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Effects of tourism CSR on employee psychological capital in the COVID-19 crisis: From the perspective of conservation of resources theory

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ABSTRACT

The main purpose of this research was to illustrate how companies contributed to employee psychological capital in tourism during the COVID-19 crisis based on the conservation of resources theory (CoR). Psychological capital including self-efficacy, hope, resilience and optimism is a key source of support at work, especially during challenging events. With threats to health and job security, employee psychological capital was unlikely to recover on its own naturally. However, tourism companies can augment employee psychological capital through corporate social responsibility (CSR). The effects of CSR on employee psychological capital remains unclear. This research examined differing effects of CSR on self-efficacy, hope, resilience and optimism. Based on a survey of 430 employees in tourism in China, the results showed that CSR had positive impacts on employee self-efficacy, hope, resilience and optimism through employee satisfaction with corporate COVID-19 responses. In addition, individual loss orientation strengthened the effects of CSR on employee self-efficacy, hope, resilience and optimism.

Keywords: Corporate social responsibility (CSR); self-efficacy; hope; resilience; optimism; satisfaction with corporate COVID-19 responses; loss orientation; conservation of resources (CoR) theory

Introduction

The outbreak of the novel coronavirus pneumonia (COVID-19) has had a significant negative impact on China's tourism. To control the disease, the Ministry of Culture and Tourism of the People's Republic of China issued an urgent announcement on January 24, requiring travel agencies and online tourism enterprises nationwide to stop operating on group and "ticket+hotel" tourism products. After January 27, all group trips and "ticket+hotel" services, including those abroad, were fully suspended. All at once, China's tourism fell into a chaotic state, with scenic spots and hotels closed, and flights stopped. Many refunds had to be issued across the whole tourism industry. Due to the strong and extensive infections from this virus, people lost the sense of security to travel outside. It was predicted that all Chinese tourism companies would have to be closed or curtail operations and make a slow recovery from January to May 2020. Employees in tourism businesses were faced with sharp declines in their incomes, causing dramatic changes in their work and lives. The panic caused by the threat of the disease spread and the income uncertainties caused widespread anxiety and frustration.

Psychological capital is a significant resource foundation for people, referring to the self-efficacy of individuals in the process of their growth and development, and a positive psychological status characterised by hope, resilience and optimism (Luthans et al., 2007). Evidence shows that psychological capital can significantly influence employee attitudes toward work, work behaviours and performance (Newman et al., 2014). During the unprecedented period of fighting against COVID-19, Chinese tourism companies needed to focus on improving employee psychological capital by strengthening self-efficacy, hope, resilience and optimism.

Corporate social responsibility (CSR) involves organisational policies and initiatives adopted to realise sustainable development of finance, society and environment (Aguinis, 2011; Akremi et al., 2018; Su & Swanson, 2019). After the outbreak of COVID-19, tourism companies of all types in China tried their best to support the war against the pandemic. Several travel agencies made use of their resources to purchase gauze masks, goggles, and other protective supplies for public-facing staff. Numerous hotels provided the space for medical workers or medical observation. Some

resorts became places for medical worker rest and rehabilitation. In addition to donating money and supplies, companies organised voluntary activities to safeguard their employees' interests, and support their clients and suppliers. Online platforms, such as Ctrip and Tuniu, and hotel groups, such as Huazhu, BTG Homeinns Hotels (Group) Co., Ltd. and Tujia, have subsequently issued special policies for their partners to support each other and confront the challenges together. Therefore, studying the influence of tourism company CSR on employee psychological capital can potentially provide guidance for the maintenance and recovery of employee psychological capital against the COVID-19 pandemic.

The existing research focuses on the effects of psychological capital on employees' work performance (Abbas, Raja, Darr, & Bouckennooghe, 2014). In most studies, psychological capital is considered to be the reason for employees to exhibit positive behaviour and attitudes in workplaces. This consists of positive corporate citizenship behaviour, innovation behaviour, active behaviour, positive work attitudes such as job satisfaction and corporate commitment, engagement, and organisational commitment (Karatepe & Karadas, 2014; Newman, Ucbasaran, Zhu & Hirst, 2014). Correspondingly, employees' negative attitudes and behaviours, such as turnover intentions, turnover, and job burnout, can be reduced by psychological capital (Abbas et al., 2014).

Previous studies tend to focus on the effects of psychological capital, but its antecedents have not been fully examined. In addition to individual efforts, enterprises can contribute to the promotion of psychological capital. For example, authentic leadership behaviour has been shown to promote psychological capital (Rego, Sousa, Marques & Cunha, 2012). However, there is a lack of in-depth investigation on how CSR motivates employee psychological capital in overcoming crisis events such as pandemics like COVID-19.

In addition, psychological capital is usually studied as one unified concept. However, self-efficacy, hope, resilience and optimism are involved in psychological capital and they are different types of psychological resources. An understanding of the differing influences of CSR on these four constructs is more conducive to providing targeted measures for the psychological recovery of employees. Also, the ways that CSR impacts psychological capital are not clear. The psychological resources of employees were seriously depleted during the COVID-19 pandemic. Further exploring

the ways that CSR influences psychological capital will not only be beneficial for employees to respond, but also conducive to the return of normal working conditions.

Furthermore, after experiencing adversity, self-adjustment plays an important role in promoting individual recovery of psychological resources. Similarly, the recovery of psychological capital is affected by employee understanding and reflections on the pandemic situation, that is, their loss orientation. Loss orientation refers to a way by which individuals manage emotions and achieve psychological recovery by thinking about past experiences. Therefore, organisations and employees need to be combined in studying the mediating effect of satisfaction with corporate COVID-19 responses on psychological capital and the moderating effect of loss orientation.

This research investigates the effect of CSR on employees' self-efficacy, hope, resilience and optimism. The following three contributions are expected to be achieved from this work. First, in the context of the COVID-19 pandemic, the impact of tourism company CSR on employees' psychological capital is tested. Second, the differing impacts of CSR on employee self-efficacy, hope, resilience and optimism are distinguished. Third, based on the theory of resource conservation, the mediating effect of satisfaction with corporate COVID-19 responses on employee psychological capital and the moderating effect of employees' loss orientation on the relationship between satisfaction and psychological capital are explored. Figure 1 shows the proposed conceptual model for this research.

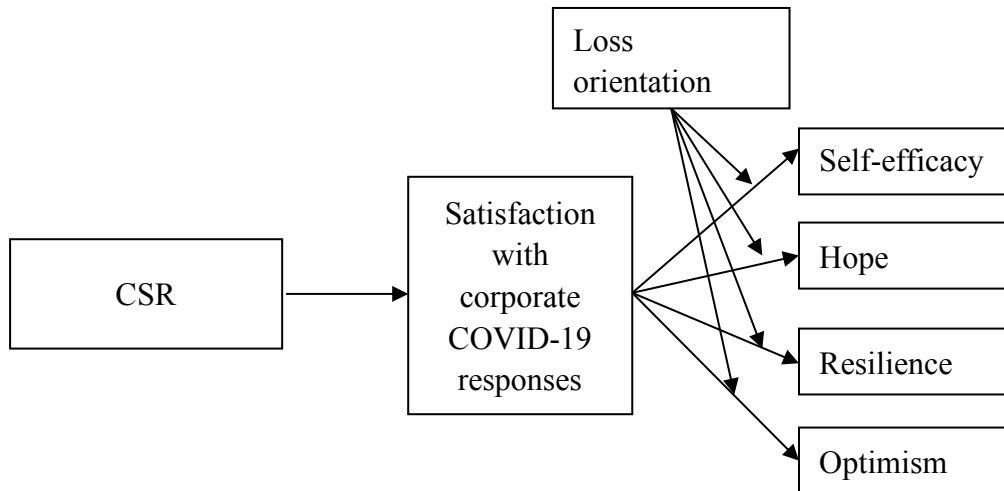


Figure 1. Research conceptual model

Theoretical Bases and Hypotheses

CSR and Satisfaction with Corporate COVID-19 responses

Tourism companies through CSR can promote economic development, cultural appreciation, environmental protection, productive and life services. Moreover, tourism company CSR can influence a variety of stakeholders. CSR is a core element for enterprises to assist with the realisation of sustainable development (Farrington et al., 2017). Research indicates that tourism companies are willing to distribute limited resources to improve social welfare, and that their attention to the expectations and requirements of shareholders and other stakeholders (including employees, customers, local communities and governments) have a significant influence on employee attitudes (Flammer & Luo, 2017; Supanti & Butcher, 2019; Su & Swanson, 2019).

Satisfaction with corporate COVID-19 responses means employee overall perceptions of the support and help provided by their employers in dealing with the pandemic. If a company helps its stakeholders, such behaviours will enhance perceived satisfaction, giving employees the feeling that they have support in coping with this crisis. Watkins et al. (2015) found that organisational support and assistance improved employee satisfaction with corporate response to a hurricane. Therefore, it

is reasonable to posit that CSR increases employee satisfaction with corporate COVID-19 responses.

CSR may affect employee satisfaction with corporate COVID-19 responses in two ways. First, when the disease broke out, companies demonstrated their CSR by providing support and help in dealing with its outcomes. These powerful corporate resources assisted employees and local communities, particularly encouraging employees to face up to and resolve the challenges brought by the pandemic. This may have enhanced employee positive evaluations of enterprises (Hsu, 2012). Second, the fulfilment of CSR can shape a more favorable corporate image, improve employee recognition of enterprises (Kim et al., 2010; Farrington et al., 2017), and strengthen employee pleasure and satisfaction in their workplaces (Kim et al., 2018; Su & Swanson, 2019). Therefore, it is proposed that tourism company CSR promotes employee satisfaction with corporate COVID-19 responses.

- H₁: CSR is positively related to satisfaction with corporate COVID-19 responses.

Psychological Capital: Self-efficacy, Hope, Resilience and Optimism

Psychological capital means the positive psychological status of employees in their development process, which is an important psychological resource and an inherent quality of individuals. Generally, psychological capital covers four aspects, including self-efficacy, hope, resilience, and optimism. Self-efficacy means that individuals have the confidence and can make required efforts to succeed in the face of challenging work. Hope is defined as people's perseverance to attain their goals and adjust approaches to realising goals if necessary to ensure success. Resilience refers to perseverance to seek improvement to succeed when faced with difficulties and adversity. Optimism refers to positive attribution of success at present or in the future (Luthans et al., 2007).

Satisfaction with Corporate COVID-19 Responses and Employee Self-efficacy

Self-efficacy means that employees believe that they have the capability to make things happen through their own initiative, with the confidence and readiness to make efforts to succeed, including finishing specific tasks, persuading others and perceiving changes (Ng & Lucianetti, 2015). In the

process of dealing with the pandemic, employee self-efficacy represents their confidence in overcoming the difficulties brought, ensuring their safety, finishing tasks, perceiving changes, and persuading others.

Satisfaction with corporate COVID-19 responses may be beneficial in improving employee self-efficacy. The higher the satisfaction with corporate COVID-19 responses perceived by employees, the more confident they might be to overcome the pandemic's challenges. In this serious crippling crisis, the clearer are employee perceptions of corporate actions to combat the pandemic (such as in the provision of donations and materials, gauze masks and other protective clothing, or alcohol for medical use, or by helping displaced passengers and medical workers), the more courage and confidence the employees will have and the more trust there will be between companies and employees, which is conducive to enhancing employee self-efficacy during this situation (Akremi et al., 2018). Additionally, by sharing and giving greater access to resources, including physical spaces (hotels, travel agencies and scenic attractions), external communication and digital assets, resource utilisation skills and staff service capabilities, companies may upgrade employee efficiency in finishing tasks and boost their confidence to contribute to many types of work (Lee et al., 2013; Flammer & Luo, 2017). Moreover, the corporate emphasis and devotion to meeting the challenges of COVID-19 may help employees perceive change and convince them to join the effort and promote the attainment of work objectives. Therefore, the following hypothesis is proposed:

- H₂: Satisfaction with corporate COVID-19 responses is positively related to employee self-efficacy.

Satisfaction with Corporate COVID-19 Responses and Hope

In the COVID-19 pandemic, hope is very important to individuals to join in the efforts to fight against its effects and recover their daily work and life routines. As such, satisfaction with corporate COVID-19 responses might give employees more hope. On the one hand, tourism companies send out clear signals by fulfilling their CSR mandates. They can address the difficulties caused by COVID-19 through emergency management and adapting to the needs and interests of employees, clients, suppliers and local communities. This generates greater hope that companies can still operate well and are on the right track to regaining normal operations. On the other hand, it is a

complex and strenuous process to combat COVID-19. The commitment to mitigate the pandemic's challenges and complete work objectives via various policies and initiatives can accentuate employee trust in organisational willingness and capabilities, enhance employee creativity, and give employees more hope to overcome difficulties and ameliorate the consequences of the pandemic (Wang & Tsai, 2014) and therefore:

- H₃: Satisfaction with corporate COVID-19 responses is positively related to employee hope.

Satisfaction with Corporate COVID-19 Responses and Resilience

Resilience refers to an employee's capability to make a quick recovery and finish objectives despite adversity (Luthans et al., 2006). With resilience, employees can face up to difficulties and setbacks, overcome them, and keep moving ahead. Resilience is a precious personal quality, which is especially helpful in the face of challenges, obstacles and an ever-changing and unpredictable environment (Britt et al., 2016). Resilience is not only a psychological trait, but also subject to the influence of corporate environments (Bardoel et al., 2014). Companies' care for employees, clients, suppliers and local communities is not only reflected through the provision of material resources, but also by offering psychological support to help employees overcome abnormal difficulties in life and work, which strengthen organisational commitment and advance psychological recovery (Kim et al., 2017); thus, the fourth hypothesis was as follows:

- H₄: Satisfaction with corporate COVID-19 responses is positively related to employee resilience.

Satisfaction with Corporate COVID-19 Responses and Optimism

Optimism means employees' positive attribution of their success either at present or in the future (Chiu et al., 2007). People who are optimistic tend to explain positive events in terms of individual, long-term and universal causes, and negative events from external, temporary and specific causes. Therefore, optimism has a positive influence on success, which lowers the destructive influences of failure (Youssef & Luthans, 2007). Not only can optimism buoy individuals, but it also can affect corporate environments (Zhou et al., 2019; Zhu, 2019). Despite the terrible outcomes of COVID-19,

its risks and challenges can be more effectively met by the joint efforts of companies and staff. With systematic crisis management and the emotional intervention of companies, employees can tackle the pandemic with greater rationality, and with anticipation that the challenges will eventually be surmounted; thus, the following hypothesis:

- H₅: Employee satisfaction with corporate COVID-19 responses is positively related to employee optimism.

Mediating Effect of Satisfaction with Corporate COVID-19 Responses

It is unlikely that CSR directly influences self-efficacy, hope, resilience and optimism; these changes are more likely to be dependent on affected people's psychological states and understandings of situations. The conservation of resources (CoR) theory may be used to explain how CSR impacts self-efficacy, hope, resilience and optimism.

According to conservation of resources theory (CoR), individuals strive to obtain, retain, protect, and foster resources that they value, and have the tendency to avoid resource loss, especially in negative events (Hobfoll, 2001). Psychological capital is a positive psychological resource, and people are motivated to maintain and protect it (Luthans et al., 2007). In addition, organisations can contribute to employee positive psychological resource conservation and reduce resource loss, thereby improving employee positive behaviour in workplaces. Therefore, management can impact employee psychological capital through employee perceived organisational behaviour. In this process, employee perceptions of satisfaction with corporate COVID-19 responses could play a mediating role between CSR and employee psychological capital.

According to CoR, people tend to work hard to obtain and maintain valuable psychological resources, and to reduce or avoid loss of the same (Halbesleben et al., 2014). Management policies and initiatives can be significant antecedents in influencing employee psychological resources. Staff may adjust their emotions and behaviours through perceptions of the corporate environment to obtain and maintain a positive psychological status, such as through self-efficacy, hope, resilience and optimism (Jung & Yoon, 2015).

The loss of people's psychological resources is an apparent result of the COVID-19 pandemic. The acquisition and maintenance of self-efficacy is influenced by company fulfilment of CSR mandates. On the one hand, CSR provides material support and assistance for employees, clients, suppliers and local communities, including offers of space, food, protective wear, and medicine. The stronger are the perceptions of company CSR, the more beneficial CSR is in augmenting employee capabilities to cope with the pandemic and its outcomes. On the other hand, psychological counselling provided by companies can alleviate concerns and fears about the disease and its effects. Staff will have more satisfaction with corporate COVID-19 responses if they feel their companies are showing greater care for them in these difficult circumstances. Therefore, CSR fulfillment may promote greater satisfaction with corporate COVID-19 responses, thus stimulating employee self-efficacy and faith in finishing tasks by adopting necessary actions. Thus, the following hypothesis:

- H_{6a}: Satisfaction with corporate COVID-19 responses plays a mediating role in the relationship between CSR and self-efficacy.

With the onset of COVID-19, hotels, travel agencies and scenic areas initiated emergency management programs by addressing the housing and food needs of stranded and homebound employees, delivering gauze masks, sanitisers and medicines to staff unable to leave because of the pandemic. They prepared statistical analyses on health status on a daily basis. Companies also showed consideration for clients and by flexibly handling bookings and orders, by assisting suppliers in coping with difficulties; and by actively organising volunteers to help communities. The more the CSR actions undertaken, the stronger the perception of employees is, and the higher the employee satisfaction with corporate COVID-19 responses. All these measures taken by companies give individuals hope and stimulate them to flexibly adjust to cope with the pandemic in different ways and, thus, the following hypothesis:

- H_{6b}: Satisfaction with corporate COVID-19 responses plays a mediating role in the relationship between CSR and hope.

People's resilience to recover from difficulties, setbacks and adversity is not only determined by psychological endurance capacity, but also influenced by corporate management measures. CSR

reflects the policies and programs to safeguard the interests of company stakeholders. CSR may not directly influence employees' resilience; however, it can help employees cope with difficulties caused by the pandemic through provision of organisational support, thus strengthening trust in companies, deepening employee sense of mission and significance, and encouraging staff to participate in volunteering activities to help others (Supanti & Butcher, 2019). Hence, employees' perception of corporate COVID-19 responses will affect the influence of CSR on employees' ability to cope with setbacks during the pandemic and therefore the following hypothesis:

- H_{6c}: Satisfaction with corporate COVID-19 responses plays a mediating role in the relationship between CSR and resilience.

Similarly, CSR can indirectly influence employee optimism. Despite the disastrous events in this pandemic, many tried hard to maintain their optimism. The greater the uncertainties and risks in terms of work status and health, the more intense the pressure on individuals, which may inevitably cause pessimistic emotions. Material support and psychological guidance can strengthen positive perceptions of corporate environments, which then helps to maintain employee optimism (Hu, Liu & Qu, 2019) and thus:

- H_{6d}: Satisfaction with corporate COVID-19 responses plays a mediating role in the relationship between CSR and optimism.

Moderating Role of Loss Orientation

Loss orientation is a person's self-adjustment after experiencing adversity. A loss orientation can help people recover their normal psychological functions (Shepherd, 2009). Generally speaking, loss orientation occurs in response to the loss of valuable things and focuses on rethinking the process of loss and reasons that caused the loss (Shepherd, 2009). Loss orientation can improve individual learning and manage the loss or failure through rational thinking in setbacks, and it is an important process for individual grief recovery. Therefore, individuals contemplate and identify the causes of their problems through loss orientation, so as to actively deal with the adversity and setbacks.

According to the theory of psychological resources, individuals need to recover from loss or grief after experiencing adversity or trauma. With COVID-19, tourism employees needed to face health threats, economic losses, mental anguish, and uncertainty about the future. Therefore, companies were obliged to actively assume social responsibility, provide the necessary material assistance and psychological guidance, so as to make employees feel more comfortable and satisfied with the timely responses of their companies, and help staff maintain or restore their psychological resources of self-efficacy, hope, resilience, and optimism. A person's emotional management affects their psychological recovery speed and recovery effect. When faced with the setbacks and traumas brought by this unprecedented pandemic, loss orientation assisted with the management of despair and grief. Guiding individuals to conduct emotional management and reflection is beneficial. It is better for them to rationally face up to and comprehend the situation and respond in a reasoned way. This not only reduces the potential negative impacts on people, but also enhances capabilities to cope with the crisis. Through repeated rational thinking to find alternative strategies to overcome the difficulties brought by the situation, people tend to have more hope to overcome the challenges.

In addition, the help and care from companies assist in individual recovery from difficulties, setbacks, and adversity. This encourages rational responses to difficulties and challenges. Through rational reflection and with access to objective data, staff may begin to recognise that the crisis is temporary and an accident beyond their control. With the joint efforts of companies and employees, people can gain greater confidence and have higher expectations that the pandemic can be beaten. This is conducive to the recovery of people's normal psychological functions and the maintenance and recovery of self-efficacy, hope, resilience, and optimism. Therefore, this research suggests that loss orientation strengthens the relationship between employee satisfaction with corporate COVID-19 responses and self-efficacy, hope, resilience and optimism with the following four hypotheses:

- H_{7a}: Loss orientation positively moderates the relationship between satisfaction with corporate COVID-19 responses and self-efficacy.
- H_{7b}: Loss orientation positively moderates the relationship between satisfaction with corporate COVID-19 responses and hope.

- H_{7c}: Loss orientation positively moderates the relationship between satisfaction with corporate COVID-19 responses and resilience.
- H_{7d}: Loss orientation positively moderates the relationship between satisfaction with corporate COVID-19 responses and optimism.

Research Methods

Research Sample

This research employed a questionnaire survey among employees of tourism companies, including travel agencies, scenic attractions, online travel agencies (OTAs) and cultural and tourism firms, so as to test the research conceptual model. The COVID-19 outbreak had a direct and hugely negative impact on tourism, which dealt a heavy blow to the sector in all provinces, autonomous regions and municipalities in China. Essentially, this resulted in an almost immediate shutdown of an economic sector that relies heavily on a non-local worker population. The future risks and uncertainties caused a tremendous loss of psychological capital among tourism employees and therefore they were chosen as the survey respondents. Second, tourism is very labor-intensive and an activity in which employees are the service providers. The development of tourism companies depends on the performance of employees, and their positive psychological states directly affect service quality, sales performance, customer satisfaction and loyalty. The recovery of employee psychological status is important to the sound and sustainable development of tourism companies. Third, employees directly interact with tourists. Each side can influence the feelings of the other. Traveling should be a pleasurable experience, and this is possible when tourism employees have positive, optimistic and healthy psychological states.

Hubei Province, particularly Wuhan, the capital city of Hubei, was the main area beset by COVID-19, with the greatest numbers of people diagnosed with and dying of COVID-19 and the highest risk level in China. In order to prevent COVID-19 from spreading nationwide, Wuhan made great sacrifices, with the whole city locked down for 76 days, causing serious challenges to

production activities and the daily life of local residents. The outbreak of COVID-19 exerted an even stronger psychological impact on employees of tourism companies in Wuhan, causing serious loss of psychological capital among them. Therefore, employees of Wuhan tourism enterprises were chosen to be the respondents in this research.

From February 7-12, 2020, during the peak of COVID-19 in China, the researchers distributed the questionnaire through wjx.com and WeChat to collect 466 responses from employees of tourism companies of different types. Some 36 forms were identified as being invalid as they demonstrated a specific tendency (choosing the same option for more than eight statements) or failed to answer the questions seriously or gave answers too quickly. Finally, 430 valid questionnaires were obtained. A majority of the responses were from Wuhan and other parts of Hubei Province, the epicenter of the COVID-19 outbreak.

After the online survey, semi-structured in-depth interviews were carried out with 14 employees at different management levels from travel agencies, hotels, scenic attractions, OTAs, and tourism planning companies so as to gain a deeper understanding of the influence of psychological feelings of tourism employees in COVID-19 and how the CSR of tourism companies help comfort employees. Due to COVID-19, it was impossible to conduct face-to-face interviews. Therefore, voice or video chats were organised via WeChat. The interviews lasted for around 50 to 100 minutes. There were three senior managers, three middle-level managers, and eight junior managers or ordinary staff. Eleven were from local tourism companies in Wuhan, three were from companies within and outside of Hubei Province. Six were from travel agencies, three from scenic attractions, three from hotels, one from an OTA, and one from a tourism planning company. Table 1 presents an overview of interviewees.

Table 1. Overview of interviewees

No.	Gender	Company type	Level	Location	Duration
1	Female	Scenic Spots	Ordinary Staff	Wuhan	55mins
2	Male	Scenic Spots	Ordinary Staff	Yichang	62mins
3	Male	Travel Agency	Senior Manager	Wuhan	75mins
4	Male	Hotel	Senior Managers	Wuhan	67mins
5	Female	Travel Agency	Ordinary Staff	Wuhan	85mins
6	Male	Travel Agency	Ordinary Staff	Wuhan	77mins
7	Female	Tourism Planning Company	Junior Managers	Wuhan	70mins
8	Male	Scenic Spots	Senior Managers	Wuhan	80mins
9	Female	Travel Agency	Junior Managers	Wuhan	82mins
10	Male	Hotel	Middle-level Managers	Wuhan	50mins
11	Female	Hotel	Middle-level Managers	Shanghai	100mins
12	Male	Travel Agency	Middle-level Managers	Wuhan	74mins
13	Female	OTA	Ordinary Staff	Wuhan	85mins
14	Female	Travel Agency	Ordinary Staff	Guangzhou	78mins

Measures

Five-point Likert scales were used to measure key variables ranging from “strongly disagree” (1) to “strongly agree” (5). Previously validated scales for all variables were adopted to guarantee the reliability and validity of this research. The CSR scale from Ong et al. (2018) was applied, and the Cronbach’s α was 0.930. The measure of satisfaction with corporate COVID-19 responses followed Watkins et al. (2014) recommendations and the Cronbach’s α was 0.894. The scale of loss orientation applied Xie et al.’s (2017) specifications and the Cronbach’s α was 0.626. The psychological capital scales were from Luthans, Youssef & Avolio (2007), including self-efficacy (Cronbach’s α of 0.864), hope (Cronbach’s α of 0.833), resilience (Cronbach’s α of 0.798) and optimism (Cronbach’s α of 0.782).

Research Results

Respondent Profile

Among the survey respondents, 192 were females (44.7%) and 238 were males (55.3%). Employees aged 20 to 39 accounted for 72.6% of the total. Some 64% held degrees of junior college or above. Middle and senior management were 42.6%; 19.3% were in other management positions; and 38.1% were front-line employees. A majority (44.2%) were from Wuhan; 38.6% from other places within Hubei Province; and 17.2% were from beyond Hubei Province.

Validity Assessment

Harman's single factor test was applied to examine for common method bias, because the data were collected at an individual level. The results of the Harman test showed that the largest variance explained by a single factor was 34.5%, and the common method bias was acceptable.

Furthermore, validity was tested through confirmatory factor analysis (CFA). The CFA results showed good model fit ($\chi^2/df = 2.93 < 5$; RMSEA = 0.0049 < 0.080; CFI = 0.92; TLI = 0.91; SRMR = 0.046). Table 2 indicates that CSR, satisfaction with corporate COVID-19 responses, self-efficacy, hope, resilience and optimism had good validity construct reliability (CR). All the variables' average variance extracted (AVEs) were acceptable.

Table 2. CFA results

Variables	Items	Factor loadings	t-values	CR	AVE
CSR	CSR1	0.753	33.182*	0.935	0.643
	CSR2	0.771	35.596*		
	CSR3	0.794	40.139*		
	CSR4	0.702	26.969*		
	CSR5	0.908	84.605*		
	CSR6	0.800	41.877*		

	CSR7	0.808	43.528*		
	CSR8	0.860	59.114*		
Satisfaction with corporate COVID-19 responses	S1	0.889	54.339*	0.897	0.743
	S2	0.866	49.789*		
	S3	0.830	43.281*		
Self-efficacy	SE 1	0.683	23.068*		
	SE 2	0.783	33.189*	0.866	0.522
	SE 3	0.815	37.408*		
	SE 4	0.767	31.08*		
	SE 5	0.660	20.856*		
	SE 6	0.604	17.05*		
Loss orientation	RO1	0.453	8.948*	0.682	0.433
	RO2	0.862	13.457*		
	RO3	0.593	11.111*		
Hope	HO1	0.617	17.783*	0.841	0.475
	HO2	0.738	26.532*		
	HO3	0.569	15.448*		
	HO4	0.566	15.361*		
	HO5	0.809	34.961*		
	HO6	0.790	33.1*		
Resilience	RE1	0.616	16.492*	0.800	0.445
	RE2	0.697	20.841*		
	RE3	0.683	20.262*		
	RE4	0.671	19.473*		
	RE5	0.667	19.31*		
Optimism	OP1	0.576	14.57*	0.784	0.479
	OP2	0.742	23.45*		
	OP3	0.747	23.75*		
	OP4	0.689	20.128*		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Correlations of Variables

Table 3 presents means, standard deviations (SD), and correlations for the seven variables. The results show the Pearson correlation coefficients of dyadic data. CSR was positively correlated with employee satisfaction with corporate COVID-19 responses ($r = 0.78, p < 0.01$), self-efficacy ($r = 0.426, p < 0.01$), hope ($r = 0.442, p < 0.01$), resilience ($r = 0.401, p < 0.01$) and optimism ($r = 0.450, p < 0.01$). Satisfaction with corporate COVID-19 responses was positively correlated with self-efficacy ($r = 0.469, p < 0.01$), hope ($r = 0.454, p < 0.01$), resilience ($r = 0.423, p < 0.01$) and optimism ($r = 0.438, p < 0.01$). In addition, the square root value of AVEs on the diagonal was greater than the Pearson correlation coefficient in the same lines. Therefore, there was good discriminant validity among the variables.

Table 3. Correlation analysis

	Mean	SD	1	2	3	4	5	6	7
1CSR	4.27	0.61	0.802						
2 satisfaction with corporate COVID-19 response	4.21	0.65	.780**	0.862					
3loss orientation	3.66	0.64	.257**	.252**	0.658				
4self-efficacy	3.98	0.54	.426**	.469**	.383**	0.722			
5hope	3.89	0.55	.442**	.454**	.287**	.689**	0.689		
6reselience	3.95	0.54	.401**	.423**	.295**	.592**	.678**	0.667	
7optimism	4.10	0.57	.450**	.438**	.227**	.539**	.604**	.560**	0.692

* $p < 0.05$, ** $p < 0.01$

Hypotheses testing

Through the use of Mplus 7.0 software, the fitting of the mediating model and path coefficients were tested. The fit index of the mediation model for self-efficacy, hope, resilience and optimism through satisfaction with corporate COVID-19 responses was acceptable ($\chi^2/df = 2.94 < 5$; RMSEA = $0.067 < 0.080$; CFI = 0.90; TLI = 0.89; SRMR = 0.046). As shown in Table 4, the positive relationship between CSR and satisfaction with corporate COVID-19 responses was significant ($\beta =$

0.846, $p < 0.001$), and CSR and satisfaction with corporate COVID-19 responses showed a positive association. The relationship between satisfaction with corporate COVID-19 responses and self-efficacy was positive ($\beta = 0.42$, $p < 0.01$); the path coefficient of hope was ($\beta = 0.39$, $p < 0.01$); the path coefficient of resilience was ($\beta = 0.42$, $p < 0.01$); and the path coefficient of optimism was significant ($\beta = 0.28$, $p < 0.05$). This supported the first five hypotheses.

Furthermore, the mediating effects of employee satisfaction with corporate COVID-19 responses were significant. The mediation effect on self-efficacy was ($\beta = 0.358$, $p < 0.01$), hope was ($\beta = 0.333$, $p < 0.05$), resilience was ($\beta = 0.358$, $p < 0.01$), and optimism was ($\beta = 0.241$, $p < 0.05$). Employee satisfaction with corporate COVID-19 responses played a complete mediating role in the process of CSR affecting self-efficacy, hope, resilience, and optimism. The impact of employee satisfaction with corporate COVID-19 responses on self-efficacy and resilience was greater than for hope and optimism. The results of the Bootstrap test showed the mediating effect of satisfaction with corporate COVID-19 responses was positive and significant, and the 95% confidence interval (CI) of CSR on self-efficacy was [0.12, 0.60], hope [0.06, 0.61], resilience [0.16, 0.55] and optimism [0.02, 0.47]. Therefore, H6a, H6b, H6c and H6d were supported.

Table 4. Mediating effects

Hypotheses	Paths	β	Results
H1	CSR → satisfaction with corporate COVID-19 response	0.846***	Supported
H2	satisfaction with corporate COVID-19 response → Self-efficacy	0.42**	Supported
H3	satisfaction with corporate COVID-19 response → hope	0.39**	Supported
H4	satisfaction with corporate COVID-19 response → resilience	0.42**	Supported
H5	satisfaction with corporate COVID-19 response → optimism	0.28*	Supported
H6a	CSR → satisfaction with corporate COVID-19 response → self-efficacy	0.358**	Supported
H6b	CSR → satisfaction with corporate COVID-19 response → hope	0.333*	Supported
H6c	CSR → satisfaction with corporate COVID-19 response → resilience	0.358**	Supported
H6d	CSR → satisfaction with corporate COVID-19 response → optimism	0.241*	Supported

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Moderating Effects of Loss Orientation

SPSS 22 was applied to test the moderating effects of loss orientation. The regression results showed loss orientation positively moderated the relationship between satisfaction with corporate COVID-19 responses and self-efficacy (M3: $\beta = 0.216$, $p < 0.001$) (Table 5), hope (M6: $\beta = 0.174$, $p < 0.001$) (Table 5), resilience (M9: $\beta = 0.154$, $p < 0.001$) (Table 6) and optimism (M12: $\beta = 0.229$, $p < 0.001$) (Table 6). Hypotheses 7a,7b,7c,7d were supported.

Table 5. Moderating effects of loss orientation (1)

Variables	Self-efficacy			Hope		
	Mode1	Mode 2	Mode3	Mode4	Mode5	Mode6
Gender	-0.101	-0.087	-0.099	-0.093	-0.079	-0.088
Age	0.013	0.003	-0.001	0.007	0.006	0.002
Education	0.060	0.022	0.016	0.026	0.000	-0.005
Occupation	-0.006	-0.014	-0.015	0.083	0.079	0.078
Position	-0.235	-0.225	-0.231	-0.222	-0.212	-0.216
Tenure	-0.006	-0.038	-0.040	-0.003	-0.034	-0.035
Location	0.007	0.020	0.025	-0.005	0.005	0.009
Satisfaction with corporate COVID-19 responses		0.382***	0.417***		0.394***	0.422***
Loss orientation		0.282***	0.224***		0.183***	0.136**
Satisfaction with corporate COVID-19 responses*loss orientation			0.216***			0.174***
R ²	0.079	0.356	0.398	0.075	0.298	0.336
ΔR^2	0.063	0.342	0.384	0.059	0.283	0.309
F	5.139***	25.788***	27.784***	4.876***	19.791***	20.228***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6. Moderating effects of loss orientation (2)

Variables	Resilience			Optimism		
	Mode7	Mode 8	Mode9	Mode10	Mode11	Mode12
Gender	-0.133***	-0.120***	-0.129***	-0.036	-0.022	-0.034
Age	-0.047	-0.051	-0.055	-0.077	-0.075	-0.080
Education	0.030	0.001	-0.003	-0.067	-0.087	-0.094
Occupation	0.017	0.013	0.012	0.022	0.020	0.019
Position	-0.088	-0.078	-0.082	-0.069	-0.059	-0.064
Tenure	0.065	0.036	0.035	0.044	0.014	0.012
Location	-0.006	0.003	0.007	0.015	0.023	0.028
Satisfaction with corporate COVID-19 responses		0.359***	0.384***		0.399***	0.436***
Loss orientation		0.206***	0.164***		0.138**	0.076
Satisfaction with corporate COVID-19 responses*loss orientation			0.154***			0.229***
R ²	0.038	0.245	0.267	0.017	0.221	0.269
△R ²	0.022	0.229	0.249	0.001	0.204	0.252
F	2.404***	15.134***	15.227***	1.032	13.251***	15.424***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results suggested that CSR and satisfaction with corporate COVID-19 responses exerted different influences on self-efficacy, hope, resilience and optimism. Specifically, the influence of CSR and satisfaction with corporate COVID-19 responses on self-efficacy and resilience were the most significant, followed by hope. Among the four dimensions of psychological capital, the

influence of CSR and satisfaction with corporate COVID-19 responses on optimism were the weakest ($\beta = 0.358, p < 0.01$; $\beta = 0.358, p < 0.01$; $\beta = 0.333, p < 0.05$; $\beta = 0.241, p < 0.05$) (Table 4).

For the moderating effects of loss orientation, the effect intensity can be ranked in descending order as the moderating effect on optimism, self-efficacy, hope and resilience, respectively (M12: $\beta = 0.229, p < 0.001$; M3: $\beta = 0.216, p < 0.001$; M6: $\beta = 0.174, p < 0.001$; M9: $\beta = 0.154, p < 0.001$) (Tables 5 and 6).

Conclusions and discussion

With the background of the COVID-19 pandemic, the effect of tourism company CSR on employee self-efficacy, hope, resilience and optimism were studied based on CoR theory. Employee psychological capital, including self-efficacy, hope, resilience and optimism, was effectively enhanced by CSR through improving perceptions of satisfaction with corporate COVID-19 responses. This research was aimed to make theoretical and practical contributions in better coping with the psychological trauma caused by the pandemic by studying the measures taken by tourism companies to enhance employee psychological states.

According to the survey results and interviews, the conclusions were as follows:

Tourism CSR is beneficial to employee self-efficacy. The more CSR the tourism companies initiated, the higher was employees' satisfaction with corporate COVID-19 responses. In the face of challenging tasks, employees had the confidence and could make the necessary efforts to achieve success. This provides solid evidence for H₁ ($\beta = 0.358, p < 0.01$), and coincides with the viewpoint of Gond et al. (2017). In other words, help provided by companies influences employees' perceived satisfaction with corporate COVID-19 responses and strengthen employees' self-efficacy.

The hotel writes letters to guests, provides alcohol, gauze masks and other protective materials for guests in the public region, and allows guests to get refunds unconditionally; arranges employees returning to Shanghai to live in the quarantine dormitory, disinfects the quarantine dormitory, sends the meals door-to-door, and provides favorable accommodation conditions. The enterprise measures or actions against COVID-19 can give employees

psychological security. I strengthen training of employees, and shows to receptionists about how to serve guests and ask guests about where they are from and whether they have interaction with people in epidemic areas. The enterprise also buys gauze masks for employees, and asks employees' physical health. I am very busy, but my efforts have helped guests alleviate their sense of anxiety, which gives me a sense of fulfilment. ---No. 11.

Tourism CSR promotes employee hope through employees' perceived satisfaction with corporate COVID-19 responses. Tourism CSR is positively related to employees' perceived satisfaction with corporate COVID-19 responses and motivates employees to work persistently for organisational goals and adjust their paths to success if necessary. This supports H₂ ($\beta = 0.333$, $p < 0.05$). Watkins et al. (2015) pointed out that national relief may not always be available or reliable, and individuals are not powerful enough, but organisational care and help can enhance employees' satisfaction with corporate COVID-19 responses and increase channels for employees to cope with difficulties. Interview results showed that the more help provided by a company to fight against COVID-19, the stronger the positive perception of employees were, and the more channels for employees to cope with COVID-19 and related difficulties.

The company ensures every employee to be healthy every day, give the refund in full amount to tourists, and provide rooms free of charge for medical workers. Our company establishes the anti-epidemic task force to realise overall planning of all affairs. The frontline employees behave anxiously, meaning that COVID-19 has influenced employees emotionally, so the company helps them regain psychological peace. After the outbreak of the epidemic, the whole tourism industry of Wuhan has suffered a heavy blow, and our company comes up with the idea to adjust the employee structure and future market layout. Attention is paid to the hotel's alliance business to see whether there are possibilities to make breakthroughs. The time-table is planned as a whole. Hotels in different places in china are contacted via WeChat and phone calls to see whether they have the intention to form an alliance. Meanwhile, preferential policies are formulated for alliance. There has been a buffer period for companies' Internet section. It is hoped that a non-standard accommodation industrial system can be developed. And the resources can be displayed on large-scale OTA platforms. ---No. 4.

Tourism CSR helps employees maintain resilience through satisfaction with corporate COVID-19 responses. This means that CSR helped employees persevere, seek quick growth and achieve success when in adversity. This supported H₃ ($\beta = 0.358$, $p < 0.01$). Luthans et al (2010)

and Britt et al. (2016) pointed out that organisational management practices can help employees recover from adversity and difficulties and seek development. When an epidemic breaks out, CSR will be an important support for employees to stick to their posts and recover from their psychological shocks inflicted by the epidemic.

Our company actively copes with refund requests from travel groups, and send regards to them via WeChat. The company undertakes its due CSR. For example, our company will cover the losses resulting from difficulty in communicating with hotels and suppliers abroad, which are unwilling to give refunds in full amount, so as to prevent tourists from suffering the losses. The enterprise is human-oriented, and cares about its employees. Even if I might be jobless for half a year, I am generally peaceful in mind, for I cannot change the status quo but just get adapted to it. But I can have more time learning professional knowledge. In 2020, the enterprise might adjust the posts, and changes of my job duty requires constant learning. ---No. 6.

Tourism CSR helps employees remain optimistic through perceived satisfaction with corporate COVID-19 responses. The finding substantiated H₄ ($\beta = 0.241$, $p < 0.05$). In other words, tourism CSR affects employees' positive attribution for the victory of fighting with the epidemic and for their success at present and in the future. If a company actively undertakes its CSR, employees will have attribute difficulties of epidemic prevention and control externally, but attribute company's active responses to the epidemic internally. Hu et al. (2019) and Zhou et al. (2019) thought that organisational management practices can provide intervention for psychological capital. Interviews also revealed that tourism CSR sends positive signals to employees during the epidemic period, making employees believe that the epidemic and difficulties are temporary, and can be addressed through concerted efforts, thus effectively boosting employees' optimism.

Our company donates for the fight against the epidemic. Employees participated in purchasing and transporting materials for the construction of Shipailing Cabin Hospital. The company will provide the "National Top-ranking Guide Philanthropic Training" to create a highly responsible image. Our company does not reduce the salary or downsize its workforce. The company has not ignored its employees because of the outbreak of the epidemic. This can make employees feel psychologically secure and confident about the company. Every project is moving ahead in a good order, and the company is showing care for its employees. The general atmosphere is positive and harmonious. Employees feel depressed periodically but their emotions are generally stable, that is,

most employees feel hopeful, secure and confident for the company. ---No. 9.

Loss orientation strengthens the correlation between employees' satisfaction with COVID-19 responses and employees' self-efficacy. Through repeated reflection, employees can rationally summarise the causes behind the phenomenon so as to better cope with the adversity and setbacks. The higher the employees' satisfaction with COVID-19 responses, the greater the influence was on employees' self-efficacy. The finding provides evidence for H₅ ($\beta = 0.216, p < 0.001$). Xie et al. (2017) found that individuals' reflection can strengthen the ability of actors. This research also found that individuals' reflection is beneficial for strengthening the positive relationship between employees' perceived satisfaction and self-efficacy. Therefore, companies, apart from undertaking CSR, should emphasise employees' individual reflections, including paying attention to their self-reflection abilities in the process of recruitment and selection, and enhance individuals' self-reflection through training. Interviews showed that employees of tourism companies were all faced with severe difficulties, and with the help of their organisations, they developed a stronger self-reflection ability and were more confident in finishing their tasks.

The company encourages employees, introduces the epidemic status throughout the country, and which CSR has been undertaken by the company, thus creating a generally positive atmosphere. Personally, I have a clear goal for my future work. After returning to work, I will provide the training on positive energy for branches in different cities so that sales assistants can engage themselves into their work as soon as possible. Difficulties and challenges coexist. The tourism industry will embrace its growth spurt. Then, how to seize the opportunity when others are slacking their efforts is of vital importance. Opportunities provided by the tourism industry can bring dramatic changes. (During the epidemic period, I have) learned new product information, how to increase depth of my product training, background information of history and culture. All in all, I have trained my speech skills, achieving a general improvement. --- No. 12.

Loss orientation strengthens the relationship between employees' satisfaction with corporate COVID-19 responses and hope. This research finding substantiates H₆ ($\beta = 0.174, p < 0.001$). According to the viewpoint of Shepherd (2009), individual loss orientation is an important dimension for grief recovery, and an important psychological recovery mechanism for individuals to cope with difficulties and adversity. With the help of the company, individual loss orientation can

lead employees to find new ways to finishing tasks and adjusting their strategies to realising job objectives.

Our company orders gauze masks, disinfects the office, and helps handle tourists' refund requests. The enterprise also encourages employees that to stick to the end will be the victory. It is believed that the epidemic will be finally put under control. The future tourism market will be further segmented. After the epidemic, citizens have a strong demand for health, recreation and resort. Our company will lead the public to develop the concept of health-promoting tourism, and plan the hot spring scenic area into a TCM rehabilitation base. ---No. 8.

Loss orientation strengthens the relationship between employees' satisfaction with corporate COVID-19 responses and employees' resilience. The research findings provided evidence for H₇ ($\beta = 0.154, p < 0.001$). In other words, the stronger were individuals' ability to reflect on themselves, the more significant the positive correlations between employees' satisfaction with corporate COVID-19 responses and employees' resilience. Britt et al. (2016) pointed out that, in addition to intervention in organisational management, employee resilience is subject to the influence of personal characteristics, including personal abilities and motivation. Individuals' ability to reflect on themselves can help them reasonably respond to the epidemic, cope with the difficulties arising from it, actively respond to changes, and reduce the negative influence as much as possible.

The group issued the "plan for safe cancellation", which allowed guests to cancel all reservations free of charge. The "fellowship" plan was issued for partners, including starting the partner support foundation, reducing the platform commissions, and buying insurances for partners in Hubei Province. The group's internal academy provides the online boutique courses for employees. This gives me much pride, for the company I work for is very responsible. I also try my best to handle refund requests of guests, take the initiative to donate, and participate "Wuhan Medical Care Hotel Support Alliance" by posting messages to help medical teams in Wuhan contact hotels. I am proud that I can contribute my share to my people when the motherland is faced with difficulty. I hope that I can have more opportunities to make more changes and have more tries. --- No. 13.

Individuals' loss orientation strengthens the relationship between employees' satisfaction with corporate COVID-19 responses and employee optimism. This research finding supported H₈ ($\beta = 0.229, p < 0.001$). In other words, the stronger were individuals' abilities to reflect on themselves, the more significant the influence of employees' satisfaction with corporate COVID-19

responses on employees' optimism. Xie and Wang (2016) put forward that optimism is a psychological status with obvious individual characteristics. Individuals' loss orientation is beneficial for the development status of the epidemic and correct attribution of difficulties brought by the epidemic, and helps employees maintain optimism. Interviews showed that, affected by individuals' self-reflection, the stronger the employees' satisfaction with corporate COVID-19 responses, the more likely it was that employees had reasonable and positive attribution of the epidemic, the dilemmas facing by the company, and challenges in individuals' work.

Our company provides free accommodation for employees staying in Wuhan. The enterprise's canteen prepares the meals and delivers them in the downstairs of employees' dormitory. At the same time, the enterprise provides the gauze mask, disinfectant fluids, and drugs for employees, and statistically puts down the health status. The round-trip fees of performers (including artists performing walking on stilts and colorful lanterns) in the scenic area during the Spring Festival will be covered by the enterprise. The enterprise also assists foreign performers in going back to their motherland. All these behaviours of my enterprise give me psychological security and pride, making me feel that our enterprise is responsible. I think the epidemic indeed has some influence on the tourism industry, but the tourism industry is good at recovering from these difficulties, and generating retaliatory consumption among consumers. Therefore, I am confident in the development of the tourism industry. --- No. 1.

Theoretical Contributions

It is suggested that this research enriches the existing literature on the theory of psychological capital. The impacts of tourism company CSR on employee psychological capital were explored against the background of an unprecedented pandemic event. The psychological capital of employees in tourism usually plays a significant role in promoting work performance and positive work behaviour (Wu et al., 2018). The effects of psychological capital have been given much attention in the literature; however, the conservation and development of employee psychological capital have been minimally investigated. From the outbreak of COVID-19, employees faced great threats to their health and uncertainties about their working incomes. This posed a significant challenge to maintaining employee psychological capital in tourism companies. In addition to individual efforts, companies can contribute to conserving employee self-efficacy, hope, resilience

and optimism. Under normal operating conditions it might be difficult for companies to influence employee psychological capital. However, through the appropriate CSR policies and actions and with the unusual circumstances of COVID-19, companies can assist with the maintenance and recovery of psychological capital. It was proposed that CSR could benefit employee self-efficacy, hope, resilience and optimism and was an antecedent of employee psychological capital.

The research on employee psychological capital was refined through this analysis. Generally, previous studies have considered psychological resources as a whole and psychological capital as an individual's positive mental state in discussing causes and effects (Karatepe & Karadas, 2014; Kang et al., 2018). However, different types of positive psychological qualities, such as self-efficacy, hope, resilience and optimism, are involved in psychological capital. The analysis of the differing impacts of tourism company CSR on self-efficacy, hope, resilience and optimism reveals a more lucid understanding of the effects of various management measures. For example, when compared with optimism, employee self-efficacy, resilience and hope are more positively affected by CSR. However, optimism is the most significant factor affected by the moderating effect of loss orientation. The influence of organisational management on self-efficacy, hope and resilience is more obvious, while optimism is more significantly influenced by individual personality characteristics.

The micro-level research on CSR is augmented through this investigation. Generally, the impact at a macro level, such as corporate performance and reputation, financial returns, and market performance, are the focus for CSR (Calveras, 2015). However, more scholars are finding that CSR has a significant impact on individuals and can be regarded as an informal human resource management measure (De Roeck & Farooq, 2017; Kim et al., 2017; Luu, 2017; Su & Swanson, 2019). CSR stands apart from the rigid provisions of other management systems and may demonstrate more of a compassionate perspective.

Practical Contributions

In a crisis such as COVID-19, tourism companies need to actively assume social responsibility. In addition to helping companies establish a good public image, CSR also helps employees maintain a positive psychological state of self-efficacy, hope, resilience and optimism. The COVID-19

pandemic shattered the confidence of people worldwide and for the tourism employees of Hubei Province the effects were even deeper. It sensitised employees to pay more attention than previously to every move made by companies. Demonstrating social responsibility in such a calamitous crisis as COVID-19 through caring for employees, showing genuine interest in the needs of customers, suppliers and peers, helping the local community to deal with the pandemic, increased employee satisfaction with corporate COVID-19 responses and greatly improve the image of tourism companies. Also, these initiatives set an important leadership example for employees and others. They tended to make employees feel prouder to be a member of a caring, thoughtful and generous company. The social responsibility demonstrated by tourism companies will lay a solid foundation for follow-up efforts by employees. Tourism companies should not be afraid to appropriately publicise their policies and actions related to social responsibility under these circumstances.

Managers must pay attention to the four dimensions of psychological capital. When companies pay greater attention to employee psychological capital, this may help them to return to normality more quickly. Employees of tourism companies during COVID-19 were under tremendous psychological pressure in the face of multiple unprecedented difficulties, such as life and health threats, uncertain income, restricted living environments, and changes in work schedules and methods. For employees to work and create benefits for companies they have to maintain calm and healthy psychological states and increase their reserves of psychological capital. Social responsibility performance builds employee confidence, makes employees have more belief in their capabilities, and motivates them to continue to work hard, endure hardships in adversity and cultivates resilience. In addition, companies should take the initiative to find solutions to problems in such predicaments, seek more secure future development paths, and accumulate knowledge and experience for the long-term development of individuals and themselves. Companies should constantly advise and guide employees by using data and case examples, so that employees can have more positive attitudes toward the present and future, and realise that the present challenges are temporary. They need to strengthen the optimism of employees and communicate that in the medium- to longer-term the tourism industry has a bright future.

Tourism companies must help employees to retain and recover positive psychological

conditions by guiding and strengthening them to self-adjust. The recovery of psychological capital is positively affected by the loss orientation of employees. It was easy for individuals to have all kinds of negative emotions because of the spread of the disease and difficulties in determining the veracity of news reports and the opinions of others. Companies should publicise positive news and their deeds to create an atmosphere of overcoming difficulties together. They might deflect employee attention away from the pandemic by arranging training or other learning experiences. Companies should help employees to have a rational and scientific evaluation of the pandemic so that they can gradually become better informed through continuous reflection. The negative psychological toll of the pandemic can be reduced and thus the abilities of employees to cope with it can be enhanced through greater corporate attention to psychological capital.

Limitations and Future Research Directions

First, the cross-sectional design used in this research has limitations in explaining the causal relationships among CSR, satisfaction with corporate COVID-19 responses and psychological capital. In addition, a single data source can easily lead to common source errors. Randomising the questionnaire design, anonymous completion of questionnaires, and the application of the Harman single-factor and CFA tests ensured that this error factor was within the accepted range. In order to reduce the common error as much as possible, it is better for future research to obtain data from different sources.

This research had a focus on the influence of CSR at the individual employee level and is lacking an evaluation at the corporate level. Future research should consider a multi-level survey and the diversification of data sources.

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