the implications of COVID-19 on employee job insecurity and its consequences. Drawing on event system theory and focusing on the psychological aspects of the pandemic, we considered COVID-19 as a work-related event characterized by employees' perceptions of event novelty, disruption, and criticality, offering a psychological perspective to understand and

capture the characteristics of the COVID-19 event. In addition, we showed the detrimental effects of COVID-19 event novelty and disruption on employees' job insecurity and its downstream work (i.e., emotional exhaustion and organizational deviance) and non-work (i.e., saving behavior) outcomes. Such findings not only add to our knowledge of the COVID-19 pandemic's psychological implications on employees' employment uncertainty and insecurity, but also advance our understandings of the potential linkages between the COVID-19 pandemic and employees' work wellbeing, dysfunctional work behavior, and economic coping behavior. It is worth noting that, in contrast to event novelty and disruption, the main effect of event criticality on job insecurity was not significant (see Table 2). A possible explanation is that criticality sheds light on employees' prospects about their future working lives and careers, which is more distal and ambiguous (and thus less detrimental) compared to novelty (signaling dangers in organization's survival right away) and disruption (reflecting interference with employees' work-related activities in the present) that have more concrete implications. This result also provides a potential extension to the event system theory, which generally posits that event novelty, disruption, and criticality affect interpretive processes and responses in a similar way.

Second, the majority of research on job insecurity focused on its outcomes, whereas "less effort has been devoted to studying the antecedents of JI (job insecurity)" (Lee et al., 2018, p. 340). According to Shoss (2017), among the limited number of studies examining antecedents of job insecurity, the main focus was on macro-economic factors (e.g., economic index, unemployment rate), organizational factors (e.g., occurrence of organizational change), positional factors (e.g., contract type, manual/blue-collar work), and individual demographics (e.g., tenure, education). These factors either depict the existence of a crisis situation or entail the possibility that employees can survive the crisis situation. However, what has been largely overlooked is employees' psychological experience in such largescale crisis (e.g., COVID-19 pandemic). Given the subjective nature of job insecurity, it is important to understand how people perceive the crisis event and how such perceptions affect their interpretations of job insecurity and

Figure 3
Moderating Effect of Organization Adaptive Practices on the Relationship Between COVID-19 Event Novelty and Job Insecurity

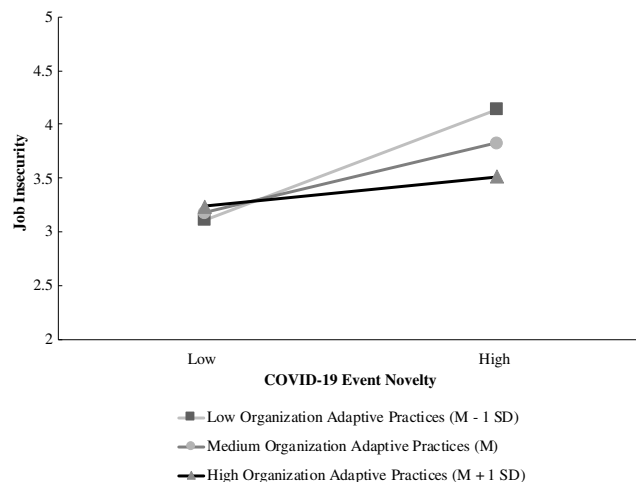
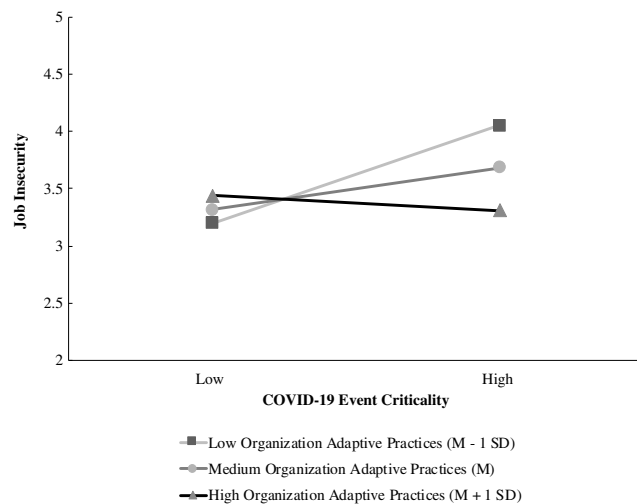


Figure 4

Moderating Effect of Organization Adaptive Practices on the Relationship Between COVID-19 Event Criticality and Job Insecurity



subsequent responses in such a high-stake situation. By examining the psychological implications of COVID-19 (i.e., perceived COVID-19 event strength) on job insecurity, our study not only expands antecedents of job insecurity and contributes to the job insecurity literature, but also offers implications of the impacts of similar largescale events (e.g., SARS, 911) on persons' job insecurity as well as work and non-work responses.

Third, we identified four organization adaptive practices responding to COVID-19, and found that it mitigated the harmful effects of COVID-19 event novelty and criticality (but not disruption). This highlights the contingency condition regarding when COVID-19 event strength affects employees' job insecurity and outcomes. It is worth noting that although our results suggest that organization adaptive practices are effective in coping with COVID-19 event novelty and criticality, those practices may not be able to mitigate the harmful effects of COVID-19 event disruption. This may be because some disruptive situations are less likely to be completely resolved by the four adaptive practices. For example, for sales employees, the pandemic may reduce customers' or downstream clients' demand for products, or even cause clients to shut down their business. This disruption could make it difficult for employees to complete their jobs (e.g., sell products/services) and meet their performance requirements, leading them to worry about losing jobs. Yet, such disruption cannot be effectively addressed by organizations' implementation of adaptive practices such as paid leave. Future research could examine how the detrimental effect of event disruption may be attenuated by task-related support provided to employees in different occupations or industries.

Our findings also add to the literature on discrete practices examined in this research. For example, the literature on family-friendly work practices (FFWPs) has argued that some employees may refrain from utilizing FFWPs (e.g., work from home, paid sick/family leave) because that could signal their low motivation to work and low commitment to the organization so that they feel less secure when opting themselves in these practices (Moore, 2020). However, our study suggests that in crisis situations, those practices can be

helpful in alleviating employees' feelings of insecurity when they perceive the event as threatening.

This study also provides several practical implications for organizations. First, in light of the detrimental effects of COVID-19 event strength, organizations may take action to reduce the extent to which employees perceive the pandemic as novel or disruptive. For example, organizations could develop clear and understandable work procedures and guidelines amid the pandemic to reduce perceptions of COVID-19 event novelty. Second, our findings suggest that perceptions of job insecurity would lead to employees' poor wellbeing, dysfunctional work behavior, and reduced expenditure and life quality. Thus, our research points to the importance of alleviating employees' concerns about job insecurity so as to avoid their negative psychological and behavioral reactions. For instance, organizations may maintain transparent communication with employees about personnel decisions that are relevant to their job security during the pandemic. Third, our findings suggest that organization adaptive practices responding to COVID-19 could mitigate the detrimental effects of COVID-19 event strength. Thus, in order to attenuate the undesirable influences of COVID-19, organizations are encouraged to implement adaptive practices, such as providing employees with personal protective equipment, allowing employees to work from home and arrange their working hours flexibly, and making paid pandemic leave available.

Limitations and Suggestions for Future Research

This study has several limitations. First, the findings may be impacted by common method bias because all measures were self-reported (Podsakoff et al., 2003). To partially alleviate such concern, we collected data at two time points and controlled for the baseline levels of outcome variables. Nevertheless, future research using multi-source data is warranted to further validate our findings. Second, our survey design was correlational in nature, which may render concerns of reversed causality (e.g., employees who perceive more job insecurity may interpret the pandemic as more disruptive to their work routines). Although we measured event strength and its outcomes at different time points and controlled for some common antecedents including negative affectivity, financial security, and demographics so as to mitigate such concern, future research should use longitudinal design to rule out reverse causality possibilities and provide stronger evidence for the impact of COVID-19 event strength on job insecurity. Third, the exclusive focus on Chinese employees may limit the generalizability of our findings. Thus, we call for more research to examine the impacts of COVID-19 using samples across different countries. Fourth, future research may further explore more outcomes of COVID-19, such as emotional states, attitudes towards job, organization, and career, and performance and behaviors at work.

References

- Akkermans, J., Richardson, J., & Kraimer, M. L. (2020). The Covid-19 crisis as a career shock: Implications for careers and vocational behavior. *Journal of Vocational Behavior*, 119, Article 103434. <https://doi.org/10.1016/j.jvb.2020.103434>
- Allen, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58(3), 414-435. <https://doi.org/10.1006/jvbe.2000.1774>
- Anderson, J. C., & Gerbing, D. W. (1991). Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their

- substantive validities. *Journal of Applied Psychology*, 76(5), 732–740. <https://doi.org/10.1037/0021-9010.76.5.732>
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, cause, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32(4), 803–829. <https://doi.org/10.5465/256569>
- Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of Vocational Behavior*, 119. Article 103436. <https://doi.org/10.1016/j.jvb.2020.103436>
- Brenan, M. (2020, April 22). *Record-high 25% of U.S. workers say job loss is likely*. Gallup. <https://news.gallup.com/poll/308960/record-high-workers-say-job-loss-likely.aspx>
- Brislin, R. W. (1980). Translation and content analysis of oral and written materials. In H. C. Triandis & W. Lonner (Eds.), *Methodology. Handbook of cross-cultural psychology* (pp. 389–444). Allyn and Bacon.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Burke, R. J. (1998). Job insecurity in recent business school graduates: Antecedents and consequences. *International Journal of Stress Management*, 5(2), 113–119. <https://doi.org/10.1023/A:1022959815313>
- Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>
- Center for Disease Control and Prevention. (2020, May 6). *Interim guidance for businesses and employers responding to coronavirus disease 2019 (COVID-19), May 2020: Plan, prepare and respond to coronavirus disease 2019*. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- Chen, Y., Liu, D., Tang, G., & Hogan, T. M. (2020). Workplace events and employee creativity: A multistudy field investigation. *Personnel Psychology*. Article peps.12399. <https://doi.org/10.1111/peps.12399>
- Chong, S., Huang, Y., & Chang, C.-H. (D.) (2020). Supporting interdependent telework employees: A moderated-mediation model linking daily COVID-19 task setbacks to next-day work withdrawal. *Journal of Applied Psychology*, 105(12), 1408–1422. <https://doi.org/10.1037/apl0000843>
- Colquitt, J. A., Sabey, T. B., Rodell, J. B., & Hill, E. T. (2019). Content validation guidelines: Evaluation criteria for definitional correspondence and definitional distinctiveness. *Journal of Applied Psychology*, 104(10), 1243–1265. <https://doi.org/10.1037/apl0000406>
- Crossland, C., Zyung, J., Hiller, N. J., & Hambrick, D. C. (2014). CEO career variety: Effects on firm-level strategic and social novelty. *Academy of Management Journal*, 57(3), 652–674. <https://doi.org/10.5465/amj.2012.0469>
- Debus, M. E., König, C. J., & Kleinmann, M. (2014). The building blocks of job insecurity: The impact of environmental and person-related variables on job insecurity perceptions. *Journal of Occupational and Organizational Psychology*, 87(2), 329–351. <https://doi.org/10.1111/joop.12049>
- DeCelles, K. A., DeRue, D. S., Margolis, J. D., & Ceranic, T. L. (2012). Does power corrupt or enable? When and why power facilitates self-interested behavior. *Journal of Applied Psychology*, 97(3), 681–689. <https://doi.org/10.1037/a0026811>
- DeSimone, J. A., Harms, P. D., & DeSimone, A. J. (2015). Best practice recommendations for data screening. *Journal of Organizational Behavior*, 36(2), 171–181. <https://doi.org/10.1002/job.1962>
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42–51. <https://doi.org/10.1037/0021-9010.86.1.42>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>
- Erlinghagen, M. (2007). Self-perceived job insecurity and social context: A multi-level analysis of 17 European countries. *European Sociological Review*, 24(2), 183–197. <https://doi.org/10.1093/esr/jcm042>
- Finkel, S. E. (1995). *Causal analysis with panel data*. Sage Publications.
- Fouad, N. A. (2020). Editor in Chief's introduction to essays on the impact of COVID-19 on work and workers. *Journal of Vocational Behavior*, 119. Article 103441. <https://doi.org/10.1016/j.jvb.2020.103441>
- Frye, N. K., & Breaugh, J. A. (2004). Family-friendly policies, supervisor support, work-family conflict, family-work conflict, and satisfaction: A test of a conceptual model. *Journal of Business and Psychology*, 19(2), 197–220. <https://doi.org/10.1007/s10869-004-0548-4>
- Gasparro, R., Scandurra, C., Maldonato, N. M., Dolce, P., Bochicchio, V., Valletta, A., Sammartino, G., Sammartino, P., Mariniello, M., di Lauro, A. E., & Marenzi, G. (2020). Perceived job insecurity and depressive symptoms among Italian dentists: The moderating role of fear of COVID-19. *International Journal of Environmental Research and Public Health*, 17(15). Article 5338. <https://doi.org/10.3390/ijerph17155338>
- Grote, G., & Pfombeck, J. (2020). Uncertainty in aging and lifespan research: Covid-19 as catalyst for addressing the elephant in the room. *Work, Aging and Retirement*, 6(4), 246–250. <https://doi.org/10.1093/workar/waaa020>
- Hammer, L. B., Neal, M. B., Newsom, J. T., Brockwood, K. J., & Colton, C. L. (2005). A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *Journal of Applied Psychology*, 90(4), 799–810. <https://doi.org/10.1037/0021-9010.90.4.799>
- Hamouche, S. (2020). COVID-19 and employees' mental health: Stressors, moderators and agenda for organizational actions. *Emerald Open Research*, 2, 15. <https://doi.org/10.35241/emeraldopenres.13550.1>
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1(1), 104–121. <https://doi.org/10.1177/109442819800100106>
- Hoffman, A. J., & Ocasio, W. (2001). Not all events are attended equally: Toward a middle-range theory of industry attention to external events. *Organization Science*, 12(4), 414–434. <https://doi.org/10.1287/orsc.12.4.414.10639>
- Huang, G., Niu, X., Lee, C., & Ashford, S. J. (2012). Differentiating cognitive and affective job insecurity: Antecedents and outcomes. *Journal of Organizational Behavior*, 33(6), 752–769. <https://doi.org/10.1002/job.1815>
- International Labor Organization. (2020). *ILO monitor: COVID-19 and the world of work*. 5th ed. https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_749399/
- Ito, J. K., & Brotheridge, C. M. (2007). Exploring the predictors and consequences of job insecurity's components. *Journal of Managerial Psychology*, 22(1), 40–64. <https://doi.org/10.1108/02683940710721938>
- Jiang, L., & Lavaysse, L. M. (2018). Cognitive and affective job insecurity: A meta-analysis and a primary study. *Journal of Management*, 44(6), 2307–2342. <https://doi.org/10.1177/0149206318773853>
- Jiang, L., Xu, X., & Wang, H. (2020). A resources–demands approach to sources of job insecurity: A multilevel meta-analytic investigation. *Journal of Occupational Health Psychology*. Advance online publication. <https://doi.org/10.1037/ocp0000267>
- Keim, A. C., Landis, R. S., Pierce, C. A., & Earnest, D. R. (2014). Why do employees worry about their jobs? A meta-analytic review of predictors of job insecurity. *Journal of Occupational Health Psychology*, 19(3), 269–290. <https://doi.org/10.1037/a0036743>
- Kooij, D. T. A. M. (2020). The impact of the Covid-19 pandemic on older workers: The role of self-regulation and organizations. *Work, Aging and Retirement*, 6(4), 233–237. <https://doi.org/10.1093/workar/waaa018>
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854–1884. <https://doi.org/10.1177/0149206315575554>

- Lee, C., Huang, G.-H., & Ashford, S. J. (2018). Job insecurity and the changing workplace: Recent developments and the future trends in job insecurity research. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 335–359. <https://doi.org/10.1146/annurev-orgpsych-032117-104651>
- Lin, W., Koopmann, J., & Wang, M. (2020). How does workplace helping behavior step up or slack off? Integrating enrichment-based and depletion-based perspectives. *Journal of Management*, 46(3), 385–413. <https://doi.org/10.1177/0149206318795275>
- Liu, Y., Wang, M., Chang, C.-H., Shi, J., Zhou, L., & Shao, R. (2015). Work–family conflict, emotional exhaustion, and displaced aggression toward others: The moderating roles of workplace interpersonal conflict and perceived managerial family support. *Journal of Applied Psychology*, 100(3), 793–808. <https://doi.org/10.1037/a0038387>
- Lozza, E., Libreri, C., & Bosio, A. C. (2013). Temporary employment, job insecurity and their extraorganizational outcomes. *Economic and Industrial Democracy*, 34(1), 89–105. <https://doi.org/10.1177/0143831X12436617>
- Matusik, J. G., Hollenbeck, J. R., Matta, F. K., & Oh, J. K. (2019). Dynamic systems theory and dual change score models: Seeing teams through the lens of developmental psychology. *Academy of Management Journal*, 62(6), 1760–1788. <https://doi.org/10.5465/amj.2017.1358>
- McFarland, L. A., Reeves, S., Porr, W. B., & Ployhart, R. E. (2020). Impact of the COVID-19 pandemic on job search behavior: An event transition perspective. *Journal of Applied Psychology*, 105, 1207–1217. <https://doi.org/10.1037/apl0000782>
- Mo, S., & Shi, J. (2020). The psychological consequences of the COVID-19 on residents and staff in nursing homes. *Work, Aging and Retirement*, 6(4), 254–259. <https://doi.org/10.1093/workar/waaa021>
- Moen, P., Pedtke, J. H., & Flood, S. (2020). Disparate disruptions: Intersectional COVID-19 employment effects by age, gender, education, and race/ethnicity. *Work, Aging and Retirement*, 6(4), 207–228. <https://doi.org/10.1093/workar/waaa013>
- Moore, T. S. (2020). Why don't employees use family-friendly work practices? *Asia Pacific Journal of Human Resources*, 58(1), 3–23. <https://doi.org/10.1111/1744-7941.12212>
- Morgeson, F. P. (2005). The external leadership of self-managing teams: Intervening in the context of novel and disruptive events. *Journal of Applied Psychology*, 90(3), 497–508. <https://doi.org/10.1037/0021-9010.90.3.497>
- Morgeson, F. P., & DeRue, D. S. (2006). Event criticality, urgency, and duration: Understanding how events disrupt teams and influence team leader intervention. *The Leadership Quarterly*, 17(3), 271–287. <https://doi.org/10.1016/j.leaqua.2006.02.006>
- Morgeson, F. P., Mitchell, T. R., & Liu, D. (2015). Event system theory: An event-oriented approach to the organizational sciences. *The Academy of Management Review*, 40(4), 515–537. <https://doi.org/10.5465/amr.2012.0099>
- Munyon, T. P., Carnes, A. M., Lyons, L. M., & Zettler, I. (2020). All about the money? Exploring antecedents and consequences for a brief measure of perceived financial security. *Journal of Occupational Health Psychology*, 25(3), 159–175. <https://doi.org/10.1037/ocp0000162>
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (8th ed.). Muthén & Muthén.
- Neal, A., & Griffin, M. A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4), 946–953. <https://doi.org/10.1037/0021-9010.91.4.946>
- Nebehay, S., & Mutikani, L. (2020, March 27). *Tens of millions face losing jobs in escalating coronavirus crisis*. Reuters. <https://www.reuters.com/article/us-health-coronavirus-jobs/tens-of-millions-face-losing-jobs-in-escalating-coronavirus-crisis-idUSKBN21D374>
- Ngo, H. Y., Foley, S., & Loi, R. (2009). Family friendly work practices, organizational climate, and firm performance: A study of multinational corporations in Hong Kong. *Journal of Organizational Behavior*, 30(5), 665–680. <https://doi.org/10.1002/job.606>
- Occupational Safety and Health Administration. (2020). *Guidance on preparing workplaces for COVID-19*. U.S. Department of Labor. <https://www.osha.gov/Publications/OSHA3990.pdf>
- Paulsen, N., Callan, V. J., Grice, T. A., Rooney, D., Gallois, C., Jones, E., Jimmieson, N. L., & Bordia, P. (2005). Job uncertainty and personal control during downsizing: A comparison of survivors and victims. *Human Relations*, 58(4), 463–496. <https://doi.org/10.1177/0018726705055033>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, 15(3), 209–233. <https://doi.org/10.1037/a0020141>
- Probst, T. M., Lee, H. J., & Bazzoli, A. (2020). Economic stressors and the enactment of CDC-recommended COVID-19 prevention behaviors: The impact of state-level context. *Journal of Applied Psychology*, 105, 1397–1407. <https://doi.org/10.1037/apl0000797>
- Restubog, S. L. D., Ocampo, A. C. G., & Wang, L. (2020). Taking control amidst the chaos: Emotion regulation during the COVID-19 pandemic. *Journal of Vocational Behavior*, 119, Article 103440. <https://doi.org/10.1016/j.jvb.2020.103440>
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714. <https://doi.org/10.1037/0021-9010.87.4.698>
- Sergeant, K., & Stajkovic, A. D. (2020). Women's leadership is associated with fewer deaths during the COVID-19 crisis: Quantitative and qualitative analyses of United States governors. *Journal of Applied Psychology*, 105(8), 771–783. <https://doi.org/10.1037/apl0000577>
- Shoss, M. K. (2017). Job insecurity: An integrative review and agenda for future research. *Journal of Management*, 43(6), 1911–1939. <https://doi.org/10.1177/0149206317691574>
- Sinclair, R. R., Allen, T., Barber, L., Bergman, M., Britt, T., Butler, A., Ford, M., Hammer, L., Kath, L., Probst, T., & Yuan, Z. (2020). Occupational health science in the time of COVID-19: Now more than ever. *Occupational Health Science*, 4(1–2), 1–22. <https://doi.org/10.1007/s41542-020-00064-3>
- S&P Global Market Intelligence. (2018). *Global industry classification standard*. https://www.spglobal.com/marketintelligence/en/documents/112727-gics-mapbook_2018_v3_letter_digitalspreads.pdf
- Spurk, D., & Straub, C. (2020). Flexible employment relationships and careers in times of the COVID-19 pandemic. *Journal of Vocational Behavior*, 119, Article 103435. <https://doi.org/10.1016/j.jvb.2020.103435>
- Sverke, M., & Hellgren, J. (2002). The nature of job insecurity: Understanding employment uncertainty on the brink of a new millennium. *Applied Psychology: An International Review*, 51(1), 23–42. <https://doi.org/10.1111/1464-0597.0077z>
- Thompson, C. A., & Protas, D. J. (2006). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology*, 11(1), 100–118. <https://doi.org/10.1037/1076-8998.10.4.100>
- Truxillo, D. M., Cadiz, D. M., & Brady, G. M. (2020). COVID-19 and its implications for research on work ability. *Work, Aging and Retirement*, 6(4), 242–245. <https://doi.org/10.1093/workar/waaa016>
- van Dalen, H. P., & Henkens, K. (2020). The COVID-19 pandemic: Lessons for financially fragile and aging societies. *Work, Aging and Retirement*, 6(4), 229–232. <https://doi.org/10.1093/workar/waaa011>
- Wang, H., Lu, C., & Lu, L. (2014). Do people with traditional values suffer more from job insecurity? The moderating effects of traditionality. *European Journal of Work and Organizational Psychology*, 23(1), 107–117. <https://doi.org/10.1080/1359432X.2012.712751>
- Watkins, M. B., Ren, R., Umphress, E. E., Boswell, W. R., Triana, M. C., & Zardkoohi, A. (2015). Compassion organizing: Employees' satisfaction

- with corporate philanthropic disaster response and reduced job strain. *Journal of Occupational and Organizational Psychology*, 88(2), 436–458. <https://doi.org/10.1111/joop.12088>
- Wayne, J. H., Casper, W. J., Matthews, R. A., & Allen, T. D. (2013). Family-supportive organization perceptions and organizational commitment: The mediating role of work-family conflict and enrichment and partner attitudes. *Journal of Applied Psychology*, 98(4), 606–622. <https://doi.org/10.1037/a0032491>
- Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job insecurity and financial concern during the COVID-19 pandemic are associated with worse mental health. *Journal of Occupational and Environmental Medicine*, 62, 686–691. <https://doi.org/10.1097/JOM.0000000000001962>
- World Health Organization. (2020a, March 11). *WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020*. —<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19—11-march-2020>
- World Health Organization. (2020b). *Getting your workplace ready for COVID-19: How COVID-19 spreads*, 19 March 2020. <https://apps.who.int/iris/handle/10665/331584>
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83(3), 486–493. <https://doi.org/10.1037/0021-9010.83.3.486>
- Zweber, Z. M., Henning, R. A., & Magley, V. J. (2016). A practical scale for multi-faceted organizational health climate assessment. *Journal of Occupational Health Psychology*, 21(2), 250–259. <https://doi.org/10.1037/a0039895>

Appendix

Items and Factor Loadings from Confirmatory Factor Analysis

Items (7-point Likert scale from 1 = <i>strongly disagree</i> to 7 = <i>strongly agree</i>)	Factor loadings ($p < .001$)
<i>Event novelty</i>	
1. There are clear rules, procedures, or guidelines to follow at work when the COVID-19 pandemic occurred. (R)	1.00
2. There is a clear, known way to respond to the COVID-19 pandemic at work. (R)	.89
3. There is an understandable sequence of steps that can be followed in responding to the COVID-19 pandemic at work. (R)	.92
4. There are reliable and established procedures and practices in responding to the COVID-19 pandemic at work. (R)	.99
<i>Event disruption</i>	
1. The COVID-19 pandemic requires me to change the way I do my work	1.00
2. The COVID-19 pandemic disrupts my ability to get my work done	.89
3. The COVID-19 pandemic causes me to stop my work and think about how to respond	.92
4. The COVID-19 pandemic alters my normal way of completing my job	.99
<i>Event criticality</i>	
1. The COVID-19 pandemic is a priority for me to deal with in attaining long-term success at work	1.00
2. The COVID-19 pandemic has critical impacts on my long-term success at work	.79
3. The COVID-19 pandemic is an important event that hinders my long-term success at work	.77
<i>Organization adaptive practices</i>	
1. During the COVID-19 pandemic, my organization implemented a flexible work schedule, allowing me to arrange my working hours freely	1.00
2. During the COVID-19 pandemic, my organization implemented a telecommuting program, allowing me to work from home or other places	.79
3. During the COVID-19 pandemic, my organization implemented a paid-leave policy, allowing me to take a personal leave with pay	.72
4. During the COVID-19 pandemic, my organization implemented an employee security plan, providing me with adequate supplies for epidemic prevention	.40
<i>Job insecurity</i>	
1. I am worried about the possibility of being fired	1.00
2. My job is insecure	.99
3. My job is likely to change in the future	.99
4. My job is not permanent	.87
5. The thought of getting fired really scares me	.99
<i>Emotional exhaustion</i>	
1. I feel burned out from my work	1.00/.99
2. I feel emotionally drained from my work	.86/.86
3. I feel exhausted when I think about having to face another day on the job	.96/1.00
<i>Organizational deviance</i>	
1. I intentionally left work early	1.00/.98
2. I took extra breaks to avoid work	.95/1.00
3. I lied about the number of hours that I worked	.89/.95
<i>Saving behavior</i>	
1. I minimized unnecessary expenses	1.00/1.00
2. I cut expenses on daily consumption.	.97/.93
3. I tried to save more money for a rainy day.	.93/.86

Note. Unstandardized factor loadings were reported. R denotes reversed coded item. Since emotional exhaustion, organizational deviance, and saving behavior were measured at both Time 1 and Time 2, factor loadings for these variables at both Time 1/Time 2 were reported. All factor loadings were significant ($p < .001$).

Received August 27, 2020
Revision received January 10, 2021
Accepted January 19, 2021 ■