CASE STUDY



Organisational resilience in the COVID-19: A case study from China

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Abstract

The sudden outbreak of coronavirus disease-2019 (COVID-19) sparked widespread concern about organisational resilience in the management domain. The resources, operations and practices of organisational resilience have to be considered in particular contexts at different stages and in relation to numerous inputs, processes and outputs. Selected as one example, the preparation, response and development of a retail supermarket's management and operations in China is examined through an empirical case study. Supply chain and digital construction, improvisational ability, system management and corporate social responsibility all played a positive role in this organisation's response to the outbreak of COVID-19 (2019–2020) in the Chinese management context. Organisational resilience is reflected in the case study organisation's self-interested and altruistic policies and practices. The case provides valuable insights on efficacious management practices for organisational resilience building in the retail industry.

Key words: COVID-19; organisational resilience; supermarket chain management

Introduction

Resilience is derived from adversity (Zhang, Zhang, & Liu, 2020). In recent years, resilience has been regarded as an effective ability to respond to emergencies (Bai, Zhai, & He, 2017) and has received extensive attention from scholars in the fields of disaster management, urban construction, risk and emergency management (Manyena, 2006; Wildavsky, 1988). 'Make your organisation more resilient' has gradually become a hot topic in the field of management practice (Hillmann & Guenther, 2021), which indicates the urgency of conducting research on organisational resilience. Numerous literature studies have studied the concept of resilience (Amann & Jaussaud, 2012; Burnard & Bhamra, 2011), influencing factors (Deria, Ghannad, & Lee, 2020; Maliszewski & Perrings, 2012), action processes (Jüttner & Maklan, 2011; Walther, Schulz, & Dörry, 2011) and so on.

However, in the existing research conducted on 'resilience', scholars have largely explored macrolevels such as urban resilience and regional resilience, whereas research on resilience at the organisational level is developing in a less systematic way (Kantur & Iseri-Say, 2012). As the background for these times, volatility, uncertainty, complexity and ambiguity have become the consensus norm of global change (Li, 2020), and some argue that the production, operation and living environment of enterprises are more unpredictable than ever before (Fan & Tian, 2019). Furthermore, the existing literature on organisational resilience mostly focuses on corporate practices in Western developed countries (Cotta & Salvador, 2020; Kim, 2020), and fewer studies consider China's unique situation in organisational resilience research. Therefore, exploring organisational resilience in the Chinese management context is of both theoretical and practical significance.

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2 Hangsheng Yang et al.

As a major 'black swan' event, coronavirus disease-2019 (COVID-19) broke out at the beginning of 2020, having the characteristic property of 'unconventional emergencies' and causing an unprecedented major crisis to the global economy and society (Brown & Rocha, 2020). The World Health Organization (WHO) reported over 50.26 million confirmed cases of COVID-19 worldwide, which was equivalent to .67% of the global population (7.585 billion), and the total number of deaths had reached over 1.25 million according to data available at the time by 14:00 on November 8, 2020. Moreover, the months-long crisis had a great impact on people's lives and organisational survival. During the COVID-19 pandemic, the resilience of business organisations became a key topic that needed further study (Keenan, 2020; Sharma, Rangarajan, & Paesbrugghe, 2020). China was the first country to be severely affected by the COVID-19 epidemic (Huang, Chen, & Nguyen, 2020), and the retail industry suffered a huge impact. Most retail companies have undergone severe survival tests: existing plans were forced to be shelved; most of the business was unable to operate normally, and many companies were forced into bankruptcy. A question worth investigating is: How can retail companies respond to the crisis to maintain resilience? In practice, some retail companies represented by Yonghui Supermarket effectively dealt with the impact of the COVID-19 epidemic through rapid response and adjustment. In addition to turning crises into opportunities, they made outstanding contributions to the nation's fight against the epidemic and achieved further development, which provides an appropriate background for in-depth research on the mechanisms of organisational resilience. In the literature, existing studies have shown that organisational crisis coping strategies or processes play an important role in building organisational resilience (Ates & Bititci, 2011; Demmer, Vickery, & Calantone, 2011). Therefore, given the impact of the sudden outbreak of COVID-19, discussing how the organisational resilience of Yonghui Supermarket functions and works effectively and clarifying the key factors and mechanisms will contribute to theoretical research on this subject.

In summary, from the perspective of dynamic development, this paper comprehensively reviews the overall processes of a Chinese company, Yonghui Supermarket, in responding to the sudden outbreak of COVID-19. We construct a theoretical framework for organisational resilience in the context of Chinese management through a case study and endeavour to provide a useful reference for the organisational resilience of Chinese enterprises in response to public health emergencies.

The contributions of this study are as follows: 1) Innovatively divides the process of organisational resilience construction into dynamic processes of organisational preparation, response, and development and combines with the analysis logic of 'input-process-output', which offers a dynamic perspective for studying organisational resilience. 2) Presents an overall framework for the organisational resilience of retail companies in the context of Chinese management in the context of the sudden outbreak of COVID-19, analysing the key factors and effects of organisational resilience in different stages and providing a theoretical basis for the structural analysis of organisational resilience and enterprise emergency management in major public health emergencies. 3) Explains how the organisational resilience of the case firm reflects the policy practices of self-interest and altruism, which gives a theoretical reference for the study of organisational resilience from the perspective of stakeholders. (4) Demonstrates how the resilience building process at the case company provides an operational reference for Chinese retail companies to cultivate and improve organisational resilience, by which the retail industry could show increased vitality in adapting to environmental changes.

Literature review

Concept and connotation of organisational resilience

Research on organisational resilience originated from the field of American business management in the 1990s (Mallak, 1998). As one of the goals of enterprise development, resilience mainly refers to the ability of an enterprise to effectively meet customer needs, maintain production efficiency, and continue to grow in a highly turbulent environment (Gibson & Tarrant, 2010). Later, with the frequent occurrence of unconventional emergencies such as the '9–11' terrorist incident in the United States, volatility, uncertainty, complexity, and ambiguity in the environment have become the new normalcy that companies face in their production and operation activities (Millar, Groth, & Mahon, 2018), so scholars have been paying more attention to the connotation and significance of organisational resilience.

According to previous research, organisational resilience is a multi-dimensional, cross-level complex concept (Chewning, Lai, & Doerfel, 2013; Kantur & Iseri-Say, 2012), and its definition is controversial and vague (Williams, Gruber, Sutcliffe, Shepherd, & Zhao, 2017). It is mainly reflected in scholars describing and interpreting the concept from different perspectives and methods, but the definition and evaluation of organisational resilience from the perspective of 'ability' have been widely recognised by scholars (Tang, Li, & Liu, 2019). A representative view holds that organisational resilience is the ability of organisations to bounce back from unexpected, stressful and adverse situations and pick up where they left off (Chen, 2016). For example, Hamel and Valikangas (2003) point out that organisational resilience is the ability to dynamically and quickly establish strategies and business models in emergencies to respond to inevitable changes. This ability is embedded in a series of personal-level knowledge and skills and is among the capabilities that help organisations overcome the undesirable consequences of potentially destructive shocks. This viewpoint is similar to the physical definition of resilience, that is, the ability of an object to return to its original shape after being squeezed. Scholars holding this view tend to focus on the strength of organisational resilience, in other words, restricting organisational regression or ensuring that the basic functions of the organisation are not compromised (Tang et al., 2019; Wang, 2016). Another representative view defines organisational resilience as an organisation's ability to recover to its original state under the impact of various uncertain environments and become stronger following recovery (Carvalho & Areal, 2016; Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). This approach is more inclined to ecological resilience, which is essentially different from physical resilience because organisms will not be passively subjected to external forces because they can actively self-adjust to adapt to the existing environment (Holling, 2001).

With the rapid changes in the internal and external environment of organisations as well as the deepening knowledge of management research, the concept of organisational resilience has gradually developed and matured. Apart from emphasising adaptability itself, it has also been defined as 'a function of the ability, process and result of an organisation to cope with uncertain crisis scenarios' (Luo, Tian, & Shi, 2011). Li (2020) reviewed the latest literature in world-class journals and argued that organisational resilience refers to a special ability to prepare, respond to and learn from adverse events in order to rebound and survive in the short term and achieve better development over time. In addition, it covers relevant concepts with all adverse events as the premise, preparation, response, and learning are the core mechanisms that run through the three stages, and survival and development are the main results; thus, an integrative input-process-output framework of resilience at the organisational level is proposed. In addition to explaining recovery and improvement as the core characteristics of organisational resilience, the proposed framework highlights the evolving nature of organisational resilience through continuous iteration. Furthermore, the research paradigm of organisational resilience in the academic community has evolved from a single concept study to a more elaborate discussion of mechanisms and has gradually come to identify the key influencing factors of organisational resilience (Wang, 2016).

Influencing factors of organisational resilience

The improvement of organisational resilience includes a cyclical and iterative process of 'recognizing changes in the external environment, identifying critical vulnerabilities, and taking effective actions' (McManus, Seville, Vargo, & Brunsdon, 2008). Therefore, it is necessary to identify the influencing factors affecting the whole process. At present, scholars have studied the

influencing factors of organisational resilience from multiple perspectives. For example, high organisational resilience is usually seen as the result of resource coordination and optimal allocation, and an organisation's physical resources, human resources, and economic resources have an impact on the improvement of organisational resilience according to the perspective of organisational resources. Ambulkar, Blackhurst, and Grawe (2015)'s shows that organisations with supply chain disruption in emergencies need to have the ability to reconfigure resources or manage infrastructure to maintain organisational resilience in the risk; that is, organisational resources build a bridge between supply chain disturbance and resilience. Lengnick-Hall, Beck, and Lengnick-Hall (2011) consider these issues through the management of strategic human resources, arguing that the creativity of the organisation's core employees can be greatly improved to promote organisational resilience. Their study finds that when the organisation's key human resource elements are coordinated and integrated at the organisational level, the organisation can maintain a higher ability to cope with and adapt to sudden changes in the environment, demonstrating a higher organisational resilience. At the level of organisational governance, leadership, social networks and culture play significant roles in organisational resilience. Folke et al. (2004) consider that organisational leadership is responsible for important tasks such as collecting critical information, making emergency decisions, coordinating social relations, and managing conflicts. Therefore, they argue that organisational leadership is the key factor in improving organisational resilience. Aldrich & Sawada (2015) draws attention to the mechanisms of social capital and its effects on organisational resilience, emphasising the important role of network relationships in the emergency management of organisations, where the preparatory work of establishing contacts within or among members in advance provides critical resilience and adaptability for organisations in the event of a sudden crisis. Additionally, Coutu (2002) notes that organisational culture can interpret and shape the surrounding environment for an organisation, endowing it with specific meanings and influencing its direction of development. Wang's (2016) research also considers organisational culture, revealing how it can maintain the stability of the organisation, which requires employees to respond to the anxiety caused by a crisis in a positive and effective inertial way instead of falling into a vicious circle of panic and negative cognition, thus further highlighting the role of culture in the cultivation of organisational resilience. From the perspective of risk management, the 'flexibility', 'redundancy' and 'robustness' (Conner, 1993; Kantur & Iseri-Say, 2012; Tierney, 2008) of post-crisis organisational recovery are regarded as the core elements to evaluate organisational resilience. Specifically, with reference to organisational flexibility, flexible decision-making and customer-centric attitudes are considered to be powerful facilitators of organisational resilience. Redundancy is important because it plays a key role in the allocation of organisational resources, whereas robustness refers to the organisation's ability to resist crises (Pal, Torstensson, & Mattila, 2014) in ways that enable the organisation to achieve better development.

With the growing diversification of the business environment, some scholars draw attention to the importance of corporate social responsibility (CSR) in contexts of organisational resilience. For example, based on a sample of Chinese listed companies, Lv, Wei, Li, and Lin (2019) discuss the relationship between CSR and organisational resilience from the perspectives of performance improvement and guarantee mechanisms. This research study found that CSR significantly improves the long-term growth of corporate performance, reduces financial fluctuations, and significantly enhances organisational resilience. Huang et al.'s (2020) study of the organisational resilience of Chinese listed companies adopts stakeholder theory and resource-based theory against the background of the COVID-19 epidemic and finds that the better a firm's CSR performance before a shock, the less damage it suffers and the less recovery time it takes, thus to some extent also confirming a win-win logic by performing social responsibility to encourage enterprise development.

Organisational resilience and unconventional emergencies

The majority of research on organisational resilience examines different contexts of unconventional emergencies, mainly including natural disasters, economic crises and major destructive events. For example, Pal et al. (2014) take the 2008 economic crisis as a research context, conducting follow-up interviews with several small and medium-sized enterprises in Sweden through case studies exploring influencing factors affecting organisational resilience. The results show that organisational resources, dynamic competitiveness, organisational learning and culture can significantly improve organisational resilience. Similarly, through a case study, Burnard, Bhamra, and Tsinopoulos (2018) construct a resilient-configuration matrix for an organisation's response to an interruption from the dimensions of preparation before the interruption and adaptation after the interruption and conclude that organisations with a response process involving high levels of preparation and adaptation are the most resilient. Tang et al. (2019) studied the recovery and reconstruction process of Dongfang Turbine Co., Ltd. in response to the '5.12' Wenchuan earthquake disaster. Their analysis indicates that organisational culture and social networks in the Chinese management context play positive roles in the organisational resilience of the case enterprise, which in this case was characteristic of 'progressive' evolution. Tisch and Galbreath (2018) examine the impact of extreme weather on the agricultural sector using interviews, on-site observation records and archives of 38 New Zealand dairy farmers to examine the microprocesses of retention-enactment-selection sensemaking. This systematic research on the mechanisms of organisational resilience argues and concludes on the significant role of 'community perception' in organisational resilience.

The challenge of organisational resilience

In general, published empirical studies have concentrated on the value of organisational resilience in business management practices and presented a number of research findings and conclusions, but there are still several challenges: 1) Researchers have focused on the concept of organisational resilience, its acting factors and the design of an analytical framework. However, the dynamic process, key event characteristics and effects of organisational resilience in response to emergencies are still unclear in many business management case studies. The construction of organisational resilience is a dynamic and continuous activity and process. Therefore, it is urgent to analyse the whole process of organisational resilience in response to emergencies and identify the crucial elements and effects of organisational resilience at all stages to form a dynamic and continuous theoretical framework. (2) Studies on organisational resilience in the context of major public health emergencies need to be strengthened. Existing studies have focused on unconventional situations such as natural disasters and economic crises, with few of them paying attention to major public health emergencies. However, the COVID-19 epidemic, as a representative event, is characterised by multiple cross-infections and rapid transmission, resulting in unpredictable risks, which bring new challenges to the management and operation of most enterprises. Therefore, it is necessary to carry out research on organisational resilience in the context of major public health emergencies. (3) A limited amount of the business management literature explores organisational resilience in the retail industry. Although some scholars have mentioned the need to adapt to the new business realities under the epidemic (e.g., Jacobides & Reeves, 2020), more in-depth research from the perspective of organisational resilience is needed.

Based on the above analysis, this paper takes the COVID-19 epidemic situation as the background to study the mechanisms of organisational resilience within retail enterprises in the Chinese context and seeks to make theoretical contributions to the concept of organisational resilience in major public health emergencies.

Research design

Research methods

Research methods are mainly selected based on research problems. Normally, when the research questions focus on the mechanism of action, the process of influence, especially to answer the

6 Hangsheng Yang et al.

question of 'why' and 'how', or when the existing theory cannot explain the research question in-depth, then the case study approach is more applicable (Eisenhardt, 1989; Tsui, 2009). Based on the background of Chinese management, this study constructs a theoretical framework of organisational resilience suitable for Chinese companies under public health emergencies, aiming to explore the mechanisms of organisational resilience in specific situations, and answers research questions consistent with the paradigm of case studies. Furthermore, one strength of case methods is that researchers can obtain detailed primary (e.g., observation, interviews, field visits) and secondary data (e.g., corporate files, internal briefings, news reports, etc.), perform a comprehensive and in-depth analysis and interpretation, and track behaviours and processes over time (Yin, 2017). Making an accurate assessment of behaviours and the characteristics of processes in the organisation are central to the case study reported in this paper.

Case selection

Based on the typicality of case selection and the theoretical sampling principle (Mao & Li, 2018), this paper takes Yonghui Supermarket as the research object, and the characteristics of this case enterprise are as follows. (1) As a leading enterprise in the retail industry and one of the top 500 enterprises in China, Yonghui Supermarket plays an important role in local economic and social development. (2) During the COVID-19 epidemic, Yonghui Supermarket responded quickly and actively, displaying activities of organisational resilience. The whole process of its effective response to public health emergencies in a relatively short period of time, turning crisis into opportunity, and making outstanding contributions to the national fight against the epidemic arguably has strong research value and practical significance. (3) Considering the availability of research data, Yonghui Supermarket issues many authoritative news reports in addition to offering reasonable access to internal disclosure data given that it is a high-profile listed company. Therefore, abundant data were available for research investigation.

Data sources

In the field of management research, Western scholars generally use experiments, questionnaire surveys, interviews and other channels to obtain primary data for case studies (Randall & Fernandes, 1991). However, on the basis of strict assurance of process specifications, clear secondary data can effectively support case studies so that case researchers can confidently use secondary data as a worthwhile data source (Su & Liu, 2013). Taking into account the situation of epidemic prevention and control, it was more difficult to carry out research using only first-hand data, which increased the importance of drawing on secondary data to supplement the primary source materials. Our data collection is shown in Table 1.

Specifically, interview methods were mainly used for some front-line employees of Yonghui Supermarket. Two formal interviews and several informal interviews were conducted in this study. Due to the impact of the epidemic and time cost, convenience sampling was adopted to determine the interviewees, including the manager of a Yonghui Chongqing store, grassroots staff, the manager of a Yonghui Chengdu store, the person in charge of the Yonghui Life area, and delivery personnel, with a total of seven interviewees. Each interviewee was interviewed for 40–80 min, and the text recording was exported immediately after the interview. In addition, after the COVID-19 outbreak, we obtained the required first-hand information through store visits, store observations, and online experiences.

Secondary information was mainly collected from internal information of the enterprise (e.g., Yonghui Supermarket anti-epidemic briefing, quarterly report, and internal journal), authoritative and open reports, enterprise microblog, WeChat official account, official website articles, and enterprise senior management speeches. We finally acquired 10 examples of Yonghui supermarket's internal journal materials during the epidemic period, 53 samples of Yonghui supermarket's

Category	Text number	Examples	Source
Internal publication	10	The marketing story of a group of Yonghui people	Enterprise official website
		Fight 'epidemic' Yonghui sticks to the 'pulse' of urban life	
		Anti epidemic and assisting agriculture Adhere to the responsibility and responsibility of Minsheng Supermarket	
		The general manager of Yonghui Supermarket was awarded the title of 'National Advanced Individual in Anti-Epidemic'	
Media reports	53	Under the epidemic, how to 'reverse attack' of Yonghui Supermarket	Media sites
		Yonghui supermarket exposed three success rules under the COVID-19	
		You don't know which businesses are certain until the COVID-19 pandemic	
		Since the epidemic, Yonghui people have persisted	
Epidemic letter	3	Letter from Yonghui Supermarket to its national supplier partners	Enterprise official website
		A thank-you letter from China's Ministry of Commerce	
		A letter to Yonghui's family	
Annual reports	1	Yonghui Supermarket 2020 Semi-annual Report	Enterprise official website
Visit information	8	Yonghui supermarket online delivery in time during the epidemic	Interview and experience
		The store manager handed out masks and ginger soup for the 'families'	
		Yonghui Supermarket has a sense of social responsibility	

Table 1. Relevant information of Yonghui Supermarket

authoritative media reports, three internal letters of Yonghui Supermarket and letters of thanks from national ministries and commissions, and one semi-annual public report, and the rest of the information was drawn from official accounts in the public media. Using multiple data collection methods can avoid or compensate for the subjectivity brought by a single data source, thereby ensuring that the data are more sufficient and accurate, forming verification through triangulation and improving the reliability and validity of the research (Jiang & Wang, 2020).

Theoretical analysis framework

Based on the literature reviewed, the selected theoretical framework follows the logic of 'input (action factor)-process (action path)-output (action effect)' to analyse the mechanisms and processes of organisational resilience in the context of COVID-19 and Chinese business management. Taking the 'Conventional management situation before the outbreak of COVID-19 (Preparation) -- The sudden Outbreak of COVID-19 in 2020 (Response) -- The COVID-19 prevention and control normalisation at the end of April 2020 (Development)' as the timeline, we discuss the organisational behaviour, behavioural impact, and effects of the research objects at various stages. To identify and assess organisational resilience factors in the context of the

8 Hangsheng Yang et al.



Figure 1. Theoretical framework.

epidemic at different stages, we apply a research framework for organisational resilience based on public health emergencies in the Chinese context. The basic framework of the research is shown in Figure 1.

Case description

Yonghui Supermarket was founded in 2001. It is one of the first enterprises to introduce fresh agricultural products into modern supermarkets in mainland China. It was acclaimed by the seven ministries and commissions of the state as a model of promoting 'Free market of agricultural products transformed into supermarket', and it was also praised as 'people's livelihood supermarket and common Yonghui' by the civilians. After more than 10 years of hard work, the Yonghui supermarket has developed into a large group enterprise with the retail industry as its leader, modern logistics as its support, modern agriculture and the food industry as its two wings, and industrial development as its foundation. Yonghui Supermarket adhered to the concept of 'integration and sharing' and 'competition and cooperation' to create a blue ocean strategy, together with domestic and foreign retail enterprises to prosper in the Chinese retail market. Nearly 1,133 chain supermarkets have been developed in 28 provinces and cities throughout the country, with supermarket stores of more than six million square metres. It has been ranked sixth in the top 100 chain enterprises and fourth in the top 100 fast-moving consumer goods chains of China, contributing a powerful force to the development of the retail industry.

During the COVID-19 epidemic in 2020, China's retail industry suffered a huge shock similar to other companies. However, Yonghui Supermarket initiated an emergency plan swiftly inspired by its rich operational experience. In the first quarter of 2020, the company achieved a revenue of 29.257 billion yuan, with a substantial increase of 31.57% against the industry trend. Responding to the government's supply protection measures, Yonghui Supermarket actively organised supplies to ensure the supply of goods during the epidemic prevention and control period, making significant contributions to winning the battle against the epidemic in China.

Partner plan and Yonghui's spirit

In 2013, Yonghui Supermarket implemented its partner plan designed to stimulate higher enthusiasm amongst employees to reduce problems created by the lack of motivation among grassroots employees and the failure of senior employees to effectively manage finances. The partner plan was agreed upon by the stores and headquarters. Representatives of Yonghui headquarters, store managers and section leaders held a meeting to discuss and establish an expected gross profit as the performance standard. In the process of store operations, the incremental profits exceeding this performance standard would then be distributed according to the relevant system of partners. After the store manager received this dividend, he made a secondary distribution based on the contribution of everyone in his store and finally distributed the dividend amongst all of the grassroots employees, such as the receiving staff. They were enthusiastic in marketing, careful in accounting and distribution, promptly cleaning up rotten food materials and promoting flexible discounts, which greatly improved overall efficiency. This type of system is similar to all employees running the business, creating a collective spirit of Yonghui Supermarket staff to turn crisis into opportunity. Furthermore, Yonghui internally advocated the core values of 'unity, joint efforts and making progress together'. The long-term working environment and conditions have cultivated the family culture of helping each other and cohesiveness among employees in the face of crisis, forming the Yonghui spirit of taking responsibility. During this period of the epidemic, Yonghui employees explained the spirit of Yonghui with stories such as 'walked back to work for 3 days without transportation' and 'remained at their posts during pregnancy'.

Enterprise resources and capacity building

To solve common operational obstacles in the fresh food industry, Yonghui Supermarket has opened up high-quality upstream procurement, cooperated with a powerful logistics system for rapid delivery, cold chain system preservation, 'store-to-home', and a powerful intelligent middle station, creating a complete and efficient supply chain system. The supply chain has been strengthened with intelligent technology. With the assistance of intelligent analysis provided by Tencent Cloud, it optimises the transportation route, carefully selects the locations of stores and warehouses, and optimises transportation costs. During its long-term development, Yonghui Supermarket accumulated a large number of social cooperation resources and formed unique core competitiveness. In 2015, to develop new retail formats and undertake digital transformation, Yonghui established the 'Yonghui Cloud Innovation'. With this technology, Yonghui has incubated multiple online and offline integrated retail formats, such as 'Super Species', 'Yonghui Life' and 'Yonghui Life Home', which all have invested heavily in digital transformation.

During the epidemic period, due to its strong supply chain and digital construction capability, Yonghui Supermarket was able to respond quickly, transforming its business model, making substantial contributions in the retail industry to the national fight against the epidemic and efforts to turn the crisis into an opportunity.

Emergency response to COVID-19 outbreak

Within a short period of time following the outbreak of COVID-19, Yonghui Supermarket responded quickly and launched its emergency plan. It made a commitment to ensure supply and stable prices, actively cooperating with government departments in methods of epidemic control. Internally, the company rapidly implemented its emergency plans across the supply chain to ensure a stable supply of goods through efficient store operations and logistics distribution.

To meet consumers' needs, 'Yonghui Life Home' was launched as part of the emergency plan commencing on 27th January (see Figure 2). In addition, from 26th January to 30th January (Figure 2), Yonghui logistics started a 24-hour nonstop allocation mechanism. Because most areas had been in special traffic control areas, Yonghui Supermarket obtained a 'Green Pass' to ensure logistics and transportation by applying for a letter from the commerce department for the preferential supply of people's livelihood-related materials, laying a solid foundation for the normal operation and continuous supply of the enterprise.

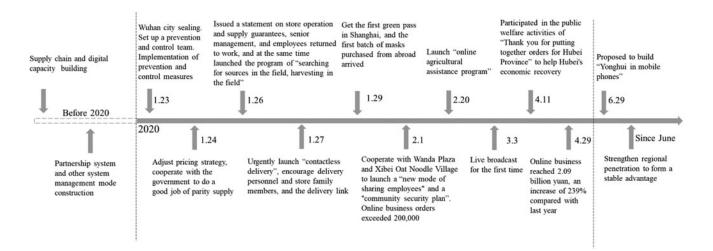


Figure 2. Important events in Yonghui Supermarket's response to the epidemic.

New development of business enterprises under the COVID-19 epidemic

Based on digital construction in the early stage, Yonghui's online sales gained an advantage, and orders increased sharply during the epidemic period. To strengthen the integrated offline and online development, 'Yonghui Life ·Home' focused on fresh goods and further improved its dining out table consumption scenarios. At the same time, Yonghui Supermarket launched its limited-time service 'slow will pay' and quality service 'bad will pay', extending the advantages of offline fresh markets to online businesses. Benefiting from the integrated development of online and offline as well as the advantages of the established supply chain, Yonghui's financial report in the first quarter achieved a 'headwind' start. The sales volume of the online business reached 2.09 billion yuan, obtaining an increase of 239% compared to the previous year. Affected by the change in consumer demand and the epidemic, live streaming e-commerce is becoming increasingly popular, so Yonghui Supermarket has experimented with this new marketing channel. Relying on its strong fresh supply chain system, the Yonghui supermarket has gradually expanded its live streaming products from households, food and washing to fresh products that are more in line with Yonghui's brand reputation, which declares 'Fresh is the king'. Through live broadcasts, Yonghui has broken from tradition and taken consumers to source direct purchasing sites all over the world, presenting the production and purchasing of goods more visually. The one-way purchase process has been transformed into a two-way interactive process.

Case analysis

Following the outbreak of COVID-19, Yonghui Supermarket quickly set up an epidemic prevention and control team and initiated its emergency response, which ensured the continuing operation of the enterprise turning crisis into opportunity. Analysing the entire process of Yonghui Supermarket's response to COVID-19, we find that in management preparations, emergency responses to the epidemic situation lead to a more normal stage of operations, and the Yonghui supermarket's behaviour shows strong organisational resilience. These resilience factors also play key roles in the next stage of evolutionary development.

Phase I: conventional management situation before the outbreak of COVID-19 (preparation)

As early as before the outbreak of COVID-19, Yonghui Supermarket made great efforts in the layout of the enterprise's key capabilities, which provided a good guarantee for the strategic development and crisis response of Yonghui Supermarket in the later period and laid the foundation for its strong adaptability in the context of this epidemic.

In terms of the supply chain, Yonghui Supermarket focused on the three core principles of 'quality, brand and source', which built the triple mode of 'source direct purchase + regional direct purchase + own brand', established a nationwide system of unified and direct regional production of fresh agricultural products, and reduced the lengthy circulation links typical of the traditional mode of retail operation. To develop a direct purchasing team of supply chain departments with thousands of people, it worked with different categories, inquiring deeply into the source of products to more accurately grasp the appropriate product prices and quality through direct contact with farmers or rural cooperatives. In summary, Yonghui Supermarket created an efficient supply chain system through high-quality upstream procurement, rapid distribution using a strong logistics system, cold chain system preservation, store-to-home, and a powerful intelligent middle platform. With the growth of business orders, Yonghui Supermarket used the digital approach to break the information silos, realising the seamless connection between planning, procurement, delivery and marketing by improving synergy across all links and shortening the response time of the supply chain. After the outbreak of the epidemic, the demand for fresh products increased sharply, and the supply was in serious shortage. At one time, the phenomenon of 'out of stock' appeared, and the supply chain and logistics capacity of major

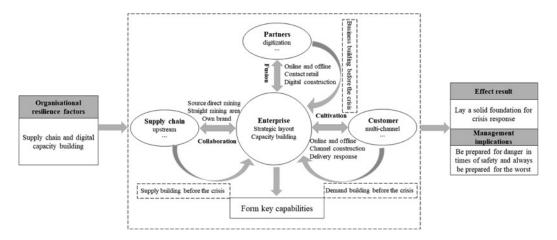


Figure 3. Mechanisms of organisational resilience in the preparation stage.

supermarkets faced a serious test. Yonghui Supermarket started programmes of 'searching for goods in the field' and 'harvesting in the field' to organise the supply of goods at this time. Meanwhile, the epidemic restricted the resumption of work and production of livelihood goods by factories, rendering it difficult to maintain a normal supply of some livelihood products. Yonghui Supermarket started emergency reserving work and cross-border purchasing of people's livelihood commodities and limited the number of goods that could be stockpiled for approximately 30 days.

Through the strategic alliance with Tencent, Yonghui has invested heavily in new online and offline retail formats and the construction of digital infrastructure. By establishing its technical team and launching the Yonghui Life APP, as well as forming a fixed-point grid distribution within 3 kilometres, Yonghui took the lead in promoting the application of WeChat code scanning purchases and a small program in the domestic retail industry. In 2018, Yonghui Supermarket practised the concept of 'full contact retail', committed to merging online and offline, and built an operation matrix from online to offline. During COVID-19, the city was forced to 'close', and traffic control was implemented. The offline retail business was greatly impacted, and residents' online demand increased dramatically. Thanks to the construction of digital capacity in the early stage, Yonghui Supermarket quickly adjusted its business model and focused on online business, which not only ensured the continuous operation of the enterprise but also provided basic material guarantees for residents' lives.

'Many supermarkets stopped distribution after the outbreak of the epidemic. During the epidemic, their online distribution was timely, and there was no distribution quota. It responded quickly within three kilometres and met all the needs of consumers with better and faster services'. (Excerpt from a customer interview)

The strategic development of Yonghui Supermarket's capacity and reserves as a retailer laid a solid foundation for rapid response to the outbreak of COVID-19 in 2020. As Li (2020) remarked, whenever an organisation is faced with a crisis, the higher the degree of preparation in the first stage, the better the response in the next stage. The management's attitude was to prepare in advance conscious of the necessity of preparing for risks and building the organisation's strategic capabilities. The mechanisms of organisational resilience at this stage are shown in Figure 3.

Phase II-The sudden outbreak of COVID-19 in 2020 (response)

In 2020, the outbreak of COVID-19 caused panic among people across the country. The closure of Wuhan city indicated that COVID-19 had become increasingly serious, and many sectors

connected to the retail industry suffered a huge detrimental impact. During Yonghui Supermarket's implementation of the emergency plan to maintain product supply and distribution, personal-psychological stress increased exponentially, especially amongst the front-line staff of Yonghui retail and logistics distribution personnel who were exposed to the clustered environment. Even so, organisational resilience, rooted in a family culture of cohesion and altruism, meant employees were willing to return to work despite a greater risk of being infected than the average citizen.

'I come back quietly anyway. As a person of the Yonghui supermarket, to fulfil social responsibility, my colleagues are in action, how can I stay at home, they are fearless, what am I afraid of!' (Excerpt from Yonghui internal magazine)

'A group of people take risks and hold on to their jobs, it seems just such a group of common people who are doing ordinary things, but it indicates the true love. The operation of the supermarket needs people from every department, and their stories are worthy of praise.' (Excerpt from Yonghui Supermarket internal magazine)

'The store manager put a mask on the family members, unite as one to prevent and control the situation; they cook warm ginger soup for employees every day to prevent cold, and prepare healthy and delicious working meals and fruits. Only hope that all the family members can ensure their health, to better fight against epidemic'. (Excerpt from Yonghui internal Supermarket magazine)

At this stage, the organisation system management based on Yonghui Supermarket's partner system and Yonghui spirit formed a huge value appeal and sense of mission. All employees are the community of interests as well as destiny. On 26th January (Figure 2), at the initial stage of the full-scale outbreak of the epidemic, Yonghui Supermarket management, supply chain, logistics and stores staff intensified the rework efforts. The number of staff in the logistics centres across the whole country reached nearly 700, and all Yonghui Supermarket stores achieved one distribution per day. The apparent adaptability of Yonghui Supermarket under the impact of the epidemic was supported by the staff commitment to self-help as well as the robustness of the supply chains and digital capacity, such as the 'Yonghui Life · Home' online business (see Figure 2). Inevitably, due to the surge in online orders, Yonghui Supermarket encountered problems such as a shortage of delivery personnel and delays with deliveries. Yonghui encouraged the families of delivery personnel and store assistants to participate in the delivery process and provided meals for the delivery teams to reduce these difficulties. In addition, all of the front-line purchasing staff returned to the place of production and the wholesale market. By regularly relisting key commodities and adjusting the stock product structure in time, the offline business of Yonghui Supermarket reduced the impact of the epidemic and contributed to organisational survival.

Externally, Yonghui Supermarket made a commitment to society to ensure supply and stable prices, actively cooperating with government departments in epidemic control, and remaining open for the Spring Festival. In early February, employees in some stores of Yonghui Supermarket had difficulty returning to work due to traffic restrictions, and the stores faced shortages of staff. Yonghui Supermarket cooperated with Wanda Plaza, Xibeixiaomian Village and other enterprises to actively explore a new mode of 'sharing employees' to create job opportunities for employees from other enterprises while satisfying their own needs. At the same time, to ensure the daily needs of domestic residents, Yonghui Supermarket initiated the 'Community Guaranty Plan' together with Longhu Group and Greenland Group in Chongqing, Xi 'an, Chengdu and other cities to provide consumers with healthy, safe and high-quality food. On 20th February (Figure 2), Yonghui Supermarket launched the 'Online Rural Assistance Programme' to help society cope with these difficult times. Organisational resilience not only reflects the enterprise's improvised and temporary measures but also indicates the integration of the organisation that had practised social responsibility and sustainable development. During this public health crisis, Yonghui contributed to the national fight against the epidemic

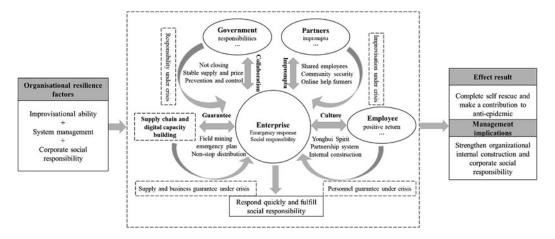


Figure 4. Mechanisms of organisational resilience in the response stage.

by ensuring supply, stabilising prices, supporting employment, instigating agricultural programmes, and encouraging partners to serve society, which is a manifestation of high resilience. Organisational resilience in the Chinese situation values altruistic rather than self-interested behaviour, which is a win-win logic between CSR and the sustainable development of enterprises. Yonghui management culture encouraged self-help and serving society, attaching great importance to the development and implementation of CSR. Moreover, Yonghui's CSR in the antiepidemic process reflects the organisation's altruistic behaviour during crisis, contributing to a responsible social image and retail brand development. The mechanism of organisational resilience at this stage is shown in Figure 4.

Phase III-The COVID-19 prevention and control normalisation at the end of April 2020 (development)

On 29th April, COVID-19 epidemic prevention and control in China entered the normal stage. Yonghui Supermarket's recovery under the impact of the epidemic benefitted from its previous preparation and planning, including rapid self-help and social responsibility activities. Its actions were reported positively by the news media and widely praised by national ministries and commissions, which provided favourable conditions for new development opportunities, heightened corporate image and continuing innovation and evolution.

'After the outbreak of COVID-19, your company has fully implemented the decisions and deployments of the Party Central Committee and the State Council, insist on reporting daily necessities sales, inventory and other information, playing the role of the main channel for the supply of residents' daily necessities, and organise the majority of employees to stick to their posts. Actively stocking up in the face of the epidemic, daring to take responsibility and dedicate, which reflects the strong social responsibility of the industry's backbone enterprises and makes outstanding contributions to winning the battle against the epidemic.' (Excerpt from General Office of the Ministry of Commerce)

'The Yonghui supermarket has a sense of social responsibility, which makes every one of us feel at home. It is the corporate culture that makes us internalized in the heart, externalized in the line, so the culture is the intangible assets of the enterprise. The long-term incentive mechanism makes every employee aspire to share the mission with the company.' (Excerpt from Yonghui Supermarket internal magazine)

At this stage, organisational resilience is derived from the continuous improvement of the enterprise and through innovation towards a more adaptive and greater competitive advantage.

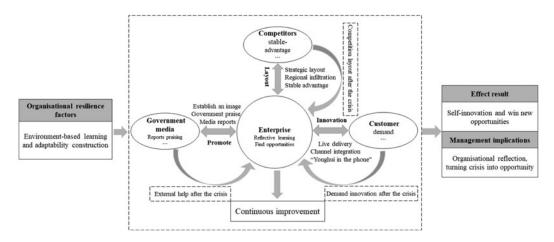


Figure 5. Mechanisms of organisational resilience in the evolution stage.

During the epidemic period of COVID-19, people's online consumption habits changed as the demand for online consumption and noncontact consumption gradually increased, and online shopping entered a golden period of development. At the end of June, the number of online business members of Yonghui Supermarket reached 32.84 million, with a monthly amount of 7.72 million in the reporting period, and the online operating income reached 4.561 billion yuan, an increase of 242.93% compared to the previous year. 'Yonghui Life Home' was becoming the new driving force for business growth. On 24th June 2020, (see Figure 2), an internal letter proposed speeding up the digital transformation process, increasing investment in online stores, promoting the integration of online and offline stores to form a more integrated way of conducting operations called all-channel development, and 'Yonghui in mobile phones'. Experimenting with different ways of working, the company launched the project of live broadcasts with goods. For example, in June 2020, Yonghui Supermarket's first global wine festival was delivered on online platforms such as the Yonghui Life APP and Small Program. The company's CEO Li Guo appeared in the live broadcast, and the 3-hour live broadcast attracted more than 1.2 million citizens to view online. During the Wine Festival, Yonghui's omni-channel sales of wine products exceeded 88 million yuan, with community stores showing strong consumption potential. Since June 2020, the Yonghui supermarket has increased its commitment to the strategy of 'big stores + small stores' to strengthen regional penetration while simultaneously developing the core area of business. On 30th October, Yonghui Supermarket released its financial report for the third quarter of 2020. In the first three quarters, Yonghui Supermarket achieved 72.670 billion yuan in operating income, thus reporting a retail industry countertrend of growth during the epidemic Figure 5.

Discussion

Companies vary in organisational resilience, and their ability to cope with unexpected crises differs. Our 'input-process-output' analysis of the Yonghui supermarket's organisational resilience at different stages of a public health emergency reveals that the resources, operations and practices of organisational resilience have to be considered in particular contexts and in relation to numerous inputs, processes and outputs. To analyse the organisational resilience-building process, we divided the company's epidemic management activities into three stages: conventional management situation before the outbreak of COVID-19 (Preparation), the sudden Outbreak of COVID-19 in 2020 (Response), and the COVID-19 prevention and control normalisation at the end of April 2020 (Development). To advance theory and practice, we present a framework for improving the organisational resilience of retail enterprises in the context of Chinese management, as shown in Figure 6.

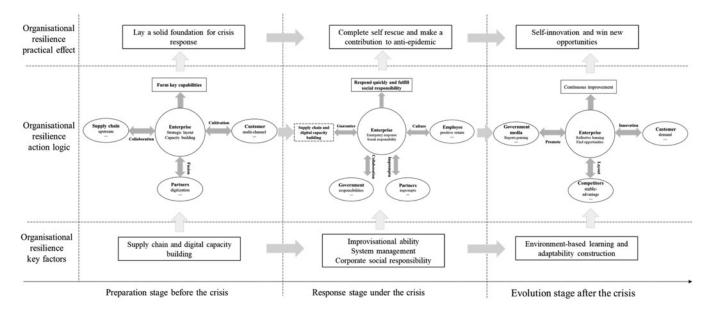


Figure 6. Overall framework of organisational resilience.

Our study finds that the construction of organisational resilience reflects both self-interested and altruistic policies and practices during different stages of the organisation's development and crisis response. First, possessing a reserve of core capabilities is the precondition for enterprises to be able to respond effectively to a crisis. Because the construction of core competences cannot be accomplished immediately, enterprises should make arrangements before a crisis occurs. Therefore, for enterprises, this constitutes self-interested crisis preparation behaviour. Second, the improvisational ability of enterprises and the system management (including corporate culture and internal incentive systems) formed by enterprises in the Chinese management context play key roles in employee behaviour and organisational response to the crisis. CSR is an important area for enterprises to build organisational resilience. In the process of responding to the epidemic, the case enterprise achieved a win-win logic of corporate development while fulfilling its social responsibilities, showing a dialectical relationship between egoism and altruism in the characteristics of organisational resilience. Finally, building learning capacity and adaptability based on environmental change are crucial in this case study. After the crisis, reflection and turning the crisis into an opportunity can promote a virtuous cycle of organisational development and sustainable resilience.

Limitations and future research

Several limitations should be mentioned. The research findings are based on a single case study in the retail industry in China prior to and during 2020. The analysis and interpretation follow the logic of 'input (action factor) - process (action path) - output (action effect)' to explore organisational resilience mechanisms of the case company at each stage. Both qualitative and quantitative methods are valuable in research on organisational resilience; and clearly, this qualitative case study reflects the Chinese retail management context for the period of the COVID-19 crisis in 2020.

Conclusion

Although organisational resilience has received extensive attention from scholars in the field of management, the dynamic processes, systems, key behaviours and activities, events, contextual characteristics and effects of resilience in response to emergencies are still unclear (Duchek, 2020). In this study, the preparation, response and development of a retail supermarket's management and operations in China are examined through an empirical case study. This retail industry case demonstrates that supply chain development, digital construction, improvisational ability, system management and CSR play positive roles in this organisation's response to the outbreak of COVID-19 (2019–2020) in the Chinese management context. Moreover, organisational resilience is reflected in the case study organisation's self-interested and altruistic policies and practices. We provide a dynamic perspective and theoretical framework, giving valuable insights into efficacious management practices for organisational resilience building in the retail industry.

Implications for policy and practice of this study are as follows: (1) Enterprise managers should cultivate crisis management awareness in their daily work and build the core ability of emergency response before the crisis arises. (2) It is important to develop an organisational culture and incentive mechanisms for flexible system management and high employee commitment to respond appropriately to crises. (3) Companies should strengthen their sense of social responsibility and pay more attention to stakeholders while considering their interests, enhancing organisational resilience by strengthening stakeholder relations. (4) Managers should improve crisis adaptability through reflection and learning and have the courage to innovate, seeking opportunities in the period of the crisis to promote the company's sustainable development capabilities.

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