

BMJ Open Role of social capital in response to and recovery from the first wave of COVID-19 in Thailand: a qualitative study

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To cite: Samutachak B, Ford K, Tangcharoensathien V, *et al.* Role of social capital in response to and recovery from the first wave of COVID-19 in Thailand: a qualitative study. *BMJ Open* 2023;**13**:e061647. doi:10.1136/bmjopen-2022-061647

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2022-061647>).

Received 07 February 2022
Accepted 05 January 2023



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ABSTRACT

Objective This study assesses the role of social capital among people and communities in response to the first wave of the pandemic in 2020.

Design Qualitative study using focus group discussions.

Setting Capital city (Bangkok) and the four regions (north, northeast, south and central) of Thailand.

Participants 161 participants of 19 focus groups with diverse backgrounds in terms of gender, profession, education and geography (urban/rural; regions). They are selected for different levels of impact from the pandemic.

Findings The solidarity among the Thai people was a key contributing factor to societal resilience during the pandemic. Findings illustrate how three levels of social capital structure—family, community and local networks—mobilised resources from internal and external social networks to support people affected by the pandemic. The results also highlight different types of resources mobilised from the three levels of social capital, factors that affect resilience, collective action to combat the negative impacts of the pandemic, and the roles of social media and gender.

Conclusion Social capital plays significant roles in the resilience of individuals, households and communities to respond to and recover from the impacts of the pandemic. In many instances, social capital is a faster and more efficient response than other kinds of formal support. Social capital can be enhanced by interactions and exchanges in the communities. While face-to-face social contacts are challenged by the need for social distancing and travel restrictions, social media steps in as alternative socialisation to enhance social capital.

INTRODUCTION

Recorded as the first country to report COVID-19 infection outside China, Thailand had the least time to prepare for this new disease. Even so, Thailand did not experience two-digit daily cases until mid-March 2020, and three-digit cases until late March 2020. The country started to see a downward slope of daily new cases at the beginning of April 2020, when the curve flattened with mostly a one-digit count of new cases. There was

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The face-to-face interviews applied in this study, with strict COVID-19 prevention measures by interviewers and key informants, allow in-depth reflection and ‘hands-on’ experiences by the affected individuals.
- ⇒ Despite the ongoing pandemic, a large number of participants (161) represent views and experiences from five geographical regions with different socio-economic and epidemiological contexts.
- ⇒ The impact assessment tool using subjective and self-report may introduce either positive or negative biases.
- ⇒ Findings from this study, conducted shortly after the first wave, may not be applicable to the third wave with a serious surge of cases and deaths in the third quarter of 2022, which required significantly greater support from outside the communities.

no local transmission after 25 May 2020. All subsequent infections were diagnosed from inbound international travellers.¹

The WHO commended Thailand’s successful responses to the COVID-19 due to strong leadership, scientific evidence-led decision-making, an efficient health system, cultural norms and a ‘whole-of-society’ approach.² This paper investigates the role of social capital (SC) in contributing to the efficient responses and supporting community resilience during the first wave of the COVID-19 in 2020.

Social capital

SC is the societal connectedness and capacity to mobilise resources from different levels of the society. It was commonly used to analyse the ability of people to recover from disasters.³ LJ Hanifan,⁴ the founder of SC concept, described it as goodwill, fellowship, mutual sympathy, and social intercourse among groups of individuals and families who make

up a societal unit. The concept also encapsulates social organisations that enable members of the society to assist each other, thus strengthening the civic community and reducing the passive reliance on the state.⁵

Not only structural connectedness, SC also means the quality and cohesion of relationships among the members.⁶ It is characterised by the degree to which individuals have access to the community's resources to aid their resilience gaps.⁷ SC comprises three distinct dimensions, that is, structural, relational and cognitive.⁸

Structural SC represents the overall patterns of connections between actors in terms of who and how they reach others. *Relational SC* reflects the strength of the bonds among the members, determining how well the resources can be mobilised and shared. *Cognitive SC* refers to shared values, visions and ideologies among members of the community that facilitate the exchange of resources among them.

In addition, SC can be viewed in three forms.⁹ *Bonding SC* is connection among individuals who are emotionally close such as family members and friends.^{10,11} *Bridging SC* refers to the relationships between members or groups and non-members or groups.¹² *Linking SC* refers to the relationships between members in the community and formal institutions outside the community.

SC and resilience

SC is the most commonly used to explain and predict individual resilience.^{13,14} Resilience is defined as a person's capacity to recover from, adapt to, and/or remain strong in the face of adversity.¹⁵ Resilience occurs in groups of people who possess comparatively high SC.¹⁶ Resilience is explained by three attributes; first, resistance explains how one absorbs the threat; second, recovery means the time it takes to bounce back to normal conditions; and third, creativity is the ability to maintain a constant process of creating and recreating, to respond to threats, but also reach a higher level of functioning.¹⁷

SC concept has been widely applied to investigate resilience in various settings. A series of investigations by Aldrich^{18–20} on post-disaster recovery in various events, such as the Kobe earthquake (1995), Tamil Nadu (2004) and Chilean earthquake (2010), underscore the importance of SC in a speedy recovery. These studies call for a reorientation of disaster recovery programmes at all levels away from the standard focused on physical infrastructure towards strengthening social infrastructure.

A qualitative study on the Hurricane Katrina that attacked the city of New Orleans revealed the role of Mary Queen of Vietnam Catholic Church in addressing the needs of its community and providing shelter, food, school and day-care for children to its congregational members.²¹ Another study on 2012 tornadoes that struck southern Indiana reported that social connections and broader community engagement facilitated the swift recovery.³ During a period of violence from political conflicts in Kenya between 2012 and 2014, the Congolese refugees who resided in urban Nairobi were reported

to have access to resilience-promoting resources, that is, emotional, informational and instrumental support, through formal and informal connections and relationships.¹⁴ Females were found to secure support via informal bonding SC, while males via bridging and linking networks. The case of Student Volunteer Army (SVA), a youth-led organisation in New Zealand, that has actively responded to multiple disasters since the Canterbury Earthquake Sequence of 2010–2011 shows how SC facilitates resource mobilisation through the network of volunteers.²² Social media fostered mental support during the 2020 and 2011 earthquakes in Canterbury, New Zealand.²³

Thailand and COVID-19: first wave in 2020

In the first 2.5 months of 2020, Thailand reported a very low number of daily cases (1.5), until the Lumpini Boxing Stadium cluster broke out with 32 cases on 13 March. The situation became worse with over a hundred new daily cases since the third week of March. Public health and social measures were introduced and enforced to contain the outbreak, including curfews (22:00–04:00), use of face mask and hand hygiene, closing down public areas, schools and shopping malls, and interprovincial travel restrictions. From May to October, the new case report declined to 4.5 per day. After 25 May, there was no local transmission; all cases were due to inbound travellers to Thailand. While the efficient health system reduced the impact,²⁴ a negative economic impact was inevitable due to a nationwide closure of business in April 2020.

The estimated 6.5% gross domestic product contraction in 2020 was on top of the pre-COVID-19 sluggish economy.²⁵ Job losses, notably in the service sector which relies on international tourists, forced a great number of urban labourers to move back to their rural hometowns.²⁶ Small street-side businesses suffered as people stayed home to maintain social distancing.

At the time of great difficulty, the Thai society manifested its strength not only in strong family ties but through various levels of SC to get through the crisis. In communities, especially in rural areas, members collaborated to prevent the disease and supported each other by sharing food and information about jobs and government assistance, and providing consolation. The solidarity and resilience of the Thai people during the COVID-19 have been much recounted.²⁷

A bivariate linear correlation study in the USA suggests that the number of COVID-19 infections is negatively associated with the level of SC at state and county levels.²⁸ Community attachment and social trust were associated with more COVID-19 deaths, while family bond and security were associated with fewer deaths.²⁹ Another quantitative study shows that when a county in the USA moves from the 25th to the 75th percentile of the distribution of SC, it results in an 18% and 5.7% decline in the cumulative number of infections and deaths.³⁰ Further, a study in China suggests SC affects COVID-19 response through facilitating collective actions and promoting public

acceptance of and compliance with control measures in the form of trust and norms at the individual level.³¹ Our review of literature published after 2020 on SC and COVID-19 pandemic responses showed US dominance and lacked a qualitative approach.

Much has been known about the key role of SC and social network during the acute and recovery of a disaster,³² and the association between social cohesion and community disaster resilience in facilitating disaster recovery.³³ Little is known of their roles in the ‘once-in-a-century COVID-19 pandemic’, with its devastating impacts on health, the economy, and the employment and livelihood of the people. This study fills the gap on how SC interplays with other determinants such as family attributes, employment status, sources of income, urban versus rural residents, information technology (IT) skills and access to social media, to support responses to the pandemic in Thailand, a middle-income country.

The objectives of this study are to assess the level and profile of SC in the urban and rural communities, and determine how SC relates to other determinants, in order to further our understanding of how these contribute to the COVID-19 pandemic, boost resilience and support recovery from the pandemic. Lessons from this study will inform policy and actions to boost SC.

MATERIALS AND METHODS

This study is the second phase of the project ‘Think Forward–Move Forward Thailand’. The first phase used the nationally representative Labour Force Survey to identify vulnerable careers.³⁴ This phase of the study used the focus group discussion (FGD) technique, to explore how SC contributes to resilience during the pandemic. Large sample sizes do not allow for individual in-depth interviews.³⁵ There are several advantages of FGDs in this study context. The pandemic has differential impacts on populations with different socioeconomic and health status. These differential impacts require different coping strategies, collective efforts and interactions among community members, through their social networks, in mobilising social sources in and outside the community. Such an interactive experience requires a less structured interview guide and more interactions among participants through FGDs. Further, the issues are not sensitive and can be shared in the focus group.³⁶

Recruitment of participants

All 18 sessions of FGD were organised between August and November 2020 in Bangkok and the four provinces in the four regions, that is, Chiangmai (north), Songkla (south), Chonburi (east) and Khonkaen (northeast). Samples were randomly selected from the 2 million customers of a special emergency loan scheme managed by the Bank of Agriculture and Cooperative who were previously employed. This was the largest nationwide population sample of persons who needed assistance due to the pandemic. The

government mandated the Bank for Agriculture and Cooperative (BAAC) to manage the scheme. The loan offers 10 000 baht (around US\$281) per account with a monthly 0.35% fixed interest rate without guarantors, 30-month repayment and first 6 months interest free.³⁷

The participants were purposively recruited to achieve approximately equal samples by gender, location (rural and urban) and five provinces. Officers of the provincial BAAC and the Bank of Thailand posted messages to all loan takers in the chat rooms of the LINE application for volunteers to participate in this study. Because we aim to assess the pandemic’s impact on employment, we recruited persons who were employed prior to the pandemic. The participants were screened of the level of impact they experienced using an online short question ‘How well were you able to handle the impact of the COVID-19 pandemic?’, using a rating scale ranging from (1) very well, (2) manageable, (3) barely manageable, to (4) unable to handle/still not knowing what to do. These answers are proxies of the level of resilience they have in managing the pandemic. If they report very well or the pandemic is manageable, they have high resilience. Participants who fulfil the inclusion criteria were invited to participate in this study. We used the rating of different levels of impact to assign participants to focus groups, so we could then have discussions with participants with diverse experiences.

We found it difficult to recruit urban volunteers; only four and five were recruited from two provinces (6–12 participants required). Through the snowball technique, the urban participants identified additional participants from their networks to fill the gaps. There were four focus groups convened in each of the five provinces, that is, two urban and two rural groups, except for Bangkok Metropolitan where two focus groups were convened. Out of the two focus groups in rural and in urban areas, one group included participants who had minor impact scores 1 or 2, while the other group had higher impact scores, 3 and 4. Both sexes are represented in each group.

FGD guide and procedures

The contents of FGD were guided by the SC and resilience literature with the following prompt questions: (1) how has the pandemic affected your living and livelihood?; (2) how well did you handle the situation and how did you handle it?; (3) what thoughts first came to your mind and in what way, (eg, worry, source of assistance, blame, praise)?; (4) who has offered support (mental, financial, information, shelter, etc) at what level, with probing on family, community, personal network, local government and national government? The investigators moderated all of the FGD sessions. The average length of the 18 FGDs was 2 hours and 38 min, with a range between 171 and 122 min.

In the context of COVID-19, the FGD sessions were arranged conforming to the social distancing and pandemic control guidelines. The participants applied pseudonyms to safeguard personal identity. The investigators used focus group guidelines and qualitative techniques, that is, word association and sentence completion. For example, we applied the word association technique when we asked participants to describe ‘What was the first word in your mind without thinking too hard when you first heard the word lockdown?’. The sentence completion technique was applied when we asked them to describe what they had in mind when they went through the pandemic experiences and response.³⁸ The methodological approach was informed by the standards for reporting of qualitative research outlined by O’Brien *et al.*³⁹

Patient and public involvement

Participants of this study were not patients. Patients and the public were not involved in the design, conduct and reporting of the study. Objectives and benefits of the research, and the scope of the questions were explained during the recruitment to encourage the participants’ wilful and active involvement. Written informed consent was solicited prior to discussion and permission was granted before audio-recording. They were allowed to leave the discussion at any time when feeling unsafe or uncomfortable.

Data analysis

The verbatim transcriptions of all FGD sessions were analysed using the content analysis approach as suggested by Kiger and Varpio⁴⁰ and Braun and Clarke.⁴¹ Using an inductive process, a code for each meaningful sentence was given. Codes in the similar content or area were compiled to form subthemes, and similar subthemes formed the main themes. The investigators met in a series of workshops to finalise the themes and subthemes. Compilation of contents into subthemes and forming themes from subthemes were managed without a software program.

RESULTS

Table 1 summarises the demographic profiles and pandemic impact among 161 participants in 18 groups. Each group consisted of 6–12 participants. All participants stayed through the discussion. More than half of participants (55.3%) reported they can manage the impact of the pandemic, while 34.8% barely manage and 9.9% unable to handle the situation.

Three main themes emerged, that is, (1) sources of support during the pandemic, (2) factors affecting resilience and (3) coping mechanisms in response to the pandemic. The themes reflected the three forms of SC, that is, bonding, bridging and linking, as well as the three dimensions of SC, that is, structural, relational and

Table 1 Demographic details of participants

Characteristics	N (%)	N (%)	
		Rural	Urban
Gender			
Male	72 (44.7)	34 (47.2)	38 (52.8)
Female	89 (55.3)	41 (46.1)	48 (53.9)
Age group			
30 and below	45 (28.0)	21 (46.7)	24 (53.3)
31–40	39 (24.2)	17 (43.6)	22 (56.4)
41–50	44 (27.3)	20 (45.5)	24 (54.5)
51–60	24 (14.9)	12 (50.0)	12 (50.0)
61 and older	9 (5.6)	5 (55.6)	4 (44.4)
Education			
Elementary school	23 (14.3)	14 (60.9)	9 (39.1)
High school	36 (22.4)	23 (63.9)	13 (36.1)
Vocational school	29 (18.0)	9 (31.0)	20 (69.0)
College and graduate	73 (45.3)	29 (39.7)	44 (60.3)
Size of impact from pandemic			
Very little	4 (2.5)	3 (75.0)	1 (25.0)
Manageable	85 (52.8)	45 (52.9)	40 (47.1)
Barely manageable	56 (34.8)	21 (37.5)	35 (62.5)
Unable to handle/still not knowing what to do next	16 (9.9)	6 (37.5)	10 (62.5)
Types of job categorised in two broad sectors			
1. Engaged in formal sector such as communication (1), arts and creativity (1), education (2), engineering (4), hospitality (10), manufacturing (3), merchandising (2), office worker (7) and service (7)	37 (23.0)	8 (21.6)	29 (78.4)
2. Engaged in informal sector such as, agriculture (7), construction (6), arts and creativity services (10), education (1), food (20), hospitality (2), merchandising (20), service (46) and transportation (12)	124 (77.0)	56 (45.1)	68 (54.9)
Total	161 (100.0)	75 (46.6)	86 (53.4)

cognitive. Due to space limitations, the authors were able to provide only some examples of the participants’ direct quotes to support the analyses.

Theme 1: sources of support during the pandemic

Three main sources of support emerged from this study—family, community and local networks, which represent the three subthemes.

Family support: cash, kind and moral

In response to the question 'Who was the first person who came to your mind when you were affected by the pandemic?', most people mentioned their family members either as the providers or the recipients of support, reflecting family as the most fundamental structure of SC that offer support (bonding SC) that comes earliest to aid during the crisis.⁴²

I've just graduated from college in January (2020). The job was gone because of the COVID-19. Luckily, my mom has a secured job as a government official. I am still living with her; she still supports me and never put pressure on me to find a job. (N, young adult woman, south)

The tolerance to the negative impacts of the April 2020 lockdown depended very much on the amount of savings in the household. For daily wage earners who suddenly lost jobs, feeding the whole family for tomorrow was unthinkable. Savings were limited and the support from the central government took several days or even months to arrive. In this situation, it was surprising that many reported their dependents as the source of moral support which, in times of crisis, is no less important than material support and provided by a strong relational structure such as family.⁴³

I only know that I cannot give up. My son needs me. I think I derived a great deal of strength from him (that we must fight and get through together). He is a grade 9 student. (D, adult woman, east)

Community: the second tier of support

Community strength has been praised by all FGDs, echoing what was reported by the WHO.² It was noted that communities in the countryside were more active and collaborative in response to the pandemic than those in the urban areas. The rural participants perceived the deadliness of COVID-19 more than the urban participants and collaborated through the village head's leadership and committee. This included setting up the screening points at the village entrances, surveillance of outsiders or unquarantined visitors entering the village, offering food and essential items to the affected families, and dissemination of information about financial aids. The socially cohesive nature of rural Thai villages makes communication and collaboration relatively efficient and timely. All rural villages and urban communities have a news broadcasting tower managed by the village head, community leader or village health volunteer (VHV). In respect to the SC dimension, it reflects in the FGDs that the strength of ties (relational dimension) among the community members and network of volunteers²² in the rural areas is stronger than in the urban areas, which makes the transmission of support more efficient. The support was provided voluntarily as they have bonding with each other.¹⁰ In addition, sharing the sense of unity

(cognitive SC) especially when facing the same plight reflects the cognitive SC of the rural communities.^{8 32}

Temperature screening points were set up and run 24 hours at all entry points to the village. All adult villagers were asked to take a shift at those points. Strangers or even those living or working in other provinces who returned home for a visit will be reported and asked to self-quarantine. Or-sor-mor (VHV), mostly female, have been very active and worked very hard. (J, adult woman, south)

During the lockdown, we had a communal vegetable plot, not because the food was scarce but because people lost jobs and had no money to buy from the market. It worked quite well; people came to work together and shared what they had. Sometimes we bartered so that we don't have to use money. (D, adult woman, east)

Local networks of relatives and friends boosted by social media platforms

Networks of relatives and friends were repeatedly highlighted as instrumental to survival and resilience during the pandemic. The significance of networks of relatives and friends as a prominent SC structure during the pandemic has been supported by social media platforms which facilitate linking and matching demand with supply—which is a clear example of bridging SC. In such case, support was expanded beyond the limited resources of family members to a larger network of networks, in bridging resources from outside their original network.¹² The networks updated the pandemic situation, advised about financial assistance from the central and local governments, and informed various types of support available around the community and opportunities for temporary jobs. It is interesting to note that social media, especially Facebook and LINE, which are more popular than other platforms in Thailand, played a significant role in helping people to connect, call for and offer help. In a way, these social network platforms function as an alternative/ad hoc market that facilitates individual and community resilience.^{23 32 44}

I had to close my fresh sea-food stand because the market was closed during the lockdown. My husband was a motorbike taxi rider; his bike station was not closed down but the number of clients plummeted. I am now selling food I cook via the Facebook and LINE groups. I had no experience selling online before. My niece taught me how to do it. I sold out every day. (P, middle-aged woman, south)

Even after lifting the lockdown, the social distancing measure remained strictly imposed. Almost all businesses did not fully recover and required rearrangements. Business owners in the same community use their good personal relationships to get together and make the rearrangements of the new business feasible, suggesting the importance of the relational aspect of the SC.⁹

I ran a Pizza shop at the arcade. The sales drop forced me and several shops nearby to relocate to a cheaper place. We could afford only one small unit at the new place; so we shared the space to continue our businesses on a smaller scale. (C, adult man, north)

In summary, the three sources of support during the pandemic play different roles in different contexts. The cohesive family bonds, larger family size and rural communities have a comparative advantage compared with urban settings. However, the size of local networks and use of social media platforms play important roles in both areas.

Theme 2: factors affecting resilience

The FGDs revealed a set of factors affecting resilience and discrepancies in resilience across population groups. These factors include age, education, economic burden and location of residence. Some of these factors, such as IT skills, family members with salaried jobs and family burden, are embedded in the concept of SC while others, although not directly relating to SC, mediated the effects of SC.⁴⁵

Younger age, education and IT skill boost resilience

The unemployed new graduates were affected most. On top of the worry about finding a job, they felt that they remained a burden to their family, instead of supporting the family. Falling back to family in times of crisis, however, suggests the importance of the bonding SC and its relational aspect.⁴²

This was my first job in my life. I had worked there for only half a year. Before I knew what it was like to have a salary raise, I was shocked to know that my salary was cut by half. A few weeks later, we were laid off. I was desperately discouraged. (S, young adult woman, northeast)

What was the worst about losing my job and going back to mom's home was that I felt like I never grew up. (T, adult woman, northeast)

It also appeared that many of these young people were resilient and quick to adapt. They were able to use their social media skills to earn money and carry on income-generating activity during the lockdown and social distancing. Foreseeing that outdoor activities would be discouraged for a long time, they took advantage of starting small online businesses. This part of the results not only suggests the advantage of having comparatively good IT skills in young people, but also the usefulness of their personal networks mediated by social media applications.⁴⁴

I worked as a receptionist on a cruise ship. Even when the lockdown ended, foreign tourists wouldn't come back right away. Now I am learning to sell cosmetics and supplementary foods online. I also live stream video sexy dancing. My former guests liked it a lot and gave me some money. (C, adult transgender, east)

Education and IT skills also affected the resilience of the participants. Those with relatively low education faced more limits in retraining opportunities. Many of the retraining programmes offered by the government are too advanced for certain groups of people.

If possible, I will step up from house painting job to air-conditioner service. The disruption is much faster. I finished only high school; that's just how far I can be retrained. (P, young adult man, south)

Those with permanent employment and income are more resilient

Salary earners and those with permanent employment were the least affected by the pandemic. Many participants admitted that they should have taken a salaried job, especially as civil servants. Having a spouse of a family member (bonding SC and relational aspect) with a stable income (as opposed to an unstable income from businesses or odd jobs) could cushion the economic impact of the pandemic.

Civil officer is safe. The lockdown doesn't affect the income. However, this doesn't include those who have extra jobs though. In some cases, money from the extra job is more than the regular salary and tempts them to live an expensive life and create a big debt. (P, middle-aged woman, south)

Larger family responsibility, less resilient

FGDs revealed that participants having many dependents are less resilient. Particularly, middle-aged participants who had to care for both young children and aged parents faced greater hardship. In this regard, the bonding SC of family presents some obstacles for resilience.

It made me weep. I lost my job and couldn't send money to my parents. I had no money to service my house mortgage. My mom also has diabetes; her medication costs a lot. It was very heavy on my shoulders. (T, adult man, northeast)

Domicile: rural people fare better than urban people

It was interesting to find that rural participants having closer interpersonal relationship (relational SC) and higher collectivism are more resilient and coped with the pandemic's impacts better than their urban counterparts. Members of the rural community are interconnected either through close or distant family ties (relational), thus having richer SC.⁴⁶ Material and mental support were important and common practices. In addition, the relatively small and secluded geographical area made it easier for rural community members to conduct surveillance for strangers who might bring in the virus. Locating far away from the epicentre of outbreaks, less crowding in public spaces and more efficient screening made the rural areas safer from the pandemic. Furthermore, the rural areas normally had cheaper or locally produced food supplies and a lower cost of living.

Though we've no money, we have rice. Chicken and fishes are in the rice field, and vegetables are everywhere. In town, no money no food. (W, middle-aged woman, northeast)

In the village, we all know each other. We know who is this boy's father, who is this man's wife. If we sit down and trace family tree, I think more than half of the village are relatives. So, it is easy to ask for help or give help (as we're all kins). (Y, middle-aged woman, north)

Theme 3: coping mechanisms in response to the impacts of the pandemic

Participants revealed how they coped and lived through a difficult time. Two subthemes emerged: getting a job and managing household finance.

Getting a job or engaging in income-generating activity

In addition to being less 'choosy' for a job and taking jobs that paid the bills even the jobs were below their qualifications or new to them, they sought help from their network of friends to find better jobs through bridging SC. With respect to the structural SC, having a much larger network of friends and more diversity of resources can provide greater support, particularly jobs and material supplies.³

Those who were lucky enough to continue employment helped ease the financial burden of their employers by taking the same or additional jobs with less pay in order to keep the business running. Employers were more careful about production plans in order to reduce cost as much as possible. Small family businesses that were used to casual operation and management started to keep a strict accounting on revenue and to control expenditures. Most importantly, business owners sought help from their network of suppliers, representing the work-related structure of SC and bridging SC,⁴⁷ especially on payment flexibility.

I used to work as a salesperson in a gemstone factory. Now I took a cleaning job at a hospital around 60 kilometres away, plus making and selling sushi to kids in front of a school. I learned the skill in making sushi from Youtube. (P, middle-aged woman, east)

I had to scale down my stew pork-leg shop. Sales dropped more than half because of the take-away-only measure. I had to be more careful about cost control and closely watch the accounting entry which I had never done before. I also told all suppliers about my situation and asked for sympathy to relax the repayment. Servicing the debts was very difficult. I gave priority to debt servicing to my supplier and let the bank wait or else I couldn't keep the business running. (W, adult woman, north)

Managing household finance: tight control over spending

Rearranging household finance was vital to family resilience. The participants adjusted their household

spending to keep the family moving on. It was interesting to note that the largest share of expenses was on children, especially schooling. The worst experience to deal with was to convince the children to suspend their education.

My two daughters went to a private elementary school in the province. With this sluggish business, I couldn't afford the private school tuition fees. So I decided to move my daughters to a public school nearby our place. It (the public school) was not famous but it helped us save a lot. I was quite ashamed when my friends found out about this. But I had to manage finance to keep the family. (W, adult woman, north)

We synthesise SC dimensions and its forms, and sample quotes from participants by each subtheme under three major themes in online supplemental table 1.

DISCUSSION

This study adds to the literature of SC and resilience in three important ways. First, while the literature suggests the importance of family as a source of bonding SC during crisis,⁴² this study found limitation of bonding SC which depends on family attributes. For example, if all family members are wage earners and lost jobs during the crisis, they cannot help each other while the larger family size is a burden. A secure job such as government or state enterprise employees with steady income is a more reliable bonding SC. Families whose members were relatively better off either economically or educationally had a better chance to boost resilience to other family members.

Second, SC varied by urbanity. In this study, individuals in rural communities have higher SC than those in urban areas due to stronger personal relations. People in rural communities have more sympathy and are ready to help each other. The role of the VHV network in mitigating the hardship during the crisis was more salient in the rural than urban areas. VHVs were instrumental in working with local health authority (subdistrict health centres) and village heads to defend against introducing infection into the village and enforced social measures such as the use of face masks and social distancing, and identified vulnerable individuals who needed support.⁴⁸ Innovative and income-generating initiatives, such as cooperative vegetable growing, and the use of a barter system bypassing market mechanisms and the cash economy were possible in the rural settings.

Third, though older generations and people in rural areas are reported to have less access to or literacy related to social media,^{49 50} no digital divide was observed in this study across old and young generations, and urban and rural, in access to and use of social media. Lay people, older merchants in rural fresh markets and motorbike taxi drivers in urban areas commonly reported how social media helped them earn income, find extra jobs and access useful information such as government financial aid.

Structural, cognitive and relational dimensions of the SC

This study provides additional insight and understanding of how structural, cognitive and relational SC contribute to individual resilience. Regarding the structural dimension, the results suggested three social actors: family, community and local networks. Family members were the most practical, readily available, dependable and trusted first sources of assistance. Not only material, but psychosocial and mental support were provided. Family has been the primary source of emotional and instrumental support, consistent to previous studies.^{42 51} However, as noted, family support has its limitation if all members fell in vulnerable situation such as job and income loss. Instrumental support reported by this study is similar to those reported from Kobe earthquake and political conflicts in Kenya,^{14 19} where food, shelter, up-to-date information and other material support are provided by the community.

Local networks make use of social media as an important platform in matching demand for and supply of support through a network of networks beyond their original network. Larger networks through linking with other networks provide exponential size of support.

The cognitive dimensions, demonstrated by sympathy, helping and sharing, are similar to that reported by SVA.²² *Jit-ar-sa* (voluntarism), which was often repeated during the FGDs, reflected a combination of philanthropy, civic engagement and spirituality.⁵² All kinds of help were offered and tagged with the term 'jit-ar-sa', such as jit-ar-sa face masks (N95 mask free distribution to the needy) and jit-ar-sa lunch packs (free lunch boxes).

The relational dimension of SC determines the scope and extent of support which contribute to individual resilience. When a crisis strikes, the family is always the most important resource where a person wants to stay with. In communities where members were closely connected, communal programmes and activities were easily established and sustained. The FGDs identified at least three communities out of around 40 (not all participants provided their community name), all in rural areas, that is, Hin Heab Silathip (Khonkaen), Ban Man Khong (Cholburi) and Jana (Songkla), that showed strong leadership and collaboration among members. They were able to obtain timely support and depend less on assistance schemes from the central government.

Bonding, bridging and linking dimensions of SC

The bonding SC is reflected by resources and assistance mobilised from within the network, such as within family or community members. This study showed that the bonding SC contributes through the three SC dimensions, that is, structural, relational and cognitive. Many participants revealed that the whole family was laid off and no one could help each other; the depleted structural SC is then complemented by bridging dimension of SC which mobilises resource from outside family or community through bonding, personal connections and social media. It is noted that the bridging and linking

aspects of SC synergise and enlarge the scope and size of resources and assistance. Bridging and linking were applied and reported by the Hurricane Katrina event in New Orleans.²¹

While bridging contributes to resilience by horizontal mobilisation of resources from members and non-members of networks, linking has similar effects but through vertical connections, appealing to the higher structure including formal organisations. Both bridging and linking synergise resource mobilisation.

Although the literature suggests that SC is critical in response to emergencies and crises, studies on SC and COVID-19 pandemic responses have been dominated by quantitative assessment, and qualitative application is limited. This study, using a qualitative approach, fills the gap of understanding how the three levels of SC interplay in mobilising resources from inside and outside the networks to support people affected by the COVID-19 pandemic.

SC can contribute more to household and community resilience through consistent intensive socialisation and interactions. The pandemic, through social distancing and travel restriction, has severely eroded socialisation and hence SC. Physical face-to-face and social contacts and interactions are fortunately replaced by social media such as the use of LINE and Facebook. This study did not uncover a 'digital divide'; all groups had access to the internet and mobile phones.

Although family ties have been culturally strong, family members may hesitate to join together for fear of infections. In addition, SC can diminish and dissipate through time. Even with the high coverage of COVID-19 vaccination, social distancing and use of face masks need to continue. Indeed, social media has proven to be immensely helpful, but with some limitations. Society has to find ways amidst the new normal to enrich SC for future disasters or public health emergencies.

Based on findings from this study, we propose the following recommendations:

First, SC can be enhanced through consistent and intensive socialisation and interactions. The erosion of socialisation and SC from social distancing and travel restrictions was replaced by social media such as the extensive use of LINE and Facebook even among the lower socioeconomic households and communities. Besides being a channel to mobilise material support, SC also helps with emotional and mental support.²³ Psychological distress required mental support, which is as equally important as material support in a crisis situation.⁵³ At the recovery from the acute phase of the pandemic, community leaders, civil society organisations and government should seize the opportunity of 'digital technology' to continue enhancing SC and community resilience through social media as well as face-to-face interactions.

Second, when resources from inside and outside networks were exhaustively mobilised, reaching maximum limits, but are still inadequate, the government needs to step in and provide additional in-kind or in-cash support

to facilitate access to education, employment and loans. Although SC helps to minimise impacts on vulnerable populations, it is the government's responsibility to fully finance pandemic responses and prioritise interventions to the vulnerable, even in high-income countries.^{54 55}

Limitations

The study relies on a subjective, self-report tool to determine the participants' level of impact from the pandemic. A quantitative survey tool can better capture the measurable impacts of the pandemic, but the ongoing pandemic especially from the high case fatality rate Delta variant during the survey period did not allow such a lengthy quantitative survey. Further, generalisability is a common limitation of qualitative study; the authors are aware that in focus group technique, some vocal participants can influence others who are less vocal and prevent a free flow of responses. While moderating the discussions, the authors ensured independent responses by the participants.

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Acknowledgements The authors are deeply grateful to the key informants for sharing with them their time and candid accounts. They also would like to thank the Bank for Agriculture and Cooperative and the Bank of Thailand for assisting them during the participants' recruitment process. They also thank Dr Josephine Wildman and Dr Lucie Ozanne for their constructive reviews which greatly help them to improve the manuscript.

Contributors BS conceived, designed and is the guarantor of the study. BS and KS collected the data. All authors interpreted and analysed the data. BS drafted the manuscript. VT and KF critically reviewed the manuscript. All authors read and approved the final manuscript.

Funding This study was funded by the Royal Initiative Discovery Foundation.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not required.

Ethics approval This study involves human participants and was approved by the Institute for Population and Social Research, Mahidol University, Institutional Review Committee (IRB) (ID of ethics approval: no. 2020/08-360). Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request.

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