

## **COVID-19, Resilience, Job Satisfaction and Organisational Citizenship Behaviour Among Hotel Employees After Thailand's Reopening Plan: A Moderated Mediation Model**

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### **Abstract**

In 2022, Thailand fully reopened to welcome tourists again after two years of COVID-19 lockdown. Amid this reopening, employees were still concerned about the high risks associated with COVID-19. This study investigates how frontline hotel employees were still afraid and stressed because of the COVID-19 pandemic and how their resilience and organisational citizenship behaviour (OCB) have fared during the industry's recovery from COVID-19. A cross-sectional descriptive and analytical design using PLS-SEM was employed to measure COVID-19 concern, job stress, job satisfaction, resilience and OCB among hotel staff after the country's reopening. Through a self-administration survey, the study collected a sample of 362 respondents from 33 three-five-star hotels in Phuket, Thailand.

The results show a negative relationship between COVID-19 concern and job satisfaction. Job stress and job satisfaction were independent mediators of OCB. At the same time, resilience had a moderate negative effect on the relationship between job stress and job satisfaction and a moderate positive effect on the relationship between job satisfaction and OCB. This study provides practical implications for enhancing job satisfaction and OCB for hotel managers and staff. Hotel managers should offer regular training, provide development opportunities, promote a supportive work environment, encourage work-life balance, and provide resources for coping with stress through resilience. Such measures can alleviate the negative effects of job stress, increase job satisfaction, and foster OCB among hotel staff.

### **Keywords**

Moderated Mediation Model, COVID-19 Concern, COVID-19 Resilience, Job Satisfaction, OCB

## **Introduction**

The COVID-19 pandemic that started in 2019 has profoundly affected the tourism industry. The ensuing global lockdowns caused a shock to both supply and demand. Not only did fear of the virus deter tourists, but government policies to control the spread of the virus also had an impact, as many countries implemented nationwide lockdowns that restricted the movement of billions of people. In Thailand, the tourism industry is estimated to have lost 1.9 trillion baht in revenue in 2020 (Elango, 2019).

Tourism is a vital industry for the Thai economy. In 2019, before the outbreak of COVID-19, travel and tourism accounted for 19.7% of Thailand's GDP and provided around 8,054,600 jobs, which was 21.4% of total employment (World Travel & Tourism Council, 2022). Thailand began a carefully planned gradual reopening to revive the international tourism industry on July 1, 2021, with the Phuket Sandbox, Samui Plus, and 7+7 Extension programs. This campaign was followed by a four-phase reopening timeline from October 2021 to January 2022, during which destinations throughout the country reopened to tourists. On July 1, 2022, the Thailand Pass registration scheme was removed, and foreign nationals were only required to show proof of vaccination or a negative ATK test result within 72 hours of travel (Tourism Authority of Thailand, 2022). Since the kingdom fully reopened, international visitor arrivals have increased, international events and local festivals are being held, and major international and regional airlines have resumed their flights.

Reopening major tourist destinations was a significant challenge for the tourism industry after the COVID-19 outbreak. However, few studies have focused on management measures during the first stage of the epidemic. Given the severe impact of COVID-19 on the world, the tourism sector may have difficulty returning to normal. The hotel business, in particular, has taken some of the hardest hits (Wieczorek-Kosmala, 2021), and hotel staff continue to work in an uncertain environment leading to job stress.

Several studies have examined health-related crisis management in the tourism industry (Hall et al., 2020; Shao et al., 2021). However, most have focused only on the impact of the epidemic on the economic revenue and flow of tourists. Venkatesh (2020) presented study on COVID-19's impact on employment, such as job loss, job changes, job outcomes, coping, and support, as well as its impact on home life, such as home life changes, children, life-related outcomes, social life, and support. However, a research gap exists, and future studies should focus on frontline workers in the hotel business. With the current phase of uncertainty in Thailand, organisational growth and sustainability in the hotel industry are highly dependent on human capital management (Luthans, 2002).

Organisational citizenship behaviour (OCB) refers to the voluntary actions that employees take to benefit their organisation beyond their formal job requirements. In the context of the hotel industry, OCB can include actions such as going beyond formal job

requirements to ensure guest satisfaction, helping to maintain a positive work environment, and taking steps to improve the overall operations of the hotel.

The COVID-19 pandemic has significantly impacted the hotel industry, with many hotels experiencing decreased occupancy and revenue. This situation has increased pressure on hotel employees to maintain a high level of service while also dealing with the added challenges posed by the pandemic.

This study examines the OCB of hotel employees after Thailand's reopening plan during the COVID-19 pandemic. Specifically, the study will investigate how the pandemic has affected the OCB of hotel employees. The research will also examine the relationship between resilience and its moderating effect on job stress, job satisfaction, and OCB in hotel employees following Thailand's reopening. The study aims to understand how resilience, as a personal resource, can influence the psychological well-being and organisational outcomes of hotel employees in the context of the COVID-19 pandemic. Specifically, the research will examine how resilience can buffer the negative effects of job stress on job satisfaction and OCB and how it can enhance the positive effects of job satisfaction on OCB. The results of this study have the potential to inform the development of interventions and policies aimed at promoting resilience and psychological well-being among hotel employees and, more broadly, in the hospitality industry.

## **Literature Review and Hypothesis Development**

### **COVID-19 Concern**

Many tertiary institutions have been suspended in the face of the COVID-19 pandemic, leading to increased stress and concern. A literature review of recent studies found that the pandemic has increased anxiety, worry, and stress among individuals, particularly those in essential roles (Ahorsu et al., 2022; Luo et al., 2021; Üngüren & Arslan, 2022).

Fear of COVID-19, which arises from the worry of being infected, has been shown to trigger negative emotions and physiological reactions (Üngüren & Arslan, 2022). The outbreak of COVID-19 has also resulted in high levels of fear and anxiety due to isolation, mental disorders and limitations in social interactions caused by lockdowns and travel bans (Ahorsu et al., 2022; Luo et al., 2021).

### **Job Stress**

Job stress is a person's psychological or physiological response to environmental forces that cause bodily and mental strain (Beehr & Franz, 1987). It can be caused by factors such as high workload, lack of control, role ambiguity, poor relationships with colleagues or supervisors, and inadequate resources to complete tasks (Karasek, 1979). This response

occurs when the demands of a job do not align with an employee's abilities, resources, and/or needs (Tongchaiprasit & Ariyabuddhipongs, 2016).

In health science, previous research has shown a correlation between fear of contracting infectious diseases at work and increased job stress (Hartley et al., 2013). More recent studies have focused on the specific concern of COVID-19, with evidence showing that higher levels of fear of COVID-19 are associated with higher levels of job stress and mental health issues, including burnout (Ahorsu et al., 2022; Falguera et al., 2021).

The COVID-19 pandemic has significantly affected the hospitality industry, and hotel employees have been particularly affected by the changes in work and economic conditions. Studies have shown that these employees are at an increased risk for job stress, with COVID-19 concern being a major factor (Karatepe et al., 2022; Sun et al., 2022; Üngüren et al., 2021). Furthermore, the fear of COVID-19 has significantly and positively affected hotel employees' sense of insecurity and loss (Sun et al., 2022; Üngüren et al., 2021). As the hospitality industry recovers from the pandemic, employees face fear and uncertainty related to COVID-19, which can impact job stress and turnover intentions (Chen & Qi, 2022; Teng et al., 2021).

The literature suggests that the COVID-19 pandemic has increased job stress among individuals and hotel employees, with concerns about the virus being a major contributing factor. As such, these results also confirm that COVID-19 concern is significantly and positively related to job stress. Thus, this study proposes the following hypothesis:

**H1:** COVID-19 concern is significantly and positively related to job stress.

### **Job Satisfaction**

Job satisfaction has been defined from various perspectives, including psychological, physiological, and environmental factors that lead individuals to express their contentment with their job (Hoppock, 1935). Such expression is an example of a positive emotional state that stems from one's occupation (Locke, 1976) and the outcome of different employee attitudes (Blum, 1990). It is widely perceived as a multifaceted and often personalised experience influenced by numerous internal and external factors, including the employee's perception of external environmental threats that may cause psychological stress (Bakotić et al., 2013). According to Bakotić et al. (2013), job satisfaction can also play a crucial role in shaping organisational behaviour, as feelings toward the company can result in either positive or negative actions based on the level of job satisfaction.

Multiple studies have shown a negative correlation between job stress and job satisfaction. High stress levels at work have a major impact on job satisfaction and decreased job performance (Kurniawaty et al., 2019). This notion supports the theory proposed by Fairbrother and Warn (2003) that the ability to manage work-related pressures

affects job satisfaction. Stress can lead to job dissatisfaction, higher turnover rates, and labour loss (Samad, 2006). Previous studies, including those by Applebaum et al. (2010), Kurniawaty et al. (2019), Bemana et al. (2013), Lam et al. (2022), Puspitawati and Atmaja (2021), and Singh et al. (2019), also confirm this observation.

Research has been conducted on the relationship between job stress and job satisfaction in various industries, including banking (Kurniawaty et al., 2019), healthcare (Salam, 2016), public municipalities (Bemana et al., 2013), and the hospitality industry (Lam et al., 2022; Puspitawati & Atmaja, 2021). These studies consistently show a negative relationship between job stress and job satisfaction. In the hospitality industry, job stress has been found to affect both job satisfaction and employee performance negatively (Puspitawati & Atmaja, 2021). Furthermore, Lam et al. (2022) found that emotional labour and cultural intelligence also impact job satisfaction in the luxury hotel industry, with emotive dissonance negatively affecting job satisfaction. The COVID-19 pandemic has also added to the stress and job insecurity faced by frontline employees, including those in the hospitality sector (Üngüren & Arslan, 2022). Hence, these results also confirm that job stress is significantly and negatively related to job satisfaction.

**H2:** Job stress is significantly and negatively related to job satisfaction.

### **Organisational Citizenship Behaviour (OCB)**

OCB has been extensively discussed and defined within the literature (Organ, 1988). It refers to discretionary behaviours exhibited by individuals that are not explicitly recognized or rewarded by the formal reward system. As employee behaviours, OCBs include helping co-workers and attending functions that are not required. It is not necessary for the task or job, but it facilitates organisational functioning.

Several researchers have demonstrated that OCB is related to job satisfaction. Two different theoretical explanations for this relationship have been forwarded. One explanation provided by Organ and his colleagues emphasises the role of cognitions (Farh et al., 1990; Moorman, 1991; Organ & Konovsky, 1989) and, in particular, perceptions of fairness (Organ, 1988; Organ & Konovsky, 1989). In making this argument, Organ suggested that OCB represents an input for the employee's equity ratio and can be more easily and safely altered to involve the employee's formal job duties. Employees who feel fairly treated will likely engage in OCB to maintain equilibrium between them and their organisation. Meanwhile, those who feel treated unfairly will withhold OCB behaviour. This perspective views OCB as controlled and deliberate behaviour primarily influenced by cognitive, rather than affective, factors.

In the hotel industry, OCB mediates the influence of ethical leadership on employee performance through employee engagement (Sugianingrat et al., 2019) and is linked to CSR

perception through perceived external prestige and pride in an organisation (Alsheikh & Sobihah, 2019; Boĝan & Dedeoĝlu, 2020). For instance, studies on OCB in Jordanian five-star hotels contribute to the literature on the impact of organisational culture, leadership styles, organisational commitment, and job satisfaction on OCB (Alomari et al., 2019).

Previous studies have investigated the relationship between job satisfaction and OCB in various settings, including supply chain management companies (Purwanto et al., 2021), political organisations (Soelton et al., 2020) and academic organisations (Fitrio et al., 2019). The findings from these studies suggest a positive and significant correlation between job satisfaction and OCB.

Other studies have reported a positive relationship between job satisfaction and OCB in the hotel industry, such as Fiermaningsih et al. (2019) and Massoudi et al. (2020). Massoudi et al. (2020) found that organisational commitment and job satisfaction positively impact OCB among hotel employees. Similarly, Fiermaningsih et al. (2019) discovered that job satisfaction positively and significantly affects OCB among five-star and four-star hotel employees.

The literature suggests that job satisfaction positively correlates with OCB among employees. This notion emphasises the need to focus on job satisfaction to improve OCB and overall organisational performance. Therefore, the following hypothesis is formulated:

**H3:** Job satisfaction is significantly and positively related to OCB.

### **Resilience**

Resilience theory has gained popularity in research across various nations and disciplines (Van Breda, 2018). The core of resilience is the capacity of individuals to confront and respond positively to inevitable unpleasant conditions and to turn those conditions into opportunities for personal self-development (Maddi, 2005; Norman, 2000). Resilience refers to the ability to bounce back from failure, conflict or adversity (Luthans, 2002). Seven domains that build resilience have been identified by Reivich (2002), including emotion regulation, impulse control, optimism, causal analysis, empathy, self-efficacy and reaching out.

Research has consistently demonstrated a relationship between resilience, stress and job satisfaction. Rutter (2012) considered resilience as coping with stress and depression. Moreover, Hudgin (2016) reported that high resiliency is associated with higher employee job satisfaction.

Several antecedents of resilience have been identified in the literature, including individual characteristics such as optimism, self-esteem and hardiness (Luthans, 2002; Tugade et al., 2004) as well as social support and connectedness (Luthans, 2002; Tugade et al., 2004). In the hotel industry, resilience can be crucial for hotel employees who may

encounter various stressors, such as dealing with guests, long hours and high levels of customer interaction (Al-Hawari et al., 2020; Ogińska-Bulik & Michalska, 2021).

Studies have demonstrated that resilience protects employees from the adverse effects of job stress ( Aguiar-Quintana et al. , 2021; Oginska-Bulik & Michalska, 2021) . Resilience is a complex construct encompassing cognitive, emotional and behavioural processes and has been consistently linked to positive outcomes, such as mental health, well-being and life satisfaction (Aguiar-Quintana et al., 2021).

### **Resilience and its moderating role**

The literature on resilience as a moderator is cross-disciplinary. Boakye et al. (2022) found that resilience significantly impacts OCB when leadership and interpersonal trust act as moderators. Alsheikh and Sobihah (2019) focused on the Jordanian hospitality industry and how organisational commitment, leadership style and culture influence OCB with the moderating role of job satisfaction. In the hotel industry, Ogungbamila (2019) found that emotional intelligence and resilience predict occupational burnout and that gender moderates the relationship. Aguiar-Quintana et al. (2021) examined the moderating role of hotel employees' resilience on the impact of job insecurity on anxiety and depression and whether these strains influenced their self-rated task performance during the COVID-19 pandemic. Rabiul et al. (2022) introduced employee resilience as a moderator in the relationship between motivating language, work engagement and commitment to quality customer service in the hotel industry in Thailand.

The literature on resilience and its role in moderating job stress and job satisfaction among employees is limited but growing. Jung and Yoon (2015) found that resilience is positively associated with job satisfaction and negatively associated with job stress among employees. In addition, Bernard (2021) discovered that resilience and job satisfaction play a potential role in the construct of "intent to remain" in a position and the relationship between job satisfaction and turnover intention.

The literature suggests that resilience is important in moderating the negative effects of job stress and promoting job satisfaction in hotel employees (Bernard, 2021; Jung & Yoon, 2015; Tugade et al., 2004). However, more research is required to fully understand the moderating role of resilience in these relationships. Resilience can mediate between job satisfaction and OCB and between job stress and OCB.

Hence, the following hypotheses are proposed:

**H4:** Resilience moderates the negative relationship between job stress and job satisfaction such that the relationship is stronger for employees with lower levels of resilience than those with higher levels of resilience.

**H5:** Resilience moderates the positive relationship between job satisfaction and OCB such that the relationship is weaker for employees with higher levels of resilience than those with lower levels of resilience.

To understand the research design shown in Figure 1, we summarise the hypotheses as follows:

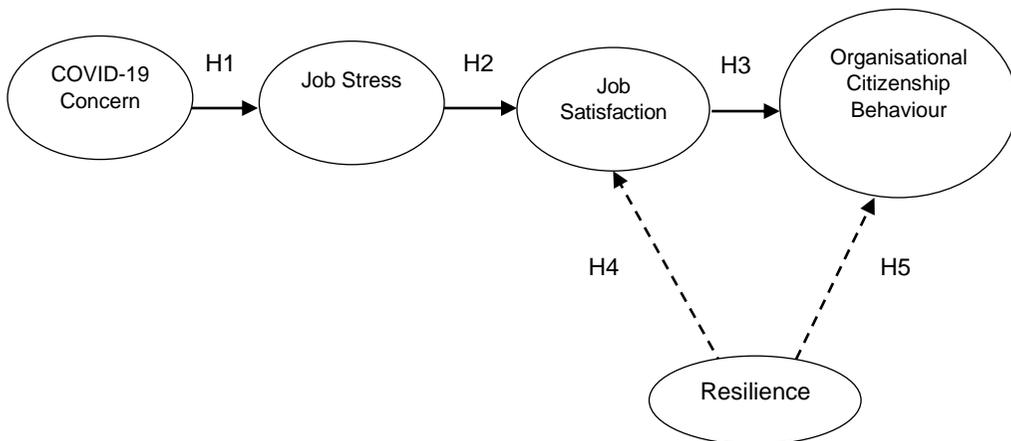
**H1:** COVID-19 concern is significantly and positively related to job stress.

**H2:** Job stress is significantly and negatively related to job satisfaction.

**H3:** Job satisfaction is significantly and positively related to OCB.

**H4:** Resilience moderates the negative relationship between job stress and job satisfaction.

**H5:** Resilience moderates the positive relationship between job satisfaction and OCB.



**Figure 1** Research Hypotheses

## Methodology

### Data Collection

The present study was conducted in Phuket, Thailand, which has experienced rapid growth in its tourism industry over the past few decades. In recent years, Phuket has seen the highest growth rate of hotels in Thailand, with many new properties opening up in various parts of the island (Hotelworks, 2022). The survey was conducted among frontline employees from various hotels throughout their respective human resource departments. Thirty-three hotels volunteered to participate in this study. Among the thirty-three hotels, nine are five-star, fourteen are four-star, and ten are three-star hotels. Seventeen are independent hotels, whereas sixteen are chain hotels. Cover letters that explained the study background,

procedures and purpose were sent to the human resource departments. The anonymity and confidentiality of personal information were ensured for the survey respondents. Data were collected from September to October 2022. The sample size was calculated using the sample size to free parameter ratio, which should be 10:1 (Wolf et al., 2013). Therefore, a minimum sample size of 180 would be adequate for estimating the 18 free parameters. With our 40% response rate, we initially obtained 455 filled-in responses. After checking the questionnaire and removing those with incomplete responses or suspicious response patterns, we obtained 362 usable questionnaires for analysis.

### **Measurement**

Standardised instruments were employed to measure several variables, including COVID-19 concern, job stress, job satisfaction, resilience and OCB. All variables were rated on a five-point Likert scale, with 1 indicating strong disagreement and 5 indicating strong agreement. COVID-19 concern was assessed using a four-item scale developed by Yu et al. (2021), while job stress was measured using a four-item scale by Schwepker and Dimitriou (2021). Job satisfaction was evaluated using a three-item scale developed by Salem et al. (2021) and Tsaur et al. (2019). Meanwhile, resilience was measured using a three-item scale developed by Pathak and Joshi (2021), and OCB was measured using a four-item scale developed by Lee and Allen (2002). Approval of the questionnaire by an institutional review board was obtained before launching the survey. A detailed summary of the instruments utilised in this study can be found in Table 3.

Partial least-squared structural equation modelling (PLS-SEM), a multivariate statistical technique used to analyse the relationships among latent variables in complex models, was used for data analysis in this study. This technique is commonly used in social science research to investigate complex causal relationships among multiple variables (Hair, 2017).

Unlike traditional structural equation modelling (SEM), which focuses on maximising the explained variance of the observed variables, PLS-SEM targets the predictive power of latent variables. PLS-SEM is more suited to models with fewer observations or variables and more tolerant of non-normality, missing data and small sample sizes. In this regard, PLS-SEM involves two stages of analysis: the measurement and the structural models. In the measurement model, the relationships between the observed variables and their corresponding latent variables are established. In the structural model, the relationships among the latent variables are analysed.

PLS-SEM also has several advantages over traditional SEM, including its ability to handle complex models with small sample sizes and its ability to provide reliable and valid results even when the variables have high levels of collinearity. It also has certain limitations,

such as its inability to test complex structural models with multiple mediators or multiple outcomes.

PLS-SEM is a powerful technique for investigating complex causal relationships among multiple variables, particularly in the social sciences. Its unique strengths and limitations make it a valuable tool for researchers seeking to understand the relationships among latent variables better.

As a moderated mediation, the focus is on the estimation of the conditional indirect effect of the independent variable on the outcome through the mediator at the values of the moderator (Hayes, 2015). Moderated mediation refers to the instances in which the mediated relationship between the predictor and the outcome varies across the levels of a moderator (Muller et al., 2005). Such models are mediational at their foundation, and the moderator has a secondary role in explaining the mediation effect. A moderated mediation model is a statistical model that examines the relationship between an independent variable (X), a mediator variable (M), a moderator variable (W), and a dependent variable (Y). In this model, the relationship between X and Y is mediated by M, while the effect of X on M is moderated by W. In simpler terms, a moderated mediation model suggests that the effect of an independent variable (X) on a dependent variable (Y) is explained through a mediator variable (M), but the relationship between X and M is moderated by another variable (W). The moderator variable (W) influences the strength or direction of the relationship between X and M, affecting the relationship between X and Y (Hayes, 2017). For this study, we used two moderated mediation models. The first is that resilience moderates the negative relationship between job stress and job satisfaction, while the second moderates the positive relationship between job satisfaction and OCB.

## **Data Analysis**

Table 1 shows the details of the participating hotel employees in the primary survey. The survey had a sample size of 362 respondents who participated and provided their opinions. More than half of the participants were female. Around 40% were 25–34 years old, and 1.7% were more than 55 years old. In addition, 50.6% of the participants were four-year college graduates, and 52% had been in the hotel industry for 5–10 years. Furthermore, 49.5% had worked in a hotel for less than five years.

**Table 1** Profile of Sample

|   | Frequency | Percentage |
|---|-----------|------------|
| <b>Gender (n=362)</b>                           |           |            |
| Male  | 145       | 40.1       |
| Female  | 217       | 59.9       |
| <b>Age (n=362)</b>                              |           |            |
| Less than 25                                    | 22        | 6.1        |
| 25–34 years                                     | 145       | 40.1       |
| 35–44 years                                     | 125       | 34.5       |
| 45–54 years                                     | 64        | 17.7       |
| 55 years and above                              | 6         | 1.7        |
| <b>Education level (n=362)</b>                  |           |            |
| High school graduate and below                  | 76        | 21.0       |
| Two-year college                                | 73        | 20.2       |
| Four-year college                               | 183       | 50.6       |
| Postgraduate                                    | 26        | 7.2        |
| Other   | 4         | 1.1        |
| <b>Experience in the hotel industry (n=362)</b> |           |            |
| Less than 5 years                               | 75        | 20.9       |
| 5–Less than 10 years                            | 188       | 52         |
| 10–Less than 20 years                           | 71        | 19.6       |
| >= 20 years                                     | 28        | 7.8        |
| <b>Experience at the current hotel (n=362)</b>  |           |            |
| Less than 5 years                               | 179       | 49.5       |
| 5–Less than 10 years                            | 42        | 11.6       |
| 10–Less than 20 years                           | 47        | 13         |
| >= 20 years                                     | 19        | 5.2        |

The correlations for the constructs in this study are reported in Table 2. Multicollinearity is not an issue in this study because the highest correlation between the predictor variables was 0.549, under the threshold of 0.90 (Bos-Nehles & Veenendaal, 2019; Janssen, 2000).

**Table 2** Correlations

| Variable         | COVID-19 |            |            | Job          |       |
|------------------|----------|------------|------------|--------------|-------|
|                  | Concern  | Job Stress | Resilience | Satisfaction | OCB   |
| COVID-19 Concern | 1.000    |            |            |              |       |
| Job stress       | 0.394    | 1.000      |            |              |       |
| Resilience       | 0.261    | 0.197      | 1.000      |              |       |
| Job Satisfaction | -0.040   | -0.229     | 0.280      | 1.000        |       |
| OCB              | 0.106    | -0.074     | 0.509      | 0.549        | 1.000 |

Table 3 shows the standard loadings for the items used for the primary survey. The reliability of the scale was measured by the values of the standard loading for various items, namely, COVID-19 concern (CC), job stress (JT), resilience (RS), job satisfaction (JS) and OCB. Items with values below the threshold limit were deleted. Table 3 shows that the value of all items is greater than the threshold value of 0.70, and all are suitable for further analysis.

The variance inflation factor (VIF) is often used to evaluate the collinearity of the reflective indicators. VIF values of 5 or above indicate critical collinearity issues among indicators of formatively measured constructs. Collinearity issues can occur at lower VIF values of 3 (Becker et al., 2015; Mason & Perreault, 1991). Ideally, the VIF values should be close to 3 or lower.

**Table 3** Reliability and validity of constructs for model building

| <b>Items</b>  | <b>Standard Loadings</b> | <b>VIF</b> |
|---|--------------------------|------------|
| <b>CC COVID-19 Concern</b> (Yu et al., 2021)  |                          |            |
| CC1 I am anxious that I might also be infected by customers.  | 0.830                    | 2.906      |
| CC2 I get anxious if the customer I am catering to is infected.   | 0.839                    | 2.246      |
| CC3 I worry about the high possibility that my family might also be exposed to the epidemic because I am prone to be exposed to and infected by the epidemic. | 0.876                    | 2.358      |
| CC4 I worry that I might get infected by the epidemic and spread it to customers.   | 0.871                    | 2.201      |
| <b>JT Job Stress</b> (Schwepker & Dimitriou, 2021)  |                          |            |
| JT1 I feel fidgety or nervous because of my job.  | 0.913                    | 3.519      |
| JT2 Problems associated with work have kept me awake at night.  | 0.860                    | 2.703      |
| JT3 I feel nervous before attending meetings in this organisation.  | 0.925                    | 3.720      |
| JT4 If I had a different job, my health would probably improve.   | 0.904                    | 3.011      |
| <b>RS Resilience</b> (Pathak & Joshi, 2021)   |                          |            |
| RS1 I can be 'on my own,' so to speak, at work if I must.   | 0.823                    | 1.511      |
| RS2 I usually take stressful events like covid-19 pandemic at work in stride.   | 0.875                    | 1.547      |
| RS3 I can get through this pandemic because I have had trouble before.  | 0.714                    | 1.373      |
| <b>JS Job Satisfaction</b> (Salem et al., 2021; Tsaur et al., 2019)   |                          |            |
| JS1 I feel satisfied with my present job.   | 0.863                    | 1.952      |
| JS2 I like my work.   | 0.892                    | 2.104      |
| JS3 My job is enjoyable.  | 0.862                    | 1.999      |
| <b>OCB Organisational Citizenship Behaviour</b> (Lee & Allen, 2002)   |                          |            |
| OCB1 Help others who have been absent.  | 0.866                    | 2.210      |
| OCB2 Willingly give your time to help others who have work-related problems.  | 0.844                    | 2.011      |
| OCB3 Adjust your work schedule to accommodate other employees' requests for time off.   | 0.782                    | 1.766      |
| OCB4 Go out of the way to make newer employees feel welcome in the workgroup.   | 0.838                    | 2.019      |

Table 4 reveals the value of Cronbach’s alpha, rho\_A and composite reliability for all the constructs is above 0.7. Hence, all the constructs are internally consistent. Furthermore, the average variance extracted (AVE) for all constructs is above 0.5, which fulfils the condition of convergent validity of the construct (Fornell & Larcker, 1981).

**Table 4** Reliability statistics for different constructs.

|                  | <b>Cronbach’s<br/>Alpha</b> | <b>rho_A</b> | <b>Composite<br/>Reliability</b> | <b>AVE</b> |
|------------------|-----------------------------|--------------|----------------------------------|------------|
| COVID-19 Concern | 0.877                       | 0.892        | 0.915                            | 0.730      |
| Job Stress       | 0.923                       | 0.939        | 0.945                            | 0.812      |
| Resilience       | 0.738                       | 0.790        | 0.847                            | 0.651      |
| Job Satisfaction | 0.844                       | 0.850        | 0.905                            | 0.762      |
| OCB              | 0.853                       | 0.860        | 0.900                            | 0.694      |

The discriminant validity was assessed using the method of Fornell and Larcker (1981), which compares the square root of each AVE in the diagonal with the correlation coefficients (off-diagonal) for each construct in the relevant rows and columns. Table 5 reveals that the value of the square root of the AVE is above 0.7, and the values for all the constructs are between 0.807 and 0.901.

**Table 5** Discriminant validity.

| <b>Fornell–Larcker criterion</b> |                     |               |              |                     |              |
|----------------------------------|---------------------|---------------|--------------|---------------------|--------------|
|                                  | COVID-19<br>Concern | Job<br>Stress | Resilience   | Job<br>Satisfaction | OCB          |
| COVID-19 Concern                 | <b>0.854</b>        |               |              |                     |              |
| Job Stress                       | 0.394               | <b>0.901</b>  |              |                     |              |
| Resilience                       | 0.261               | 0.197         | <b>0.807</b> |                     |              |
| Job Satisfaction                 | -0.040              | -0.229        | 0.280        | <b>0.873</b>        |              |
| OCB                              | 0.106               | -0.074        | 0.509        | 0.549               | <b>0.833</b> |

**Table 6** Discriminant validity

|                               | Heterotrait–Monotrait ratio (HTMT) |            |            |                  |       |                               |                         |
|-------------------------------|------------------------------------|------------|------------|------------------|-------|-------------------------------|-------------------------|
|                               | COVID-19 Concern                   | Job Stress | Resilience | Job Satisfaction | OCB   | Resilience x Job Satisfaction | Resilience x Job Stress |
| COVID-19 Concern              |                                    |            |            |                  |       |                               |                         |
| Job Stress                    | 0.425                              |            |            |                  |       |                               |                         |
| Resilience                    | 0.351                              | 0.294      |            |                  |       |                               |                         |
| Job Satisfaction              | 0.101                              | 0.254      | 0.330      |                  |       |                               |                         |
| OCB                           | 0.139                              | 0.090      | 0.620      | 0.638            |       |                               |                         |
| Resilience x Job Satisfaction | 0.025                              | 0.048      | 0.215      | 0.036            | 0.059 |                               |                         |
| Resilience x Job Stress       | 0.188                              | 0.287      | 0.164      | 0.066            | 0.081 | 0.243                         |                         |

**Table 7** Results of hypothesis testing.

|  | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ( O/ STDEV ) | P values | 95% Confidence Interval |        | Findings     |
|--|---------------------|-----------------|----------------------------|---------------------------|----------|-------------------------|--------|--------------|
|  |                     |                 |                            |                           |          | 2.5%                    | 97.5%  |              |
| <b><i>Direct Effects</i></b>               |                     |                 |                            |                           |          |                         |        |              |
| CC -> JT                                   | 0.394               | 0.397           | 0.053                      | 7.441                     | 0.000    | 0.291                   | 0.498  | H1 Supported |
| JT -> JS                                   | -0.357              | -0.357          | 0.052                      | 6.885                     | 0.000    | -0.455                  | -0.253 | H2 Supported |
| JS -> OCB                                  | 0.434               | 0.434           | 0.041                      | 10.635                    | 0.000    | 0.349                   | 0.511  | H3 Supported |
| <b><i>Moderated Mediation Analysis</i></b> |                     |                 |                            |                           |          |                         |        |              |
| RS x JT -> JS                              | 0.165               | 0.164           | 0.048                      | 3.424                     | 0.001    | 0.068                   | 0.256  | H4 Supported |
| RS x JS -> OCB                             | -0.117              | -0.115          | 0.047                      | 2.499                     | 0.012    | -0.204                  | -0.020 | H5 Supported |

**Note:** 10,000 bootstrap samples were used for bias-corrected bootstrap confidence intervals

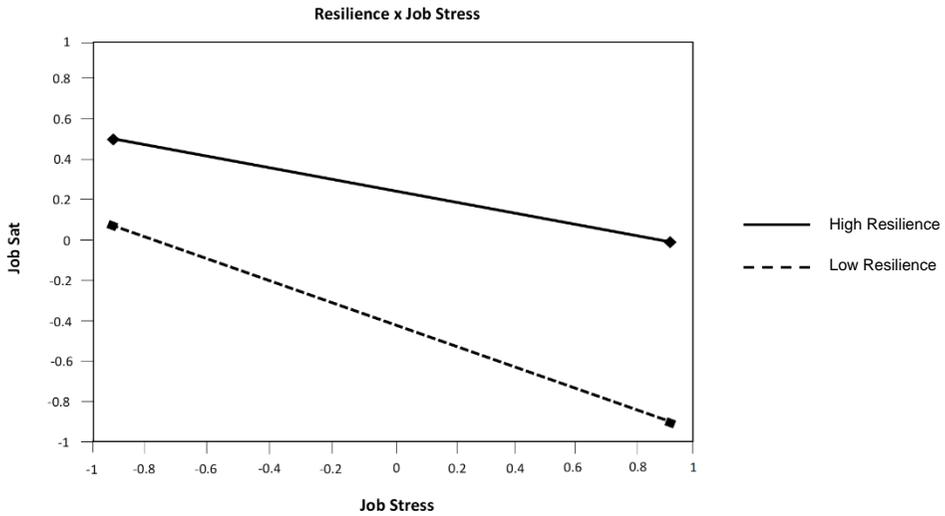
Table 6 indicates the HTMT results for assessing discriminant validity. The values of HTMT ratios for all the constructs are below 0.9, indicating the absence of multicollinearity among the latent constructs. The discriminant validity has been established for the study based on the results.

Table 7 shows the results of bootstrapping (n = 10,000) for testing the hypothesis. The p-values and t statistics of H1, H2, and H3 support the p-values of 0.000, 0.000 and 0.000, respectively. These results indicate that perceived epidemic concern has a positive impact on job stress, while job stress has a significantly negative effect on job satisfaction. Moreover, job satisfaction has a significantly positive effect on OCB.

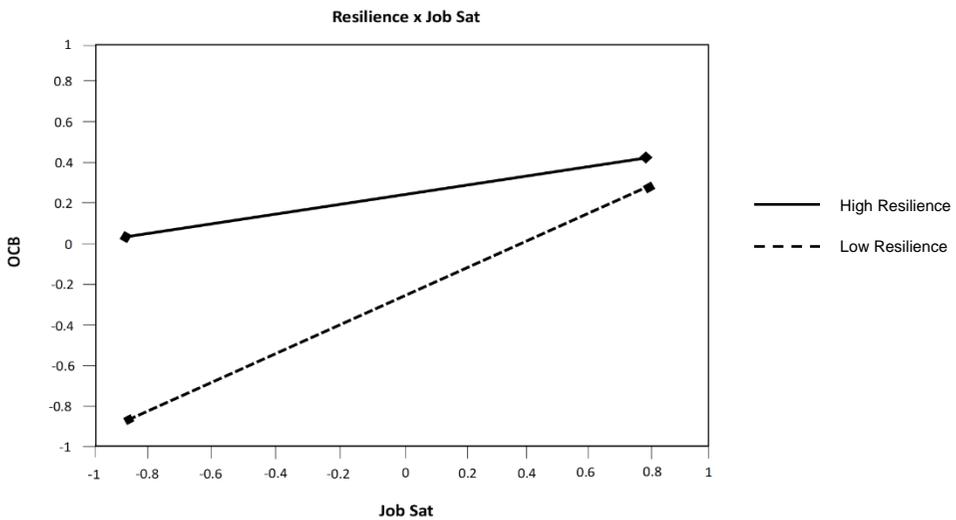
The results further show the role of resilience as a moderating variable. Resilience moderates the relationship between job stress and job satisfaction, such that the relationship is stronger when the level of resilience is low. In particular, this relationship is more negative and weaker for hotel employees with high resilience. ( $\beta=0.165$   $t=3.424$ ;  $p=0.001$ ). Hence, hypothesis 4 is supported. This research uses two-way interaction to plot the graph. The result of the  $\beta$  value is used to plot the relationship. Figure 2a depicts that the relationship between job stress and job satisfaction is more negative and weaker for employees with low resilience than those with high resilience. This outcome indicates that job satisfaction decreases when job stress is high and that higher resilience slightly weakens job dissatisfaction.

For hypothesis 5, resilience moderates the relationship between job satisfaction and OCB such that the relationship is weaker when the level of resilience is high. Specifically, this relationship was more positive and weaker for hotel employees with high resilience than those with low resilience ( $\beta=-0.117$   $t=2.499$ ;  $p=0.012$ ).

Hence, hypothesis 5 is supported. Figure 2b illustrates that OCB increases when hotel employees' job satisfaction and resilience are high. This correlation implies that OCB will increase job satisfaction for employees with higher resilience.



**Figure 2a** Moderated mediation effect of resilience between job stress and job satisfaction



**Figure 2b** Moderated mediation effect of resilience between job satisfaction and OCB

## Conclusion

This study examined the association between COVID-19 concern, job satisfaction, resilience and OCB in Thailand’s hospitality sector during the country’s reopening. To date, no study has examined these associations in this context.

According to the standard loadings in Table 3, the key elements of OCB include helping absent colleagues, voluntarily offering time to help those experiencing work-related problems, adjusting work schedules to accommodate requests for time off from other

employees, and making new employees feel welcome. To foster these behaviours, hotel managers must create a supportive work environment and be open to receiving employee feedback. Effective communication is also essential in clearly defining responsibilities, addressing performance issues and informing employees of the hotel's business model and operation. Additionally, challenging and stimulating tasks should be designed, job rotation policies must be implemented, and employees with positive emotions, proactivity and strong time and stress management skills should be recruited (Tian et al., 2020; Viseu et al., 2022).

In the research model, COVID-19 concern was observed to have a positive relationship with job stress, while job stress had a negative relationship with job satisfaction. Conversely, job satisfaction had a positive relationship with OCB. Additionally, employee resilience was found to moderate the relationship between job satisfaction and OCB.

A strong association was also observed between COVID-19 concern and job stress, and a significant positive relationship between COVID-19 concern. Previous studies have also confirmed the significant positive relationship between COVID-19 concern and job stress (Ahorsu et al., 2022; Chen & Qi, 2022; Falguera et al., 2021; Sun et al., 2022; Teng et al., 2021; Üngüren et al., 2021). The standard loadings in Table 3 indicate that hotel employees' COVID-19 concerns include worries about being infected by customers, concerns about the possibility of their family being exposed to the disease and concerns about spreading it to others. To address these concerns that have a negative impact on job satisfaction, hotel managers should implement effective risk communication and sanitation procedures in the workplace, such as touchless service and contactless digital technology. Technological innovation is essential for reducing guest interaction with employees and enhancing cleanliness. Psychological safety is also critical for creative performance and employee engagement, which has implications for management in the hospitality industry. As suggested by Filimonau et al. (2020), new cleaning and disinfection protocols should be implemented, client health should be monitored regular, and the hotel space layout should be modified to guarantee social distancing. Effective communication of risk-reduction strategies to potential hotel customers is also crucial (Ahorsu et al., 2022; Falguera et al., 2021; Shin & Kang, 2020; Teng et al., 2021; Üngüren & Arslan, 2022).

A significant negative association exists between job stress and job satisfaction (Bemana et al., 2013; Kurniawaty et al., 2019; Lam et al., 2022; Puspitawati & Atmaja, 2021; Salam, 2016). The findings of this study present components of job stress, which include feeling fidgety or nervous because of one's job, experiencing work-related problems that keep one awake at night, feeling nervous before attending meetings in the organisation and wishing to have a different job or believing that one's health would improve if they changed jobs. Chen and Eyoun (2021) recommended that hotel managers create a relaxing environment for employees and provide entertaining activities and a functional break room to

reduce job stress. Similarly, Yu et al. (2021) suggested that employees be trained regarding preventive measures to minimise the risk of infection and that hotel practitioners take measures to minimise employees' direct and indirect contact with customers. Manuals can be provided for this purpose, and employees should be able to self-quarantine if they exhibit COVID-19 symptoms. To minimise stress caused by the pandemic, the WHO recommends talking to someone, maintaining a healthy lifestyle and collecting information from trusted international organisations (WHO, 2020). Hotel managers must be aware that employee performance is proportional to company performance, and break areas or psychotherapy programs for the staff need to be developed to minimise their stress (Fabiyani et al., 2021). Furthermore, strategies must be developed to help employees feel more enthusiastic and prouder of their work to increase employees' sense of dedication to their work.

The result also shows a significant positive correlation between job satisfaction and OCB. These findings are consistent with the results reported by Fiermaningsih et al. (2019) and Massoudi et al. (2020). The standard loadings result in Table 3 indicate that among the important components of job satisfaction for hotel employees are feeling satisfied with their current job, enjoying their work and thinking that their job is enjoyable. Tietjen and Myers (1998) proposed that altering employees' tasks to ensure daily fulfilment can improve job satisfaction. Additionally, hotel managers can provide incentives and non-monetary rewards, invest in employee training and development and create an effective reward system to retain employees and reduce dissatisfaction (Koo et al., 2020; Qader, 2021). Costen and Salazar (2011) found that employees who perceive opportunities for skills development are more satisfied, loyal and likely to stay with the organisation. Managers should also ensure that the basic job duties assigned in job descriptions align with the intrinsic feelings that produce positive attitudes and fulfil Maslow's higher order of needs (Tietjen & Myers, 1998).

The current study highlights the importance of resilience in the context of the hospitality sector in Thailand during the reopening of the country. The results suggest that interventions aimed at increasing resilience in employees may be beneficial to reducing the negative impacts of job stress on job satisfaction and OCB. The study also confirms the findings of previous studies (Bernard, 2021; Jung & Yoon, 2015; Tugade et al., 2004) that resilience moderates the relationship between job stress and job satisfaction. Specifically, the results revealed that high levels of resilience lead to weaker negative impacts of job stress on job satisfaction. This outcome suggests job stress has a weaker negative impact on the job satisfaction of employees who are more adaptive or have a flexible experience.

Additionally, this study found that resilience moderates the positive relationship between job satisfaction and OCB, such that the relationship is stronger for employees with higher levels of resilience than those with lower levels. This result implies that high resilience strengthens the positive relationship between job satisfaction and OCB. The standard

loadings in Table 3 show an important component of employee resilience, such as being able to be “on their own” at work if they must, and the ability to deal with stressful events such as the COVID-19 pandemic.

In the hospitality industry, promoting employee resilience requires hotel managers to provide adaptability training and awareness of the moderating effect of resilience on job satisfaction and OCB (Tuan, 2021). Hotel organisations should provide such training through cognitive mapping techniques ( Bell & Kozlowski, 2008) , which involve structuring and assessing a specific theme expressed in verbal forms (e.g., interviews) to help employees build adaptation tactics to confront events (Sacchelli et al., 2017). In addition, hotel managers should create a work environment that encourages positive OCB, offer non-monetary incentives, educate employees on its importance, and promote a resilient culture. Strategies based on employee resilience should be developed for recruitment and promotions, and employee belief restoration during a crisis should be emphasised. Hotel managers should help employees understand risk environments, enhance their psychological tolerance for crisis and adversity, and implement communication activities and family support to fuel employee resilience during a crisis (Liu et al., 2021; Xie et al., 2023). However, while high employee resilience can weaken the negative impact of job stress on job satisfaction, it may also weaken the positive relationship between job satisfaction and OCB, which is important for business development during the recovery period after the COVID-19 pandemic. These policy implications are shown in Figure 4.

### **Managerial Implication**

This study underlines the association between COVID-19 concern, job satisfaction, resilience, and OCB in Thailand’s hospitality sector during the country’s reopening. Results revealed COVID-19 concern and job stress were strongly associated with job satisfaction. Resilience was also found to moderate the negative relationship between job stress and job satisfaction and the positive relationship between job satisfaction and OCB.

Based on these findings, several managerial implications for the hotel industry can be suggested (See Figure 3). First, hotel managers should take steps to reduce COVID-19 concerns among employees by implementing WHO guidelines for health and safety, creating risk communication strategies, and providing access to sanitising materials and equipment. Second, efforts should be made to reduce job stress, such as creating a relaxing work environment, providing social support, and offering mental health resources. Third, incentives should be provided to promote job satisfaction by offering non-monetary rewards and training for OCB. Finally, hotel managers should promote employee resilience because it can moderate the effects of job stress and job satisfaction on OCB. The specific and practical recommendations for hotel managers are as follows:

1. Develop a crisis management plan: Hotel organisations should develop a comprehensive crisis management plan that outlines how to respond to emergencies and crises, such as natural disasters or pandemics. The plan can help hotels minimise losses, maintain operations and ensure the safety of guests and employees.
2. Invest in employee training: Hotel employees should be trained in crisis management, including emergency response procedures, communication protocols and conflict resolution skills. These skills can help employees feel more confident and prepared during crises and can also lead to increased job satisfaction and retention.
3. Foster a culture of communication: Open communication between hotel management and employees can promote transparency and trust, which can be especially important during times of crisis. Regular communication and feedback can also help hotels identify and address potential issues before they escalate.
4. Diversify revenue streams: Hotels can benefit from diversifying their revenue streams to reduce reliance on any one market or customer segment. For example, hotels could explore opportunities in new markets or offer a wider range of services and amenities to appeal to different types of guests.
5. Prioritise sustainability: Adopting sustainable practices, such as reducing waste and conserving energy, can benefit both the environment and a hotel's bottom line. Sustainable practices can also help hotels attract guests, prioritising sustainability and social responsibility.

By implementing these resilience recommendations, the hotel industry can improve its ability to respond to crises and challenges while improving employee satisfaction and OCB.

Hotel employees should also take responsibility for managing themselves. Figure 4 outlines the implications for reducing COVID-19 concerns and job stress and improving job satisfaction, OCB and resilience. Hotel employees can improve their resilience by developing a set of skills and strategies that will assist them in coping with and recovering from challenging situations. Some ways to improve resilience among hotel employees include the following:

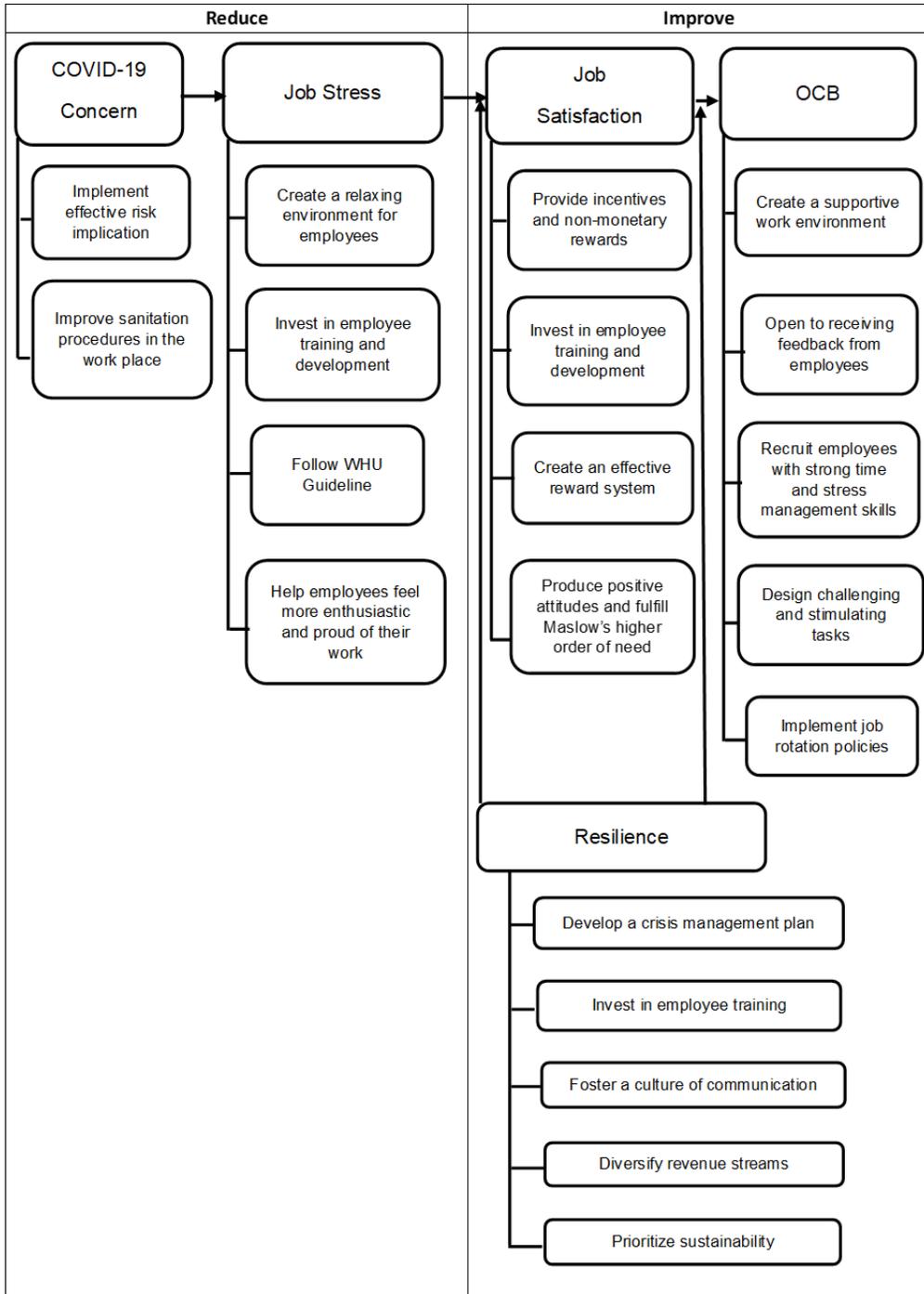
1. Developing a positive mindset: Hotel employees should focus on the positive aspects of their job and work environment and develop a positive outlook towards their work and colleagues. This can help them stay motivated and resilient in the face of challenges.
2. Building strong relationships: Developing strong relationships with colleagues and managers can help hotel employees to feel supported and valued, which can in turn help to build their resilience.

3. Practising self-care: Taking care of oneself, including getting enough sleep, exercising and eating healthy food, can help hotel employees stay physically and emotionally resilient.
4. Seeking support when needed: Hotel employees should feel comfortable seeking support from colleagues, managers and mental health professionals.
5. Developing problem-solving skills: Developing problem-solving skills can help hotel employees think critically and creatively and find effective solutions to challenges.

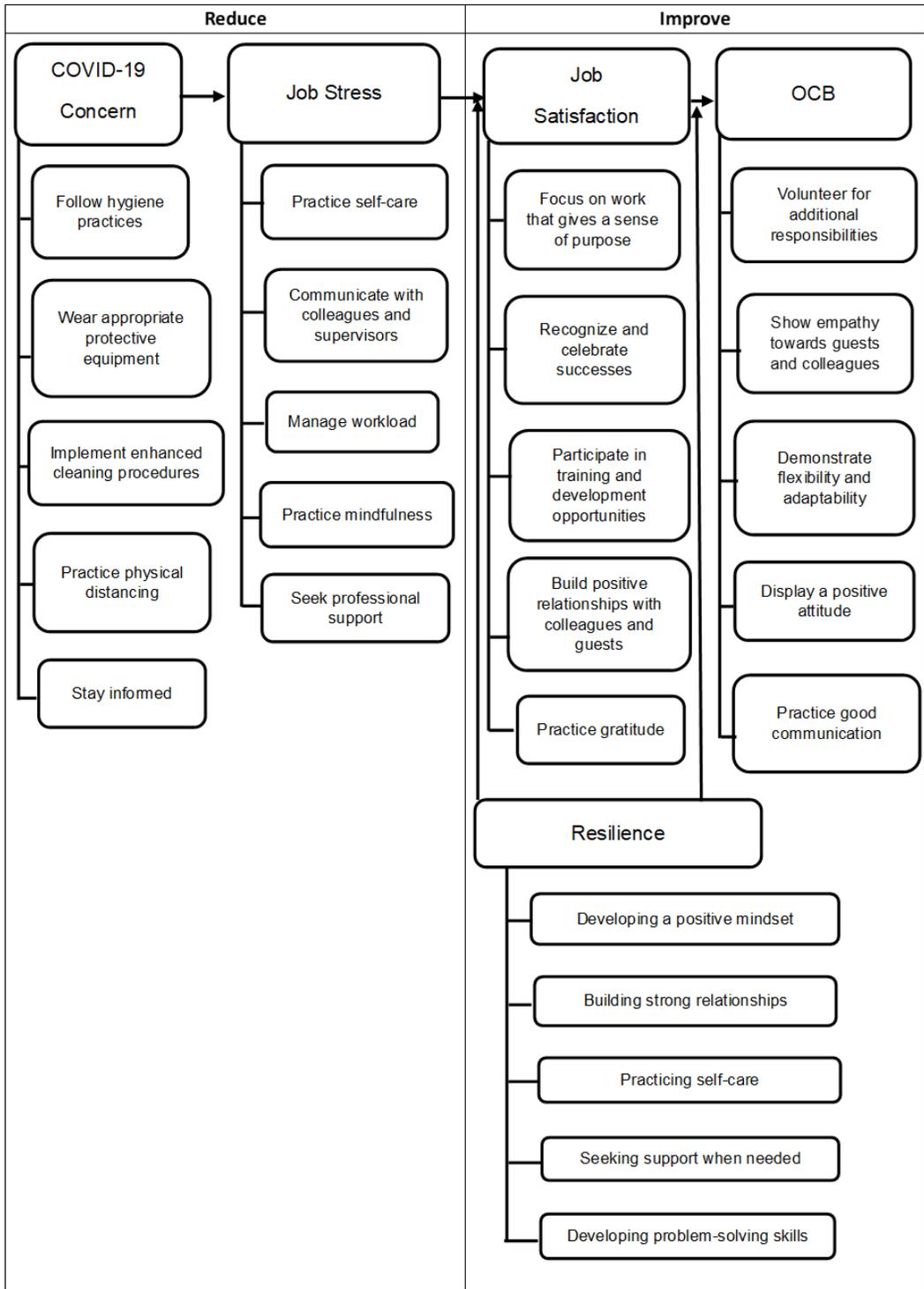
By focusing on these strategies, hotel employees can improve their resilience, which can help them to manage stress and adversity better and maintain their well-being and performance over time.

#### **Limitations and Avenues for Future Research**

Our study has some limitations. While our study provides valuable insights into employees' resilience within the hospitality sector in Thailand, its focus on a specific industry in a single country may limit the generalizability of our findings to other contexts. Hence, future research could explore the applicability of our recommendations to other industries and countries. Furthermore, the next study should emphasise the importance of a proactive mindset in crisis preparation for hotel managers. The study could also be applied to different organisations. Future research could also explore the unique challenges and opportunities for crisis preparation in different industries and regions.



**Figure 3** Implication for Hotel Managers



**Figure 4** Implication for Hotel Employees

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