

## Article

# Crisis Management Performance of Upscale Hotels in the Greater Bay Area, China: A Comparative Study in a Complex Institutional Situation

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**Abstract:** This study explores upscale hotel crisis management from the institutional environment perspective. Integrating the institutional and resource dependence theories, this study established a framework to investigate and compare the organizational crisis performance of state-owned and private-owned hotels in China. Specifically, data were collected in the Greater Bay Area. The hotels from Macau represent the private-owned samples ( $n = 247$ ), while the hotels from Guangzhou and Shenzhen are the state-owned samples ( $n = 225$ ). The results showed that the institutional environment significantly influences upscale hotels' organizational crisis performance. For example, the organizational climate has more effect on crisis performance in SOHs than POHs, while dynamic capability has more impact on the POHs than SOHs. Moreover, the results also showed that the path from an organization's commitment to their crisis performance illustrated the most significant difference between those two samples. This study provided a novel perspective to explore two different social systems (socialism vs. capitalism) in upscale hotel crisis performance and management. Theoretical and practical implications are also discussed.

**Keywords:** crisis management; state-owned hotels; private-owned hotels; institutional environment; hotel crisis performance; organizational climate; organizational commitment; organization crisis readiness



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## 1. Introduction

Crisis management has been widely discussed in the past two years in the hospitality field since the COVID-19 pandemic began. The hotel industry in particular has been facing a massive regression [1]. Many researchers have provided various strategic responses for crisis management in the hotel industry [2–6]. Institutional theory suggests that business behavior is not always economically rational but is influenced by external environmental factors such as regulations, norms, values, beliefs and traditions, even if aiming to maximize financial benefits [7–9]. Hence, institutional factors play an important role in crisis management.

However, only very limited research has been conducted on institutional environmental factors and their effect on hotel crisis management [10], despite wide acknowledgement of the importance of institutional environments by governments and destination management bodies for hotel operation [11–13]. To fill the research gap, this study discusses organizational climate, organizational dynamic capability and organizational readiness, which are the factors in organizations and in organizational commitment that can be used to assess an upscale hotel's attitudes and behavior regarding crisis management within different institutional environments [14] by integrating the institutional theory and resource dependence theory as the theoretical foundation of this study.

Furthermore, most of the previous studies are descriptive cross-sectional ones based on single cases and there is a lack of a comparison of multiple cases that analyze how

hotel crisis management is achieved in different institutional environments to improve the generalization of hospitality crisis research. The present study of hotel crisis management performance is comparative, based on different institutions and conducted in light of institutional theory and resource dependence theory to close these gaps in research [15]. Specifically, an integrative model of crisis management performance that links different crisis response components together to explicate crisis management as a dynamic process of interdependent stages and simultaneous affect across different levels [16] is established.

In particular, the Greater Bay Area in southern China, which combines the two social political systems of socialism and capitalism respectively within 9 Chinese cities and 2 special administrative regions (Hong Kong and Macau), thus providing a good testing ground for these different business models, was employed as the research site. This area not only has almost all the world-famous international luxury hotels but also has most of the upscale state-owned hotel enterprises in China as well and can provide sufficient appropriately comparative study cases. Therefore, this study first explored the constructs of the three indicators which represent hotel attitudes, behaviors and norms in state-owned hotels in mainland China and privately-owned hotels in Macao: organization climate, dynamic capability and commitment for crisis management. Second, comparative structural equation modeling was conducted to analyze the direct and indirect effects of the links between the three indicators and hotel readiness, crisis management performance and ownership differences. Finally, a comparison of hotel crisis management performance based on the different social systems in both mainland China and Macao through multiple-group analysis was also conducted.

## 2. Literature Review

### 2.1. Crisis Management Performance in Hospitality Field

A crisis is defined as “an unpredictable event that threatens important expectation of stakeholders related to health, safety, environmental, and economic issues, which can seriously impact an organization’s performance and generate negative comments” [17]. There are many types of crises, including technical, human and disaster-related events, depending on the level of organizational responsibility [18]. Tourism organizations consider crises to be severe occurrences that threaten the operations of the organization and damage the destination’s reputation by affecting tourists’ perceptions, and which exceed the organization’s ability to recover from using its own resources [19].

Crisis Management (CM) refers to the strategic planning to prepare for, and respond to, the perils that may cause a halt or disruption of operational activities [20]. Previous CM studies have pointed out that business crises are characterized by ambiguous causes, effects and means of resolution [21]. During a business crisis, an organization in that crisis may face demands to exceed its abilities if the considerable additional resources required are absent [22,23]. In the field of health-related crisis research, several authors have attempted to build appropriate managerial responses to different disease crisis events, such as SARS and Ebola [24–29]. A number of frameworks [30–32] have been developed to analyze the life cycle of a crisis for a more holistic approach to providing suggestions to managers concerning the crisis. The definition of crisis management is thus the continuous systemic effort that organizations carry out to identify and prevent potential risks and problems, to manage those that occur to reduce damage to a minimum and to take learning, planning and training activities, as well as the organizational stakeholders’ interests, into account [33,34].

Drawing from the literature in emergency preparedness, CM involves four interrelated factors: prevention, preparation, response and revision [17]. According to recent research, these four factors are incorporated in a commonly used three stage approach: (a) planning before a crisis occurs (prevention and preparation); (b) executing a crisis management plan, response strategies and coordination with relevant stakeholders to mitigate impacts during the crisis (response); and (c) taking recovery actions after the crisis (learning and re-

vision) [14,35]. A CM framework of the tourism industry was also proposed by Richter [36] which contains three management stages: pre-crisis, crisis event and post-crisis.

The COVID-19 pandemic delivered one of the worst shocks to the hospitality sector ever experienced as global and local travel evaporated [34]. While the ultimate goal of crisis management for organizations is not simply surviving such a crisis, purely proposing strategic responses without evaluation of their effectiveness is not sufficient either [21,37]. Thus, the development of a framework of understanding and implementing disaster management strategies for crisis management effectiveness and capabilities that organizations can link to performance in the hospitality industry is crucial [6,37–40]. With respect to the hotel industry itself, it is generally characterized by a susceptibility to crises [40].

According to Chen and Barnes [41], hotel performance is thus described as the conversion of inputs into outputs to accomplish defined outcomes. Ćorluka, Mikić and Peronja [42] point out that hotel performance is also the accomplishment of defined measurable goals and the effective carrying out of predefined responsibilities. However, there is lack of consensus regarding how to evaluate this concept [42]. Flexibility in collaboration, leverage capability to internal environment and external resources are the indicators for hotel performance evaluation [43,44]. For hotels which are in emerging or transition economics, efficient competitive strategies are necessary [45]. In addition, strategic performance measurement may be imperative in analyzing hotel performance since the consumer may put this pressure on a business. Some researchers [46,47] have proposed an innovative method for the measurement of hotel performance using four dimensions or perspectives: financial perspectives, customers' perspectives, internal process perspectives and learning and growth perspectives.

## 2.2. *The Integration of Institutional Theory and Resource Dependence Theory in Hospitality Research*

Institutional theory and resource dependence theory essentially deal with an organization's strategic response choice among external demands and social expectations for survival under external pressures that are common and interconnected [48,49]. Institutional theory suggests that organizational behavior is not always for rational financial benefit maximization but is influenced by external environmental factors such as regulations, norms, values, beliefs and traditions [50–52]. This theory emphasizes the role of social and cultural pressures imposed on organizations, providing a theoretical framework for researchers to identify and examine environmental influences on an organization's practices [13]. Institutions for companies are the regulatory structures, government agencies, laws, courts, norms, values, beliefs, traditions and professions derived from government and professional organizations, interest groups and the general public, including professional agencies, customers, employees, and so forth [7]. On the other hand, resource dependence theory emphasizes that successful organizations are those with the structural capability to reduce environmental uncertainty so that various internal and external actors can cope with numerous and often incompatible pressures [7]. Specifically, the environmental uncertainty, resource interdependencies and the organization capabilities for effective management and resource flow control involve internal and external strategic actions, such as the capability of management, formal control or strategies for cooperation [53]. Capability is intangible but produces control power, and formal control is the outcome or process-oriented control to guide the organization's actions [54]. Cooperative strategies can be achieved through sharing to reduce environmental uncertainty and predict future action [55].

In this case, socialism and capitalism represent two completely different external environments with distinct social and cultural norms, values and beliefs. Therefore, hotel enterprises operating in these two different societies and facing these different environments would experience a significant impact on their organization policies, management and philosophy. Specifically, from the institutional theory perspective, hotel enterprises are required to adjust the organization's practices according to the institutional environment.

On the other hand, resource dependency theory suggests that hotel enterprises facing different resource and dynamic system environments in these two societies require different operating strategies and organization structures. Both theories highlight that the external environment of the organization has a profound impact on the company's internal management strategies, business model and goal setting. This study applied these two theories to elaborate how the hotel enterprises' crisis management and organizational performance would be influenced under two different social systems (Socialism vs. Capitalism). To sum up, the existing literature shows that both theories have underpinnings from organizations' strategic responses in certain institutional environments that they must be responsive to by resistance, activity and/or self-interest if they are to survive the external constraints on their institutions.

In recent years, institutional theory has been used to explain the effect of institutional environment as the external factor in hospitality performance regarding the adaption of environmental management [56,57], corporate social responsibility ([58], experiential learning [59], anti-smoking [60], e-marketing [61] and organizational performance [10,13]. However, previous studies lack a comparative scope to explore the potential difference of organizations' strategic response in different institutional contexts. For resource dependency theory, which has been used to explain effects such as board construction [62,63], inter-organizational trust [64] and compensation practice [65] on hospitality performance, only limited research has taken institutional issues both inside and out of the organizations into consideration [66,67].

### *2.3. Institutional System Relevant to Hospitality in Greater Bay Area (GBA), China*

From the regulation of institution aspect, China has a special political and economic system. China is a socialist country with the systematic innovation of "one country, two systems" that allows market systems to coexist with socialist systems in Hong Kong and Macau. The GBA consists of two special administrative regions (Hong Kong and Macau) and nine cities in Guangdong province, and is defined as the "world-class tourism destination" and "exchange hub for cultures of the East and the West" by the Communist Party of China (CPC) Central Committee in 2019. With respect to the institutional environment of GBA from the cognitive institutional perspective, the Lingnan culture (or Cantonese culture) occupied the whole GBA but differences exist given the varying effects of developmental trajectories of the Canton System and colonialism by the British and Portuguese, as well as more recently the reform and opening-up policy [68]. The two SARs experienced a different development path relative to their counterpart cities of Guangdong province both before and after the resumption of sovereignty by China.

In the context of normative institutions in the hospitality industry, hotel ownership in this area mainly appears as state-owned, private-owned, and joint ventures. In the GBA, hotels in Hong Kong and Macau are privately-owned operated and managed by various international hotel brands. They have significant strength in branding, operation and management, as well as highly flexible decision making and resource utilization [69]. The overall performance of those hotels include relatively higher RevPAR and occupancy than the state-owned hotels in China [70,71]. Elsewhere, Chinese state-owned hotels (SOHs) also play a significant role in the operation of China's hotel companies [72]. According to Wang et al. (2019), almost 49% of the Chinese publicly traded hotel companies are state controlled [73]. Those SOHs operate under a unique structure that distinguishes them from privately-owned hotels in the market [74].

Most state-owned hotels are owned by the government and its agencies at the national, provincial or local level. Thus, their management is dependent on government direction, and this is different from other commercial businesses [70]. On the other hand, they have privileged treatment and have advantages in financing [75], licensing and winning government procurement contracts in the marketplace [76]. However, SOH hotels have been found to be problematic in various ways, such as the separation of ownership and management, bureaucratic control [72,77], unprofessional operation and management, unclear

business objectives [78], a shortage of skilled human resources and lack of knowledge of capital management and operations [79,80]. For example, a conflict exists between general managers and party secretaries due to their slow marketization [81]. Meanwhile, Mak (2008) remarked that the most important task for Chinese SOHs was to meet the targets determined by the government, so that they perform political and social functions more than economic ones. Finally, SOHs are the least progressive sector in China in terms of financial performance [80].

State-owned ownership plays a positive role in helping to mitigate market failures and expanding the supply of public goods, which eventually contributes to the broader economic and social development of the country [82]. Since the outbreak of COVID-19 at the end of 2019, the Chinese tourism and hospitality industry has been plagued by uncertainties as it was the first to be hit by the devastating impact of the COVID-19. However, it has presented early signs of recovery since the end of March 2020 (Hao et al., 2020). Importantly, the institutional system in Chinese tourism and hospitality and its potential effects on management performance in the current crisis, to the best of our knowledge, has not been explored. Thus, this study analyzes the performance of hotels and their strategic responses to crisis management under the two different social systems and operational regulations in the GBA of China.

## 2.4. Hypotheses

### 2.4.1. Hotel Performance in Crisis Management (CMP)

Performance is a measurement of the achievement of hotel businesses, and thus is the ultimate dependent variable of management research and plays a dominant role in management fields [83]. It encompasses three parts, including financial performance, product market performance and shareholder return [83]. In particular, some scholars (e.g., Phillips, 1999) emphasize that the performance measurement of hotels should incorporate the interrelated effect factors, both external and internal, such as environmental characteristics, stakeholder expectations, internal resource inputs, processes and strategies and take the company's vision and mission into consideration. Sainaghi [84] suggested that the performance of a hotel relates to various factors, such as strategy, production, marketing and organization. Haktanir and Harris [85] developed five aspects of hotel performance: business dynamics, customer satisfaction, and performance in financial, employee and innovation areas of the organization.

Meanwhile, previous organizational management studies have produced a plethora of models investigating organizational performance that is affected by external environmental factors such as strategic support in its environment [86], and transaction factors including structure, systems, management practices and climate [87]. However, scholars also recognize that because organizations are slightly different, different models may thus only explain certain performance aspects [88]. In addition, several scholars [89,90] have addressed the organizational performance problem through incorporating the aspects of each of these models to build up a comprehensive framework.

### 2.4.2. Organization Climate

Organizational climate (OCL) is related to organizational culture, which is described as the organizational context for individuals' actions [91]. OCL is the representation of the organization members' assignment of their own experiences within the workplace [92], which manifests more abstract and deep organizational cultural values and can be expressed as the interpersonal relations and meaning required to produce tangible outcomes [93]. Prior studies show that through initiative and psychological safety, OCL positively effects the organization's growth rate, competitive advantage, innovation and performance [94–97]. The underlying mechanism of the profound influence of OCL on organizational performance is that OCL is closely related to the employees' attitudes, feelings and perceptions of their work environment, affecting their behavior in the organization and eventually affecting the overall organizational performance.



Many studies have confirmed that there is a direct and positive correlation between good OCL and organizational performance [94,98,99]. In the hospitality area, Davidson [100] examined OCL and organizational performance within the hotel industry framework and proved that OCL positively contributes to customer satisfaction and hotel performance. Several studies have also explored the impact of OCL on organization performance in crisis situations, particularly in relation to COVID-19 [101,102]. Therefore, we propose the following hypothesis:

**H1.** *There exists a positive relationship between OCL and CMP in both the SOHs and the POHs in the GBA.*

#### 2.4.3. Organization Dynamic Capability (ODC)

Organization dynamic capability (ODC) was initially defined by Teece, Pisano and Shuen [103] as “a firm’s ability to integrate, build, and reconfigure internal and external capabilities to address rapidly changing environments”. Past research suggests that ODC has practical importance to a firm’s sustainable competitive advantage, especially in complex, unstable and uncertain external environments [104–106] by renewing and reconfiguring capabilities and resources [107]. Thus, ODC allows firms to adapt to rapid changing environments [108] and is the most valuable item when the external environment is changing rapidly or unpredictably. Such an ability also enables firms to match the resource based on the situation and help the company to find the best solution to avoid potential loss. Therefore, hotel enterprise with high ODC could flexibly adjust their policy and strategies to maximize organizational performance and minimize the harm in a crisis situation.

Prior research has shown that ODC has a positive influence on firm performance [19,109–111]. The firm’s success or good performance depends on its ability to renew competencies to achieve coherence with the changing environment, which is considered to be the ODC [103]. Hence, for further sustained firm performance, ODC is required [111]. For hospitality studies, Marco-Lajara et al. [112] explored the positive effect of ODC on organizational performance in Spanish hotels during COVID-19. Moreover, Liu and Yang [113] studied how hotels evolved their ODC to improve performance during the COVID-19 pandemic. Therefore, the following hypothesis is developed:

**H2.** *There exists a positive relationship between ODC and CMP in both the SOHs and the POHs in the GBA.*

#### 2.4.4. Organizational Commitment (OCM)

Rajendran and Raduan [114] stated that organizational commitment is an employee’s loyalty towards the firm and intention to stay with the firm. It is closely related to the degree to which an employee attaches to the goals and values of the organization and is willing to exert effort to help the organization succeed [115,116]. In short, organizational commitment can be regarded as “a psychological state that links an individual to an organization” [117]. Thus, the well-established three-component model organizational commitment is composed by: affective commitment (affective attachment to the organization), normative commitment (a felt obligation to stay) and continuance commitment (perceived costs of leaving the organization) [118,119]. The extensive research conducted on organizational commitment has found that high organizational commitment can create increased effort expenditure, higher job satisfaction, decreased absenteeism and more retention.

Moreover, OCM involves deep emotional bonds with the company, which would trigger positive employee attitudes and behaviors toward the firm. Therefore, employees from hotel enterprises with high organizational commitment can lead to desirable organizational performance. Empirically, OCM has also been proven to have a positive influence on organizational and employees’ job performance by prior literature [98,99,120]. Through examining 758 hotel employees in the United States, Wong et al. [121] found that job satisfaction and OCM significantly explained employee job performance during COVID-19. OCM also mediates the relationship between the effect of talent management and organizational

performance [122]. On the basis of all these findings, we propose that OCM positively affects organizational performance in a crisis situation in the following hypothesis:

**H3.** *There exists a positive relationship between OCM and CMP in both the SOHs and the POHs in the GBA.*

#### 2.4.5. Organization Crisis Readiness (OCR)

Reilly [123] proposed the concept of organization crisis readiness to be how organizations cope with the uncertainty, chaos and uncontrollable environments caused by a crisis. OCR is a function of the control and coordinate crisis process [124]. Managers encountering a crisis situation without plans or previous experience tend to perform poorly because of unfamiliarity with the situation and the unpredictability of the crisis situation process, thus these managers may underestimate potential dangers given their shortage of experience [125–127]. Reilly [123] developed a scorecard with six indicators for measurement of crisis readiness at the organization level, which has been further grouped into three dimensions by Rousaki and Alcott [128] as the organization's perceived internal functionality, media management ability during a crisis and perceived crisis likelihood. Previous studies reveal that increasing the readiness for potential crises requires managers that are knowledgeable in the availability and accessibility of their organization's resources of technological, human and competences, and the physical and capital aspects that may be needed to ensure the effective management of different kinds of crises [127].

From the organization management perspective, companies with sound administration systems and working environments have better crisis management and resilience because they have a significant advantage in the unity of employees and the integration of resources. Moreover, a rapid and effective response to the crisis by utilizing the appropriate strategies and resources from a firm relies on a well-established organizational system. Some scholars have revealed that in a crisis, OCL is an important factor that determines readiness for change [129]. Many scholars in different industrial contexts have identified the relationship between organizational commitment and readiness [130–132]. Meanwhile, a firm with a high ODC is able to quickly cope with the dramatic changes in the external environment and have better performance [133]. Finally, Parnell [134] proved that organization crisis readiness is positively linked to both financial and non-financial organizational performance. Therefore, this study hypothesizes that:

**H4.** *There exists a positive relationship between ODC and OCR in both the SOHs and the POHs in the GBA.*

**H5.** *There exists a positive relationship between OCL and OCR in both the SOHs and the POHs in the GBA.*

**H6.** *There exists a positive relationship between OCM and OCR in both the SOHs and the POHs in the GBA.*

**H7.** *There exists a positive relationship between OCR and hotel performance in both the SOHs and the POHs in the GBA.*

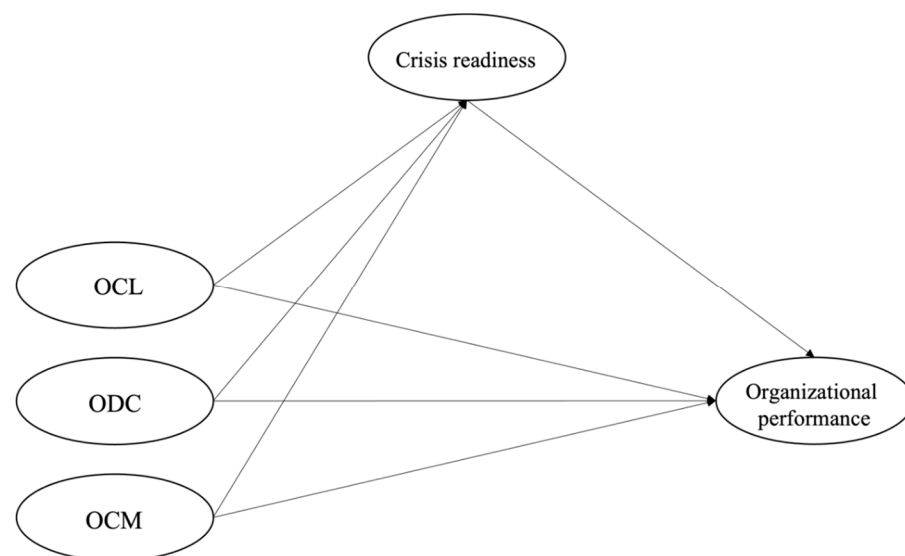
**H8.** *Upscale hotels' crisis readiness mediates the relationship between ODC and hotel performance in both a) SOHs and b) POHs in the GBA.*

**H9.** *Upscale hotels' crisis readiness mediates the relationship between OCL and hotel performance in both a) SOHs and b) POHs in the GBA.*

**H10.** *Upscale hotels' crisis readiness mediates the relationship between OCM and hotel performance in both a) SOHs and b) POHs in the GBA.*

**H11.** *The relationships between upscale hotels' OCL, ODC, OCM, OCR and hotel performance are different in different social systems (Socialism vs. Capitalism) in the GBA.*

This study therefore proposes a comprehensive and integrated model (see Figure 1).

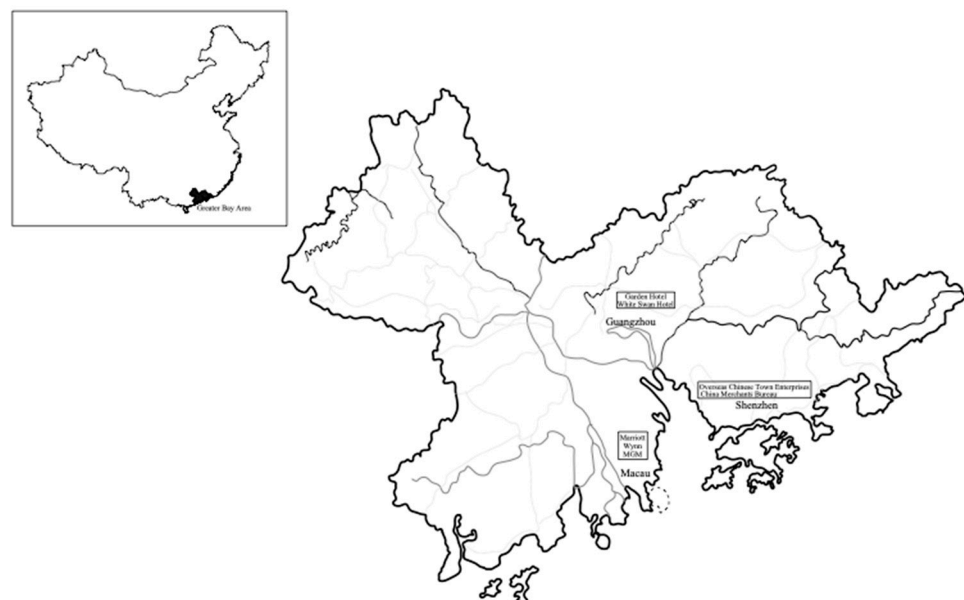


**Figure 1.** Conceptual framework. Note: OCL = Organizational climate; ODC = Organization Dynamic Capability; OCM = Organizational Commitment.

### 3. Materials and Methods

#### 3.1. Study Sites and Data Collection

This study collected data from the four- and five-star Hotels in the GBA cities. Specifically, data were collected from the hotels in Macau as the privately-owned hotels and in Guangdong province as the state-owned hotels (see Figure 2). In 2020, 53 hotels being four- and five- star rated hotels providing nearly 38,000 hotel rooms were listed in Macao. On the other hand, in the Guangdong province, there were 95 five-star hotels and 132 four-star hotels.



**Figure 2.** Great Bay Area.

Hotels in Macau show a great variety from upscale to luxurious hotel types and are owned by various international brands such as Marriott international, InterContinental Hotels Group (IHG), Hilton worldwide and Hyatt hotels. In this study, Conrad Macao Cotai, Grand Hyatt, Crowne Plaza, JW Marriott, Sheraton Grand, St. Regis, Okura Macau, Banyan Tree and Sofitel Macau which belong to Hilton worldwide, Hyatt hotels, IHG, Marriott international, Hotel Okura and Accor hotels were selected as the represents of the POH



research sites. For the SOHs in Guangdong province, this study chose hotels in Guangzhou and Shenzhen, the two main tourism cities in Guangdong province. In Guangdong city, the White Swan Hotel belonging to Guangdong Provincial Tourism Holdings, the oldest SOH in the GBA, was selected. Meanwhile, in Shenzhen, the Hilton Garden Inn Shenzhen World Exhibition & Convention Center, Seaview O.City Hotel Shenzhen and JW Marriott Hotel Shenzhen Bao'an, which belong to the Chinese state-owned enterprises Overseas Chinese Town Group, were also selected.

Before the main data collection, a pilot survey was conducted to assure the questionnaire's suitability through face-to-face interviews with the hotel employees in the GBA in May 2020. This procedure facilitated questionnaire quality by gathering feedback from respondents and ensuring the reliability of the questionnaire. Consequently, 60 usable samples were collected, and the result of reliability tests indicated a good Cronbach's alpha coefficient for each scale, all higher than 0.9 according to the results; all items were retained and subsequently applied in the primary data collection.

The major data collection was conducted from June to October 2020. This study applied the convenient sampling method to collect the data from the employees working in the POH and SOH mentioned above. The questionnaire was distributed online and in onsite channels to increase the sample size during the pandemic period. Consequently, a sample of 300 questionnaires was collected from both POHs and SOHs, respectively. By eliminating the response with incomplete answers and short filling times, 247 usable questionnaires (a response rate of approximately 83%) for POHs, and 225 usable questionnaires (a response rate of 75%) were retained for SOHs. The sample size fulfills the statistical requirements of PLS-SEM. PLS has the statistical power and the robustness to deal with the small size and provide valid results.

### 3.2. Measurement

A structured questionnaire was developed by reviewing previous related studies in the tourism and hospitality field. The questionnaire was composed of six parts: (1) Dynamic capability; (2) organizational climate; (3) organizational commitment; (4) organization crisis readiness; (5) organizational performance; and (6) general background information about respondents. For organizational climate scale, a total of 21 items were applied from a prior related study on hotel employees [135]. To examine organizational commitment, a scale validated from a sample of hotel employees was adopted [136]. To assess dynamic capability, a 19-item scale was adopted from prior study with minor wording changes to be hotel context specific [137]. To assess crisis readiness, a scale with 15 items was adopted from a prior study that discussed the crisis readiness from employees' perspective. Additionally, a three-item scale was used for measuring organizational performance [138]. Consequently, a total of 73 items were in this questionnaire, including 7 items for demographic information. This questionnaire is expected to complete in ten minutes. All the items were measured on a 7-point Likert scale from extremely disagree (1) to extremely agree (7).

### 3.3. Data Analysis

The study first explored the antecedent variables' internal constructions through exploratory factor analysis along with a validity evaluation of the measurement models that represented the illustrations in different hotel groups. For hypothesis testing, this study applied the Partial Least Squares (PLS) approach to examine the casual relationships for Hypotheses 1–4 since it is a desirable statistical technique for the prediction of the dependent variable and for theory building based on small sample sizes [134]. This characteristic is suitable for the current study [139]. Additionally, PLS-SEM was used since it has been extensively employed in tourism and hospitality research [140].

Multi-group analysis (MGA) was conducted for the purpose of testing the potential differences of the above-mentioned hypotheses in the two different institutional structures: socialism and capitalism, through Henseler's MGA nonparametric technique. This method evaluates the differences between the path coefficients among the two groups in PLS-

SEM [141]. For achieving this objective, the collected sample was split into two sub-samples, namely stated-owned hotels in socialist China (N = 225) and privately-owned hotels in capitalist Macau (N = 247).

## 4. Results

### 4.1. Respondents' Profile

According to the data collected from POHs, the sample had slightly more male respondents (54.3%) than females (45.7%). The modal age of respondents was between 25 to 44 years, accounting for 50.3%. Regarding seniority, nearly half of the respondents (46.1%) had less than three years' work experience in the same hotel. Approximately 44% of the respondents had a monthly income above MOP 30,001. In terms of education level, most of the respondents hold a bachelor's degree (40.5%). Moreover, 84.6% of the respondents indicated they had experienced a crisis before.

For the state-owned hotel results, the gender distribution is akin to the privately-owned hotels and dominated by male employees (54.7%). A similar pattern can also be observed with age, showing that most respondents were between 25–34 years old (45.3%). The data also revealed that the majority of the employees had less than three years in job seniority (49.8%), and more than half the respondents (69.3%) earned below MOP 10,000. Moreover, 45.8% of the respondents held a diploma degree. Finally, two thirds of the respondents indicated that they had experienced a crisis before (70.2%). The detailed demographic information of respondents is presented in Table 1.

**Table 1.** Demographic information of respondents in POHs and SOHs.

Measure	Items	POHs (n = 247)		SOHs (n = 225)	
		N	(%)	N	(%)
Gender	Male	134	54.3	123	54.7
	Female	113	45.7	102	45.3
Age	18–24	18	7.3	54	24
	25–34	124	50.3	98	43.6
	35–44	66	26.7	53	23.6
	45–54	27	10.9	19	8.4
	55–64	10	4	1	0.4
	65 and above	2	0.8	0	0
Seniority (year)	below 3 years	114	46.1	112	49.8
	3–5 years	62	25.1	45	20
	6–10 years	41	16.6	48	21.3
	11–15 years	28	11.3	12	5.3
	15 years and above	2	0.8	8	3.6
Income (MOP)	below 10,000	8	3.2	156	69.3
	10,001–15,000	49	19.4	32	14.2
	15,001–20,000	12	4.9	13	5.8
	20,001–25,000	32	13.3	7	3.1
	25,001–30,000	37	15	2	0.9
Education	30,001 and above	109	44.1	15	6.7
	Up to high school	50	20.2	62	27.6
	Diploma	74	30	103	45.8
	Bachelor	100	40.5	52	23.1

Table 1. Cont.

		POHs (n = 247)		SOHs (n = 225)	
	Master	23	9.3	8	3.6
Crisis experience	Yes	209	84.6	158	70.2
	No	40	15.4	67	29.8

To sum up, both groups of respondents in these hotels had the same gender distribution, mainly relatively young and with low work experience, but with high crisis experience. In particular, the respondents in the SOHs who were aged 18–24 were a significantly higher proportion than their peers in the POHs. Regarding their seniority level, there were more senior staff who had worked more than 15 years in the same hotel in the SOHs than in the POHs. However, the respondents in the SOHs had much lower incomes since nearly 70% of them had incomes of less than MOP 10,000 while only 3.2% of the respondents from the POHs were in the same category.

#### 4.2. Exploratory Factor Analysis

This study utilized principal component analysis as a method of extraction and varimax rotation with Kaiser normalization as recommended by past researchers [142] for a parsimonious description of the dimensions. The Kaiser–Meyer–Olkin (KMO) values were above 0.7 [143], meaning the variables were interrelated and they shared common factors. Meanwhile, Barlett’s test of sphericity achieved statistical significance ( $p = 0.000$ ) [144] indicating the factorability of the correlation matrix. As shown in Table 2, the communalities ranged from 0.504 to 0.927 in the POHs and from 0.607 to 0.924 in the SOHs, suggesting that the variance of the original values is fairly explained by the common factors [145].

Table 2. The final results of the exploratory factor analysis.

POHs				SOHs					
	Factor Loading	Eigen Value	% of Variance	Communality		Factor Loading	Eigen Value	% of Variance	Communality
Organization climate									
Factor 1: OCL1 ( $\alpha = 0.902$ )				Factor 1: OCL1 ( $\alpha = 0.942$ )					
		12.287	58.512				12.956	61.696	
Item 45	0.589			0.649	Item 44	0.700			0.651
Item 47	0.566			0.678	Item 45	0.816			0.804
Item 48	0.587			0.581	Item 46	0.798			0.747
Item 49	0.632			0.653	Item 47	0.854			0.837
Item 63	0.801			0.750	Item 48	0.778			0.687
Item 64	0.574			0.647	Item 49	0.748			0.711
					Item 50	0.695			0.773
Factor 2: OCL2 ( $\alpha = 0.954$ )				Factor 2: OCL2 ( $\alpha = 0.964$ )					
		1.771	8.198				1.936	9.221	
Item 46	0.565			0.736	Item 51	0.660			0.749
Item 50	0.827			0.811	Item 52	0.680			0.813
Item 51	0.856			0.832	Item 53	0.722			0.829
Item 52	0.669			0.573	Item 54	0.716			0.827
Item 53	0.848			0.837	Item 55	0.753			0.850
Item 54	0.857			0.846	Item 56	0.762			0.851

Table 2. Cont.

POHs				SOHs				
	Factor Loading	Eigen Value	% of Variance	Communality	Factor Loading	Eigen Value	% of Variance	Communality
Item 55	0.840			0.821	Item 57	0.715		0.736
Item 56	0.722			0.703	Item 60	0.718		0.778
Item 57	0.753			0.750	Item 61	0.731		0.615
Item 60	0.840			0.807	Item 62	0.717		0.569
Item 61	0.724			0.645	Item 63	0.758		0.708
Item 62	0.603			0.741	Item 64	0.672		0.703
Factor 3: OCL3 ( $\alpha = 0.837$ )				Factor 3: OCL3 ( $\alpha = 0.895$ )				
		1.229	5.853			1.113	5.301	
Item 58	0.827			0.800	Item 58	0.932		0.883
Item 59	0.825			0.779	Item 59	0.924		0.736
Dynamic capability								
Factor 1: ODC1 ( $\alpha = 0.964$ )				Factor 1: ODC1 ( $\alpha = 0.972$ )				
		11.641	64.671			14.217	74.829	
Item 26	0.790			0.751	Item 26	0.835		0.756
Item 27	0.823			0.781	Item 27	0.834		0.835
Item 28	0.830			0.823	Item 28	0.808		0.857
Item 29	0.846			0.804	Item 29	0.802		0.807
Item 30	0.837			0.820	Item 30	0.799		0.820
Item 31	0.76			0.771	Item 31	0.789		0.826
Item 32	0.766			0.760	Item 32	0.768		0.830
Item 33	0.773			0.765	Item 33	0.758		0.860
Item 34	0.759			0.738	Item 34	0.719		0.797
Factor 2: ODC2 ( $\alpha = 0.935$ )				Factor 2: ODC2 ( $\alpha = 0.969$ )				
		1.420	7.890			1.092	5.748	
Item 17	0.623			0.504	Item 16	0.743		0.743
Item 18	0.772			0.753	Item 17	0.921		0.741
Item 19	0.753			0.606	Item 18	0.766		0.810
Item 20	0.825			0.800	Item 19	0.755		0.733
Item 21	0.768			0.777	Item 20	0.783		0.880
Item 22	0.718			0.753	Item 21	0.761		0.880
Item 23	0.632			0.714	Item 22	0.734		0.865
Item 24	0.745			0.655	Item 23	0.794		0.870
					Item 24	0.764		0.737
					Item 25	0.663		0.670
Organizational commitment								
Factor 1: OCM1 ( $\alpha = 0.878$ )				Factor 1: OCM1 ( $\alpha = 0.884$ )				
		3.856	77.114			3.856	77.120	
Item 40	0.875			0.856	Item 39	0.827		0.824
Item 41	0.790			0.831	Item 40	0.788		0.772
Item 42	0.680			0.759	Item 41	0.839		0.845

Table 2. Cont.

POHs				SOHs					
	Factor Loading	Eigen Value	% of Variance	Communality		Factor Loading	Eigen Value	% of Variance	Communality
Factor 2: OCM2 ( $\alpha = 0.860$ )				Factor 2: OCM2 ( $\alpha = 0.868$ )					
		0.379	7.586				0.405	8.098	
Item 39	0.899			0.920	Item 42	0.911			0.958
Item 43	0.698			0.870	Item 43	0.699			0.862

The results of the factor analysis suggested a three-dimensions solution for organization climate, a two-dimensions solution for dynamic capability and a two-dimensions solution for organizational commitment in both POHs and SOHs. The constructions of the two dimensions of dynamic capability are the same in the two samples and are named as “integrating and coordinating” (ODC1) and “sensing and learning” (ODC2). Meanwhile, the same dimensions of organization commitment are named as “normative commitment” (OCM1) and “affective commitment” (OCM2). The results also explained more than 60% of the variances [145] in the data with eigenvalues greater than 1 [146]. Furthermore, the Cronbach’s alpha score of the dimensions ranged from 0.83 to 0.89, indicating satisfactory internal consistency [147]. However, two of the dimensions of organization climate illustrated a significant difference between the POHs and SOHs. In the context of POHs, organization climate is explained by three dimensions which are “leader facilitation and support” (OCL1), “Job challenge, variety and feedback from organization and work group” (OCL2) and “cohesion clarity” (OCL3), while the two explanatory dimensions in the context of SOHs are “EPOW” (OCL1), and “Job challenge, variety, feedback and support” (OCL2).

#### 4.3. Assessment of the Measurement Model

According to the results of the measurement model reliability and convergent validity tests for both groups, five items in the POHs list and four items in the SOHs list were deleted and second factor analysis was conducted due to the factor loadings being lower than the recommended value of 0.70 [148]. The second factor analysis indicated that the convergence validity of the measurement model has been confirmed [149] since the AVE values exceeded the minimum criterion of 0.50 [150].

Furthermore, alpha values of all the constructs in this study exceeded the conventional suggested value of 0.70 [151] and the construct CR values were greater than 0.70 [152]. Likewise, all the factor loading for each item exceeded the cut-off point of 0.70 [148]. Accordingly, the reliability of the measurement model has been confirmed. In addition, the comparison results between the square root of AVE scores and item correlation coefficients [150] supported the discriminant validity of the constructs.

#### 4.4. Assessment of the Structural Model

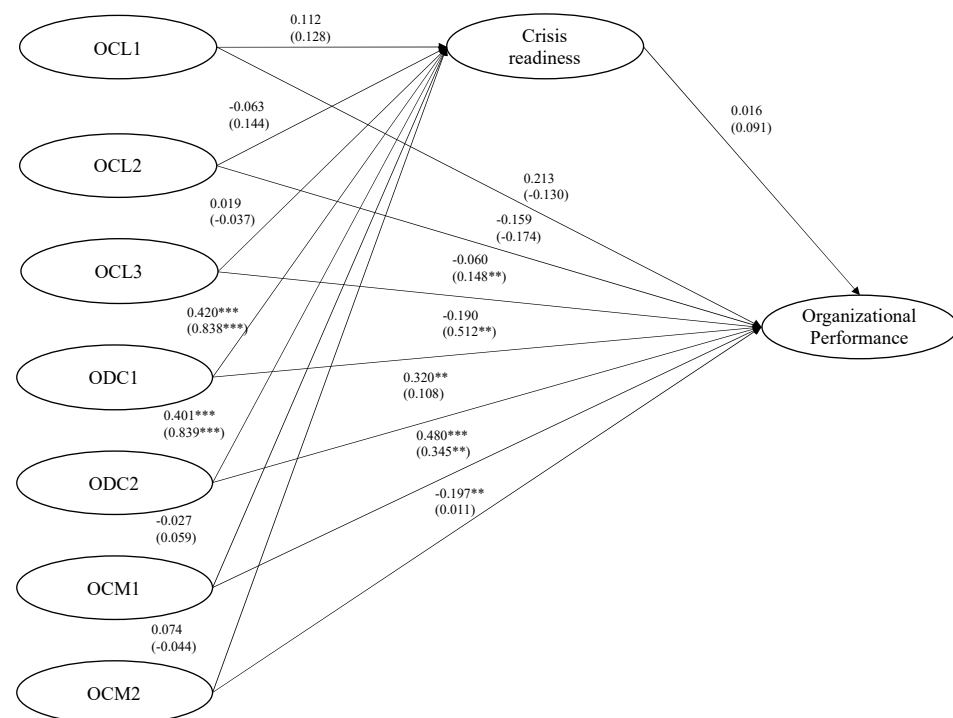
A bootstrapping procedure with 500 iterations was performed to test the statistical significance of the path coefficients [153]. Some scholars proposed that researchers should use the value of the Stone–Geisser’s Q2 as the standard for PLS to test the predictive significance of the path model [154]. As shown in Table 3, all the positive Q2 values in this study demonstrated that the prediction of the model in this study is acceptable [155]. Moreover, the R<sup>2</sup> value is considered as the primary way to evaluate the explanatory power of the model [156], and Chin [157] suggested R<sup>2</sup> values of 0.67, 0.33 and 0.19 as substantial, moderate and weak, respectively. Accordingly, the explanatory power of the model in this study is acceptable. Furthermore, considering the guidelines of Cohen [158], the average R<sup>2</sup> could be used to calculate the goodness-of-fit (GoF) value, and the GoF values in this study were greater than the threshold of 0.36, which indicates a satisfactory model fit [159,160].



**Table 3.** Structural model evaluation of the model in POHs and SOHs.

	POHs			SOHs		
	AVE	Q <sup>2</sup>	R <sup>2</sup>	AVE	Q <sup>2</sup>	R <sup>2</sup>
OCL1	0.672			0.744		
OCL2	0.692			0.765		
OCL3	0.858			0.905		
OCM1	0.804			0.816		
OCM2	0.877			0.889		
ODC1	0.778			0.82		
ODC2	0.691			0.787		
OP	0.801	0.188	0.250	0.858	0.241	0.285
OR	0.659	0.487	0.751	0.713	0.581	0.831
Average number	0.760		0.500	0.811		0.558
AVE × R <sup>2</sup>						0.453
GoF = $\sqrt{(AVE \times R^2)}$						0.673

The next step of the analysis is to measure the hypothesized correlations among the latent variables using path coefficients and significance levels [161]. The results (Figure 3) indicate that organization climate in the POHs has no significant effect on their crisis performance and only the cohesion clarity as one of the indicators in the SOHs has such an effect. For the effect of organization dynamic capability on hotels' crisis performance, the indicator integrating and coordinating was the only one to demonstrate its significance in the SOHs. while the other indicator, sensing and learning, has been identified as having a significant effect in the POHs.



**Figure 3.** Summary of structural results for POHs and SOHs. \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Note: OCL = Organizational climate; ODC = Organization Dynamic Capability; OCM = Organizational Commitment.

Meanwhile, the normative variable of commitment has a significant effect on hotel crisis performance in both POHs and SOHs. Therefore, the hypotheses concerning hotel crisis performance (H1–H3) are partially supported. With respect to the effect of crisis readiness, it is revealed that their organizational climate and organizational commitment have no significant effect on crisis readiness in those hotels, a result that completely rejects Hypotheses 4 and 6. However, organizational dynamic capability has been identified as having a significant influence in both POHs and SOHs. Accordingly, Hypothesis 5 is fully supported. On the other side, organizational crisis readiness has no significant effect on hotel performance of crisis management in these two samples either, thus Hypothesis 7 is rejected.

#### 4.5. Assessment of the Mediation Effects

Table 4 shows the mediating effects of crisis readiness on the relationships between organizational dynamic capability, organizational climate, and organizational commitment and organizational performance. According the guideline of Lin et al. [162], since zero values were not included in the CIs, the indirect effect of crisis readiness has been revealed its significance in both POHs and SOHs between organization climate, organizational commitment and organization performance, which is consistent with Hypotheses 8 and 10. However, the indirect effect of organization readiness between organizational dynamic capability and organizational performance was not significant in SOHs while it only partially existed in the context of POHs. Therefore, Hypothesis 9 cannot be fully supported.

**Table 4.** Regression coefficients of mediation models estimated using PROCESS.

Model	Indirect Effect	S. E.	95% Confidence Interval		Direct Effect	S. E.	95% Confidence Interval	
			Boot Lower	Boot Upper			Boot Lower	Boot Upper
POHs (SOHs)								
OCL1-OCR-OP	0.223 (0.200)	0.084 (0.118)	0.069 (0.033)	0.400 (0.477)	0.430 (0.588)	0.101 (0.092)	0.232 (0.407)	0.628 (0.769)
OCL2-OCR-OP	0.232 (0.326)	0.066 (0.103)	0.117 (0.137)	0.374 (0.539)	0.290 (0.331)	0.081 (0.107)	0.131 (0.121)	0.450 (0.541)
OCL3-OCR-OP	0.109 (0.119)	0.030 (0.030)	0.055 (0.060)	0.173 (0.178)	−0.009 (−0.010)	0.045 (0.021)	−0.098 (−0.057)	0.080 (0.025)
ODC1-OCR-OP	0.246 (0.054)	0.112 (0.085)	0.035 (−0.060)	0.468 (0.260)	0.390 (0.799)	0.122 (0.091)	0.150 (0.621)	0.629 (0.978)
ODC2-OCR-OP	0.126 (0.061)	0.110 (0.125)	−0.092 (−0.179)	0.340 (0.323)	0.591 (0.640)	0.115 (0.137)	0.365 (0.371)	0.817 (0.909)
OCM1-OCR-OP	0.080 (0.120)	0.021 (0.042)	0.039 (0.050)	0.124 (0.213)	0.224 (0.577)	0.034 (0.084)	0.157 (0.482)	0.290 (0.673)
OCM2-OCR-OP	0.186 (0.159)	0.050 (0.051)	0.086 (0.076)	0.282 (0.266)	0.269 (0.423)	0.067 (0.052)	0.138 (0.320)	0.400 (0.526)

#### 4.6. Multi-Group Analysis Results

This study used Henseler's MGA [163] to compare the group bootstrap estimates from each bootstrap sample. There are 5% level significant differences between the two group-specific pathway coefficients when the p-values are below 0.05 or above 0.95 [164]. As shown in Table 5, the results indicated that the paths to organization crisis readiness have been revealed as the significant difference across the different social systems. However, the paths to organizational performance did not demonstrate the difference completely as the result of the p-value of organizational dynamic capability and their readiness. In particular, the path from organization commitment to their crisis performance illustrated the most significant difference of those two samples. However, the SOHs in socialist China showed the highest coefficient difference in the path from organization climate to their readiness.

**Table 5.** Results of multi-group analysis.

	diff	p-Value (Socialism vs. Capitalism)	Result
OCL → OP	0.356	0.029	Support
OCL → OR	0.317	0.012	Support
OCM → OP	0.410	0.013	Support
OCM → OR	0.144	0.034	Support
ODC → OP	0.214	0.247	Reject
ODC → OR	0.225	0.036	Support
OR → OP	0.016	0.540	Reject

## 5. Discussion and Conclusions

### 5.1. Conclusions

China's hotel industry has been profoundly affected by the COVID-19. Although many studies have explored the crisis management of the Chinese hotel industry during the epidemic, few researchers have explored the impact of institutional environment, especially the simultaneous exploration and comparison of two different institutional systems. To fill this gap, this study explores the crisis management of stated-owned hotels and private-owned hotels in the Greater Bay Area in China. Results showed that the institutional environment significantly influences upscale hotels' organizational crisis performance. This study fills the research gap in related fields and provides practical suggestions for crisis management in hotel industry.

### 5.2. Theoretical Contribution

This study expands on previous research into hotel institutional environmental competence for crisis management and strengthens the theories of institution and resource dependency. Organizations and their activities of crisis management are always being affected by the institutional environment. In a crisis situation with a complex institutional environment, individuals and organizations are frequently under pressure because of the uncertainty of decision-making [165]. When people and systems are under pressure, they need help, particularly in uncertain, dynamic and emergency situations with time constraints [166]. Therefore, to preserve the existing stock of resources and achieve organizational success, organizational and individual factors must be considered. Based on an empirical study of the crisis performance of hotels in the Greater Bay Area of China according to the data from the past two years of the pandemic COVID-19, this study discusses for the first time the construction of relevant key elements of crisis management and the differentiation of its effects on hotel performance in multiple institutional conditions of ownership and social system.

Regarding the construction of the three key elements of crisis management in those two groups of hotels, differences were observed in the organizational climate as one of the organizational factors, although the other two factors of dynamic capability and organizational commitment demonstrated the same dimensions in these hotels. For one thing, cohesion clarity existed in both POHs and SOHs. For another, it showed clearly that the organizational climate in the POHs particularly emphasized the substantial support of leaders and organizations, while the esprit de corps of organizations and workgroups for unity to deal with crises were more important in the SOHs. This indicates that both groups of respondents in hotels with different ownership shared the general characteristics of unity in a crisis, which may be based on the same regional Lingnan cultural tradition. However, this result identified the strong influence of the socialist ideology of solidarity and the presence of group incentives in mainland China to a crisis situation in those SOHs after decades of reform and opening-up policies for community capitalism [167].

With respect to the effect on the organization performance at times of crisis, organizational climate, which used to be identified as one of the important factors in the hospitality industry in relation to this issue [94,99], has been revealed as having only a weak influence on crisis management for both POHs and SOHs since only one of the dimensions of

cohesion clearly demonstrated such an effect in SOHs. This indicated that both types of hotels were lacking a good organizational climate in this crisis. Meanwhile, the hypothesis of organizational dynamic capability in organizational crisis management is only partially accepted in both POHs and SOHs. For the SOHs, these results in some degree supported those obtained in previous studies, that SOHs' have problematic ownership, management, operation, human resource and capital management situations resulting from where they came from [78,79]. For the POHs, which have the strength of operational practices and management, flexibility of decision making and resource utilization [70,79], this indicates their relatively low capability to cope with crisis. In addition, respondents from both SOHs and POHs did not show affective commitment to their own organizations in the crisis situation. This is the inevitable outcome of the uncertain business of hotels and their career future, while it is also a crucial issue that hotels need to pay special attention to give its identified importance to organizational crisis performance [121,122].

For the effect of hotel readiness and its further effect on crisis performance, only organizational dynamic capability has been identified as having a significant role in these two groups of hotels. Meanwhile, organizational readiness in the two groups of hotels did not have an effect on their crisis management performance. This result indicates that a hotel's capabilities in normal situations may be limited [34] since crisis situations are complex and often require non-traditional business strategies that depart from "business as usual" tactics. It also implies the necessity to develop and maintain a good organizational climate and the employees' commitment in normal situations as the organization's own resource to contribute to the readiness for crisis. Moreover, preparation for crises, especially improvisation strategies, are necessary for those hotels. Meanwhile, the significant mediation of organization readiness on crisis performance in both POHs and SOHs has been identified and its importance for successful crisis management noted, especially for climate, dynamic capability and commitment in the SOHs', areas that have been emphasized as having poor performance in previous studies [78,79].

With respect to the discussion of the influence of the social system that may induce different performances in organization crisis management, there is no difference in the link between organization dynamic capability, readiness and crisis performance in the two different social system contexts. However, the path from organization commitment to crisis performance showed the greatest difference in socialist China along with the path of organization climate. This indicated the importance of organization climate and employee commitment when these hotels lack dynamic capability and readiness for a crisis like the pandemic. As the previous studies mentioned, SOHs in socialist China perform more political and social functions rather than economic goals to contribute to broader development for the country [168]. In mainland China over the past two years, SOHs' efforts in keeping a good organization climate and enhancing employee commitment obviously were important as a political function to support the government's anti-pandemic targets and finally improve their crisis management performance.

### 5.3. Practical Implications

Our findings have several practical implications. First, for the POHs who are in a capitalist society and focused on their economic performance in crisis situations but cannot live without that special institutional environment, it is important for them to understand that the good climate within a hotel and the employees' commitment to crisis preparation and performance are essential. It is thus necessary for POHs to strengthen their staff's perceived job security to retain loyal employees in times of crisis. Meanwhile, hoteliers need to invest to build up human and economic capital for the purpose of (better) preparation for future disasters and crises that will increase the image of strong organizational resilience to crisis and enhance their staffs' organizational loyalty. In addition, the present study indicates the crucial role of the dimension of leader and organizational support and feedback on employees' job performance in the prevailing organizational climate. Therefore, POHs are expected to establish fast, transparent and robust response systems to react to crisis

with their employees, based on routine information of measurements of anti-disaster/crisis preparedness to improve their retention and organizational commitment.

Second, the importance of employees' consistent engagement and participation for successful crisis management that is strongly illustrated by the respondents in SOHs in mainland China reflects a type of collective cooperation in organizational culture and finally has significant effects on their crisis management performance. Thus, the policy makers of both SOHs and POHs must enhance their cooperative organizational cultures through intangible stimulants and tangible incentives, such as recognizing the importance of collective group culture and greater employee participation in crisis events, training opportunities, career development, praise and certificates, as well as financial support. For the SOHs in mainland China that have been criticized as having poor performance previously and have demonstrated unsatisfactory economic management in the current crisis, sensing and learning is in short supply in their dynamic capability. Therefore, the quick establishment and execution of reactive actions to respond to unanticipated crisis are important for SOHs trying to improve their crisis performance. Especially for the decision makers, specifically the party secretary and general manager in the SOHs, a crisis event is an opportunity to analyze and utilize their crisis experiences and newly gained knowledge as an organizational learning base for developing specific proactive crisis management competencies. That is, the decision makers must create and implement a suitable series of operational routines for the purpose of careful monitoring the crisis situation and then make attempts to avoid or at least minimize the negative outcome of the crises that may develop.

#### *5.4. Research Limitation and Future Research Direction*

Several limitations exist in this study. First, despite our generalization efforts, the results may only be applicable to the hotels in the Greater Bay Area in China. The research sites in this study include Macau and other mainland Chinese cities that are located in capitalist and socialist systems, respectively, meaning that while they may be innovative in this study their impact could be limited in other places given the special "one country, two systems" that the POHs must obey. These systems outline national laws, regulation and rules that are different from other places, especially in a crisis situation. Therefore, other empirical studies regarding POHs' crisis performance are expected to be used to explore this topic in the future. Second, other institutional factors that lead to hotel crisis performance might extend beyond those considered herein. The governance structure, law system, profession regulation and local cultural elements could be further decisive factors. Third, this study only focused on the demonstration of the crisis performance in the POHs in capitalist Macau. Thus, potential bias might exist if a future study seeks further exploration of crisis performance with employees who are from the same international hotel brands located in mainland China. Finally, as this study is based on a retrospective data collection and analysis over the past two years of hotel crisis performance, it will be necessary to conduct a staged study via a time division for a richer theoretical contribution consideration in terms of the longer-term reality of the COVID-19 pandemic.

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