

## EXPLORING THE BRIGHT SIDE OF THE STRESS FROM COVID-19 TO IMPROVE THE HOTEL STAFFS' CITIZENSHIP BEHAVIOR

Siriporn Khetjenkarn<sup>1</sup> and Charoenchai Agmapisarn<sup>2,\*</sup>

### ABSTRACT

The hotel industry worldwide has suffered owing to the COVID-19 pandemic. This study explores the relationship between hotel employees' COVID-19 risk perception and their likelihood to show challenge stress, hope, and optimism, affecting interpersonal citizenship behavior. In addition, manager support for fun is also tested as a moderator. Data were collected from 541 hotel employees of 4- and 5-star hotels in Thailand. Results indicate that hotel employees who perceive COVID-19 risk in their tasks can show a positive working attitude (i.e., challenge stress, hope, optimism) and favorable organizational behavior (i.e., interpersonal citizenship behavior). The moderating role of supervisor support of having fun in the workplace (i.e., manager support for fun) on the relationship between COVID-19 risk perception and challenge stress is also confirmed. Lastly, a discussion and practical implications for hospitality studies and hotel industry practitioners are provided, as well as limitations and suggested paths for future research.

**Keywords:** COVID-risk perception, challenge stress, hope, optimism, interpersonal citizenship behavior, manager support for fun, hotel employee

### 1. INTRODUCTION

During the COVID-19 pandemic, hotel employees faced challenging times, owing to the slowdown in domestic and international travel (Yan et al., 2021). The pandemic significantly affected the hospitality industry worldwide (Wu, Hu, & Chen, 2022). It has also affected the hotel industry in Thailand as the demand for room occupancy was severely reduced, given that people feared the risk of coronavirus spreading in hotels. Given this situation, hotels were required to find ways to adapt their strategies to the prevailing circumstances and avoid shutdown

(Bhrammanachote & Sawangdee, 2021; Kanyama, Nurittamont, & Siripipatthanakul, 2022). Consequently, hotel employees have experienced numerous sources of stress caused by uncertainty and new policies, including forced unpaid leave of hotel staff, reduce pay and welfare benefits, and changes to work shifts or positions (Edgecliffe-Johnson, 2020). Moreover, hotel employees face the risk of COVID-19 infection while working. That is, through their service, they are in direct and indirect contact with guests of varying nationalities, performing actions such as checking in and out, providing information, and cleaning and managing

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<sup>1</sup> Dr. Siriporn Khetjenkarn is currently working as a lecturer in Tourism and Hotel Department, Faculty of Humanities and Social Sciences, Nakhon Pathom Rajabhat University, Nakhon Pathom. She obtained a Ph.D. in Integrated Tourism and Hospitality Management from Graduate School of Tourism Management, National Institute of Development Administration, Thailand. Email: skhetjenkarn@webmail.npru.ac.th

<sup>2,\*</sup> Associate Prof. Dr. Charoenchai Agmapisarn (corresponding author) is currently working as a lecturer in the Graduate School of Tourism Management, National Institute of Development Administration. He obtained a Ph.D. in Economics from School of Development Economics, National Institute of Development Administration, Thailand. Email: Charoenchai.a@nida.ac.th

guest rooms. Therefore, hotel employees responding directly to customers are highly likely to become infected through customer contact. Accordingly, they can experience exhaustion and stress due to the high perceived risk from the nature of their work (Yu, Park, & Hyun, 2021), thereby influencing employees' work outcomes, performance, and organizational behavior.

Although several researchers have studied the risk perception influences of hospitality employees' stress in the workplace and reported unfavorable work outcomes (Karatepe, Saydam, & Okumus, 2021; Wong et al., 2021; Yan et al., 2021), several studies have shown differing results. Risk perception depends on cognitive bias and is subjectively evaluated by individuals. Khelifat et al. (2021) indicated the interesting concept of the positive side of stress. Employees can encourage themselves to show challenge stress even if they perceive risk in their job. In addition, employees with high-level psychological capital (Pscap; e.g., hope and optimism) can show a positive attitude when affected by threats. The hopeful ones have the skill to accomplish the specific tasks of their goals. Employees who are optimistic can make positive internal attributions of success (Avey, Luthans, & Jensen, 2009). Previous studies have also reported that a desirable attitude and performance in the workplace are affected by other factors, such as social-psychological factors (Sullivan-Wiley & Gianotti, 2017; Zhang & Cueto, 2017). Tews, Michel, and Stafford (2013) and Tews, Michel, and Allen (2014) reported that supervisor support could mitigate negative factors in the workplace, enhancing the positive attitude and work performance of hotel employees thereafter. Thus, individuals can respond differently to risk perception even if they perceive such risks from the same source (Hardy et al., 2020). Accordingly, employees' perceived risk should be studied as it is a critical factor in employees' mental health regardless of the actual risks (Qin, Yan, & Lai, 2020; Yan et al., 2021). Moreover, understanding how stress can heighten desirable performance, attitudes, and

behaviors, in hospitality organizations remains crucial (Khelifat et al., 2021).

During the COVID-19 pandemic, hotel employees' risk perception and its consequences, including other social support factors, should be studied, as there are several questions remaining (Khelifat et al., 2021) from the currently limited studies on these relationships. Therefore, the objectives of the current study are to explore the relationship between hotel employees' COVID-19 risk perception, the advantage side of stress, and the Pscap factors of hope and optimism which affect organization behavior, such as interpersonal citizenship behavior (ICB). Furthermore, the support factor of managerial support for fun examines whether or not this factor could reduce risk perception in turn enhancing hotel employees' working attitude and performance. The research findings can benefit the hotel industry and provide practical implications supporting hotel employees during the COVID-19 pandemic and other crises.

## **2. LITERATURE REVIEW**

### **2.1 COVID Risk Perception**

Perceived risk relates to an individual's belief in potential harm (Brewer et al., 2007). Sandman, Weinstein, and Hallman (1998) defined risk as a creation between threat and fear. Risk is proposed as an assessment that compares events and the seriousness of the potential damage. Evaluation of risks is influenced by numerous individual, social, and diverse factors (e.g., social, cultural, and contextual factors) influencing risk perception (Cori et al., 2020). When individuals perceive risk, they will evaluate the dangers they may be exposed to. Perceived risk affects various negative results (Yan et al., 2021), such as disaster response activities (Sullivan-Wiley & Gianotti, 2017), organizational decision-making (Sitkin & Pablo, 1992), and health behaviors (Brewer et al., 2007). Risk perceptions influence individual health beliefs and cognitions (Renner et al., 2008). Hotel employees are a

high-risk group for COVID-19 infection owing to the nature of their jobs; that is, they have direct and indirect contact with people from various countries and customers of diverse races (Yu et al., 2021).

## 2.2 Challenge Stress

Individuals' challenge stress motivates sources to invest effort, time, and energy to meet challenging demands, thereby achieving beneficial work outcomes (Khelifat et al., 2021; LePine, LePine, & Saul, 2007). Eatough et al. (2011) defined challenge stress as stress that can benefit individuals as it challenges their effort toward goals and development. Consequently, individuals may achieve favorable work outcomes and performance. Challenges include work overload, time pressure, job complexity, and job responsibility (Khelifat et al., 2021). When individuals perceive challenge stress containing work overload, time pressure, job complexity, and job responsibility, among others, as challenging, they can exhibit mastery, personal development, and growth as a result of the work stress (LePine, Podsakoff, & LePine, 2005).

## 2.3 Hope and Optimism: Psycap Components

Luthans, Youssef, and Avolio (2007a) defined hope as one Psycap component characterized by positive psychological states. Hope is a positive motivational state based on an interactively derived sense of success. Employees who have hope are strong-willed persons, and have a feeling that they can control their destiny. Distracting them is difficult when they have targeted endeavors, and they can enjoy engaging in such goals. It is a positive state, in which goal-oriented determination and pathways and proactive planning to achieve individual goals interact.

Optimism, another component of Psycap, is an attitude reflecting a belief or hope that the outcome of some specific endeavors, or outcomes in general, will be

positive, favorable, and desirable. This attitude relates to goal-seeking behavior, which affects career outcomes (Scheier & Carver, 1985). Optimism is a concept of individuals' belief that good things will happen in the future. Employees with high Psycap optimism can also state their appreciation for anything that contributed to their achievements. Consequently, they can capitalize on situations' opportunities developing their skills and abilities (Luthans, Youssef, & Avolio, 2007b).

## 2.4 ICB

Khelifat et al. (2021) coined the concept of interpersonal citizenship behavior (ICB), which is one component of organizational citizenship behaviors (OCB). ICB incorporates the extra-role requirements directed toward other organizational social parties. OCB generally includes citizenship behaviors directed to the actual organizations (e.g., sportsmanship, conscientiousness), while ICB specifically relates to behaviors directed at coworkers rather than the organization (e.g., altruism, general compliance, and helping others) (LePine & Van Dyne, 2001; Moorman, 1993). Employee citizenship behavior is essential for achieving superior service quality, effective organizational operation, and customer satisfaction, in the hospitality industry (Bavik, Bavik, & Tang, 2017). Employees who exhibit ICB demonstrate best job practices to their less-experienced coworkers (Settoon & Mossholder, 2002). Khelifat et al. (2021) indicated that ICB could help supervisors to have more free time for productive tasks, decrease the time and energy exerted on training and development, improve teamwork, increase organizational productivity, and support retention of employees (Kyei-Poku, 2014).

## 2.5 Managerial Support for Fun

Managerial support for fun is conceptualized as the extent to which managers allow, encourage, and enable

employees to have fun at work (McDowell, 2004; Tews et al., 2013). Managerial support for fun is one element of fun that several studies have focused on. This element is interrelated with two other aspects: fun activities and coworker socializing. Tews et al. (2014) explained that all elements can produce enjoyment among employees, foster cohesive relationships, and embed individuals in the organizations. However, the three elements are distinct by the level of formality. Although the organization of fun activities is the most formal element organized and sponsored by organizations, socialization between coworkers is an informal element that coworkers or team members voluntarily initiate. Managerial support for fun can be formal or informal (Tews et al., 2013). It is traditional when managers supervise employees, while it is a means of affording the freedom to have fun that may promote informal and opportune fun among employees (Tews et al., 2014).

## 2.6 Relationships Among the Study Variables and Hypothesis Development

**1) Effect of COVID-19 risk perception on challenge stress and the impacts of challenge stress on ICB:** Hotel frontline employees constantly face customers from different places, races, and ages. Their working conditions, such as serving and interacting with customers directly, and managing, including cleaning used rooms, can lead to exposure to contagious diseases. Therefore, employees could perceive risks that lead to work stress. Previous studies have found that hotel employees' perceived pandemic concerns significantly affect work stress (Yu et al., 2021). However, there are two components of stress: hindrance and challenge. Hindrance stress negatively affects hotel employees as it constrains individual goal achievements and growth (Kang & Jang, 2019; Khelifat et al., 2021). This type of stress is caused by role ambiguity, interpersonal conflicts (Khelifat et al., 2021; Podsakoff et al., 2000), and job insecurity, that triggers undesirable work outcomes among

employees (Dawson, O'Brien, & Beehr, 2016; Khelifat et al., 2021), such as burnout, and negative behaviors (Khelifat et al., 2021; Pooja, De Clercq, & Belausteguigoitia, 2016). Hindrance stress is a type of interpersonal conflict affecting unfavorable outcomes in the hotel context (e.g., service sabotage and deviant behavior) (Khelifat et al., 2021). Such an interpersonal conflict caused by hindrance stress makes employees likely to respond unhelpfully to other team members.

Conversely, challenge stress can generate desirable work outcomes and good organizational behavior. Khelifat et al. (2021) explained the concept of challenge stress consistent with conservation of resources theory (COR) (Hobfoll, Shirom, & Golembiewski, 2000). Their ideas explained that people seek to obtain, retain, and protect valued resources. When facing difficulties, although employees have stress, they would try to take advantage of and maintain such challenging practices as they can increase individual resources and obtain potential support in the future. Challenge stress enhances job responsibilities as it triggers employees to gain and accumulate essential competencies related to their work (Kang & Jang, 2019). Given that challenge stress is contrary to hindrance stress, the possible assumption is that employees who report high challenge stress tend to exhibit helpful behavior to others. This assumption is supported by previous research, which has reported the significant positive effects of challenge stressors on desirable work outcomes, such as commitment and job satisfaction (Crawford, LePine, & Rich, 2010; Kang & Jang, 2019), including organization citizenship behavior (Khelifat et al., 2021). Therefore, the following hypotheses are formulated:

*H1: COVID-19 risk perception has a significant positive effect on the challenge stress of hotel employees.*

*H2: Challenge stress has a significant positive effect on the ICB of hotel employees.*

## **2) Effect of COVID-19 risk perception on hope and optimism and the impact of hope and optimism on ICB:**

Hope and optimism are the elements of constructive Psychcap that have been defined as the positive developmental state of individuals (Luthans, Luthans, & Luthans, 2004). Previous studies have revealed the relationship between hope and coping, which reported that healing strategies, such as coping, can reduce risk perception. Folkman (2013) stated that patients' interdependence of hope and coping showed numerous paths for prolonged stress. Krok and Zarzycka (2020) reported the relationship between the risk perception and well-being of hospitality staff (i.e., healthcare personnel). The possible implication is a relatively strong relationship between how their perception of the risk of contracting, fear, and the perceived threat of COVID-19, and their psychological well-being. Stimulating hope in intensely stressful situations depends, at least partially, on cognitive coping processes. In turn, people's capacity to sustain coping with intensely stressful situations over time depends, at least in part, on having hope in desired outcomes (Folkman, 2013; Krok & Zarzycka, 2020).

Individuals who can develop stress-coping strategies supported by their own hope are less likely to assess the COVID-19 pandemic as a risk (Cori et al., 2020; Majd Ara et al., 2017; Yan et al., 2021). During the pandemic, hotels continued their business by assigning fewer workers and working under restrictive hygiene precautions for guests and their staff. Thus, employees were required to work heavily with the risk of COVID-19 infection. Çavuş and Gökçen (2015) explained that hope is a vital supportive factor as it motivates people. Krok and Zarzycka (2020) studied the risk perception of healthcare workers, finding that staff with a strong sense of purpose and values can efficiently interpret and reorganize daily experiences, identify significant aspects of their life, and constructively pursue their aims. Thus, employees with the aforementioned attributes can deal with the negative psychological consequences of

COVID-19 (Tews et al., 2013). Employees initially perceive the COVID-19 risk at the workplace. As such, they could report some stress, but also encourage themselves to survive and overcome such a crisis.

Hope and optimism are positive personality traits linked to physiology and psychological well-being (Du, Bernardo, & Yeung, 2015). Hope is significantly positively related to employees' performance, job satisfaction, work happiness, and organizational commitment (Youssef & Luthans, 2007). Numerous research findings have also shown the relationship between hope and performance in the workplace, including employees' work engagement and well-being (Adams et al., 2002; Combs, Clapp-Smith, & Nadkarni, 2010; Luthans et al., 2005; Malinowski & Lim, 2015; Ouweneel et al., 2012; Reichard et al., 2013). Optimism has been shown to positively relate to numerous desirable outcomes, such as work performance and work engagement (Cao et al., 2016; Dan & Pollitt, 2015; Luthans et al., 2006; Luthans et al., 2005; Mache et al., 2014; Malinowski & Lim, 2015; Meneghel, Salanova, & Martínez, 2016; Rees et al., 2015; Şahin, Çubuk, & Uslu, 2014; Stander, De Beer, & Stander, 2015; Van Wingerden, Derks, & Bakker, 2017; Youssef & Luthans, 2007). Both outcomes can help motivate employees to utilize their abilities and work unselfishly (Çavuş & Gökçen, 2015), which could make hotel employees generate favorable behavior in the organization (i.e., ICB). Therefore, the following hypotheses were developed:

*H3: COVID-19 risk perception significantly affects the hope of hotel employees.*

*H4: Hope significantly affects the optimism of hotel employees.*

*H5: Hope significantly affects the ICB of hotel employees.*

*H6: Optimism significantly affects the ICB of hotel employees.*

*H7: Hope has a significant indirect effect on the ICB of hotel employees via optimism.*

**3) The mediating role of managerial support for fun:**

Tews et al. (2013) noted that fun plays a vital role in the context of the hospitality industry, as fun can reward other less desirable aspects of work. Hospitality employees often perform routine tasks, are paid relatively low wages with few benefits, are afforded few opportunities for advancement, and frequently have irregular and unbalanced work shifts (Brown et al., 2006; Maxwell, 2008). During the COVID-19 pandemic, hotel employees received a greater workload due to staffing shortage and disease precautions, thereby increasing stress and exhaustion, which could lead to the adverse effects of emotional labor. In this situation, fun could help to diminish the emotional labor related to such service work (Brotheridge and Grandey, 2002; Glomb and Tews, 2004), particularly during the pandemic. Liu et al. (2021) found that social support, such as friends and family, could moderate the relationship between perceived uncontrollability and mental health symptoms. Tews et al. (2013) studied employees' perception of support from their managers. They reported that when managerial support for fun is low, employees

perceive advisory activities as artificial and contrived. By contrast, when managerial support for fun is high, employees perceive such activities as considerably genuine. Consequently, fun in the workplace supported by managers is effective in achieving employees' favorable work outcomes.

Therefore, fun supported by managers can reduce the negative results of stress, such as perceived risk. Moreover, fun that comes from social support could encourage hotel employees to create a positive mental situation at work. Furthermore, fun can lead to friendships that support favorable organizational behavior. Therefore, the possible assumption is that fun with social support could reduce some threats, thereby improving the positive state of mind of employees (i.e., Psycap-hope). Therefore, the following hypotheses were developed:

*H8: Managerial support for fun significantly affects the relationship between COVID-19 risk perception and the challenge stress of hotel employees.*

*H9: Managerial support for fun significantly affects the relationship between COVID-19 risk perception and the hope of hotel employees.*

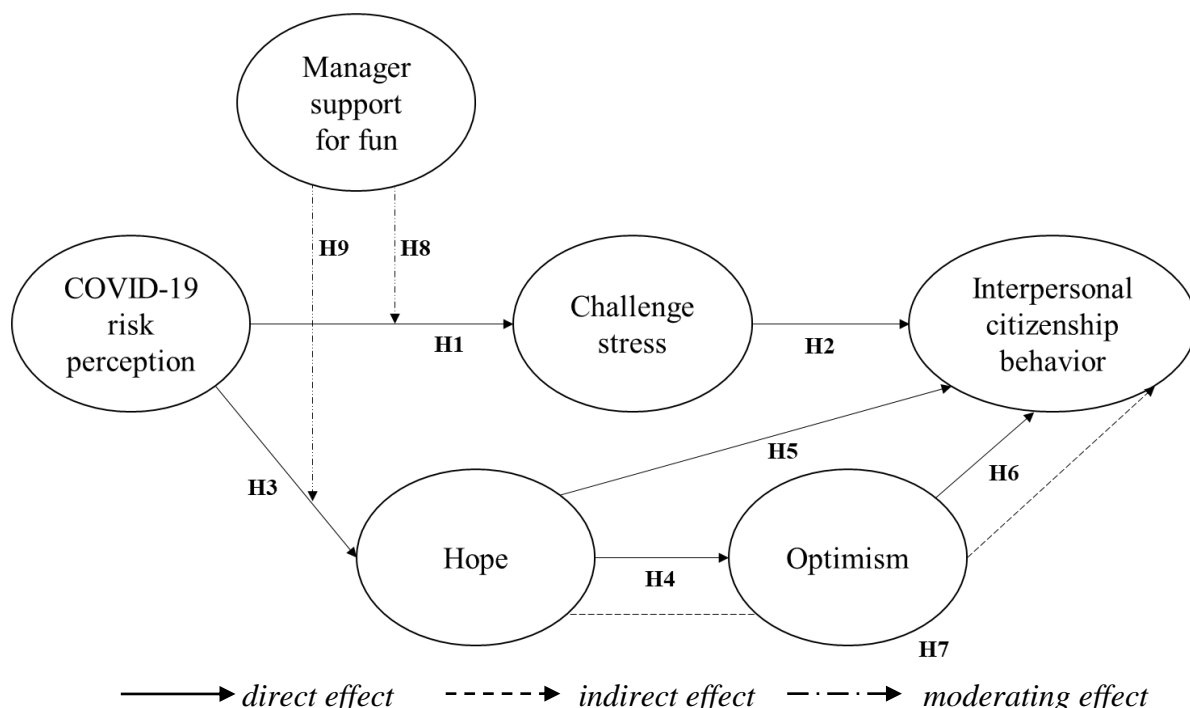


Figure 1. Conceptual model of the relationships between COVID-19 risk perception, challenge stress, hope, optimism, interpersonal citizenship behavior, and managerial support for fun

### 3. RESEARCH METHODOLOGY

#### 3.1 Research Tool and Measurement Scales

The original English questionnaire was translated into Thai and back-translated to English. The first section asked about respondents' demographic data. The second section used a five-point Likert scale (0 = not at all, 4 = frequently, if not always) to rate the following constructs. COVID-19 risk perception was measured using the five items from Yan et al. (2021) and Zhan et al. (2022). Five items with scales from Khelifat et al. (2021) measured challenge stress. The hope and optimism scale used five items from Khelifat et al. (2021), Mathe et al. (2017), and Pathak and Joshi (2021), supplemented with two synthesized items. ICB was measured using nine items from Khelifat et al. (2021). Lastly, three items with scales from Pathak and Joshi (2021) were used to measure managerial support for fun.

#### 3.2 Sample and Data Collection

The data collection period was from February to August 2022. The study was conducted using a sample of Thailand-based 4- and 5-star hotel frontline employees as this group experienced more stress from staffing shortages, heavy workload, and interaction with customers. That is, they faced more situations during the COVID-19 pandemic than other hotel employees. The questionnaire approved by the Ethics Committee on Human Research of National Institute of Development Administration was randomly distributed to 541 employees. All respondents were informed that their participation was voluntary. Respondent data were kept confidential and anonymous. They were free to decline participation at any time, and the invitation noted that the employing hotels would not receive any information on who participated. The questionnaire took approximately 10 minutes to complete.

#### 3.3 Analysis Methods

This study applied structural equation modeling (SEM) with a partial least squares (PLS) approach to test the theoretical model using the SmartPLS 3.0 software (Ringle, Wende, & Will, 2005). The advantage of the PLS-SEM method is that it does not require high-level normal data distribution while being able to handle different sample sizes and dealing with constructs (Hair, Ringle, & Sarstedt, 2011). Moreover, PLS can avoid biased and inconsistent parameter estimates as it simultaneously and consequently estimates all path coefficients and multiple individual item loadings (Loureiro & González, 2008).

### 4. RESULTS

#### 4.1 Sample Characteristics

Among the 541 respondents, 44.7% were male and 55.3% were female. Regarding age, 9.2%, 31.2%, 11.8%, 38.4%, and 8.3% of the respondents were aged below 25 years, between 25 and 34 years, between 35 and 44 years, between 45 and 54 years, and 55 years and above, respectively. For work experience, 42.3%, 37.8%, 11.8%, 4.4%, and 3.7% of the respondents had a duration of work experience within their hotels of less than or equal to 5 years, between 6 and 10 years, between 11 and 15 years, between 16 and 20 years, and more than 20 years, respectively. The demographic data show that the most significant age of hotel staff was around 45–54 years old, as this age category contributed the highest percentage of respondents. Meanwhile, the largest number of hotel employees were found to have work experience within their hotel of 5 years or less. This information could imply from the comparison between age and working experience of the sample that there is a dynamic turnover rate among hotel employees. This result supports the importance of retaining hotel employees for the organizations.

#### 4.2 Evaluation of the Measurement Model

The model was analyzed using a two-step approach. First, the measurement model

was evaluated to verify the reflective constructs. Table 1 presents the reliability and validity of the constructs with reflective measurement model specifications.

Table 1 Assessment of the reflective measurement model.

<b>Constructs and Items</b>	<b>Loading</b>	<b>Cronbach's alpha</b>	<b>Composite reliability</b>	<b>AVE</b>
<b><i>COVID-19 risk perception</i></b>		<b>0.834</b>	<b>0.889</b>	<b>0.667</b>
I'm worried about getting sick during my work.	0.875**			
My health will be severely damaged if I contract COVID-19.	0.856**			
I am worried that the facilities in the workplace will not be sanitary.	0.785**			
I think that I might contract COVID-19 even if I try to avoid it.	0.744**			
<b><i>Challenge stress</i></b>		<b>0.870</b>	<b>0.910</b>	<b>0.717</b>
The volume of work that must be accomplished in the allotted time.	0.872**			
The amount of time you spend at work.	0.863**			
The amount of work responsibility you have.	0.857**			
The scope of responsibility your position entails.	0.793**			
<b><i>Hope</i></b>		<b>0.819</b>	<b>0.892</b>	<b>0.734</b>
Now I see myself quite successful at work.	0.864**			
I can think of many ways to reach my current work goals.	0.853**			
At this time, I am meeting the work goals that I have set for myself.	0.853**			
<b><i>Optimism</i></b>		<b>0.772</b>	<b>0.896</b>	<b>0.812</b>
I am optimistic about what will happen to me in the future as it pertains to work.	0.927**			
I always look on the bright side of things regarding my job.	0.875**			
<b><i>Interpersonal Citizenship Behaviors</i></b>		<b>0.817</b>	<b>0.878</b>	<b>0.644</b>
I consider the impact of my actions on coworkers.	0.851**			
I am mindful of how my behavior affects other people's jobs.	0.836**			
I take steps to try to prevent problems with other workers.	0.785**			
I do not abuse the rights of others.	0.732**			
<b><i>Manager support for fun</i></b>		<b>0.840</b>	<b>0.926</b>	<b>0.862</b>
My managers encourage employees to have fun on the job.	0.933**			
My managers try to make my work fun.	0.923**			

Note: Factor loading is significant at \*\*p < 0.001, AVE = average variance extracted



Cronbach's alpha and composite reliability values of the constructs exceeded the acceptable threshold of 0.70 (Hair Jr et al., 2021), showing the internal consistency and reliability of the constructs. In addition, item loadings for all indicators were above the 0.70 threshold, thereby supporting each indicator's reliability. Furthermore, the reflective measures could be said to have satisfactory convergent validity as the average variance extracted (AVE) values of the constructs were above the threshold of 0.50 (Henseler, Ringle, & Sinkovics, 2009).

Table 2 shows the analysis of discriminant validity. The correlations' heterotrait-monotrait (HTMT) ratio values were presented in the upper off-diagonal, none of which exceeded the threshold of 0.85 (Henseler et al., 2009). The Fornell and Larcker (1981) discriminant validity was also investigated. When comparing the square root of AVE (numbers set in bold along the diagonal) with the correlation of the constructs, the square root of AVE of each reflective construct was above the inter-construct correlations. Therefore, the

reflective constructs of the model can be said to have satisfactory discriminant validity.

#### 4.3 Evaluation of the Structural Model

The structural model was assessed to test the hypothesized relationships among the constructs. Table 3 shows that the percentages of explained variance ( $R^2$  values) for the independent variables of challenge stress, hope, optimism, and ICB were 13.6%, 13.9%, 31.7%, and 24.4%, respectively. All  $R^2$  values were above the minimum limit of 0.10. The model was also evaluated using the Stone-Geisser's  $Q^2$  test, which was developed to observe the predictive relevance of the constructs (Geisser, 1975). Blindfolding procedures were utilized to obtain the  $Q^2$  values. Table 3 shows that all  $Q^2$  values are significantly above the zero thresholds (Henseler et al., 2009), indicating sufficient predictive relevance of the exogenous constructs. Therefore, the structural model has satisfactory predictive validity.

Lastly, a bootstrapping procedure with 5,000 iterations of re-sampling was used to

Table 2. HTMT analysis and discriminant validity (inter-construct correlations and the square root of AVE).

Construct	1	2	3	4	5	6
1. COVID-19 risk perception	<b>0.816</b>	0.354	0.131	0.046	0.264	0.049
2. Challenge stress	0.316	<b>0.846</b>	0.071	0.043	0.306	0.028
3. Hope	0.108	0.052	<b>0.856</b>	0.678	0.451	0.428
4. Optimism	0.011	-0.003	0.546	<b>0.901</b>	0.432	0.428
5. Interpersonal citizenship behavior	0.213	0.267	0.383	0.361	<b>0.802</b>	0.303
6. Managerial support for fun	-0.010	-0.004	0.355	0.322	0.253	<b>0.928</b>

Note: The values in the upper off-diagonal present the HTMT. The values in the lower off-diagonal present the correlation of the constructs. The bold numbers along the diagonal present the square root of AVE.

Table 3. Explained variance ( $R^2$ ) and the constructs' prediction relevance ( $Q^2$ ).

Endogenous latent constructs	Coefficients of determination ( $R^2$ )	Prediction variance ( $Q^2$ )
Challenge stress	0.136	0.093
Hope	0.139	0.099
Optimism	0.317	0.250
Interpersonal citizenship behaviors	0.244	0.149

obtain the path coefficients and t-statistics of the hypothesized relationships (Chin, 2010). On the bases of the path coefficients and associated significance, the bootstrap testing indicated excluding zero. The testing results of the hypotheses are shown in Table 4.

For hypothesis testing, COVID-19 risk perception was shown to have a significant effect on challenge stress (H1:  $\beta = 0.318$ , 97.5% CI = [0.249, 0.394],  $p^{**} < 0.001$ ), while challenge stress significantly affected interpersonal citizenship behaviors (H2:  $\beta = 0.255$ , 97.5% CI = [0.175, 0.333],  $p^{**} < 0.001$ ). In addition, COVID-19 risk perception had a significant effect on hope (H3:  $\beta = 0.112$ , 97.5% CI = [0.036, 0.189],  $p^* < 0.01$ ). When testing the impact of hope on optimism, a significant effect was found (H4:  $\beta = 0.494$ , 97.5% CI = [0.467, 0.564],  $p^{**} < 0.001$ ), while hope also had a significant direct effect on interpersonal citizenship

behaviors (H5:  $\beta = 0.245$ , 97.5% CI = [0.151, 0.342],  $p^{**} < 0.001$ ). Optimism also had a significant effect on interpersonal citizenship behaviors (H6:  $\beta = 0.228$ , 97.5% CI = [0.136, 0.317],  $p^{**} < 0.001$ ). The indirect effect of hope on interpersonal citizenship behaviors via optimism was also found to be significant (H7:  $\beta = 0.113$ , 97.5% CI = [0.067, 0.159],  $p^{**} < 0.001$ ). When examining the interaction term of managerial support for fun, a moderation effect was found on the relationship between COVID-19 risk perception and challenge stress (H8:  $\beta = 0.178$ , 97.5% CI = [0.098, 0.255],  $p^{**} < 0.001$ ). However, the moderating role of managerial support for fun was not found to significantly moderate the relationship between COVID-19 risk perception and hope (H9:  $\beta = 0.009$ , 97.5% CI = [-0.068, 0.077],  $p > 0.05$ ).

Table 4. Results of Hypothesis Testing.

Hypotheses	Path coefficient	t-values	Confidence interval	Result
H1: CRP $\rightarrow$ CHS	0.318**	8.614	0.249, 0.394	Supported
H2: CHS $\rightarrow$ ICB	0.255**	6.293	0.175, 0.333	Supported
H3: CRP $\rightarrow$ HOP	0.112*	2.867	0.036, 0.189	Supported
H4: HOP $\rightarrow$ OPT	0.494**	13.287	0.467, 0.564	Supported
H5: HOP $\rightarrow$ ICB	0.245**	5.101	0.151, 0.342	Supported
H6: OPT $\rightarrow$ ICB	0.228**	4.918	0.136, 0.317	Supported
H7: HOP $\rightarrow$ OPT $\rightarrow$ ICB	0.113**	4.788	0.067, 0.159	Supported
H8: MSF x CRP $\rightarrow$ CHS	0.178**	4.394	0.098, 0.255	Supported
H9: MSF x CRP $\rightarrow$ HOP	0.009	0.231	-0.068, 0.077	Rejected

Note: \* $p < 0.01$ , \*\* $p < 0.001$ , CRP = COVID-19 Risk Perception, CHS = Challenge Stress, HOP = Hope, ICB = Interpersonal Citizenship Behaviors, OPT = Optimism, MSF = Managerial Support for Fun, Values in the confidence interval column represent the value at the 2.5% lower / upper bound (97.5% CI).

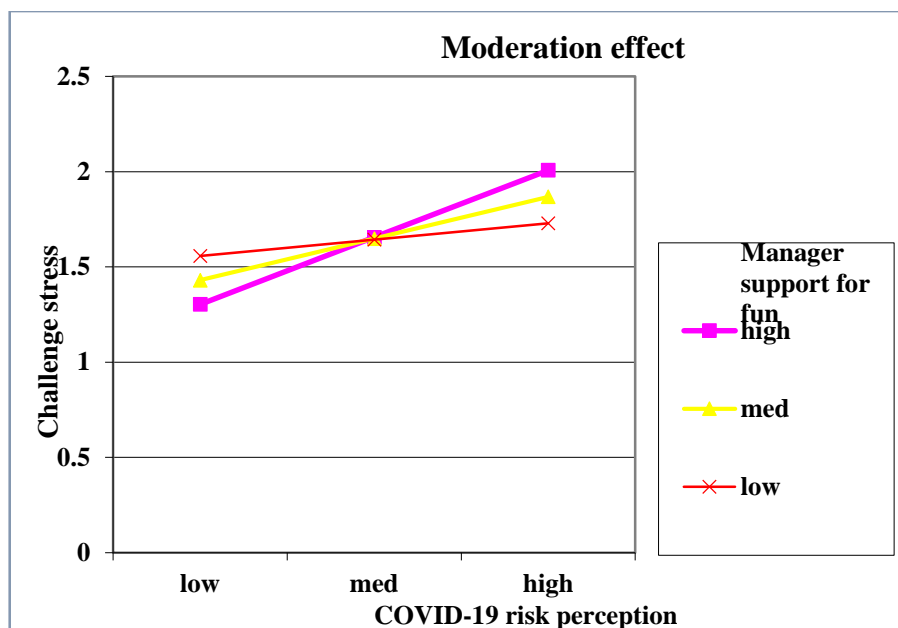


Figure 2. The moderation effect of managerial support for fun on the relationship between COVID-19 risk perception and challenge stress

Figure 2 shows the moderating effect of managerial support for fun on the relationship between COVID-19 risk perception and challenge stress. The result shows that managerial support for fun enhances the positive COVID-19 risk perception-to-challenge stress relationship. Furthermore, managerial support for fun functioned as an enhancer between COVID-19 risk perception and challenge stress. That is, the highest level of challenge stress was reported by high COVID-19 risk perception of individuals, who also perceived high-level managerial support for fun.

## 5. DISCUSSION

This study examines the relationships among COVID-19 risk perception, challenge stress, hope, optimism, and interpersonal citizenship behaviors. The results are discussed as follows.

First, COVID-19 risk perception influences challenge stress. This result is consistent with the explanation of Yan et al. (2021). Individuals may perceive different levels of risk in relation to COVID-19. When hotel employees perceive risk, they may show different reactions. Thus, they can exhibit a positive side of stress, such as challenge

stress. This result corresponds with Khelifat et al. (2021), who indicated that employees could report pressure when they face difficulties in their work.

Nevertheless, there is a positive element of stress. Therefore, hotel employees who adapt appropriately to work pressure could encourage themselves to handle complicated workplace situations, thereby exhibiting challenge stress. This study's result found that challenge stress has a positive effect on ICB. The result does not correspond with Khelifat et al. (2021), who reported that challenge stress is negatively associated with employees' ICB. They explained that individuals may exhibit unfavorable organizational behavior not generated internally but influenced by their social environment or team members. Such a reason could explain this phenomenon. This study was performed in Thai hotels with varying organizational cultures. The hotels' team members could effect employees' perceptions of whether they were helped and supported during the COVID-19 pandemic at their workplace. Thus, employees would show good performance of ICB. This result is consistent with several studies that have found a positive relationship between challenge stressors and organizational

citizenship behavior (Rodell and Judge, 2009; Webster et al.,2010).

Second, this study found that COVID-19 risk perception influences the levels of hope and optimism among hotel employees. This result is consistent with Folkman (2013), who explained that individuals' capacity to sustain coping with intensely stressful situations over time, depends at least partially, on having hope concerning the desired outcome. Stressful situations often arise, forcing people to get through challenging times. This corresponds with Krok and Zarzycka (2020) who reported that employees with a strong sense of purpose and values can efficiently interpret and reorganize daily experiences, identify significant aspects of their life, and constructively pursue their aims. People who are capable of coping with challenging situations to get what they want are hopeful individuals. This situation exists amid the COVID-19 pandemic, in which hotel staff are concerned with the risks of contracting the disease and illness arising from meeting guests from various locations and using working equipment.

Employees could use the hope strategy to devise a mental remedy, finding a way to work under such situations and prevent work-related infections. Hope also affects optimism in the work of employees as well. Employees with this qualification will be able to see the good sides of working and having a smooth career path. The result of the current study is also consistent with Van Wingerden, Derks, and Bakker (2017) and Youssef and Luthans (2007), who explained that hope and optimism are the components of positive Psycap that can affect individuals' organizational behavior. Hotel employees who have hope are satisfied with their working abilities and can apply many methods to accomplish tasks. Optimistic employees can perform well and expect success in their career path. These attributes could influence hotel employees to exhibit a behavior of supporting others in the workplace, which is consistent with the finding of Çavuş and Gökçen (2015). Therefore, hope directly affects optimism and

indirectly affects interpersonal citizenship behavior.

Interestingly, the results found a robust direct effect of hope on optimism and a substantial impact on ICB. This can imply that hotel employees perform together with hope and optimism, which are two components of Psycap. Consequently, they can report assertive favorable organizational behavior.

Lastly, this study found a significant effect of managerial support for fun on the relationship between COVID-19 risk perception and challenge stress. This finding is consistent with Tews et al. (2013). Fun activities supported by managers effectively achieve desirable outcomes for employees. In this case, hotel employees who perceive managerial support for fun can reduce stress from risk perception and the difficult conditions caused by the COVID-19 pandemic. Moreover, managerial support for fun can develop the challenge stress of employees. Hotel employees who perceive high levels of fun supported by their manager show higher challenge stress. When managers include fun when advising entry-level staff to work during challenging conditions, such as the COVID-19 pandemic, it can produce a joyful working atmosphere. This strategy can decrease the working pressure of staff (i.e., the risk perception and the heavier work) and encourage them to develop positive emotions and feelings. This function can support hotel employees to achieve tasks and make them perceive the feeling of success in completing their mission. Surprisingly, managerial support for fun does not significantly affect the relationship between COVID-risk perception and hope in this study. One possible explanation is that individuals develop hope (one of Psycap's element) from their own personality traits. Fun supported by the social environment or managers does not have a considerable influence on the aforementioned relationship.

### 5.1 Practical Implications

Hotel managers would benefit from developing factors that create challenge

stress, hope, and optimism in their employees, which could reflect markedly desirable organizational behavior.

For the recruitment process, hotel managers may seek to find employees with moral attributes, such as a high (positive) Psycap and open-minded attitude, to prevent stress and protect against fear caused by threats that could possibly turn into adverse effects on employees' work outcomes. The Psycap scale can be used to test the state of mind of applicants in the selection process. Hotels can also develop a test that can identify the type of stress to investigate the applicants and how they handle themselves when they face pressure. Interview questions on managing threats and tension in the workplace can also be applied.

Regarding the training and retention process, measures should be taken to improve employees' handling of stress, Psycap-hope, Psycap-optimism, and others, including ICB. Accordingly, hotel managers should consider developing training programs to enhance their employees' way of positive thinking and social support. For example, training activities should be provided, such as setting values in all tasks and challenging their goals and themselves (hope and stress). In addition, creative and alternative thinking programs should be developed and trained to support employees in accomplishing their objectives (optimism) and organization, including sharing these creative and alternative ways of thinking to achieve tasks with colleagues and the team (ICB).

During the pandemic, the risk perception of COVID-19 was generally determined as a threat that places considerable working pressure on hotel employees. However, this study found it had a positive effect on employees with high Psycap and strong minds, resulting in the desirable behavior of individuals and organizations. Therefore, such a threat could encourage employees' mental and psychological toughness. Hotel managers should also provide mind-healing activities, such as a short breaks during work, meditation, and yoga programs, to improve and maintain employees' mental strength.

At the supervisor level, managerial support for fun can lower fear and risk perception from COVID-19 and can generate higher challenge stress. Programs that can encourage managers to support employees' happiness are essential. Leadership programs and knowledge-sharing between managerial-level staff should be developed to support fun and create the desired atmosphere in the workplace, thereby enabling employees to reduce stress and enhance their working performance even during the COVID-19 pandemic or any future threats.

## **6. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS**

This study has some limitations. First, the sample was limited to hotel employees in Thailand during the COVID-19 pandemic. Thus, the findings may not be generalizable to cover other service industries and cultures. Accordingly, future research should conduct comparative studies in the context of other businesses in the hospitality industry and different cultures. Second, this study's result shows the positive factors of challenge stress and hope affected by risk perception. Subsequent research should apply a qualitative working method, such as in-depth interviews or group discussions, to more deeply study how hotel employees can develop these positive factors, affected by risk perception. Third, some researchers have reported the different effects of demographic characteristics on stress and Psycap. Future studies should explore such relationships by investigating the diverse groups of hotel employees, such as gender (i.e., male versus female employees) and work experience (i.e., senior versus junior employees). For example, multiple indicators multiple causes (MIMIC) could be employed to manipulate different results. Multiple group analysis for different hotel employee groups could be tested to examine a higher or lower level of challenge stress and hope, including optimism affected by individual factors. This could help the hotel managers to customize suitable practical implications for different groups of

hotel employees. Fourth, such factors as coping appear to be a mechanism that triggers the healing process for the mental health and attitude of employees. Future studies should further explore coping as a mediator between risk factors and hope, including optimism. Lastly, longitudinal research could be applied for a comparative analysis studying the same group of employees by comparing employees' perception and behavior in the differing situations of the COVID-19 pandemic and post-COVID periods.

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