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The Effects of Mandatory Work-from-Home Strength on Job Performance: An Investigation into the Mediating Role of Emotional Exhaustion during the COVID-19 Pandemic in China

Ziyun Zhao ^{1,*}

*Corresponding author

¹ Postgraduate researcher, The Australian National University, Canberra, Australia, ziyun.zhao1@outlook.com

ABSTRACT

The COVID-19 pandemic has compelled organizations to adopt mandatory work-from-home (WFH) policies, which have distinct features of criticality, disruptiveness, and novelty. These features, collectively known as event strength, have the potential to trigger avoidance coping behaviors among individuals. To minimize the potential for common method bias, we conducted a three-wave time-lagged study with a sample of 269 Chinese employees. Our results show that mandatory WFH strength during COVID-19 is positively associated with emotional exhaustion, which in turn is negatively related to job performance. Furthermore, emotional exhaustion partially mediates the relationship between mandatory WFH strength and job performance. Drawing on the Conservation of Resources (COR) theory, we offer a theoretical explanation for these findings and enrich the COR framework by including these variables. Our study contributes to the understanding of teleworking in exceptional circumstances and offers practical implications for governments and organizations to implement effective strategies during times of crisis.

Keywords: The COVID-19 pandemic, mandatory WFH strength, emotional exhaustion, job performance, COR.

INTRODUCTION

Since the onset of the COVID-19 outbreak in January 2020, the global community has faced profound and far-reaching impacts, affecting individuals, businesses, and societies on a devastating scale. In response, many countries have resorted to implementing stringent lockdown measures, with home isolation emerging as a cost-effective strategy for mitigating the spread of the virus. In China, Level 1 responses to public emergencies have been activated in various regions. Businesses have increasingly adopted delayed return-to-work policies and WFH options as measures to mitigate the detrimental effects of the outbreak. Notably, the advent of the digital economy and advancements in information technology has played a vital role in enabling remote work, effectively breaking down the barriers of organizational space, and providing a viable means of avoiding market risks and major crises during this unprecedented time (Liu et al., 2021). Specifically, the evolution of mobile communication technology networks and the enhanced functionality of computers, smartphones, and other devices have significantly boosted people's aptitude to collaborate and communicate effectively across various locations and time zones. Furthermore, the development of telecommuting tools, such as instant messaging, video conferencing, and shared document platforms, has facilitated seamless remote collaboration and efficient task management. These technological advancements have undoubtedly played a critical role in enabling businesses and individuals to adapt and cope with the challenges posed by the pandemic.

Despite the diffusion availability of mature information technology and the successful implementation of telecommuting in a few companies, prior to the onset of the COVID-19 pandemic, the use of remote work had stalled and had not been widely embraced by most enterprises. Industries were wary about whether the benefits of teleworking would outweigh the costs, leading most companies to continue relying on traditional offline office models. In the aftermath of the COVID - 19 pandemic, multinational governments have prioritized minimizing public health risks, often necessitating the temporary closure of public places and quarantine measures to protect citizens from infection. Consequently, WFH has become the preferred mode of remote work, making it the only viable option during an epidemic. In the meantime, Tripathi and Dubey (2020) observed diverse social reactions toward WFH culture, based on an analysis of 100,000 tweets. While some individuals expressed trust and satisfaction with the WFH culture, others reported undesirable psychological states such as disgust and anger. Overall, remote work presents both challenges and opportunities, both apparent and latent, irrespective of the period.

The current state of knowledge on teleworking during the COVID-19 pandemic prompts questions regarding whether and how staffers adjust their emotional resource input to preserve and access work resources. Specifically, it remains unclear whether emotional resources are overtaxed during teleworking, leading to emotional exhaustion and ultimately reduced job performance. These conflicting lines of inquiry highlight a fundamental tension, which is encapsulated in the question: Can the mandatory WFH during the COVID-19 pandemic in China lead to emotional exhaustion, and subsequent declines in job performance? While telecommuting is not a novel concept, the worldwide crisis has catalyzed its adoption as the primary

means of sustainable business operations, drawing widespread attention and necessitating a re-evaluation of its significance. To investigate whether mandatory WFH strength during the outbreak affects people's work status through emotional exhaustion, we conducted a time-lagged study in China.

As per the aforementioned details, this study aims to assess the influence of teleworking on job performance under COVID-19 by utilizing event strength as a measure. In this study, we have considered China's mandatory home office as an event and defined it as a specific activity with particular goals and effects that can be observed, measured, and analyzed within a particular time and space, as proposed by Morgeson et al. (2015). Drawing on the protection of resource theory in the COVID-19 context, our research has investigated the novel, destructive, and critical event characteristics associated with WFH for the time being the epidemic. Due to the epidemic's threat, the fear of external threats, such as work insecurity and basic livelihood security, may compel employees to devote more emotional resources to reduce the loss of resources (Liu et al., 2021). To comprehensively evaluate changes in employees' work performance in this event, we have employed the widely used Job Performance Scale developed by Williams and Anderson (1991), which assesses role behavior and organizational citizenship behavior for individuals and organizations, respectively. We have explored how the strength of mandatory WFH in China during the epidemic affects job performance through self-assessment of emotional fatigue. These findings contribute to our understanding of event strength management and unpredictability in the context of the Conservation of Resources (COR) theory and have practical implications for individuals, organizations, and society regarding adapting to positive working conditions, stimulating employee potential, and managing the public during compelling events.

The present study reports on a well-planned and methodical research endeavor, structured into several distinct sections. The second section provides a comprehensive literature review, which details the theoretical framework construction and the formulation of hypotheses. Specifically, the study first introduces the COR theory and subsequently proposes a series of assumptions that build on relevant literature and the COR theory. The third section outlines the research methodology and describes the sample selection, survey procedure, and scale application. In the fourth section, the authors present the empirical results, which include confirmation factor analysis, correlation analysis, and intermediary effect analysis. Finally, the study offers a discussion of the results, emphasizing the theoretical and practical significance of the findings, as well as the limitations of the study.

LITERATURE REVIEW

Telework/ WFH and its Impact

The concept of telework was first introduced by Nilles in 1975, in response to the oil crisis. Telework refers to a flexible work arrangement in which individuals work outside of the primary or central workplace and communicate with others inside and outside the organization using computer technology or other communication methods (Olson & Primps, 1984). Multiple terms such as workfrom-home (WFH) and remote work have been used interchangeably with telework. Telework models can be further categorized based on workplace location, with home-based telework being the most prevalent. Telework centers and shared workplaces are also viable alternatives. Certain types of work, such as e-sourcing and sales trips, are not considered telework. The former involves performers who are not official members of the organization, and the latter typically involves tasks that are performed outside the central workplace and as part of regular work arrangements (Gajendran & Harrison, 2007).

The implementation of teleworking, or WFH, has been a topic of concern for organizations and researchers concerning its relationship with job performance. Past studies have demonstrated that a majority of employees perceive the positive effects of telecommuting (Liu et al., 2021). Researchers such as Shepherd-Banigan et al. (2015) suggest that the flexibility of teleworking grants employees' greater independence, job autonomy, and work engagement, leading to higher concentration and lower work-related recovery needs compared to office days. Meanwhile, a study by Wang et al. (2020) has reported the positive effects of WFH on employee well-being, reducing negative psychological conditions such as depression and stress. Telecommuting has also been found to reduce job stress and increase employee retention rates by reducing the effort required to build and maintain workplace relationships (Shepherd-Banigan et al., 2015). Lastly, it was found that the utilization of rich and synchronised communication media can help overcome distance and psychological isolation, which are critical factors in improving work performance (Baines, 2002).

While evidence from previous research supports the idea that the benefits of telecommuting, conflicting findings exist in the literature. Van der Lippe and Lippenyi (2018) has emphasised a gender effect, with females experiencing more work-family conflict due to higher expectations of boundary permeability and greater time and effort devoted to domestic and family responsibilities while telecommuting. Moreover, scholars have argued that the high flexibility and autonomy of telecommuting can negatively impact productivity and performance, leading to deviations from planned work trajectories, inefficient in-role behaviour, and reduced output due to the lack of supervision or assistance from colleagues or supervisors. Additionally, remote workers may face difficulties in managing their work-life balance, with some perceiving the need to work longer hours and being forced to deal with work during non-working hours, which can lead to physical and mental health issues and further decrease productivity.

As organizations continue to adopt WFH policies, considerations are being raised about hidden adverse effects on employee well-being and work outcomes. Research has shown that extended periods of WFH can lead to a reduced sense of job integrity and belonging to the organization, as well as social isolation (Bartel et al., 2012). Specifically, WFH fails to fully replace the

spontaneous, informal interactions that occur in a physical office setting. The absence of such interactions can have a detrimental impact on social and emotional well-being, resulting in depression, psychological isolation, and anxiety (Shepherd-Banigan et al., 2015), especially among certain demographic groups, including more educated, female, and elderly workers (Bartel et al. 2012). Additionally, WFH presents obstacles in information dissemination, which may negatively affect performance due to time and space distance differences, immature online office processes, and communication barriers (Lee et al., 2007). These concerns accentuate the importance of considering the potential drawbacks of teleworking and tailoring WFH arrangements to individual needs and circumstances, including gender and work-life balance considerations.

Despite the increasing prevalence of teleworking, research on the relationship between WFH and job performance has produced inconsistent and inconclusive results. This lack of consistent findings can be attributed to the interdisciplinary nature of research on remote work, which spans fields such as organizational management, psychology, and industrial relations (France Belanger Rosann Webb Collins, 1998). Furthermore, variations in teleworking practices, such as the frequency of WFH, and differences in sample characteristics, including the types of teleworkers and job differences, may contribute to the variability in study outcomes. Other diverse factors, such as differences in sampling strategies (e.g., firm size) and national cultural differences, may also play a role (Mokhtarian et al., 2005). Thus, drawing definitive conclusions regarding the impact of teleworking on job performance requires careful consideration of these elements and their possible effects on study outcomes.

As a result of the COVID-19 outbreak, scholars have been placing increased emphasis on examining the relationship between teleworking and job performance. One theory that has gained attention in this area is the Conservation of Resource Theory (COR), which aims to uncover the origins of personal stress and provide measures for alleviating it. According to COR theory, individuals tend to protect and access resources when they are experiencing resource stress, and personal stress may arise from both the potential threat of loss and the actual loss of resources. The sudden and mandatory transition to teleworking amidst the COVID- 19 pandemic has created a novel, disruptive, and critical situation, particularly for employees and organizations that had not previously experienced telecommuting. As employees are forced to isolate themselves from the formal workplace, the event strength of teleworking is heightened, while individual work resources are diminished, given that most resources are typically accessed in the office, Furthermore, designing effective work norms and accurately describing tasks can be challenging for organizations under epidemic conditions, necessitating employees to pay extra resources to proactively adapt to their working environment and reduce visible and possible resource loss.

The outbreak of the new coronavirus has generated uncertainty about its potential course and outcome. Morgeson et al. (2015) argue that the impact of an event depends on its characteristics. However, not all events capture our attention in the same way as SARS did. Chen et al. (2020) have shown that the higher the perceived strength of an event, the greater its influence on individuals. Therefore, event strength, as generated by Morgeson et al. (2015), is a measure of force that produces change. Nonetheless, current research on the relationship between telework strength and job performance are limited to short-term, flexible telecommuting studies, and the reference to improved performance under telecommuting in the context of self-evaluation has also not been substantiated (Gajendran & Harrison, 2007). During the outbreak of COVID-19, logistical constraints and mass infections have hindered the satisfaction of people's daily needs, leading to a build-up of psychological insecurity and emotional exhaustion, particularly among office staffers.

Theoretic Framework

The Conservation of Resources (COR) theory proposes that individuals strive to acquire, protect, and nurture the resources that they value, in order to support their well-being and social relationships (Hobfoll et al., 2018). The theory suggests that individuals will invest resources to protect existing resources from potential or actual loss, and that this process can facilitate a faster recovery from resource loss. Over the past three decades, COR theory has been widely applied in the field of organizational behavior and has provided a valuable framework for understanding countless psychological and behavioral processes in individuals' daily lives. For instance, a recent paper by Chong et al. (2020) applies COR theory to explain how daily task frustrations related to the COVID-19 pandemic can serve as stressors that trigger resource-loss processes, ultimately leading to emotional exhaustion among employees. This finding underscores the significance of considering the impact of contextual factors on individuals' resource conservation and well-being and highlights the uninterrupted relevance of COR theory for understanding the complex dynamics of organizational behavior.

In this context, the application of the Conservation of Resources (COR) theory can offer a valuable framework for investigating the mechanisms that underlie the relationships between WFH arrangements, emotional exhaustion, job performance, and event strength. Specifically, COR theory posits that individuals strive to acquire, protect, and build resources and that the loss of resources can have negative consequences for well-being and performance. In the case of WFH, individuals may experience a loss of resources such as direct communication with leaders and colleagues, spontaneous interactions, and physical resources like paper documents and office equipment. These losses can trigger efforts to compensate for the shortfall, leading to emotional exhaustion and reduced job performance. If this situation continues, it will lead to a rapid and impactful spiral of losses (Halbesleben et al., 2014; Hobfoll, 2018). By considering the role of resources and their conservation in the context of WFH, our study can contribute to a more nuanced understanding of the impact of remote work on individuals and organizations and inform the development of interventions to support well-being and performance in this challenging context.

However, it is crucial to acknowledge that this mode of work may also entail certain drawbacks and inconveniences. For example, the blurring of work-family boundaries and a low sense of job security may contribute to reduced job performance among teleworkers. Additionally, the occurrence of unexpected events can disrupt individuals' daily routines and lead to the loss of valuable resources (Morgeson et al., 2015). During the recent pandemic, mandatory teleworking may have served as a catalyst for significant disruptions, leading to both tangible and intangible resource losses among employees. In line with the COR theory, this study seeks to investigate the extent to which strength in the context of mandatory teleworking during the COVID-19 pandemic in China, as an event, is associated with reduced job performance, and whether this relationship is mediated by emotional exhaustion.

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HYPOTHESIS DEVELOPMENT

Mandatory WFH Strength During COVID-19 and Emotional Exhaustion

The concept of event strength is often evaluated along three distinct dimensions, namely novelty, disruptiveness, and criticality. The novelty dimension assesses the degree to which the current event differs from past occurrences, representing a new or unexpected phenomenon. The disruptiveness dimension refers to the extent to which the event influences changes at the organizational and individual levels. Finally, criticality reflects the event's level of importance or priority for both the organization and the individual. The event strength can significantly affect its degree of influence, as noted in prior studies (Morgeson et al., 2015).

In the context of COVID-19, the disease caused by a novel coronavirus, teleworking has emerged as three vital responses to ensure business continuity while adhering to social distancing measures. Telework is commonly defined as working in a location outside the office, using information and communication technologies. However, for the purposes of our study, we conceptualize telecommuting as mandatory based-home work that leverages telecommunication technology. Emotional exhaustion, which represents the overtaxing of an individual's emotional and physical resources due to work stress and intensity, is considered a key element of burnout (Frone & Tidwell, 2015). COR theory posits that work stress arises from resource dilemmas, leading individuals to expend additional physical and emotional resources to find Ways to maintain resources and alleviate stress (Hobfoll, 2008). This theory is relevant in the context of mandatory WFH during COVID-19, as employees must navigate an array of new challenges and stressors in this unique work environment.

In terms of novelty, the COVID-19 pandemic has created three new paradigms for telecommuting, in which the practice has become mandatory, ad hoc, and urgent, as opposed to being short-term, optional, and flexible in traditional telecommuting. This change in circumstances has led to a lack of effective procedures and guidelines for companies to respond to such events, resulting in vague and confusing procedural steps for employees who work from home. Such differences in distance, time, and space dimensions, along with a lack of understanding of uncertainty rules between employees, impede effective communication, making it difficult for telecommuters to access key resources such as task resources, which, in turn, increases uncertainty and lags in information exchange. As a result, telecommuting employees must expend more personal emotional, and physical resources to avoid resource dilemmas and other negative influences. The scarcity of resources and lack of information exchange in such contexts may lead to further depletion of mental resources, making it difficult for telecommuters to access.

Adopting a disruptive perspective, the outbreak of COVID-19 has brought the world to a halt, resulting in increased uncertainty for those working from home. As a response to the exceptional circumstances, many companies have had to restructure their organizations, cut salaries, lay off employees, and reorganize teams to increase their chances of survival. Consequently, employees are not only facing the stress of potential infection but also heightened levels of job insecurity. The COR theory asserts that individuals are more affected by the loss of resources than by the acquisition of resources, and the effects of such loss are both more rapid and longer lasting (Morgeson, 2005). Similarly, Huang et al. (2013) point out that when employees are uncertain about external pressures in the organization, their psychological well-being can be negatively affected. Consequently, telecommuters should implement strategies to mitigate resource depletion and the disruptive impact of the event, which may be accompanied by heightened tension and emotional exhaustion.

The concept of criticality, as defined by Morgeson et al. (2015), encompasses the influence of event strength on goal achievement. Considering the COVID-19 pandemic, the implementation of mandatory WFH policies represents a novel and disruptive event that may have unforeseen consequences. Categorically, such policies may result in policy imperfections, increased communication barriers, and blurred work-life boundaries. These factors can limit telecommuters' independence and autonomy, ultimately leading to a loss of resources. Drawing on the COR theory, this initial loss of resources can trigger an unfavorable spiral of further resource depletion, which can be exacerbated by the stress and pressure associated with resource loss. Employees who work at home experiencing resource loss may struggle to invest in resources effectively, which can impede their ability to halt the resource loss. Meanwhile, the "loss first" principle, coupled with the stress response triggered by resource loss, can further diminish the resources available to employees to prevent further resource loss (Hobfoll, 2008). Hence, staffers who accepted mandatory WFH arrangements during the COVID- 19 pandemic are at an increased risk of depleting their mental resources, which can hinder their ability to attain the goal of maintaining and developing their resources.

Thus, the three dimensions of mandatory WFH strength under COVID-19 are a reflection of lost resources for employees and may deepen their emotional exhaustion. In summary, we propose the hypothesis:

H1. Mandatory WFH strength during COVID-19 is positively related to emotional exhaustion

Emotional Exhaustion and Work Performance

Emotional exhaustion, defined as the extreme emotional fatigue and reduced ability to engage in emotional activity experienced during and at the end of the workday, has been found to have a negative association with job performance in multiple studies (Frone & Tidwell, 2015; Cropanzano et al., 2003).

The inconsistent relationship between organizational needs and individual resources to meet those needs can lead to job stress in the short term and potentially maladaptive outcomes, such as emotional exhaustion, in the long term. The COR theory further predicts that individuals will attempt to minimize losses and experience discomfort when faced with resource deficits (Wright & Cropanzano, 1998). This framework has been particularly valuable in predicting outcomes related to emotional exhaustion.

Holahan et al., (2005) also found that avoidance coping behaviour is often used as a response when people perceive stress. In this negative psychological state, individuals tend to take higher levels of precautionary measures, leading to avoidance coping behaviours. Avoidance coping behaviour implies the use of avoidance behaviours to confront problems and react to perceived stress when faced with emotional and psychological stress (Long, 1990). Specifically, Employees experiencing emotional exhaustion may be more likely to utilize avoidance or withdrawal as coping mechanisms, resulting in reduced job performance Or even separation (R. T. Lee and Ashforth, 1993). Therefore, they may not be able to effectively fulfill the responsibilities and behaviors of their roles. Additionally, research has found that emotional exhaustion is negatively related to organizational-directed citizenship behavior (for individuals and organizations) (Cropanzano et al., 2003). In-role behavior and organizational citizenship behavior for individuals and organizations are the three dimensions of job performance evaluation. These findings provide indirect evidence for the relationship between emotional exhaustion and job performance. Overall, the literature suggests that emotional exhaustion can have significant consequences for job performance and the well-being of employees.

Therefore, based on COR theory and related research, we propose the hypothesis:

H2. Emotional exhaustion and job performance are negatively related

Mediating Effects of Emotional Exhaustion

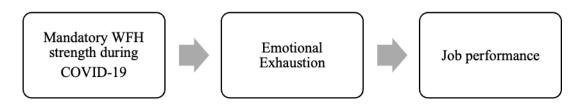
The COR framework posits that emotional exhaustion is more liable to occur in situations where there is actual resource loss, the perceived potential threat of resource loss, Or the shortage of parity between resource investment and actual returns (Hobfoll, 2018). In cases where individuals experience declined job performance, such loss of resources may prompt or force them to take action to safeguard their resources and mitigate the loss. As such, individuals may need to invest additional emotional and physical resources to manage the stressors associated with teleworking and mitigate the stress of resource loss. Moreover, the initial loss of resources may be further compounded by inadequate coping, familial conflicts, poor mental health, emotional exhaustion, and other influential factors. Chronic stress or emotional exhaustion arises when individuals perceive that they no longer possess sufficient emotional resources to deal with the stressors they encounter (Hobfoll, 2018; R. T. Lee & Ashforth, 1996), which can significantly impact their work performance over time.

Specifically, this relationship can be examined from two perspectives. First, in comparison to traditional remote work, basedhome work under pandemic restrictions is more restrictive in terms of the physical environment. The differences between traditional offline work and mandatory WFH pose significant challenges in terms of information transfer between individuals, teams, and departments. Meanwhile, the heightened mandatory WFH strength during the COVID-19 pandemic in China characterized as novel, disruptive, and critical implies that employees may require to expend additional emotional resources to achieve cross-functional, cross-process, and cross-departmental communication and collaboration SO that accomplish their work. This is liable to invite increased time consumption and decreased task completion within the same unit of time.

Secondly, it is essential to underline that remote work may offer employees more flexible working arrangements, but it can also disrupt their work-life boundaries and decrease job security, thereby exacerbating their exhaustion in the face of resource depletion. Such resources may include organizational and social support, occupational development, corporate welfare, and others (R. T. Lee & Ashforth, 1996). Workload levels and stressful events are classic examples of work demands, which constantly deplete employees' emotional resources, and have been shown in numerous studies that negative psychological emotions can impair performance (Cropanzano et al., 2003; Wright and Cropanzano, 1998).

Therefore, the changes wrought by mandatory WFH during the COVID-19 pandemic may result in increased depletion of emotional resources, leading to emotional exhaustion and then reduced job performance. In summary, we propose the hypothesis:

H3. Emotional exhaustion mediates the relationship between WFH and job performance, i.e. mandatory WFH strength during COVID-19 declined job performance through emotional exhaustion. The hypothesized model is presented in Figure 1.



Source: This study.

Figure 1: Hypothesized model.

METHOD

Process and Participants

This study was conducted using data collected from 23 companies located on the eastern coast of China that maintained normal production during the COVID-19 outbreak. Employing the snowball sampling technique, this study first contacted eight senior managers who aided in the identification of 31 middle and senior managers. Subsequently, with the help of these 39 managers, this study contacted their subordinates and distributed an electronic questionnaire that accounted for the impact of the epidemic. Event systems theory indicates that to advance the analysis of an event, it is important to consider not only its characteristics but also its ongoing impact (Morgeson et al., 2015).

To capture the strength of the COVID-19 outbreak, participants were requested to recall their mandatory WFH experiences and feelings during the peak of the outbreak in February-April 2020. The study collected data on the strength and demographic context of mandatory based-home working during this period in early February in China (Time 1). To verify that the effects of the event may persist over time as the duration and timing of the event vary (Morgeson et al., 2015), we collected data on participants' emotional exhaustion 21 days later (Time 2), and data on job performance was collected 48 days later (Time 3). The study design was reasonable as China was in the 'containment phase' of the outbreak from February to April and entered the 'remission phase' after April 5th, as stated in the 76th Coronavirus Intensity Report by the World Health Organization. During this period, most companies implemented a mandatory work-from-home policy, resulting in a substantial number of people working remotely.

This study sample comprised 269 matched employees, out of a total of 289 respondents at T1, 288 respondents at T2, and 305 respondents at T3, with a gender ratio of 101 males to 168 females. The age range of participants was diverse, with 7.8% between 18 and 25 years, 14.9% between 26 and 30 years, 46.1% between 31 and 40 years, 24.5% between 41 and 50 years, and 6.7% aged 51 years or older. In terms of educational background, 41.6% of participants had a high school education or less, 24.5% had a bachelor's degree, 30.9% had a master's degree, and 3.0% held a doctorate. The sample's professional roles were distributed as follows: 1.1% purchasing and sales personnel, 6.7% research and development personnel, 40.5% production and safety personnel, 12.3% administrative and logistics personnel, 39.4% virtual coders, and managers served as the reference group. Table 1 presents the demographic characteristics of the study sample.

Table 1: Basic Characteristics of Sample ($N=269$).					
Variables	Types	n	Frequency		
Gender	Male	101	37.5%		
	Female	168	62.5%		
Age	<18	0	0%		
•	18-25	21	7.8%		
	26-30	40	14.9%		
	31-40	124	46.1%		
	41-50	66	24.5%		
	>50	18	6.7%		
Education	High school or less	112	41.6%		
	Bachelor's degree	66	24.5%		
	Master's degree	83	30.9%		
	Doctorate	8	3%		
Position	PS	3	1.1%		
	RD	18	6.7%		
	PSP	109	40.5%		
	AL	33	12.3%		
	V	106	39.4%		

Source: This study.

Note. PS= purchasing and sales personnel; RD= research and development personnel; PSP= production and safety personnel; AL= administrative and logistics personnel; V= virtual coders

Measures

Mandatory WFH Strength During COVID-19

In this study, we utilized the three-dimensional event strength scale developed by Morgeson et al. (2015) to measure mandatory WFH in China during COVID-19. This scale comprises 11 items, which assess event novelty (four items), event disruption (three items), and event criticality (four items). To illustrate, sample items for each dimension include "There is a clear, known way to respond to mandatory WFH during COVID-19," "WFH is critical to our long-term success, and "Mandatory WFH during COVID-19 causes US to stop and think about how to respond." The participants rated their responses on a 5-point Likert scale, where 1 indicates "Strongly Disagree," and 5 represents "Strongly Agree." The Cronbach alpha coefficient was .94 for the novelty dimension, .82 for the disruption dimension, 80 for the criticality dimension, and .90 for the overall scale.

Emotional Exhaustion

We employed the Emotional Fatigue Scale from the Work Fatigue Inventory, developed by Frone and Tidwell (2015). Emotional exhaustion is a psychological manifestation of being under stress that is part of job burnout and often occurs in conjunction with other physical exhaustion. The items are rated on a 5-point scale (1= never: 2= less than once a month; 3= at least once a month; 4= at least once a week; 5= everyday). The Cronbach's alpha coefficient for our sample was .95.

Job Performance

To measure job performance, we utilized the widely accepted Job Performance Scale developed by Williams and Anderson (1991). This scale is appropriate for both self- and peer-assessment and includes three dimensions: in-role behavior (IRB), organizational citizenship behavior directed towards individuals (OCBI), and organizational citizenship behavior directed towards the organization (OCBO). We selected three items from each dimension, for a total of nine items, to assess performance. The items included in our study were "Completes assigned duties adequately," "Helps others who are absent," and "Attends work at a higher rate than standard." The reliability of the scale was tested in a cross-cultural pilot study by Bacharach and Bamberger (2007), which showed that it has good reliability in China. In our study, the Cronbach alpha coefficient was .94 for IRB, .82 for OCBI, .80 for OCBO, and .90 for the overall scale.

Control Variables

In addition to the main variables, we measured participants' gender (coded as "1" = male, "2" = female), age, education (coded as "1" = high school education or less, "2"= associate college degree, "3" = bachelor's degree, "4" = master's degree, "5" = doctoral degree), and job title (coded as "1" = purchasing and sales personnel, "2"= research and development personnel, "3" = production and safety, "4"= administrative and logistics personnel, "5" = dummy-coded manager as the reference group).

Statistical Analysis

Descriptive statistics and correlation analysis were conducted in SPSS 27.0 to explore the relationships among the variables. We used Mplus 8.0 for validation factor analysis and path analysis to test our hypotheses. To assess the mediating effects, we employed the stepwise method of multiple linear regression.

RESULTS

Confirmatory Factor Analysis

We applied Mplus 8 to Confirmatory Factor Analysis (CFA) to test whether respondents could distinguish between the main constructs in this study. We proposed the χ^2 chi-square distribution, df degrees of freedom (the formula is: df = n-k, where n is the number of samples and k is the number of conditions or variables being restricted), RMSEA, CFI, TLI and SRMR as the main indicators of CFA results. The best fit among the alternative models is shown with $\chi^2 = 0$, df = 0, $\chi^2/df = 0$, RMSEA = 0, CFI = 1, TLI = 1 and SRMR = 0. The CFA results, therefore, indicate that our proposed model is a saturated model with acceptable discriminant validity.

Descriptive Statistics and Correlations

Table 2 shows the means, standard deviations, and correlations between the key variables in the current study. As shown, mandatory WFH strength during COVID-19 was positively correlated with emotional exhaustion (r = .19, p < .01) and negatively correlated with job performance (r = -.22, p < .01). Emotional exhaustion was negatively correlated with job performance (r = -.39, p < .01). The results of the descriptive statistics and correlations provided an initial test of the model.

Table 2: Descriptive statistics and correlations ($N=269$).									
Variables	Mean	SD	1	2	3	4	5	6	7
1.Gender	1.38	0.49	1						
2.Age	4.07	0.99	02	1					
3.Education	1.95	0.92	14*	58**	1				
4.Position	3.82	1.07	.43**	.14*	34**	1			
5.MS(T1)	4.50	0.63	.01	.23**	17**	.06	1		
6.EE(T2)	4.31	0.68	.05	.06	-0.08	02	.19**	1	
7.JP(T3)	1.93	0.73	05	14*	.10	02	22**	39**	1

Note. Reliability coefficients are shown in brackets along the diagonal of the table. MS= Mandatory WFH Strength during COVID-19; EE= Emotional Exhaustion; JP= Job Performance. * p < 0.05. ** p < 0.01.

Harman's One-Factor Test

In order to evaluate the likelihood of common method bias, an analysis known as Harman's one-factor test was executed. The first factor captured 31.294% of the overall variance, falling short of the commonly accepted 50% benchmark that signifies notable common method bias. Consequently, it can be deduced that common method bias does not pose a significant issue within this dataset, despite the possibility of minor biases persisting.

Mediation Effects

The current study aimed to investigate the linear regression relationship between the variables in the "mandatory WFH strength during COVID-19 – exhaustion – job performance" pathway in the context of COVID-19. To achieve this goal, five models were constructed, and their results were summarized in Table 3.

Model 1 was designed to examine the relationship between emotional exhaustion and the control variables. The results showed that there was no linear regression between the control variables and emotional exhaustion. In Model 2, the mandatory WFH strength during COVID-19 was introduced as the independent variable, and the results revealed a positive relationship between the mandatory WFH strength during COVID-19 and emotional exhaustion (B= 0.20, p < .01), indicating that the mandatory WFH strength during COVID-19 had a significant positive predictive effect on employee emotional exhaustion, and thus, confirming H1.

Model 3 was formulated to explore the relationship between job performance and the control variables. The results indicated that there was no linear correlation between the control variables and job performance. Model 4 was based on Model 3, with the mandatory WFH strength during COVID-19 introduced as the independent variable. The results indicated a negative relationship between the mandatory WFH strength during COVID-19 and employee job performance (B= -0.23, p < .01), suggesting that the mandatory WFH strength during COVID-19 had an inverse predictive effect on job performance. Model 5 added emotional exhaustion as an independent variable to Model 4. The results showed that emotional exhaustion significantly impacts job performance (B= -0.38, p < .001), so H2 was confirmed; while the mandatory WFH strength during COVID-19 also impacts job performance (B= -0.15, p<.05). However, the impact of the mandatory WFH strength during COVID-19 was weakened by the presence of emotional exhaustion. This finding suggests that emotional exhaustion partially mediates the relationship between the mandatory WFH strength during COVID-19 and job performance, therefore H3 was validated.

	Table 3: Results of Effects on the Mediating Model (N= 269).
2)	.IP(T3)

Effect	EE(T2)		JP(T3)			
	Model 1	Model 2	Model 3	Model 4	Model 5	
Gender	0.11(0.10)	0.11(0.10)	-0.09(0.10)	-0.09(0.10)	-0.05(0.10)	
Age	0.02(0.05)	-0.01(0.05)	-0.09(0.06)	-0.06(0.06)	-0.07(0.05)	
Education	-0.07(0.06)	-0.06(0.06)	0.03(0.06)	0.02(0.06)	-0.01(0.06)	
Position	-0.06(0.05)	-0.06(0.05)	0.02(0.05)	0.02(0.05)	0.01(0.05)	
MS(T1)		0.20**(0.07)		-0.23**(0.07)	-0.15*(0.07)	
EE(T2)					-0.38***(0.06)	
R^2	0.02	0.05	0.02	0.06	0.18	
ΔR^2 <i>F</i>	0.02	0.03	0.02	0.04	0.12	
F	0.98	2.54*	1.48	3.30**	9.66***	
ΔF		8.65**		10.36**	39.06***	

Source: This study.

Note. MS= Mandatory WFH Strength during COVID-19; EE= Emotional Exhaustion; JP= Job Performance. * p < 0.05. ** p < 0.01. ***p < 0.001.

DISCUSSION

Regarding the question of how telework reduces job performance under the epidemic, we combined the concept of event strength and constructed a model based on COR theory, with emotional exhaustion as a mediating variable (Hobfoll et al., 2018; Morgeson et al., 2015). Through theoretical derivation and empirical analysis, the results support the proposed hypothesis and demonstrate that mandatory WFH as a powerfully influential event in the context of COVID-19 can trigger emotional exhaustion and reduced job performance in people.

First, emotional exhaustion mediates the mandatory WFH strength during COVID-19 and job performance. Specifically, the strength of mandatory WFH in the context of COVID-19 in China was negatively associated with staffers' job performance. In addition, we found a positive association between the mandatory WFH strength during COVID-19 and emotional exhaustion, implying that companies need to issue more effective and easily understood procedures and guidelines to reduce employees' emotional exhaustion when implementing mandatory WFH policies. Notably, we found that mandatory WFH strength under

COVID-19 reduced employees' job performance through emotional exhaustion, thus providing a new and critical mechanism that enriches the event research at the time. Faced with resource dilemmas under the mandatory telecommuting conditions of COVID-19, most employees had to expend more emotional and physical resources in order to cut their losses and may even fight it through behaviours such as leaving their jobs and reducing their job performance (Chong et al., 2020). Our findings, though previously overlooked, offer significant theoretical and practical insights. Recent studies, such as Junça Silva et al. (2022), also highlight that prolonged telecommuting exacerbates emotional fatigue and hinders performance due to blurred work-life boundaries. This underscores the need for organizations to support employees in managing work-life balance to sustain performance and well-being.

Theoretical Implications

The results of the study have extensive theoretical implications. Firstly, the relationship between mandatory WFH in China and job performance in the context of Covid-19 context is clarified, as well as the specific mechanisms. Many studies have focused on the relationship between teleworking and job performance, but the results are controversial. For example, Shepherd-Banigan et al. (2015) argue that teleworking positively predicts employee performance, whereas Tremblay and Thomsin (2012) believe that these employees are unable to achieve established job tasks and performance due to a lack of direct supervision. The study found that employees with a mandatory WFH policy implemented in the context of a global pneumonia outbreak reduce their performance through emotional exhaustion, which has not yet attracted much scholarly attention. Therefore, this study based in China illustrates the specific relationship between mandatory WFH strength and job performance by establishing a mediating mechanism and reconciling the contradictions that exist in previous related literature. Meanwhile, scholars have highlighted the need to explore different influencing mechanisms and conditions to reveal the specific relationship between teleworking and employees' job performance. In order to explain how mandatory WFH strength during COVID-19 affects job performance, inspired by the literature and related concepts, we regard mandatory telecommuting during COVID-19 as an event. Starting from the strength and emotional exhaustion of this event to explore a new mediating mechanism that serves the purpose of responding to previous scholars' claims.

Secondly, we have made a meaningful effort to incorporate the mechanisms of teleworking's impact on job performance into the COR theoretical framework. Through the lens of COR theory, people are motivated to build, protect, and nurture their own resource pools to protect the self and support their social relationships. Resource input is one of the key elements of COR theory. Resources are a key component of how individuals measure and assess stress, as resources determine how individuals will respond to stressful situations. In order to protect the resources they have and recover from their loss, individuals have to continuously invest in resources, whether at the individual or organisational level. However, stress reactions occur when existing resources are in danger of being lost, when there is an actual loss of existing resource investment principle of COR theory to explain how mandatory WFH strength under COVID-19 in China reduces job performance through the mediating effect of emotional exhaustion. Specifically, mandatory WFH in a Covid-19 environment is novel, disruptive, and critical, and employees require to overcome a loss of workplace resources. Based on the theoretical perspectives of COR, these home-based staffs need to invest more resources (e.g. emotional and physical resources) to maintain resources and reduce losses. These findings further confirm the generalisability of the COR theory in teleworking environments, both in everyday settings and in special times (e.g. COVID-19).

Furthermore, the findings can be used to explain the differential impacts of emotional resources on related behaviours such as resource loss. Abovementioned, another principle of COR is the resource caravan, the core idea that individual resources are related and interact with each other. Based on this principle (Halbesleben et al., 2014), we consider emotional exhaustion as a vital psychological resource and discuss its influence on telecommuters' behaviour. Our hypothesis is supported by the finding that higher emotional exhaustion reduces employees' job performance.

It has been established in other literature that psychological resources also affect job satisfaction and intention to leave (Scanlan & Still, 2019). It is also implied that psychological resources can have an impact on individual behaviour when individuals are under pressure to lose resources, and that one psychological resource may cause multiple impact effects. Thus, the findings related to this study also support the resource caravan principle of COR theory. In conclusion, our findings extend the scope of the COR theoretical framework.

Implications for Practice

Our research provides important management implications for individuals, organisations, societies and nations to respond more rationally to critical events. Most importantly, our research breaks down preconceptions and shows that employees affected by major events can reduce job performance through emotional exhaustion. This has important practical implications in today's turbulent world, particularly for employees who find themselves in uncertain and challenging situations (Morgeson et al., 2015). Organisations should reduce uncertainty and resource attrition by creating more effective, clear, and easily understood telecommuting strategies. With organisational support, employees will feel more confident about dealing with challenges and uncertainty in the future.

As for organisations, novel, disruptive and critical events always have two sides to their power as events, and both opportunities and threats co-exist. Fortunately, our research has identified individual responses to crisis and resource loss.

Based on these findings, we recommend that supervisors take more interest in the emotional reactions of teleworking employees and in delineating work-life boundaries. For example, organisations can design WFH training programmes to help employees communicate and collaborate more effectively across functions and departments, reduce the wastage of emotional resources in unnecessary areas such as the use of communication devices, and ultimately maintain or even improve work performance. We also recommend that supervisors identify, through regular face-to-face videos and psychometric tests, employees who are experiencing significant emotional exhaustion during mandatory based-home work and other noteworthy mental resources drain countries and provide more attention and guidance to teams and individuals. Furthermore, we suggest that creating more virtual social interactions within organizations, such as coffee breaks, team-building activities, milestone celebrations, wellness sessions, and themed events, fosters community and support among remote workers, leading to a productive remote work environment.

As we concentrate on the mandatory WFH strength under COVID-19 in China, the broader implications for society need to be considered. An important premise of our proposed model is that we measure subjective perceptions of the intensity of the event, rather than quantification of the event in an objective measure. It is particularly striking that people's perception of a crisis should be the primary factor in people's positive response. It is therefore necessary for the state and society to deploy scientific instructions, which facilitate access to justice and rational judgement in people's minds.

This approach should include open and transparent public information, thorough analysis and opinions from authorities, and a strong emphasis on cooperation. By implementing these strategies, organizations can reduce the wastage of emotional resources in unnecessary areas, such as the overuse of communication devices, and ultimately maintain or even improve work performance. These steps ensure that employees receive the necessary attention and guidance, fostering a healthier and more productive remote work environment.

Limitations and Future Research

These implications for theory and practice are qualified to some extent, given several limitations. Initially, there were common methodological differences in our study, but we have made some efforts to do so. We collected data through three longitudinal studies over a 2-month period to reduce bias. Future research is encouraged to collect data from multiple sources, for example, to measure work status based on subject behaviour.

Another potential area for future research is individual differences in our different models. That is, "how individuals struggle to make sense of novel, unexpected or puzzling events" contributes significantly to understanding the context and reactions to managerial upheaval (Maitlis & Christianson, 2014). It maintains that people's reactions to events may be influenced by personal characteristics. In this way, future research may employ individual differences, such as personality, to further enhance the validated model.

Finally, cultural context as a contextual indicator should also be investigated in future studies. As our study claims, the sample obtained from Chinese society featured a collectivist atmosphere (Hofstede, 2018). In order to make our results cross-culturally generalisable, it is important to focus on samples from other cultures in order to retest the mechanisms of how the mandatory WFH strength during COVID-19 affects individual workplace outcomes. In other words, future research should continue to provide more evidence of individualistic cultures, such as in the context of multinational enterprises or multi-working environments, not just from the Chinese context.

CONCLUSION

This study aimed to explore how mandatory WFH strength during COVID-19 in China affects job performance, focusing on emotional exhaustion as a mediating factor. The results confirmed the hypothesis that mandatory WFH strength leads to increased emotional exhaustion, which in turn reduces job performance. These findings underscore the dual impact of telework: while it offers flexibility, it also blurs work-life boundaries, leading to emotional fatigue and decreased performance. Organizations must therefore support employees in managing these boundaries to sustain performance and well-being. The study enriches COR theory by demonstrating how significant events like COVID-19 shape employee experiences and performance outcomes. Future research should further investigate these dynamics across different cultural contexts and individual differences to enhance the generalizability of these findings.

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