Volunteer community service providers during the COVID-19 crisis response in China: What are their personal needs and how to respond?

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Abstract
The needs of volunteer community service providers (VCSPs), who are the main responders to community crises, have received significantly less attention for the contributions they have been making during the COVID-19 crisis. A mixed-method research framework was used in this study, which involved semi-structured interviews with 13 NGOs and questionnaire responses from 430 VCSPs in Hubei, China to assess the VCSPs' personal needs based on Maslow's hierarchy of needs. It was found that the VCSPs had safety, love, belonging, self-esteem, and self-actualization personal needs, all of which were closely related to family, partners, organizations, society and the government. The discussions revealed that the more experienced VCSPs needed special attention and family support was extremely significant for VCSPs in crisis. Several recommendations to meet VCSPs' personal needs are proposed that could have valuable reference value for emergency managers when organizing and supporting VCSPs in contingencies.

KEYWORDS
COVID-19 crisis, personal needs, volunteer community service providers

1 | INTRODUCTION

Volunteer community service providers (VCSPs), who are mostly NGO staff and volunteers working in the public interest, also have personal needs, especially in extreme contingencies and crises. COVID-19 is a global human crisis that has brought enormous crisis response challenges to every community. Similar to front-line healthcare workers, during the COVID-19 crisis many VCSPs have been active in their communities providing personal and community services, in-kind donations, and emergency transport for affected residents, and have therefore played a significant role in the COVID-19 community crisis response (Hu & Sidel, 2020). However, unlike healthcare workers, much less attention has been paid to the infection risks of VCSPs. While research has lauded the VCSP's pandemic prevention activities, few studies have focused on their personal needs (Miao, Zeng, et al., 2021).

The COVID-19 crisis has provided a natural experimental scenario to understand VCSPs' personal needs in extreme circumstances. After the initial outbreak in Wuhan, the Chinese government declared a state of emergency, implemented lockdown measures and enforced compulsory face masks for healthy people outside their homes (Tian et al., 2020). Because of previous experience with the SARS outbreak in 2003, the COVID-19 outbreak made the Chinese public panicked and fearful (Yu & Li, 2020), with masks and ventilator supplies being rapidly depleted, and with most people afraid to go outside. It was in this extreme psychological pressure situation that the VCSPs had to conduct their pandemic prevention and control (PPC) activities, taking Hubei as the main battlefield.

Unlike natural hazards such as earthquakes and floods, the VCSPs and their immediate families were exposed to significant risk as the highly infectiousness. However, regardless of the physical and psychological pressures, the VCSPs’ enthusiasm ensured that...
community volunteering was maintained. The Information Office of the State Council of China reported that by the end of May 2020, 8.81 million registered volunteers had participated in the Chinese PPC activities, nearly one-eighth of whom were from Hubei.

In July 2020, the research team was invited to review the joint NGO PPC activities in Hubei, which provided a rare opportunity to understand the VCSP needs. In-depth interviews were conducted with VCSPs to understand the difficulties, challenges and psychological pressures they had been and were experiencing during their PPC activities. With reference to Maslow's hierarchy of needs and the interview results, a questionnaire was developed and conducted to assess the overall situation and determine the VCSPs' special needs. This study sought to answer two questions from a people-oriented and needs-based perspective, what were the VCSPs’ personal needs and how to respond, to provide a reference to improve community service sector responses to disasters and emergencies.

2 | LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This section reviews the literature on VCSP PPC activities to identify the gaps in current knowledge and more accurately define the research object. Besides, seeking answers to the two ‘what’ and ‘how’ research questions, studies on the VCSPs' personal needs and management were reviewed to build the theoretical research framework.

2.1 | VCSP PPC activities

During the COVID-19 crisis, the VCSP emergency volunteer services provided material assistance and emotional social support (O’Leary & Tsui, 2020), which specifically included PPC activities such as materials collection, distribution and transportation, and community services such as purchasing, sterilization and psychological consultations (Cheng et al., 2020). COVID-19 research has found that the pandemic adversely affected the physical and mental health of the general population, medical staff and emergency responders (Chen & Chen, 2020; Huang & Zhao, 2020; Kaufman et al., 2020; Lau et al., 2020; Thombs et al., 2020). However, few studies have focused on the well-being of the VCSPs involved in PPC activities when helping vulnerable groups and providing support to the medical and public health services (Walter-McCabe, 2020). As the VCSPs were at a greater risk of exposure to COVID-19, it was expected that they would have experienced greater fear, worry and psychological stress than usual (Al Gharaibeh, 2020). Therefore, to better understand these VCSP stresses when conducting their PPC activities, it was necessary to examine this group's health and well-being needs.

Most active NGOs involved in Hubei’s PPC activities were either civil NGOs (CNGOs) initiated by private citizens, such as volunteer associations, mutual aid and other grassroots voluntary organizations (A. Yang & Cheong, 2019), or government-organized NGOs (GONGOs), such as the Hubei Red Cross Society, which was widely criticized for its poor PPC performances (Hu & Sidel, 2020). The major focus of this study was the CNGO VCSPs, most of whom were grassroots volunteers that had other professional occupations.

2.2 | VCSP personal needs

National culture shapes the responses to a disaster (Cao et al., 2020). Most economically developed Western Europe and North American countries (such as the United States, the United Kingdom and Canada) tend to prioritize individual needs (Cao et al., 2020; Hofstede, 2001; Miller et al., 1990). However, East Asian and Eastern European countries, such as China, South Korea and Belarus, tend to emphasize social responsibility and cohesion, respect for authority and a collective orientation (Grossmann & Varnum, 2015; Hofstede, 2001). The Chinese media often herald heroic behavior in those who save other people before saving their own families regardless of their own safety as this behavior is seen as a manifestation of profound righteousness. Therefore, as this lauded collectivist spirit in China made it difficult for VCSPs to speak about their own needs, the VCSPs' needs were researched within the Chinese cultural context.

Maslow’s theory (Maslow, 1943), which identifies five basic human needs; physiological, safety, love and belonging, esteem and self-actualization; has been widely used to assess professional well-being for its concerns on the needs of residents not just as professionals but as human beings (Hale et al., 2019). Therefore, to explore the VCSPs' needs in the emergency community volunteer service, it was believed that the humanism inherent in Maslow’s theory could be adapted if some adjustments were made based on the research background and the PPC situation.

Research indicates that the hierarchy of needs based on a collectivist culture is different from Maslow's original model (Gambrerl & Cianci, 2003). For example, Nevis (1983) claimed that in cultures such as China, esteem is eliminated and self-actualization is realized by meeting social development needs. Nevertheless, it’s noteworthy that economic development tends to encourage individualism (Hofstede, 1980). China remains a relatively collectivist society; however, in practice, the Chinese increasingly associate individualistic factors with their well-being (Steele & Lynch, 2013). Therefore, individual esteem and self-actualization needs should not be ignored. Based on the PPC situation in China, Maslow's five needs were adapted as follows.

2.2.1 | Physiological needs

Isolation and lockdown measures led to a national focus on basic needs. As PPC actors, while basic living conditions were limited and somewhat weakened due to the emergency services, they were basically met; therefore, physiological needs were not the focus of this study.
2.2.2 | Safety needs

During COVID-19, the VCSPs were regularly exposed to risk and were therefore unable to guarantee their own or their family’s safety (Wong et al., 2020). Accordingly, based on these basic security needs, the VCSPs’ safety needs analysis involved the needs associated with both personal and family safety.

2.2.3 | Love and belonging

Living environment changes during COVID-19 significantly challenged people’s need for love and belonging. Family support was found to be a key resource for VCSPs in dealing with the crisis (Huynh et al., 2013) and while they had a duty and desire to serve others, they also needed social interactions with other VCSPs (Wu et al., 2019).

2.2.4 | Esteem

The positive effect on the VCSPs’ self-esteem and well-being from incentives and recognition has been proven (Wu et al., 2019), and government recognition is also important in China’s big government, small society institutional environment (Lu & Li, 2020).

2.2.5 | Self-actualization

When VCSPs engage in their professional occupations and provide community service, they could be said to be realizing their potential (Dewi et al., 2019). However, to improve their self-actualization needs, the VCSPs needed to improve their competencies to better perform their PPC activities (Blomquist et al., 2018).

2.3 | VCSP management

Responses to VCSPs’ personal needs should be shaped by management practices, which play a significant role in meeting volunteer expectations and promoting volunteer satisfaction (Cho et al., 2020; Maas et al., 2021). Volunteer management literature was comprehensively reviewed, from which it was found that both researchers and practitioners had developed valuable guides on the coordination, organization and management of volunteers (Dunn et al., 2020). Brudney and Meijs (2009) emphasized that organizational work, volunteer accomplishment and the development of volunteer competencies were vital for effective volunteer management, and other studies have emphasized that internal support and training, motivation and recognition, impact assessments, and the interaction and coordination of external relationships were important management approaches (Brudney & Meijs, 2014; Cho et al., 2020; Ellis & Jackson, 2010; Hager & Brudney, 2008). Notably, the volunteers’ expectations of management have been found to be quite different from those of the organizational managers. Volunteers have been found to place priority on relational organizational attributes, such as good interactions and rewards and recognition, rather than transactional management obligations such as planning and evaluation (Dunn et al., 2020). Therefore, greater research on volunteer management is needed from a volunteer-centric perspective to align the VCSPs’ personal needs with management practices through the internal management of the organization and the coordination of external relations (Brudney et al., 2019; Studer & Schnurbein, 2013).

Many studies have concluded that different volunteering styles require different management strategies (Maas et al., 2021). Volunteering management practices in crises, which is always risky, emergent, spontaneous and episodic (Schmidt, 2019; Trautwein et al., 2020), require particular attention. Due to its spontaneous and episodic nature, to some extent, the management characteristics in episodic volunteering are applicable, which is considered to be occasional or temporary, and volunteer service providers have no commitment or expectation to return or continue (Cnaan & Handy, 2005; Cnaan et al., 2022). While consensus has yet to be reached, it has been confirmed that the successful management of episodic volunteers in crisis and emergencies should include role recognition, personal motivation (Cnaan et al., 2017; Dunn et al., 2020), safety support and professional training (Trautwein et al., 2020).

Overall, taking a volunteer-centric perspective could improve the understanding of the VCSPs’ personal needs at work and provide practical insights for VCSP management practice in crisis (Z. Yang, 2021). Informed by the literature review, a theoretical research framework was developed (Figure 1) to explore the personal needs of Chinese VCSPs based on Maslow’s theory, and respond to their needs through the internal organizational management and the coordination of external relations from the people-oriented and needs-based perspective.

3 | METHODOLOGY

3.1 | Design

This study was conducted in cooperation with the Xiaogan Volunteer Federation, which was the coordination center for the Hubei NGO Disaster Relief Network. Immediately after Wuhan’s lockdown on 23 January 2020, the Xiaogan Volunteer Federation launched 90 CNGOs in 17 cities in Hubei Province to enable joint PPC activities, almost all of which were members of the Hubei NGO Disaster Relief Network. At significant risk to themselves, the VCSPs in these NGOs were given donated emergency medical and livelihood materials to distribute to hospitals and communities in Hubei Province, which significantly contributed to the success in controlling the pandemic. As the main Hubei NGO Disaster Relief Network, after joint PPC activities were completed in April 2020, the Xiaogan Volunteer Federation invited the research team to review its process in July.
2020, through which the research team deeply appreciated the specific personal needs of the VCSPs and the reality of the NGOs' responses to these personal needs. Thus, data were collected and analyzed with a focus on identifying the VCSPs' personal needs and the responses to those needs.

Because of the breadth and depth of understanding and corroboration associated with mixed-methods research, it has been proven to improve research reliability and validity (Johnson et al., 2007). Therefore, a mixed-methods approach was adopted for this exploratory study. In reference to Sieber's (1973) explanation of how mixed methods can be effective in the research design, data collection and data analysis phases, this study's design is shown in Figure 2. Maslow's theory was the basis for the qualitative research design, which involved the development of an interview outline, from which the case results were to be derived. Based on the qualitative research results, quantitative research was then conducted to more generally explore the personal VCSPs' needs rather than limited to known knowledge, and determine the correlations between the VCSPs' needs and their basic characteristics. Finally, the case analyses from the qualitative results were used to explain and support the quantitative results.

### 3.2 Procedure

The qualitative data were collected in interviews conducted by the research team members, which comprised one senior researcher who had been engaged with an emergency volunteer service for more
than 10 years and eight junior researchers, all of whom arrived in Hubei on 7 July 2020 to conduct the research. The eight junior researchers were divided into four pairs to conduct the interviews and the senior researcher randomly participated in each pair as needed. Each interview lasted about 2–3 h, and all sessions were recorded and transcribed. To improve the interview quality, the contents were compared and discussed after each day’s sessions.

Quantitative data were collected by questionnaire. Based on the interview results, the questionnaire used a combination of closed and open-ended questions. To ensure questionnaire rationality, the first draft was submitted to the Xiaogan Volunteer Federation to assess the appropriateness of the questions, the language clarity and the suitability of the completion time. Content validation was assessed by a group of eight crisis management experts comprising three practice experts from NGOs and five academic experts. All 14 items were judged to have an item-level content validity index (I-CVI) of more than 0.83, a scale-level content validity index based on the average method (S-CVI/Ave) of 0.86 and a universal agreement (S-CVI/UA) of 0.98 (details in Appendix A). Hence, the questionnaire content was found to be aligned with the research objectives. The adjusted questionnaire was then randomly distributed to VCSPs through the open-source, free data management platform, LINGXI, which is a contact management tool focused on serving NGOs. Data collection was conducted from 17 July 2020 to 5 August 2020.

3.3 Participants

Thirty-three people from 13 NGOs were selected to participate in the interviews using stratified sampling (Table 1). Based on discussions with the Xiaogan Volunteer Federation, NGO selection was focused on two dimensions: a regional dimension in regions that had relatively severe pandemic situations, such as the NGOs in Xiaogan, Wuhan and Huanggang; and a relationship dimension, for which objects were selected that were closely related to the network partner organizations, such as N2 and N5. The selection of NGO staff was mainly based on familiarity with the organization’s participation in the PPC

| Region     | NGO | Date             | Participants (position) |
|------------|-----|------------------|-------------------------|
| Xiaogan    | N1  | 2020/7/8-PM      | N1-1 (President)        |
|            |     |                  | N1-3 (Program officer)  |
|            |     |                  | N1-4 (Publicity officer)|
|            |     | 2020/7/12-PM     | N1-5 (Volunteer)        |
|            |     |                  | N1-6 (Volunteer)        |
|            |     |                  | N1-7 (Volunteer)        |
|            |     |                  | N1-8 (Volunteer)        |
|            | N9  | 2020/7/13-AM     | N9-1 (President)        |
|            | N10 | 2020/7/13-PM     | N10-1 (President)       |
|            | N11 | 2020/7/14-AM     | N11-1 (President)       |
|            |     |                  | N11-2 (Vice president)  |
|            |     |                  | N11-3 (Secretary general)|
|            | N12 | 2020/7/14-PM     | N12-1 (President)       |
|            |     |                  | N12-2 (Volunteer)       |
|            |     |                  | N12-3 (Volunteer)       |
| Wuhan      | N13 | 2020/7/15-PM     | N13-1 (President)       |
| Huanggang  | N8  | 2020/7/12-AM     | N8-1 (Legal person)     |
| Jingzhou   | N2  | 2020/7/9-AM      | N2-1 (President)        |
|            |     | 2020/7/15-AM     | N2-2 (Secretary general)|
| Xianning   | N3  | 2020/7/9-PM      | N3-1 (President)        |
|            |     |                  | N3-2 (Logistics Officer)|
|            |     |                  | N3-3 (Personnel Officer)|
| Suizhou    | N4  | 2020/7/10-AM     | N4-1 (Vice president)   |
|            |     |                  | N4-2 (Secretary general)|
|            |     |                  | N4-3 (Director)         |
| Jingmen    | N5  | 2020/7/10-PM     | N5-1 (Secretary general)|
| Qianjiang  | N6  | 2020/7/11-AM     | N6-1 (President)        |
| Xiangyang  | N7  | 2020/7/11-PM     | N7-1 (Personnel Officer)|
|            |     |                  | N7-2 (Volunteer)        |
|            |     |                  | N7-3 (Volunteer)        |
| Total participants |     |                  | 33                      |
activities; therefore, most interview participants were from the organization's leadership. Although some participants were from the senior leadership, they were also VCSPs who had been participating in the front-line activities.

While it was recognized that there could have been an ‘elitist bias’ because of the focus on senior personnel, it was thought that the quantitative data from the questionnaire would obviate this issue (Johnson et al., 2007). A total of 430 questionnaires were collected, 428 of which were valid. The background survey participant characteristics are shown in Table 2. There was a balanced gender response, most respondents had relatively low education levels, with two-fifths having only high school education, and around three-quarters were unpaid middle-aged volunteers who had been involved in front-line PPC activities.

3.4 | Analysis

Both closed and open coding was used to analyze the transcribed interviews. Closed coding was used to measure the demographic factors, such as the positions and the participation in front-line PPC activities, and open coding was used to explore the common themes for the four needs. The coding process was negotiated by the authors to identify the main coding phrases. When at least three NGOs (23% of the sample) expressed a similar view on a theme, it was considered a finding. Two experienced community service professionals were also consulted to review all records and assess the credibility of the findings. The quantitative results were subjected to correlation analyses and statistical tests, and the qualitative responses to the open questions were subjected to the same thematic analysis as the interviews.

4 | RESULTS

The results in this section are divided into the four focused themes of safety needs, love and belonging, esteem and self-actualization, which the interview and questionnaire data mutually complemented.

4.1 | Safety needs

The questionnaire responses identified the difficulties and needs of the VCSPs (Table 3) and revealed that the VCSP safety protection needs had been difficult to meet. Nearly one-third (32.2%) of respondents had felt a lack of security, and 10.6% said they had needed protection. When asked whether they had been worried about themselves or their family members (Table 4), less than half (very worried = 13.8% and a little worried = 30.1%) were worried about being infected, whereas more than three-quarters (very worried = 40.0% and a little worried = 37.9%) were concerned about their family members. The paired sample t-test found that the VCSPs were more worried about the safety of their families than their own safety. As one VCSP interviewee said:

I ran to the hospital and community more and more frequently, I was anxious about bringing the virus into the family, so I left home and even lived in a material storage warehouse for a period of time (N9-1).

The VCSPs’ safety support during their PPC activities was the responsibility of the NGOs. However, the materials donated to the NGOs were given to specific recipients such as hospitals and communities and didn’t include the VCSPs. Therefore, four NGO officers (31% of the interviewed NGOs) admitted that under moral and public opinion pressure to prevent volunteer infections, they were under significant pressure to strictly control the volunteer screening process, which resulted in a volunteer shortage. When asked about the volunteer protection measures, an NGO leader said:

| TABLE 2 VCSP participant population characteristics |
|-----------------------------------------------|
| Variables                        | N  | %  |
|---------------------------------|----|----|
| Total n                         | 428| 100|
| Gender                          |    |    |
| Male                            | 210| 49.1|
| Female                          | 218| 50.9|
| Age (in years)                  |    |    |
| <20                             | 8  | 1.9|
| 21–30                           | 40 | 9.3|
| 31–40                           | 122| 28.5|
| 41–50                           | 193| 45.1|
| 51–60                           | 52 | 12.1|
| >60                             | 13 | 3.0|
| Education levels                |    |    |
| Junior middle school            | 77 | 18 |
| High school                     | 172| 40.2|
| Higher vocational college       | 109| 25.5|
| Undergraduate                   | 68 | 15.9|
| Master                          | 1  | 0.2|
| Doctor                          | 1  | 0.2|
| Identity in the NGO             |    |    |
| Part-time worker                | 55 | 12.9|
| Full-time worker                | 55 | 12.9|
| Volunteer                       | 318| 74.3|
| PPC activities                  |    |    |
| Rear coordination               | 86 | 20.1|
| Front-line action               | 212| 49.5|
| Both                            | 130| 30.4|

Abbreviations: PPC, pandemic prevention and control; VCSP, volunteer community service providers.

Source: authors.
When the pandemic was urgent, we didn’t have protective materials for all volunteers. …… Our volunteer selection was also very strict, because if one of my volunteers were infected, the work of the whole organization would be wasted, which also led to the shortage of volunteers to receive and distribute the materials. (N6-1)

However, the volunteers led by the directors had less work pressure. When asked about the PPC activity work pressure, one volunteer said:

I cherished every task I carried out, and every volunteer activity was well arranged by the leaders so that I hardly encountered any difficulties. The only thing I needed to think about was how to do the work ordered by the leaders. (N12-2)

The VCSPs who had greater responsibilities and more important roles had greater pressure. The correlation analysis (Table 5) revealed that the fear of contracting COVID-19 when conducting PPC activities had a significant positive correlation with the number of years the person had been engaged in community volunteering activities (Kendall’s tau-b = 0.124, p = .002) rather than age.

### 4.2 | Love and belonging

As shown in Table 3, 8% and 7.1% of the questionnaire respondents reported difficulties regarding a lack of partner communication and family support. Lockdowns made it difficult for some VCSPs to interact with their partners, which made them feel they were isolated and had a lack of belonging. One NGO leader saw this feeling as the most painful part of their PPC activities:

I felt that the most difficult thing was that I was alone. My former partners were trapped in their homes or communities due to the lockdown policy. I had to find another volunteer team to carry out activities, which meant that there were differences of opinions on various issues and it was difficult to reach a consensus. I often quarreled about the material with my collaborator. (N13-1)
One volunteer said:

"feel that their individual efforts had been paid adequate attention. in the thank
expressed dissatisfaction, saying that because of the similar content
them. Despite this, some VCSPs (n=4, 31% of the interviewed NGOs) were expecting encouragement and spiritual
‐interviewed NGOs) were expecting encouragement and spiritual
4.5%) was mentioned in Table 3. A lack of sufficient incentives (1.9%) and expectations for greater

**TABLE 5** Kendall’s tau-b correlation coefficient analysis (n=428)

| Individual characteristics | Fear of COVID-19 when conducting PPC activities | Willingness to participate again in PPC activities |
|----------------------------|-----------------------------------------------|-----------------------------------------------|
|                            | Tau-b Coef. | p value | Tau-b Coef. | p value |
| Age                       | -0.029      | 0.498   | 0.004       | 0.920   |
| Number of years engaged in volunteering | 0.124** | 0.002 | 0.026       | 0.533   |
| Family support            | -0.198***  | 0.000   | 0.170***    | 0.000   |
| Partner communication frequency | -0.069   | 0.109 | 0.137**     | 0.003   |

Abbreviation: PPC, pandemic prevention and control.

*p < .05; **p < .01; ***p < .001.

The questionnaire result correlation analyses (Table 5) found that communication frequency between VCSPs had a significant positive correlation with a willingness to participate again in PPC activities (Kendall’s tau-b = 0.137, p = .003). The communication frequency was measured based on the VCSPs’ self-perceptions, that is, if they perceived greater partner interaction, which met their need for love and belonging to some extent, they were more willing to participate in the second-round PPC actions. An extremely significant correlation was found between family support, the fear of the COVID-19 when conducting the PPC activities (Kendall’s tau-b = -0.198, p = .000), and the willingness to participate again in PPC activities (Kendall’s tau-b = 0.170, p = .000). Therefore, it appeared that family support could allay fears and gave the VCSPs the motivation to participate in PPC activities even when the second pandemic wave emerged.

### 4.3 Esteem

A lack of sufficient incentives (1.9%) and expectations for greater spiritual and material incentives (4.5%) was mentioned in Table 3. Although the proportion was relatively low, it was highlighted in the interviews. It was found that most VCSPs (n=9, 69% of the interviewed NGOs) were expecting encouragement and spiritual comfort. All VCSPs who participated received thank-you letters, which made them feel very proud that their volunteering had been recognized, with many sharing these letters with the people around them. Despite this, some VCSPs (n=4, 31% of the interviewed NGOs) expressed dissatisfaction, saying that because of the similar content in the thank-you letters and the single incentive forms, they did not feel that their individual efforts had been paid adequate attention. One volunteer said:

We felt that the content was the same, there was no innovation and no differences. The content of the letters received by the people who served for half a day and for a month were the same, so we inevitably have a little imbalance in our hearts. (N1-8)

A large percentage of participants claimed that the recognition and support from the external environment was their greatest difficulty. As reported in Table 3, nearly one-quarter of participants felt that there was poor government support, and around one-fifth found the public’s incomprehension of their work the most troubling. The interviews also reflected that the social incomprehension and the government’s neutral attitude caused psychological difficulties for some VCSPs.

A majority of respondents (n=9, 69% of the interviewed NGOs) claimed that some social misunderstandings affected them both psychologically and physically; for example, ‘people around us looked at us with different eyes and a mentality of incomprehensibility’ (N7-3), and ‘there were some people who didn’t consider our requirements and abilities, they complained that we couldn’t solve all their difficulties in life!’ (N1-5). Six NGOs (46% of the interviewed NGOs) also reported that the government’s attitude towards the CNGOs was very vague, which meant that the VCSPs were not supported. An NGO officer stated:

During the whole PPC process, we were not understood by the corresponding government departments, that is, the government didn’t fully recognize the CNGOs’ response. As long as there were no big mistakes, the government gave no pressure, no intervention, and also no help. (N11-3)

### 4.4 Self‐actualization

Around one in 10 respondents professed to a lack of professionalism and claimed that this was the most significant challenge when conducting their PPC activities (Table 3), with some making comments such as: ‘I’m in a mess in an emergency;' and ‘I don’t have enough professional skills’. Nearly a quarter of respondents expressed the need for professional training to realize their self-worth, claiming that ‘relevant units needed to provide more professional knowledge support and guidance’, and (I needed to) ‘learn more and
communicate more to develop and improve myself’. Nearly one-fifth expressed a need to be provided with additional partner communication opportunities to exchange experiences ‘with excellent VCSPs’, which also expressed a self-actualization need. Although the lack of professionalism was not the biggest challenge, professional training to self-actualization was considerable for VCSPs to tackle crisis.

This finding was also confirmed from the interviews, with about half the NGOs (n = 7, 54% of the interviewed NGOs) claiming that they still lacked sufficient professional knowledge and skills about the PPC measures. When asked what help was needed from the NGOs, a volunteer said:

I think what I need most is more anti-pandemic knowledge learning and more professional social service training. In this way, I would have more knowledge reserves and be able to better provide the needed community welfare services. After that, I might be able to get a professional social work certificate. (N12-3)

An NGO president made comments about professional development from a different angle:

At present, CNGOs have not always established a talent recruitment mechanism because of insufficient funds and professional support. The low social recognition of the VCSPs and the lack of space for career growth make it difficult for them to realize the benefits of their service, which is also one of the reasons why social organizations don't have talents to use or retain. (N2-1)

5 | DISCUSSION

5.1 | ‘People’ in people-oriented: VCSPs, especially the more experienced VCSPs

Even though a ‘people-oriented’ focus is often highlighted in community and voluntary services (Finkelstein & Brannick, 2007), greater attention is paid to the community service recipients than the community service providers. As service providers, the VCSPs also have individual and mental health needs. Work experience was found to affect VCSP work pressure and the degree of COVID-19 fear; however, age was not found to correlate with COVID-19. For example, compared with the lay VCSPs, the institutional managers with greater experience were under greater pressure, and the VCSPs who had been involved in community service volunteering activities for a longer time were found to be more afraid of COVID-19. This result was inconsistent with other emergency responders as Wong et al. (2020) and Young and Pakenham (2021) found that age was related to stress and pain, and there were no significant differences between the stress levels of medical staff and work experience.

There may have been several reasons for these VCSP results. First, the VCSPs who had been engaged longer in community service volunteering activities had possibly been involved in a greater number of disasters and therefore had a clearer perception of the possible dangers, which may have led to a deeper fear of the uncertainties associated with COVID-19. Second, the more experienced VCSPs tended to be given more important roles and were therefore under greater pressure. Third, the suddenness and uncertainty of COVID-19 meant that there were no previous reference points for the PPC activities. Consequently, the more experienced VCSPs had to take responsibility and set good examples, and even though they faced greater personal risks, the less experienced VCSPs had less work pressure because they were more likely to be assigned less arduous tasks and were not involved in the decision-making. When the more experienced VCSPs were required to take key roles to ensure swift deployment or redeployment to cope with the emerging crisis (Miao, Schwarz, et al., 2021), they faced greater work pressures and fear; therefore, special mental health attention was needed.

5.2 | Personal needs for altruistic service: Safety, love and belonging, esteem and self-actualization

Altruistic needs reflecting a noble value and the egoistic needs based on self-interest always overlap in real life (Olsen et al., 2020). In the community service sector, supply and contribution have been unilaterally emphasized. It was found that the VCSPs had the same safety and love needs as ordinary people and esteem and self-actualization needs as volunteer VCSPs. As unsung heroes, the VCSPs’ esteem and self-actualization needs were greater as the public was mostly unaware of their community service activities, whereas health care workers were being provided with these two needs because they were in the spotlight and hailed as heroes. The importance of these needs was found to vary over the pandemic period. In the beginning, safety needs were most prominent, but after the pandemic, as safety had already been guaranteed, the need for esteem and self-actualization was emphasized, which meant that higher-level needs became more important.

The correlation analysis findings suggested that family support and partner communication symbolizing love and belonging, were both related to reparticipation intentions toward future PPC activities. Similar to previous research (Cho et al., 2020; Huynh et al., 2013), a positive relationship was found between social support, social interaction and the volunteers’ willingness to continue volunteering. The latest research has found that the relationship between social support networks, such as family support and partner communication, and the fear of COVID-19 was negative (Suhail et al., 2021), which was different from the results in this study, which found that the correlation between family support and fear was extremely significant. These different findings may have been because of the different study objects, unlike ordinary people, family love was found to give the VCSPs confidence and motivation and
played an important role in relieving their negative emotions. Other research on the well-being of volunteers found that social support, self-esteem, rewards and skills training were all closely related to well-being (Brown et al., 2012; Wu et al., 2019). Therefore, the exact answer to the question ‘what are their needs’ is safety, love and belonging, esteem and self-actualization.

5.3 | Suggestions on responding to VCSPs’ personal needs in crises

To contribute to VCSP crisis management, this section gives some suggestions on the methods NGOs can employ to better respond to VCSPs’ personal needs.

5.4 | Internal organizational management

To respond to the VCSPs’ safety, esteem and self-actualization needs in crises and balance the organization’s management requirements (Dunn et al., 2020; Studer & Schnurbein, 2013), NGOs need to focus on providing greater safety support, motivation and professional development.

Safety support. NGOs need to meet the VCSPs’ safety support expectations associated with the crisis risks. If there are insufficient voluntary service funds, special funding should be allocated from social donations or direct donations to protect the rights and interests of the VCSPs. It is also important to continually monitor and provide stress management and psychological support (Kwag et al., 2019).

Motivation. NGOs and the government need to provide personally incentive measures for VCSPs. To satisfy the VCSPs’ value and self-efficacy motives to participate in crisis response, stereotypical, identical thank-you letters or volunteer certificates need to be replaced by differentiated incentives that actually reflect the VCSPs’ individual contributions (Trautwein et al., 2020).

Professional development. NGOs need to prepare special emergency plans that include standard emergency knowledge training and drill plans for all crises, including infectious disease prevention and control. Certification is a good way to provide VCSPs with self-actualization (Blomquist et al., 2018); therefore, NGOs need to offer skills training and encourage the VCSPs to participate in professional-level national social worker examinations.

5.5 | Coordination of external relations

Aside from the internal management, NGOs also need to coordinate their external relations to specifically respond to belonging and esteem needs.

Many VCSPs expressed a lack of a sense of belonging when conducting their PPC activities, which may have been because of the unavoidable lockdown restrictions. Nonetheless, to ensure better cooperation and high-quality social networks during emergencies, NGOs could establish VCSP partnership networks to provide the volunteers with opportunities to exchange experiences and strengthen their cooperation. As the supervisory attitude of the government was found to place mental health pressure on the VCSPs, supervising NGOs need to promote better cooperation and collaboration to ensure the collection, disclosure, and sharing of supply and demand information during the crisis response period, especially in authoritarian countries.

6 | CONCLUSIONS

This study found that the VCSPs working in crises had safety, love and belonging, self-esteem, and self-actualization needs, and that more experienced VCSPs tended to be under greater safety needs pressure. Practical recommendations focused on these needs were proposed to ensure satisfactory volunteer experiences during crises. The findings from this study have practical implications for crisis management. As individualist factors in collectivist countries have become more important (Steele & Lynch, 2013), ensuring that the VCSPs’ needs during crisis emergency responses are addressed is vital to the sustainable development of the volunteer community service sector in all countries. Therefore, the results of this study can assist state agencies and NGOs attract potential VCSPs and effectively manage them during crises.

It should be noted that there were several limitations to this study. Due to the urgency of the COVID-19 situation and the hasty design of the questionnaire, the specific satisfaction of the four subfactors in Maslow’s theory was not measured and maturity scales were not used to quantify or evaluate the VCSP stress index, anxiety levels, or pandemic fear. Despite these omissions, some variable correlations were found using Kendall’s correlation coefficient analysis. Therefore, combined with appropriate scales, future research could measure the actual psychological state and specific needs satisfaction in emergency crisis responses to further explore their influences, which could be helpful to volunteer crisis management.

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CONFLICT OF INTEREST

The author declares no conflict of interest.
DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available from the corresponding author upon reasonable request.

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## APPENDIX A

Relevance ratings on the item scale by eight experts

| Items | Experts | Experts in agreement | I-CVI | UA |
|-------|---------|----------------------|-------|----|
|       | A       | B                    | C     | D  | E | F | G | |
| Q1    | 1 1 1 0 | 1 1 1 1 1 1          | 7     | 0.88 | 0 |
| Q2    | 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q3    | 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q4    | 1 1 1 1 1 1 1 0 1 1 1 | 7     | 0.88 | 0 |
| Q5    | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q6    | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q7    | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q8    | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q9    | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q10   | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q11   | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q12   | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q13   | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Q14   | 1 1 1 1 1 1 1 1 1 1 1 | 8     | 1.00 | 1 |
| Proportion | 1 1 1 0.93 | 1 1 0.93 | 1 S-CVI/Ave | 0.98 |
| Average item proportion | 0.98 S-CVI/UA | 0.86 |