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Narrative resilience in the cross-regional support of healthcare workers during the COVID-19 outbreak: The Chinese experiences of cultural input

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ABSTRACT

The healthcare staff who supported Wuhan's rescue work were the first batch of cross-regional supporters during the outbreak of the COVID-19 pandemic. To determine the cultural factors that affected their mental health and resilience, as well as the processes that organizations and individuals underwent to transform cultural resources into benefits. This study collected narrative materials in the form of national and individual statements and used Social Ecology of Resilience theory to analyse them. It identified and analysed the cultural factors of resilience in macrosystems, mesosystems, and microsystems according to four themes, namely: cognition, emotion, will, and behaviour. Altogether, it was found that the national voice adopted an optimistic narrative tone reminiscent of that used during the context of war and that the personal or public voice approved of it. The study revealed that the party and government's use of moral narration derived from its heritage culture and its belief in its continuity in new China's culture served as a mechanism of cultural resilience and mobilisation. The above is the experience of the operation of living culture (LC) and cultural heritage (CH) mentioned in Culture Based Development (CBD). In light of this, it was concluded that the predominant form of cultural input during China's national public health crisis has been storytelling with narrative resilience.

1. Introduction

Wuhan was the first city in the world to be struck by the outbreak of COVID-19. When the city was closed on January 23rd, 2020, the National Health Commission of the People's Republic of China called on all localities to set up medical teams. By February 8th, more than 11,000 people (including more than 4000 military healthcare workers) had left for Wuhan. At that time, it was the annual

Abbreviations: COVID-19, Coronavirus Disease –19.
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2 Xinhua News Agency, February 9, 2020, Xi Jinping's story: defeating the COVID-19 pandemic accessed 9 February 2020, https://cnews.Chinadaily.com.cn/a/202002/09/W55e38fc7cc3107b66b579e1f2.html
3 More than 4000 military healthcare workers supported the Wuhan _Rolling News _Chinese Government Network (http://www.gov.cn).accessed 3 March 2020 http://www.gov.cn/xinwen/2020-03/03/content_5486144.html; 16 provinces, one province supports a city in Henan Province, and more than 11,000 medical staff support; Wuhan _Rolling News _Chinese Government Network (http://www.gov.cn/).accessed/8 February 2020 http://www.gov.cn/xinwen/2020-02/08/content_5476028.html.

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Spring Festival, which is when Chinese families gather on a mass scale. Despite this, cross-regional support doctors and nurses took the initiative to leave their homes and go to the epicentre of the global pandemic. To protect patients’ and the public's best interests, the state and healthcare system needed to invest a variety of material and cultural resources into encouraging healthcare workers to continue offering their support despite adversity, responding to the pandemic quickly on the front line, and reducing the negative impact that it was having on their mental health. Obviously, the first batch of cross-regional healthcare workers who came from different places were an important form of human capital used to solve the public health crisis in a timely manner and control the loss of life and property.

Svold et al. have emphasized “the value of practicing self-care strategies” and suggested that decision-makers need to “fully realise the crucial importance and value of investing in the mental health and well-being of the healthcare workforce, on individual, organizational, and societal levels” [1]. In this sense, resilience may be associated with different levels of cultural input from the social ecosystem. During the early stage of the pandemic, there were many high-risk and high-pressure factors that disrupted healthcare workers' original ecological and social systems, such as: the infectivity and lethality of the virus, difficulty of treatment, high workload, and limited protective materials, among others. This led to the question of how their motivation to continue working could be maintained while protecting their mental health. To answer this question, many researchers adopted the theoretical perspective of psychological resilience, as it was considered to be the most effective way of achieving objectives and being able to adapt to the adverse situation of the COVID-19 pandemic [2-9]. Overall, the researchers found that the cultural factors of coping with adversity and crisis differed. Thus, Claus-Ehlers proposed that the term ‘cultural resilience’ be used as a theoretical model to convey a person's cultural advantage and socio-cultural background, which is rooted in a matrix that influences the development of coping [10]. The culture that is shared by people, which is comprised of “beliefs and values, language, conventions, socialisation, social institutions” and other factors [11] helps to promote resilience [12]. According to Ungar, emphasis “needs to be placed on the role social and physical ecologies play in positive developmental outcomes when individuals encounter significant amounts of stress and plentiful risk factors” [13].

Furthermore, from the perspective of the investment in coping with the health crisis, empirical research on the first batch of cross-regional healthcare workers' use of cultural factors to promote resilience presents the experience of turning cultural resources into benefits at the organizational and individual levels. We look forward to providing reference for decision-makers. The benefits here refer to mental health and resilience, which are of great importance for handling any economic or health crisis [14]. For this reason, we adopted from the Culture Based Development (CBD) paradigm in economics, which defines development as a process that depends on economic decisions that are inevitably culturally embedded and biased [15], and views cultural capital as the complex proto-institution culture's potential to impact growth [16]. By connecting CBD culture with organization, we can also construct a comprehensive cultural paradigm for regional development and labour markets that can be adequately translated within an economic growth modelling context [17]. Tubadji has pointed out that “culture is endogenous”, meaning that it is an internal resource that individuals and organizations can mobilize. She also espoused one aspect of a Marxist viewpoint by stating that “[c]ulture could be both a tool for ensuring promotion of individual mental health and resilience of social capital” [14]. It is remarkable that China, the guiding principle of which is Marxism, has managed to continuously invest in the first batch of cross-regional healthcare workers. Our research goal is to discover the process of the form and content of this cultural capital operation.

Storytelling, which continuously spreads through media and networks and presents narrative resilience, is the most prominent and extensive form in China. During China's Deployment Meeting of Overall Promotion of Pandemic Prevention and Control of COVID-19 and Economic and Social Development, President Xi asked that the story of China’s anti-pandemic be told well. at the. Since the beginning of the pandemic, the first batch of cross-regional healthcare workers have been important narrators and their stories are rich as observation materials or data.

In terms of content, the Social Ecology of Resilience theory, as defined by Ungar (p.369), provides a suitable theoretical perspective for analysing the complexity of time, space, and elements in their experience process. He is of the opinion that the study of resilience is a social-ecological one, and that three systematic dimensions can more clearly describe the structure and evolution of the content involved in this process [18].

Thus, this article focuses on the cultural factors and input that have been involved in maintaining healthcare workers’ resilience and perception during the pandemic at the macro-, meso-, and microsystem levels. Macrosystems, which include governments, culture, media, and both national and international organizations, are in place to provide expectations, beliefs, values, hopes, and knowledge [19]. They involve the larger cultural context surrounding people that includes cultural norms, ideologies, policies, or laws, as well as a common sharing of identity, heritage, and values [20]. Microsystems include families, peer groups, and workplace systems. The theory of biological ecosystems understands the human body to be a microsystem with emotional and cognitive subsystems [21]. The interaction between the micro-subsystems is termed the mesosystem [19]. The microsystems were divided according to the front line and rear line of medical staff who went to Wuhan to support the city. The rear line consisted of their original units, families, and communities, while the front line consisted of the hospitals, their colleagues, and the communities that supported them.

We selected narrative materials as a source of experience data because narrative involves the construction of meaningful collective and individual memories, life experiences, and local knowledge. Based on the extensive narration of healthcare workers from across the regions who supported Wuhan during the outbreak from January 21st, 2020, to May 20th, 2021, cultural factors were identified as comprising the main component of their strategies for coping with risks and pressures and actively adapting to them. From the views of CBD, the results of resilience are regarded as the interests of organizations and individuals. These cultural factors present the experience of cultural capital operation in public health crisis.
2. Method, data collection, and analysis

2.1. Narrative resilience research

We chose the narrative media of the experience of cross-regional support healthcare workers and have called the process of discovering the mental resilience elements in their stories ‘narrative resilience research’. Narrative can be used to describe the functions of society, culture [22] and even psychology. The economist Robert Shiller uses the term ‘narrative’ to refer to the simple stories or easily expressed explanations of events that many people employ in conversation or across the news and social media because it can be used to stimulate the concerns or emotions of others and/or advance self-interest [23]. Narrative research, through which collective and individual experiences can be discovered, is focused on the interpersonal, meaning the understanding that is shared by people and their environment regarding their life experiences and circumstances. It is an especially apt tool that is being used in resilience studies to examine the personal and contextual forces that influence individual lives [24-26], the new perspective of which has been called narrative resilience [27]. Kirmayer et al. (p.401, p.415) have pointed out that it not only has an individual dimension, but also "a communal or collective dimension, maintained by the circulation of stories invested with cultural power and authority, which individuals and groups use to articulate and assert their identity, affirm shared values and attitudes toward challenges, and generate creative strategies to address new predicaments" [28]. When the macro-system is in operation, “[t]here are political and ecological dynamics in the circulation and impact of stories”; at the same time, individuals use stories as rhetorical tools to position themselves within local worlds and fashion their own biographies [28]. Both of them contain storylines of micro and meso-system dimensions.

2.2. Data collection

To collect narrative data of resilience experience, we adopted criterion sampling, which involves first determining a standard or some basic conditions for sampling, and then selecting samples that meet the latter. In doing so, this study attempted to determine the standards and conditions of two types of narrative subjects – namely, the nation's voice and personal voices – as samples pertaining to China's cultural resilience during the COVID-19 pandemic and cross-regional support of Wuhan's healthcare workers.

1. In terms of the nation's voice, the sampling condition consisted of choosing samples that were only derived from official accounts that can be said to speak on behalf of the national government, health system organs, and the central media of party and government spokespersons. The Chinese government website (http://www.gov.cn/), the National Health Commission of the People's Republic of China website (http://www.nhc.gov.cn/), People's Daily, the Xinhua News Agency's two national media web pages, and Weibo were selected as data sources. With the healthcare workers supporting Wuhan as the keyword, fifty-six web pages, 304 Weibo posts, 463 media imports were obtained, including five decrees and six speeches by leaders.

2. With regard to personal voices, the diaries of Wuhan's healthcare workers that describe their situation and physical and mental experiences were sought out, as well as testimonials of those in support of them at the group and individual levels. The sampling conditions of these were: typicality of narrative, influence of narration, multidimensional psychological content, and continuity of narrative time. Firstly, we selected the diary collection of the first batch of Guangdong medical teams that obtained cross-regional support, which was first published in China and included 109 diary entries of thirty-nine team members during their fifty-seven-day support period from January 24th to March 20th. As this collection was typical of group narration, we chose it as a group case.

Secondly, we chose Zhang Shuang's online diary, as she was a nurse belonging to the Liaoning Medical Team who supported Wuhan from January 26th to March 20th, 2020. She published her diary through the Weibo account “Rosemary_Frost” on a daily basis and described what she saw, felt, thought, and did during the support period via words and photos. After returning to her hometown, she provided continuous and detailed updates of her situation as a cross-regional supporter. Based on the optimistic tone of her descriptions, her accounts can be said to be representative of high-level resilience [29]. Furthermore, they were shared by others over 100,000 times, as well as widely reported upon and reprinted by central media, local media, self-media, and other individuals. Thus, her diary entries were selected as an individual case because they are a typical sample of a personal narrative that has had significant widespread influence. Overall, we collected 121 online Weibo diary entries of hers dated from January 26th, 2020 to May 12th, 2021.

2.3. Data analysis

After collecting the materials, we used The Routledge Handbook of Research Methods for Social-Ecological Systems (SES)’s [30] qualitative content analysis method to examine narrative aims and understand how people make sense of and reconstruct their experiences from a particular standpoint in time, as well as how that has material consequences on access to resources and their governance. Through narrative, people create coherence and unity among the many different forces that are present in the context in which they live and act (p. 278).

By analysing the basic content of the above narrative materials, the present study describes and explains how cultural resilience was constructed. It adopted the coding framework of the grammar of resilience, including narrative tone and theme [31] under the macro, meso, and micro dimensions. A theme refers to the content of cultural psychology and behaviour, including cognition, emotion, will, and behaviour. The materials were examined, and the cultural forms and content adopted in dealing with stress and risk were selected as the idea unit of cultural resilience. These were independently coded and tested by two authors via the top-down coding method. Afterwards, these codes were revised and merged to realise the process from experience story to conceptual narrative. Due to the positive content orientation of the grammar of resilience itself, the results of this study have no negative information in the system voice. In order to reduce the system error, we paid attention to the exceptions in narrative and discussed them.
3. Results

The first cohort of cross-regional healthcare workers who went to Wuhan to support the city set out on January 24th, 2020, and returned home between March 17th to 20th. Our research found the narrative tone of that period to be one of high morale. In addition, and as has been noted, four major themes were revealed.

3.1. Narrative tone: optimism in the context of war

The narratives placed the events associated with the pandemic in the context of war by uniformly using military metaphors, referring to viruses as invisible enemies and describing the job of controlling the COVID-19 pandemic and preventing its spread as fighting and blocking war. In fact, the website of the National Health Commission of the People’s Republic of China referred to war 1242 times in the period. Besides, the medical environment was compared to a firing line, protective clothing to battle uniforms, and the actions in support of Wuhan to a rescue.

In terms of the narrative tone [32], positive emotional words were found to be used significantly more often than negative ones. The sense of optimism was mainly based on the idea that the individuals and groups involved were in an adverse situation but able to cope with the difficulties and challenges they were facing, and that they would eventually overcome them.

3.1.1. Macro system startup: the voice of the country is activated

First of all, the “macro narrative environment” [33] involved the use of military metaphors and the adoption of a high-spirited fighting tone. The People’s Daily’s Weibo page (2020) was the first to express itself through war-related terminology, when it made the following statement: [# Wuhan Come on #!] “We will be able to win the war of defence and control against the COVID-19 pandemic!” On January 23rd, 2020, the National Health Commission of the People’s Republic of China referred to as a battlefield: “… In this battle that must be won, medical personnel are duty-bound and once again become the vanguard and the most elite company.”

Meanwhile, the Xinhua News Agency’s Weibo page (2020) exhorted people to “Defeat the pandemic and win the sniper war with the national system!”

Similarly, when deploying the pandemic prevention and control work, President Xi, China’s supreme leader, said: “We have confidence in fighting this sniper war, fighting the overall war, and fighting this people’s war. We must build confidence, and we will win.”

3.1.2. The passionate interaction between the macro-system and individual narrative

Personal voices approved of the country’s voice and maintained the same tone as it while exhibiting firm obedience. The personal narrative of cross-regional healthcare workers was to respond to the country’s call in the form of written requests for battle assignments and petitions. Ordinary employees, including retired medical workers, “[took] the initiative to take the vanguard anti-pandemic task,” and those with positions expressed their willingness to “charge at the head of one’s men—take the lead in fighting the pandemic.” Healthcare workers who had participated in the cross-regional support for SARS in 2003 wrote: “When war befalls my country, I will answer the call to service, and fight to win” (2020, January 23) [34]. Thus, although they were not soldiers, they used the military metaphor provided by the national voice and maintained the contextual narrative of war.

3.2. Narrative themes

Spreading narratives, often many parallel narratives around a common theme [23]. Four themes based on Chinese cultural heritage and New China’s culture emerged from the narratives.

3.2.1. Cognition

(1) Faith and Values Shared by all Systems

“We will win!” was the most frequent slogan used by both macro and micro systems to motivate and support groups and individuals, with individuals in particular using it for purposes of self-motivation and providing a sense of hope. The traditional belief that “our country is in danger; everyone has a responsibility,” combined with the belief in new China’s organisational culture became an important means of maintaining work motivation and helping people to acquire the courage to face their fears. For example, Zhu Haitao, a member of the Guangdong Medical Team, wrote: “I was afraid when I came here, but I was not afraid when I saw this situation because I felt a stronger sense of mission” (2020, February 12, Xinhua News Agency’s interview report). On February 3rd, 3030, Zhang Shuang wrote: “People are not inherently brave, but with accountability and responsibility, they dare to move forward without fear”. The traditional belief that everybody is part of the same family was based on the view that all should “sacrifice individual interests for collective benefits” in the new Chinese organisational culture. As Zhang Shuang also wrote on March 8th: 2020, “I take off my protective clothing, and I must protect ‘my family’ and put on protective clothing, I have to protect ‘everyone,’ because no country, no home”. There was also a sub-narrative of showing one’s gratitude to the supporting teams, as exemplified by this statement by one of the Guangdong Medical Team’s members: “I was born into a low-income family, and I have to complete my studies with national student loans and repay society” (2020, February 27) [34]. Chinese cultural views of life and death were also expressed in some of the

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[3] (Health News) Come on, Wuhan! Come on, healthcare worker! ! accessed 23 January 2020 http://www.nhc.gov.cn/xcs/fkdt/202001/1f8f386656254068b8570faeba6c95ca.shtml.

[4] [Xinhuanet] The People’s War, the overall war! Xi Jinping commanded this (National Health Commission of the People’s Republic of China, 2020). accessed 23 January 2020 http://www.nhc.gov.cn/wjw/xwdt/202002/0f0c6fa7e64241e580c66fb31080963.shtml.
diaries; for instance, Zhang Shuang observed that “The dead people are already gone forever, we have to go on as well as how we live now” (2020, February 23).

(2) Collective Efficacy in Micro and Meso Systems

The narrative expresses: 1) the link between the individual initiative and the micro-system in reality; 2) the further link with the broader national collective; and 3) the formation of a community within the meso-system and close cooperation to accomplish the goal. The narrative slogans of Chinese collectivist values, such as “A united people is like a strong city fortification,” “unity is strength,” and “more people, more power,” enabled Chinese citizens to perceive collective efficacy in a clearer light. They also injected strength and confidence, and helped everyone to deal with the moments when personal efficiency seemed to be at a low ebb.

Individual links with the micro-system of doctors in difficult times were seen in examples such as the female doctor Yang Ping's statement in a video dated February 24th, 2020, which explained that she was encountering difficulties and felt that she was performing poorly: “I am just a little doctor [crying] … However, thousands of little doctors have gathered their strength (stops crying).”

Individuals are linked to a larger macro system, and micro systems within a meso system work closely together. This can be seen in the following two statements made by Zhang Shuang: “We are a family. Millions of people are united as one man, and we will unite like a fortress (2020, February 2). “Today, I sorted out the disease records with my comrades in the department. Everyone performed their duties, and each person was responsible for one job. We quickly sorted out dozens of thick disease records” (2020, March 6).

The diary of one of the Guangdong Support Team's members included the following statement: “Scenes of unity and cooperation are deeply imprinted in my heart” (2020, January 29) [34].

3.2.2. Emotion

The emotional narrative was based on relationship links and highlighted the cultural logic that if everyone is a member of the expanded family of the country, then supporting Wuhan is synonymous with helping one's family. The most frequently used narrative was that of a generation of love-based emotions through the intimate interaction between people, family, and nation, combined with a sense of mission behind professional identity perception, which is a factor that stimulated and maintained the motivation and strength of the supporters.

(1) The Individual and the Macrosystem

This narrative reflected the Chinese people's deep attachment to the land, linking individuals and countries, individuals and nations, and different regions to each other through metaphors of home. It also generated patriotic feelings and a sense of national identity. Leaving home during the Spring Festival and staying away from one's parents is an anti-traditional form of behaviour in China. To compensate for this, healthcare workers used metaphors of rootedness to their land to convey a concept of home that is extended beyond that of the nuclear family to the country as a whole.

Ultimately, the personal narratives of this category showed that the loving relationship between the Chinese and their home country is indissoluble. As Zhang Shuang wrote on February 15th, 2020: “As Chinese, we were born here, buried here, and the good and bad deeds of our lives stay here. Behind this is our deep love for the land under our feet.”

(2) The Individual and the Microsystem

This element of the narrative revealed the interaction between supporters, front-line workplaces, community colleagues, patients, and residents, which formed an interpersonal microsystem. Despite how unfamiliar the city of Wuhan felt to some of them, a close relationship of comradeship and familial feelings developed between them. For example, on March 9th, 2020, the topic of “The Most Moving Moment After Cabin Shutdown: Not giving up, these are the tears of the resistant to leave when parting, and it is also the tears of joy after victory” (Fig. 1) emerged on the People's Daily Weibo account. This was followed on May 12th, 2020, by the topic of “Nurses you met in those years: Huoshenshan Hospital, the head nurse of the First Department of Critical Care Medicine cheered the patients” (Fig. 2).

During front-line work, supporters and local healthcare workers “form [ed] a medical community.” Front-line communities provided supporters with their hometown, local delicacies, and festival services, such as dumplings for the Lantern Festival and haircuts on the second day of the second month of the Chinese calendar, which were received as warm and intimate gestures of material support. Xiao Guan-hua, a member of the Guangdong Medical Team, described having formed a close family-like relationship with their teammates, as follows: “Just like brothers and sisters … after this battle, we are also considered Damon and Pythias” (2020, February 14) [34].

Among the public and personal narratives, the following sentence from the earliest collection of poems in China, The Book of Songs, was frequently used to express sympathy for Wuhan and its residents: “Fear not the want of armour, for mine is also yours to wear.” Meanwhile, media narration referred to cultural heritage, such as “the benevolence of doctors,” who stressed their professional empathy and treated patients as relatives, thereby making the doctor-patient relationship family-oriented, and using love as the motivation for their work. Liu Gui-rong, a member of the Guangdong Support Team, wrote to one patient: “We flew in from Guangdong to fight side by side with you!” (2020, January 29); “It is the power of love that makes us move forward! … People of the world are families …”; “Where there is love, there is home; just like our medical staff and patients in Hankou Hospital, we are a ‘small family’” (2020, February 4); and “Protective clothing isolates viruses but cannot isolate love” (2020, February 11) [34].

At the same time, relatives, friends, and colleagues wrote letters to encourage healthcare workers to dedicate themselves to the country's service. The mother of a military doctor who had just recovered from illness knew that her son had gone to Wuhan and said, “Mom is proud of you!” (People's Daily Weibo, 2020, February 1). Besides, the diary of the Guangdong Medical Team stated that “Be-
Fig. 1. People's daily weibo (2020-5-12). Data source: People's daily weibo.

Fig. 2. People's daily weibo (2020-3-9). Data source: People's daily weibo.
fore departure, my mother said, ‘If the hospital needs you, the Party needs you, and the Country needs you, you should go to fulfil your mission’ (2020, February 16) [34].

(3) The Individual and the Mesosystem

This narrative element showed how the external microsystems interacted. The working hospitals and communities expressed their solicitude and paid special attention to the supporters’ families, which was moving and comforting for the supporters. For example, Zhang Shuang remarked that: “Dad said that the leaders (in the hometown working hospital) went home to offer condolences and were moved (2020, February 9). Furthermore, members of the Guangdong Medical Team wrote: “(Community) to send things at home… and let me not worry about home… Now I do not worry too much about my family. I love China!” (2020, February 11) [34].

The personal narration of supporters included the use of the metaphor of family to express their attachment to Wuhan, such as in Zhang Shuang’s diary, where she exclaimed: “I completely regard this place as home!” (2020, January 30) and “I feel that I have been fully adopted and integrated into the big family of Wuhan” (2020, February 4). Besides, the diary of medical team members noted that “The eighth day of supporting Wuhan made me feel emotional about Wu Han and … made me feel at home” (2020, February 1) [34].

In addition, through the regional link between the supporting and the supported places, the emotion of a code of brotherhood was generated, and the cultural heritage notion that when difficulties arise in one place, aid comes from everywhere, was taken as the modus operandi. This was demonstrated by how medical teams from all across the country proclaimed their support for Wuhan and Hubei by using the homonyms of Chinese characters in the names of their original provinces.

3.2.3. Will

The narrative unit of will was present throughout every system.

(1) The Macro-System Promotes the Will of the State and Praises Individuals with Tenacious Will

By professing its will to deal with fear and depression and adhere to the narrative of action, the country’s voice constantly conveyed the national will that the more difficult and dangerous things got, the more forward the country advanced, thereby positioning itself in the spirit of the Chinese nation. For example, on February 5th, 2020, the People’s Daily stated that “[i]n the face of the pandemic, the healthcare workers of the whole army in China do not talk about conditions and charge ahead, leaving themselves in danger; they make others safe, so that people can deeply realise a fighting spirit: the more difficult things are, the more forward the country is.” Meanwhile, the macrosystem’s media focused on reporting the strong will of the healthcare workers to rise to challenges and their refusal to quit, even if they were sick. On April 16th, 2020, the Xinhua News Agency’s Weibo account gave the example of a 72-year-old academic named Zhang Boli, who had had his gallbladder removed in Wuhan. Although his legs were throbbing, he said: “Never leave the front line!”

(2) Passing the Will of the State Within the Meso-System

Individuals used this narrative unit to motivate groups and themselves. For example, members of the Guangdong Medical Team exhorted each other to “not be afraid. Do not be sad. Isn’t this how our country and nation have overcome all kinds of difficulties and enemies time and time again and are constantly becoming stronger? It will pass, come on!” (2020, January 27) [34].

(3) The Internal Microcosmic System of the Individual

Individuals use narration to mobilize their will to influence their internal emotions and behaviors to cope with stress. For example, Zhang Shuang observed that “We cannot be afraid, … people’s will is getting weaker and weaker, and we are afraid that we cannot solve the problem. Only by facing it and beating it can we overcome it!” (2020, February 10).

3.2.4. Behaviour

Cultural and social support behaviour (noneconomic, psychogenic) for support workers helped to protect them, summon their inner powers, and enable them to experience a higher sense of self-worth, pride, and honour.

(1) From Macro-System and External Micro-System to Individual: The Award of the Title of Hero

Since the beginning of the fight against the pandemic to the present, the external macrosystem and microsystem have awarded the title of Hero to supporters and paid tribute to them, both online and offline, thereby forming a prominent and resonant voice. The personal narration of supporters shows that this has been an effective driving force and a protective factor.

First, the macrosystem media environment has paid attention to different ages, genders, and types of work, and has chosen to follow up on and pay tribute to ordinary and representative individuals. For example, Zhu Hai-xiu, the youngest member of the Guangdong Medical Team, concealed the fact that she was going to Wuhan from her parents. Since she was only twenty-two years of age, she was regarded as a typical representative of the post-95 generation. She was sought after by the media because she stated, “I cannot cry; my glasses will become invisible when I cry.” In her diary entry of February 13th, 2020, she wrote: “On the 21st day of coming to Wuhan … these days, I saw many reports about me from CCTV and other media … which made me feel more motivated and secure in Wuhan” [34].

Accessed 5 February 2020 http://opinion.people.com.cn/n1/2020/0205/c1003-31571175.html.
Then, during the supporting period, festivals, and other points in time, the microsystem such as Wuhan and the hometowns of medical staff used the city landscape to pay tribute to and praise those involved in medical care. A People's Daily Weibo video (2020, May 12) pointed out that “On Nurse's Day, 20 cities lit lights up on the same day to pay tribute to the medical staff.” Zhang Shuang noted that “My hometown-Shenyang … Rolling on the big screen, dear comrade-in-arms, every lighted lamp is a blessing from our hometown. This is the highest praise from our hometown to all those who fought on the front line” (2020, March 19) and “… I will proudly say, I have worked hard for Wuhan!” (2020, March 20).

At the end of the rescue, the official organizational macrosystems and microsystems of the Communist Party of China and government granted heroes glory by way of commendation. For example, on September 8th, 2020, the National Commendation Conference Against the COVID-19 Pandemic was held, and the Xinhua News Agency's Weibo account announced that it would award honours to individuals and commend collectives. On September 22nd, 2020, the People's Daily Weibo account broadcasted the Wuhan Commendation Conference Against the COVID-19 Pandemic live, which carried forward the anti-pandemic spirit and paid tribute to anti-pandemic heroes. In her diary entries on June 26th and July 17th, 2020, Zhang Shuang wrote that she received an honourary certificate from Wuhan and that its residents referred to her as the “most beautiful Shenyang people”, which was touching and made her feel grateful.

(2) Etiquette Interaction Between Individual Micro-System and Meso-System

According to Crawford et al., social support and regulation through rituals, ceremonies, and narratives are indicative of the form and content of Chinese culture. Rites come from heritage culture and non-material way [35]. Since ancient times, Chinese people have attached importance to the notion of “reciprocity in courtesy”, the earliest example of which comes from the Confucian classic Book of Rites, dated to around 475–221 B.C.E. The narration shows the etiquette behaviour of the external microsystem towards the supporters and emphasizes how the supporters respond with courtesy. This can be seen firstly between doctors and patients. For example, a picture frequently distributed on the Internet showed a 2-year-old patient bowing to the nurse when he was discharged from the hospital and the nurse bowing in return (Fig. 3). The image was spliced with photos of doctors and patients saluting each other 100 years ago, highlighting how China has inherited its legacy of manners and the importance of this. Secondly, in terms of the meso-system, when the mission was finished and evacuated, the supported community groups and support teams bowed and greeted each other. When the support teams met at the airport, they either sung the national anthem together, waved goodbye with the national flag in their hands, or high-fived each other, such as “Three Medical Teams Meet at the Airport, a patriotic song speaks out” demonstrates (see Xinhua net: 2020-03-20 15:17).

The ritual aspect of such representations shaped the image of the cross-regional support group as fighting heroes. When the supporters set off, their hometowns held expedition ceremonies, with the team members dressed in uniform and taking a collective oath. Their hospital or regional leaders saw them off while stating, for instance, “It is Our Duty to Support Wuhan”*5 (Fig. 4) and “The Second Emergency Medical Team of Zhejiang Province Supports Wuhan”*6 (Fig. 5). These images were published on the website of the Chinese government on January 28th, 2020. Similarly, the website of the National Health Commission of the People's Republic of China (2020, February 4) showed the launch ceremony of the National Emergency Medical Rescue Team of the First Hospital of Jilin University, which “went out to support Wuhan today”*7 (Fig. 6).

Before the medical staff who went to Wuhan returned to their hometown at the end of their mission, Wuhan rewarded them with expressions of gratitude, sending flowers and thank-you letters, and holding farewell ceremonies. When the staff took the bus (escorted by traffic police) to the airport, Wuhan citizens bid them farewell and saluted them on both sides of the road. Older people in wheelchairs also stood up and gave military salutes. When the plane landed, the hometown airport held a Crossing the Watergate ceremony, using fire engines to spray water from each side of the plane to form a Watergate, under which the plane slowly glided. Citizens stood on both sides of the runway to welcome them back. When they returned to their original posts, their colleagues held a welcoming ceremony. A People's Daily Weibo video dated April 14th, 2020, broadcasted the event, and described it as such: “I will cry when I see it! # Support the head nurse in Hubei on her first day of work, and her colleagues dance a sign language dance to welcome her back”*. On the same day, Zhang Shuang's diary also described the special welcoming ceremony held by the working hospital in her hometown.

(3) Macro and Meso Systems: Giving Thanks and Repaying a Debt of Gratitude

The media and national organizations in the macrosystem described the supporting actions as a national mission. At the same time, the patients, colleagues, and community residents in the microsystem saw it as loving-kindness and regarded the supporters as lifesavers. They often thanked them and repaid them with spiritual encouragement, expressions of emotion, etiquette, and customs.

In terms of the meso-system, the supported place interacted with the supporters in the community. In March 2020, when the medical staff who supported Wuhan finished their mission and left the city, the microsystem on the front line of the pandemic (i.e., local organizations and Wuhan medical staff) sent them an invitation to return the coming year. On March 2nd, 2021, Wuhan fulfilled the Thanksgiving Agreement by inviting the medical staff who supported Wuhan to visit the blooming cherry blossoms, watch a special performance, and take part in a literary evening that paid tribute to the heroes of the pandemic.

The individuals in the supported micro-system expressed their gratitude to the helpers in different forms. Wuhan's citizens spontaneously expressed their own gratitude. For example, the People's Daily reported on October 31st, 2020, that a 74-year-old resident of

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*5 Accessed 28 January 2020 http://www.gov.cn/xinwen/2020-01/28/content_5472646.htm#1.
*6 Accessed 28 January 2020 http://www.gov.cn/xinwen/2020-01/28/content_5472801.htm#allContent.
*7 Accessed 4 February 2020 http://www.nhc.gov.cn/xcs/kfdt/202002/1b9be8858cfa4238939b806db86f0a4.shtml.
Wuhan drove more than 600 km to thank their benefactors who fought against the pandemic. On March 13th, 2021, the *People's Daily Weibo* account told readers that the owner of a Wuhan breakfast shop gave an anti-pandemic hero a free breakfast, saying, “it is my pleasure.”

4. Discussion

The highly consistent voice of crisis transformation and victory in the narrative samples has become a narrative ceremony (main form of cultural input) that conforms to President Xi’s request that the story of China’s anti-pandemic be told well, which represents the general appearance of China’s mainstream anti-pandemic narrative. As McAdams has argued, major adverse events require “more storytelling work” [36] (p.253). During the COVID-19 pandemic, the narrative construction of cross-regional healthcare supporters became a process involving the participation of everyone within the social system. The storytelling work of supporting medical care during the pandemic crisis became a process of strengthening both national identity and party and government beliefs. In addition, it helped both the collective and individuals gain strength, and promoted the reconstruction of hope and meaning, in order to obtain the benefits of protecting resilience. From the organizational level to the individual level, the use of a eulogizing narrative was a powerful way of maintaining a unified sense of victory and cohesion during a period of stress, which was conducive to quickly and effectively coping with the crisis.
Fig. 5. The second expedition ceremony of the Zhejiang emergency medical team fighting against Covid-19 (photo taken by Huang Zongzi on January 27, 2020). Data source: Hangzhou Daily.

Fig. 6. The medical rescue team of the First Hospital of Jilin University took the oath. Data source: Yanbian broadcasting and TV station.

However, we do not completely agree with the voice of the mainstream narrative and attention must be paid to other narratives that rejected and critiqued it, such as those that have suggested that protecting and supporting cross-regional supporters only by means of cultural input is insufficient, and that excessive praise is unfavourable. On the one hand, a voice of reflection came from a media sample of the macrosystem, namely that which the Xinhua News Agency released after the end of the cross-regional support task, which was titled “Pay tribute to healthcare workers, you should take action” (2020-4-7 20:20). It stated that "[w]e must take concrete measures to solve practical difficulties for them and effectively enhance their sense of gain.” The latter served as a reminder that the protection and support of healthcare supporters should not be formalistic and must meet their specific needs. On the other hand, a voice of rejection and criticism came from healthcare supporters themselves and certain scholars, such as case samples that constantly emphasized their ordinary identity in their diary entries and refused to be labelled as heroes. This can be seen in the narrative poems and comments of healthcare supporters from Gansu. Tencent Network, one of the three most influential Internet sites in China, published an article titled “The Poem of the Nurse of Wuhan Fangcang Hospital Makes Praise Shameful” (2020-2-20), which included a series of poems that expressed her refusal to be praised. Another poem that was shared across the Internet at an even higher frequency went as follows:

The media, journalists/please don’t bother me again/the so-called truth, data/I don’t have the time and mood to pay attention/tired for a day, a night/rest, sleep/need more than your praise […] The slogan is yours/praise is yours/propaganda, pacesetter, all yours/I’m just performing my duties […] There’s really nothing lofty.
This represents the voice that emphasizes individual needs, which is a weak voice in the mainstream narrative of collectivist morality. Some scholars qualify these poems as being examples of witness literature and criticize that the flood of narration of “telling tragedies into comedies with high octave rhetoric and telling disasters as opportunities” is “unworthy of praise of historical progressivism” [37]. Indeed, these voices are valuable supplements to the mainstream ideology. They imply that cultural investment cannot be the only capital to support the supporters, and call for other forms of investment, such as those pertaining to policy and economic measures. What’s more, they provide the possibility of constructive dialogue among various systems, which could be to the betterment of the operation of social ecosystems.

5. Conclusions

The story of China’s measures to counteract the pandemic is unique and reflects the country’s use of cultural input to support the public and its health care workers in the face of a public health crisis. By transmitting narratives of moral and relational significance, the party and government was able, at an administrative level, to develop a cultural model in the form of a mechanism of cultural mobilization and resilience that enabled it to protect the mental health of its healthcare workers. While these moral narratives refer to ancient China’s disasters and pandemics, they also represent part of the narrative style that the party and government has adopted to maintain its ideal of New China. This can stimulate and motivate supporters’ motivation and maintain their high-level and sustainable investment in healthcare work.

5.1. Cultural mobilisation: the mechanism of cultural resilience

Since the founding of the People’s Republic, the Communist Party of China has accumulated rich experience in mobilizing for war. The macrosystem of the Chinese government, the National Health Commission of the People’s Republic of China, and the media used a strategy of war mobilisation during the pandemic. For healthcare workers, this mainly involved: (a) organised mobilisation according to the administrative instructions from the Country Council to the National Health Commission of the People’s Republic of China, then to the provincial hospitals; and (b) cultural mobilisation, wherein the media were organised to draw on Chinese cultural heritage and exploit party and government cultural resources. Chinese healthcare workers grew up under the influence of three major cultural resources: heritage, party/government, and organisation. These shaped their values, gave their personal and professional lives significance, and became part of their cultural system of beliefs and practices. During the pandemic, the macrosystem used organisational and cultural mobilisation to activate a sense of Chinese cultural heritage and party and government cultural resources. Cross-regional supporters consciously used these to activate the cognition, emotion, and will of the cultural elements of the internal microsystem of motivation, action, and psychological resilience. A large number of relational narratives represented their timely and frequent interactions with external micro- and macrosystems. The motivation and protection provided by the macro-, meso-, and microsystems included organisational and administrative devices (such as condolences and recognition) and cultural methods (such as folk service, letters from home, and gratitude; Fig. 7).

Fig. 7. Chinese Cultural Factors of Social Ecology of Resilience in narration about cross-regional support of healthcare workers– Cultural Input Operation.
5.2. The cultural mainstream narration of moral significance in resilience stories of disasters and pandemics

De Medeiros defined cultural master narratives as “the stories (or story fragments) told by a culture to communicate the values, expectations and attitudes of that culture” [38]. “It is historically reproduced in that subsequent generations are socialised into using the intelligible practices of their communities” [39]. The individual and collective memory constructed by Chinese anti-pandemic narrative themes belongs to the cultural master narratives of resilience. More coherent plots characterise the stories of resilience in individual narratives [40]. The resilience story of cultural mainstream narratives is the inheritance of an “ideological setting” [41,42]. From a diachronic point of view, the mainstream narration of China’s disaster and pandemic culture is consistent with the role of the hero and bears the core narrative of moral significance. The specific content varies according to the time. Ancient stories emphasized the idea that supporters were loyal to the emperor, beneficent to victims, and brave in rescue. For example, during the 9th year of Shunzhi (1652), there was a great famine in Rugao, Jiangsu Province, followed by a great pandemic, and the victims died one after another. A central figure in the event was Maoxiang, who, disregarding his personal safety, insisted on taking servants to help in the disaster relief. In the mid-Qing Dynasty, Wu Beihai of Zhenjiang was eager to carry out good deeds for everyone by dispensing favours, supporting the masses, and contributing on an ongoing basis to the treatment of pestilence [43].

The narrative stretching from the prevention and treatment of schistosomiasis in the early days of the founding of the People’s Republic of China to the fight against SARS in 2003 and recently that against COVID-19 has inherited its moral sense of benevolence, righteousness, manners, wisdom, and credit from ancient roots steeped in Confucian culture. However, this narrative has replaced the ancient culture of loyalty and filial piety with an organisational culture of loyalty and obedience to party and country. Healthcare professionals provide patients with reasonable care and serve their interests, and this can only be possible if they serve selflessly [44]. Thus, China integrates professional ethical requirements with Chinese cultural values to inspire its healthcare workers to contribute to the cause.

In summary, based on this study’s examination of the narrative materials, it can be said that China’s portrayal of its experience in mobilizing, supporting, and protecting cross-regional healthcare workers is mainly a narrative construction that emphasizes the themes of collectivism, moral encouragement, and heroism. Our research results indicate that China has used a kind of cultural narrative construction method to foster psychological resilience within its social ecosystem. This was seen through the example of how the military metaphors and traditional elements shared by Chinese people were transmitted and condensed between systems as psychological resources. At first, the macrosystem used the cultural mobilisation of war metaphor to initiate the sense of urgency within the social ecosystem. Then, both during and after the support period, the mesosystem implemented the organizational culture of military obedience, as well as the etiquette culture of interaction with folk customs and empathy. Put differently, the macrosystem first summoned the moral culture of the country and promised the spiritual reward of heroism, which not only awakened the microsystem’s recognition of the cross-regional healthcare supporters, but also generated moral emotion and heroic will and behaviour within it, thereby leading it to obey the country and the collective. Yet, to achieve the latter, the moral discipline of the macrosystem and mesosystem must be consistently maintained.

CBD views culture as a “story of stories” and divides culture into two types, namely: past culture, which is termed cultural heritage (CH), and present norms and beliefs and their related goods and services, termed living culture (LC), both of which are parts of cultural capital [45]. In this case, the Chinese party and government cultural is LC, while Chinese cultural heritage is CH. From the perspective of the CBD paradigm, this kind of narrative resilience experience shows that stories and storytelling have become the operational forms and elements of using these two kinds of cultural capital in public emergencies. LC maintains the organizational order that obeys management and is loyal to occupation, while CH affects mental health and promotes adaptability, performance, and protection. As Wang Ping et al. have found through their comparison of Chinese and Western research, Confucian culture (CH) has the same effect of facilitating individual resilience that religious belief does in Western countries [46]. Thus, the government and health organizations have used flexible cultural resources and plentiful narratives to not only maintain the mental health of medical staff, but also to stimulate and maintain their working motivation. In this way, they have created a positive cultural and ecologic environment that has ensured a healthier outcome, while successfully making use of cultural capital as a powerful supplementary measure for dealing with the crisis.

6. Limitations and reflections

In this section, the authors reflect upon and acknowledge the limitations of their research methods and results, with a view to providing directions for future research.

6.1. Method and data

This study’s qualitative content analysis method consisted mostly of open-ended inquiries [30](p.281). For the purpose of finding cultural resilience readily, our top-down coding framework kept the “good” information, the value of omitting data need to find through the down-top method and grounding theory in future research.

This study classified the data according to national voice and personal voice. The medical staff who offered their support kept diaries for self-encouragement and reflection because they believed that “[t]elling our own stories can also empower us” [47]. Indeed, diary writing was shown to function as a form of resilience to supporters themselves, while also giving readers hope and strength. However, it must be noted that we collected the personal narrative sample from public WEB and publications, and that the earliest published works were conveniently used when sampling the group level materials. Consequently, there is a publication bias implicit to the data of this study, as it reflects a mainstream voice that is consistent with national ideology. In general, it can be seen that the
personal narrations are actually explicit representations of a social self that obeys political ecology. As such, the conclusions that were extrapolated require further verification.

6.2. Narrative constructed reality

We studied narrations about human experience because, as Carr put it, “the reality of human experience can be characterised as one which has a narrative or storytelling character” [48]. Since personal narration is fueled by public media and consistent with national ideology, it creates a “performance identity” [49], and the story told becomes the constructed truth. Thus, we could not assess the gap between the latter and reality. Nevertheless, our research presented this constructed truth by paying attention to the significance of how dominant cultural phenomenon were explicitly represented. The personal narration reflected the outcome of macrosystem value regulation. In order to explore certain implicit cultural factors and unregulated voices behind the realization of resilience and gain a clearer sense of the reality on-site, future research will need to conduct in-depth interviews, as well as empirical and critical narrative research.

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Declaration of competing interest

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Data availability

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