
Make Hay While the Sun Shines: How Community-Based Nonprofit Organizations Cultivate Refugees' Social Capital and Disaster Resilience

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Abstract: This article examines community-based nonprofit organizations' (CBOs') perspectives and practices regarding cultivating refugees' disaster resilience. Adopting the theoretical framework of structural and cognitive social capital, we conducted in-depth interviews with leaders, staff members, and volunteers from refugee serving organizations. The research findings offer new insights into how CBOs help refugees obtain multiple forms of social capital and develop disaster resilience through education and training, resource mobilization, planning, and coordination. The research findings also reveal the flow of social capital exchange during the disaster resilience cultivation process. Similar CBOs can rely on our research findings to develop evidence-based programs and interventions to help culturally and linguistically diverse groups gain social capital and improve disaster resilience.

Keywords: disaster resilience, social capital, refugees, community-based organizations

- **Points for Practitioners** Social capital cultivates resilience in communities to cope with external stresses after a natural disaster. It also provides individuals and communities with the social infrastructure to self-organize and mobilize effective emergency response resources.
- Higher levels of structural social capital are associated with higher levels of cognitive social capital. However, the development of cognitive social capital is not definitely associated with the growth of relational social capital.
- Refugees are not likely to have much bonding social capital due to their relocation to a new country. Their structural social capital is more likely to come from bridging social capital.
- Disaster preparedness provides opportunities for the whole community to work together and gain some additional social capital through mutual help and strengthening network ties.
- While service providers helped refugees expand their structural social capital, service providers needed more structural social capital to make their services sustainable as well

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Since the late 1970s, the global refugee population has increased continuously. According to the United Nations High Commissioner for Refugees (UNHCR) report, there were 82.4 million people forcibly displaced worldwide at the end of 2020 because of war, violence, persecution, and natural disasters (UNHCR, 2021b). In the United States, more than three million refugees have resettled in the country since 1975 (UNHCR, 2021b). To help refugees resettle and cope with a wide variety of challenges they encounter, hundreds of nonprofit organizations have been established (Steimel, 2017).

Refugees are persons who are “unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion” (UNHCR, 2010). Refugees are significantly impacted by disasters due to the lack of resources and disaster coping capacities (Lemyre et al., 2009). Statistics show that refugees are more vulnerable to disasters than local residents. For example, UNHCR projected that among the 97.3 million people who were impacted by the COVID-19 pandemic and needed the United Nations’ assistance in 2021, 22% (26 million) were refugees and 50% (49 million) were internationally displaced people (UNHCR, 2021a).

Stakeholders from both the public and private sectors of society are deeply involved in cultivating refugees’ disaster resilience. Community-based nonprofit organizations (CBOs) play an essential role in supplementing federal government assistance. CBOs are locally rooted grassroots organizations that provide services relevant to the social, political, and economic life of people in the community (Abrams et al., 2015; Molden et al., 2017; Salami et al., 2019). They provide newly settled refugees with social, humanitarian, political, and cultural services, handling emergencies and hardships of refugees (Garkisch et al., 2017) and improving their sustainable development capacities (Garkisch et al., 2017; Simsa, 2017). During crises and disasters, CBOs offer essential services, psychological and medical aid, and have the core function of generating social capital among community members, supporting vulnerable communities, and empowering local action and civic activity (Aldrich & Meyer, 2015; Jewett et al., 2021; Jouannic et al., 2020).

Despite the countless efforts made by organizations and service providers, there is still a substantial literature gap in understanding refugee communities’ capacity and disaster resilience at the local level, which is an essential component for community-based emergency management. Also, refugees’ experiences affect their social connections, networks, and social norms, such as trust and social reciprocity, which create a unique context for social capital development (Pittaway et al., 2016). It is critical to thoroughly explore the processes through which CBOs and their service providers cultivate refugees’ disaster resilience.

Through the lens of disaster resilience and social capital, this article explores the roles of CBOs’ service providers in helping refugees develop disaster resilience and seeks to answer two overarching research questions: (1) How do service providers of CBOs cultivate refugees’ disaster resilience through helping refugees gain social capital? (2) What are the strategies and barriers for service providers of CBOs to help refugees obtain social capital and cultivate disaster resilience?

To address the research questions, we conducted semi-structured in-depth interviews with CBOs’ staff members and volunteers in Texas. Texas is one of the top placement states and the destination of numerous refugee resettlements, with a growing refugee population from countries such as Vietnam, Burma, Somalia, Cuba, and Afghanistan. The critical discussions surrounding disaster resilience cultivation have implications for other socially vulnerable groups. Practically, emergency management practitioners can rely on our research findings to develop targeted and tailored emergency management interventions to foster resilience among similar refugee communities.

Literature Review

This section summarizes and condenses the existing literature on refugee communities' social capital and disaster resilience.

Social Capital

Social capital refers to "the aggregate of the actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu, 1986, as cited by Aldrich & Meyer, 2015, p. 256). It involves social networks, societal trust, and norms (Putnam, 1995; Yong et al., 2020) and encompasses the resources one draws on through their social network and "the values ascribed to these resources by the individual" (Wind et al., 2011, p. 4).

Scholars conceptualize social capital in multiple ways. Aldrich and Meyer (2015) divided social capital into cognitive and behavioral aspects. The attitudinal and cognitive aspects of social capital are mainly concerned with trust, while behavioral manifestations focus on individuals' behaviors, particularly participation in organizational activities and social connections. Nahapiet and Ghoshal (1998) identified three types of social capital: structural, relational, and cognitive. Structural social capital is concerned with the connections between individuals: whom a person reaches and how to reach them. Relational social capital refers to the "assets created and leveraged through relationships" (Nahapiet & Ghoshal, 1998, p. 244). Cognitive social capital encompasses the resources that provide shared meanings among members of a social group (Nahapiet & Ghoshal, 1998). In this study, we adopted the comprehensive framework by Nahapiet and Ghoshal (1998) because it covers both the tangible components of social networks like the structure of relationships and resources as well as the intangible components such as perceptions and feelings.

Also, this project primarily focuses on structural and cognitive social capital for two reasons. First, among the three types of social capital, structural and cognitive social capital are the most studied in disaster-related research. Second and of more importance, there appears to be an overlap between the conceptualization of relational and cognitive social capital. Both forms of social capital encompass dimensions like trust, reciprocity, sense of belongingness, and shared norms (Claridge, 2020). Claridge (2020) also noted that both cognitive and relational social capital were intangible, rooted in the mental realm, and ultimately cognitive. Therefore, not distinguishing between relational and cognitive social capital is not likely to weaken the trustworthiness of our study.

Structural Social Capital. Structural social capital refers to the "extent and intensity of associational links or activity" (Harpham et al., 2002, p. 106). Size of social networks and broad connections are two major facets of structural social capital (Wong et al., 2019). Putnam (2000) identified two types of structural social capital: bridging social capital embedded in the heterogeneous social networks and bonding social capital embedded in the homogenous social networks. Scholars further divide structural social capital into three types: bonding, bridging, and linking (Aldrich & Meyer, 2015). Bonding social capital refers

to the connections within homogeneous groups, primarily strong ties that connect family members, friends, neighbors, and colleagues. Refugees' bonding social capital is mainly from their family connections and connections with people from the same ethnic community, which can preserve their cultural practices and strengthen their sense of identity and safety (Elliott & Yusuf, 2014). Research shows that the effects of bonding social capital on refugees' disaster resilience are two-fold. Bonding social capital can provide social support, security, and stability, which enhances disaster resilience (Iosifides et al., 2007). However, Vergani et al. (2021) found that in-group networking might increase migrants' risk of social isolation and segregation from local residents and citizens, which imposed a threat to disaster resilience.

Bridging social capital consists of weak ties that link individuals from different ethnic and occupational backgrounds through formal or informal social participation (Villalonga-Olives & Kawachi, 2015). Bridging social capital is most likely to span the unconnected parts of a network and generate novel information and resources needed to cope with a disaster (Ozanne & Ozanne, 2021). It is also known as the social relationships of exchange (Pelling & High, 2005). The interpersonal relationships between service providers and refugees are most likely to contribute to the growth of bridging social capital.

Linking social capital is the "hierarchical relations or unequal relations due to the differences in power or resource bases and status" (Villalonga-Olives & Kawachi, 2015, p. 63), such as the ones between a local community and the governmental agencies (De Silva et al., 2005). The U.S. Office of Refugee Resettlement (ORR) works with other federal agencies as well as nine voluntary agencies to provide critical services and resources for refugees. These nine resettlement agencies subsequently work with over 250 local organizations in 44 states that directly work with refugees and provide social services (U.S. Department of State, 2021). Many refugees might never have a chance to meet with governmental officials but only meet with CBOs' caseworkers and staff. Therefore, CBOs connect refugees with "those in power" (Aldrich & Meyer, 2015, p. 259), resulting in the growth of certain forms of linking social capital.

RQ1. How do service providers help refugees gain three forms of structural social capital, bonding, bridging, and linking?

Cognitive Social Capital. Cognitive social capital encompasses one's perceptions of trust, shared norms, and reciprocity that are informed by culture and social structure (Harpham et al., 2002; Kwok et al., 2019; Villalonga-Olives & Kawachi, 2015; Woolcock & Narayan, 2000). In particular, trust and norms adherence are two main indicators (Kwok et al., 2019). Trust is "the mutual expectation that arises within a community of regular, cooperative behavior, based on commonly shared norms" (Paldam & Svendsen, 2000, p. 342). Since trust encompasses the perceived benevolence of others towards oneself, a high level of trust reflects good relationships among community members (Pan, 2022). At the community level, trust reinforces norms of reciprocity, increasing a community's adaptive capacities (Pelling & High, 2005). At the individual level, together with social

connectedness, trust lowers depression and other mental health problems during pre-disaster and disaster relief stages (Wind et al., 2011; Wong et al., 2019).

Cognitive social capital can be conceptualized as three types of support: informational support that enables people to “know” and understand things, instrumental support that enables people to “do” things, and emotional support that allows people to “feel” things (Harpham et al., 2002; Wind et al., 2011). Each type of support has demonstrated its impact on individuals’ disaster coping experiences in multiple contexts. In this study, we examined how service providers helped improve refugees’ abilities to “know,” “do,” and “feel” things related to disaster resilience through various forms of communicative activities.

RQ2. How do service providers help refugees gain cognitive social capital through offering (a) informational support, (b) instrumental support, and (c) emotional support?

Social Capital and Disaster Resilience

Community disaster resilience refers to a community’s adaptive capacity and collective ability that reflects community members’ shared and unique capacities (Aldrich & Meyer, 2015; Cox & Perry, 2011; Kwok et al., 2019). While community disaster resilience is more than an aggregate of each community member’s disaster resilience, individuals’ disaster resilience is a crucial part as it brings key resources, knowledge, and expertise to the community. Individual community member’s participation in cohesive actions is the foundation of a community’s adaptive capacity and resilience (Paton & Johnston, 2006). As Rauhaus and Guajardo (2021) suggested, inclusion in rebuilding, resilience, and planning process is critical for community-based disaster resilience.

Social capital determines how individuals easily work with each other (Paldam & Svendsen, 2000), which further shapes societal cooperation, coordination, and collaboration (Jordan, 2014). In the disaster management context, social capital is important because individuals and communities have to mobilize all types of social capital to resolve the problems brought about by a disaster (Ozanne & Ozanne, 2021). Mobilizing existing social capital and generating new social capital result in more substantial adaptive capacities in response to disasters (Pelling & High, 2005).

Scholars have studied the positive effects of social capital on disaster management during the preparation, response, and recovery phases of a crisis (Koh & Cadigan, 2008; Moore et al., 2004; Murphy, 2007; Myers, 2019). Social capital prevents the marginalization of social groups and allows individuals to share information, mobilize resources, and take collective actions, resulting in stronger disaster resilience (Monteil et al., 2020). It also provides individuals and communities with the social infrastructure to self-organize and mobilize effective emergency response resources. More specifically, social capital generates material interventions and institutional modifications to reduce vulnerability in response to a crisis or disaster (Pelling & High, 2005). For example, Airriess et al. (2008) found that the Vietnamese community suffered less from Hurricane Katrina

than African Americans because of the larger amount of vital community support it received.

Nevertheless, the effects of each form of social capital vary in different contexts (Cheung et al., 2017). Some scholars argue that social capital might discourage individuals from seeking necessary external support because of the community's perceived security and in-group support (Babcicky & Seebauer, 2017; Wolf et al., 2010). Social capital is also likely to generate a perverse effect by reinforcing inequalities or by encouraging harmful behaviors (Monteil et al., 2020). Scholars have identified mixed findings regarding the effects of structural social capital on psychological well-being (De Silva et al., 2007; Wind et al., 2011). Cognitive social capital, however, has the strongest effects on disaster survivors' mental health status in various cultural and societal contexts. Studies on post-disaster experiences suggest that cognitive social capital reduces depression (Rung et al., 2017; Wong et al., 2019), anxiety (Wind et al., 2011), and common mental disorders (De Silva et al., 2007).

Formation and Mobilization of Social Capital

Social capital is a form of capital that can be produced and exchanged (Paldam & Svendsen, 2000). Despite the extensive research on the effects of social capital on individuals' and communities' adaptive capacities, less attention has been paid to how social capital is created and mobilized. Kwok et al. (2019) divided social capital into three types by the scope of resources it provides: micro (household or community), meso (city or region), and macro (nation). While the federal and municipal governments mainly take care of the macro- and meso-level resources, CBOs are mostly responsible for handling micro-level resources (Grootaert & van Bastelaer, 2001; Kwok et al., 2019). At the community level, identifying community members' financial and social needs and allocating the necessary resources to address those needs are critical elements of social capital (Jewett et al., 2021). Three common approaches can increase social capital and thus cultivate disaster resilience: providing incentives or rewards to encourage community participation, holding general social activities and events to increase trust and social cohesion, and facilitating community deliberation regarding the layout of the community (Aldrich & Meyer, 2015).

RQ3. What strategies do service providers utilize to help refugees gain social capital and foster disaster resilience?

RQ4. What are the barriers that prohibit them from achieving the above goals?

Methods

Quantitative research methods have been mostly used to measure social capital after a disaster. This project, however, adopted a qualitative approach and explored the processes through which service providers helped refugees produce social capital before the occurrence of disasters. Sixteen semi-structured in-depth interviews were conducted with leaders, staff members, and volunteers from CBOs in Texas. Fourteen out of the 16 research participants

were from the three major refugee serving organizations in the region, all of which are 501 (C) (3) organizations. Organization A is a religion-based organization established in 1932. The organization is most intensively involved in refugees' resettlement process. Its major services include providing food, sheltering children, helping refugees find affordable housing, providing legal support on the immigration process, and offering basic cultural orientation and job-seeking training. Organization B was established in 2017. Its main missions are helping refugees overcome cultural barriers, building leaders among refugees, and cultivating new refugee communities. To advance these missions, Organization B offers a wide variety of language learning, cultural orientation, and community development programs on a weekly or monthly basis. Organization C was founded in 1978 to help refugees, immigrants, and other displaced populations survive in their new communities. It provides refugees with all kinds of services needed during the resettlement process, including settling down, immigration legal services, and youth mentoring.

Given the prominent role of these three organizations in the region, we contacted each organization's administrators/leaders and expressed our interest in interviewing their staff members and volunteers. They all supported our research project and encouraged their staff members and volunteers to participate. With the administrators' approval, we reached out to the staff members and volunteers in these organizations, either face-to-face or via email, and invited each of them to participate in our study.

In addition, two research participants were from a non-refugee-focused faith-based organization in the region. Established in 1889, Organization D is intensively involved in refugee serving activities.

Even though we do not directly work with any of the aforementioned organizations, we have attended numerous events, including cultural orientation programs, social events, and information sessions, since early 2022. In addition, one author serves as a volunteer at Organization C. She is intensively involved in helping new refugees settle down in the area. She also serves as a peer mentor at Organization B, where she is "paired" with a refugee. She meets with the refugee and her family weekly to introduce local culture, reduce their feelings of isolation and loneliness, and serve as a source of practical advice and problem-solving assistance.

Prolonged engagement with the research setting enables researchers to develop a deep understanding of the research context and phenomenon, which is a crucial element of qualitative rigor (Nowell & Albrecht, 2019). Through attending numerous events at Organization A, B, and C, we were no longer outsiders-observers of refugee serving organizations. The experiences of being insiders-participants contributed to the current research project, because we developed a deep understanding of how these organizations worked and established long-term friendships with some staff members. We also experienced in person what barriers people might encounter when they communicated with refugees. We thus truly understood the frustrations expressed by several research participants. Nevertheless, during our interview and data analysis processes, we adhered to our interview protocol, which was built upon existing literature, and used the constant-comparison method (Strauss & Corbin, 1998) to identify themes. In this way, we reduced

the biases that were likely to be caused by our personal attitudes and values (Patnaik, 2013) and ensured that our research findings were rigorous.

IRB approval was obtained from the researchers' institution, and signed consent forms were collected before the interviews. All the interviews were conducted face-to-face. The interviews followed an open-ended and semi-structured interview protocol. The duration of each interview ranged from 40 to 80 minutes. The interview protocol included questions regarding participants' (1) disaster experiences during the time when he/she worked for the current organization; (2) perceptions of the organization's roles in helping refugees cultivate disaster resilience; (4) perceptions of refugees' levels of disaster resilience; and (5) communicative practices and strategies used in their interactions with refugees. In addition to the major interview questions in the protocol, we constantly asked follow-up questions to encourage participants to elaborate on their viewpoints and provide more specifics about their experiences and feelings.

Research participants' demographic information and professional backgrounds are presented in table 1.

Table 1. List of Interviewees

	Gender	Duration of Experience	Affiliation	Position	Refugee Background
CSO01	Male	5 years	Organization A	Executive director	No
CSO02	Female	1 year	Organization A	Staff (Program director)	No
CSO03	Male	1 year	Organization A	Staff (Caseworker)	No
CSO04	Female	4 months	Organization A	Staff	No
CSO05	Male	2 years	Organization A	Staff (Caseworker)	Yes
CSO06	Female	1 year	Organization B	Staff (Program coordinator)	No
CSO07	Male	2 years	Organization A	Volunteer	Yes
CSO08	Male	4 years	Organization D	Staff (Associate Pastor)	No
CSO09	Female	6 months	Organization A	Staff	No
CSO10	Male	18 years	Organization A	Staff (Caseworker)	Yes
CSO11	Male	14 years	Organization D	Staff (Pastor)	Yes
CSO12	Female	6 months	Organization A	Staff	Yes
CSO13	Female	5 years	Organization B	Staff	No
CSO14	Female	4 years	Organization B	Staff	No
CSO15	Female	3 years	Organization B	Volunteer	No
CSO16	Female	1 month	Organization C	Staff	No

With the completion of the first eight interviews, we proceeded to data analysis. We followed the three steps recommended by Hesse-Biber and Leavy (2006) to analyze interview data: data preparation, data exploration, and data reduction. First, during the

data preparation phase, all the interviews were audio-recorded and transcribed verbatim. We also wrote short memos to document interviewees' responses to our main interview questions.

Table 2. Themes and Subthemes Identified

Main themes	Subthemes	Coding categories	Example quotes/stories
Structural social capital	Linking social capital	Working with governmental and other organizations to seek external support	Worked with the local public health department to make and distribute COVID-19 flyers
	Bridging social capital	Connecting refugees with individuals outside their ethnic groups	"Let them know the right person to talk to"
	Bonding social capital	Introducing refugees to local ethnic communities	"To plug new clients or new families into an established community"
Sharing helpful information		CSO05 shared his knowledge about the job opportunities at the meatpacking plant with refugees	
Cognitive social capital	Informational support ("Knowing")	Educational efforts to enhance refugees' knowledge	CSO02 encouraged refugees to develop disaster coping strategies ahead of time
	Instrumental support ("Doing")	Offering "tangible" and specific material and instrumental support	Taught refugees how to survive a blizzard
	Emotional support ("Feeling")	Trust: let refugees feel welcomed and safe	"If they know that we are a trusted source, then they know that the next step is coming here to get the information they need as soon as possible"
		Reciprocity: service providers have learned a lot from refugees	"I got to know how things can be so different" "Rewarding"
		Norms: do not attempt to convince refugees to adapt to American culture quickly	Refugees don't have to "Americanize"

Table 2, continued

Main themes	Subthemes	Coding categories	Example quotes/stories	
Communication strategies	Honoring refugees' original cultures	Creating a sense of "shared honoring"	Constantly ask refugees to teach them about something to deliver that idea that "I'm not superior to you"	
		Yielding to refugees' original cultures	Instead of stopping "gender separation" within certain refugee populations, service providers chose to yield to the status quo	
	Understanding negative emotions	Acknowledging refugees' fear, anxiety, and frustration	"Just hearing it"	
	Establishing personal connections	Caseworkers' efforts	Wanted to go beyond a provider-client relationship but develop friendships	
		Miscommunication incidents	CSO07 became a friend of a refugee after making a minor mistake during their initial interactions	
Barriers that hindered social capital development	Language barriers	Information lost in translation processes	Translation apps did not always help	
		Not having enough interpreters	They "spoke around 32 different languages"	
		Refugees receiving misleading information from their friends and families	They learned from their family members that they could get Medicaid right away, but in fact, it could take many days for them to receive it	
	Refugees' existing bonding social capital	Distrust in government and service providers	Refugees questioned if service providers had intentionally hidden something from them	
		Lack of external resources	Insufficient funding	Short of budget
			Lack of volunteers	Need more interpreters

Next, we used the constant-comparison method to analyze data during the data exploration phase (Strauss & Corbin, 1998). The constant-comparison method involves three steps: reading through the data, identifying recurring categories, and sorting data into coding categories. We read our transcripts and memos and highlighted the themes that interview participants repetitively mentioned. The universal themes were later developed into coding categories. For example, several participants mentioned that their main tasks were teaching refugees where to seek support when they needed help. As such, we

developed the codes “education” (i.e., “educational efforts to enhance refugees’ knowledge” in table 2) and “how-to information” (i.e., “offering ‘tangible’ and specific material and instrumental support” in table 2) and sorted identical themes into both coding categories. Finally, during the data reduction phase, we coded the respondents’ answers into the coding categories identified in the previous step. We further combined several coding categories and sorted them into the existing categories in the social capital framework: (1) “linking,” “bridging,” and “bonding” in structural social capital; (2) “doing,” “knowing,” and “feeling” in cognitive social capital; (3) communicative strategies; and (4) barriers that hindered social capital development. Each group of categories responded to one research question. Table 2 presents the themes and subthemes identified in the coding process. Our data analysis methods aligned with the descriptive qualitative inquiry tradition, which enabled us to identify and describe the “outward content” (Nowell & Albrecht, 2019, p.358) of experiences, opinions, and feelings.

We kept conducting interviews after we finished analyzing the transcripts of the first eight interviews. With the completion of each additional interview, we repeated the same steps as described above. Identical themes were coded into existing categories and new themes were added. We found that we reached the data saturation point where nothing new could be found (Hesse-Biber & Leavy, 2006) in our transcripts. The last several interviews only repeated the content of early interviews, validating the trustworthiness of our coding and suggesting that we had collected sufficient data. We ended up with 16 interviews.

Scholars are encouraged to take multiple approaches to ensure the rigor of their qualitative study during the data collection, analysis, and reporting stages (Nowell & Albrecht, 2019). During the data collection stage, we developed a clear and deep understanding of the interactions between service providers and refugees through our prolonged engagement with refugee serving organizations. Besides, both authors reached out to interview participants and conducted interviews either independently or together, which reduced investigator biases. In addition, we constantly debriefed our memos and preliminary thoughts to avoid myopic interpretations and reconcile differences. Finally, we slightly modified our interview protocol during the second half of data collection to explore more deeply the themes that emerged in our earlier interviews. For example, “emotional support” was not emphasized in our initial protocol, but since several participants perceived it as a pivotal part of their job, we added it to our revised protocol. During the data analysis stage, we first coded our transcripts separately, and then compared and combined the subthemes we identified. We sought academic literature to decide how we should combine some subthemes, when we had different viewpoints. During the data reporting stage, we grounded our research findings in quotes and the stories participants told, allowing readers to independently judge the credibility of the arguments we made. When explaining the possible causes of a phenomenon, we used subjunctive mood (e.g., “could be,” “might be”) instead of making assertions. Several alternative explanations and potential biases were discussed as a part of the study limitations. Adopting all the above approaches recommended by Nowell and Albrecht (2019), we ensured research rigor to the best of our abilities.

Results

Social capital can be produced through various forms of social interactions (Harpham et al., 2002; Paldam & Svendsen, 2000). The following section elaborates on (1) how CBOs' service providers helped refugees produce social capital to foster their disaster resilience and (2) the effective strategies and intersecting barriers for service providers to foster refugees' disaster resilience.

Structural Social Capital

RQ1 asked about how service providers helped refugees obtain bonding, bridging, and linking social capital.

Bonding social capital describes the strong connections and social ties among individuals in homogeneous groups. CSO01 and CSO03 noticed that some local ethnic communities, such as the Karen, Burmese, and Somali, were already in the area. They believed that their organizations were responsible for introducing new refugees to those existing communities. As CSO03 stated, one of his jobs was "to plug new clients or new families into an established community" so that his clients would "feel safer and more comfortable." Several service providers who had a refugee background, like CSO05, CSO10, and CSO11, were the contacts of newly arrived refugees from the same ethnic origins. CSO05's parents worked at a local meatpacking plant that employed many refugees. He learned from his parents that schools and factories were closed during a blizzard, so workers needed to plan ahead of time. Truly understood how this piece of simple information might be critical for refugees, he shared it with his clients.

Bridging social capital refers to one's connections with individuals from diverse demographic and occupational backgrounds (Villalonga-Olives & Kawachi, 2015). Refugees undoubtedly lacked bridging social capital. Due to an isolated lifestyle, refugees had little exposure to the outside (CSO15). Therefore, service providers found their jobs were to "expand the world they were living in" (CSO15). Realizing that the key to success in disaster preparation and management was "knowing the right person to talk to" (CSO01), service providers acted as a bridge to guide refugees to the "right persons." "Right persons" included educators, community leaders, and anyone who could provide information or support (CSO09). Service providers took people to those who were "certified in their expertise and brought them there to share that knowledge" (CSO09). These efforts expanded refugees' social networks and brought about new information and resources (Ozanne & Ozanne, 2021), better equipping refugees for disasters.

Service providers helped refugees develop two important facets of structural social capital: the size of social networks and broad connections (Wong et al., 2019). A caseworker was assigned to a refugee family upon the family's arrival in the United States. The caseworker might be the first bridging social capital refugees obtained. Instead of providing what service providers found necessary, service providers wanted to help refugees get "what they want" (CSO09). Caseworkers helped refugees resolve their specific needs. Services they often provided included placing refugees in secure apartments, getting

groceries, offering rides to doctors' appointments, applying for Medicaid, getting a driver's license, etc. These practices ensured that refugees could resolve the minor problems they encountered in their everyday lives, which was the first step toward self-sufficiency.

These organizations also served as the starting point for more bridging social capital. In addition to introducing information and support from other sources, they also took the initiative to advocate for refugees and invite local businesses and community groups to collaborative activities and so that to alter local residents' biased perceptions and increase mutual understanding. They realized that many local people really didn't "understand what a refugee is. They think people just magically show up here and then the government provides everything for them. And that is not how it is at all" (CSO04). CSO16 noted that it would be necessary to let more Americans know that "refugees contribute four million dollars in tax contribution" instead of being a financial burden. They worked with local school districts and educated the school staff regarding refugees' cultural traditions and eating habits (CSO09). In addition, CSO03, an employment caseworker, had made numerous efforts to let employers, especially local small businesses, know that "I have lots of highly educated and well-trained clients that these companies weren't aware of before."

In terms of linking social capital, Organizations A and C, which primarily relied on federal resettlement funding, played a critical role in distributing funds and assisting refugees in navigating the public benefits system (CSO02). During the COVID-19 pandemic, the U.S. Office of Refugee Resettlement provided funds that allowed these organizations to get personal protective equipment for staff and provide remote services (CSO01). Organization B worked with the local public health department to make COVID-19 information flyers in various languages and distributed them to refugee communities (CSO13). This organization also conducted refugee community surveys and asked questions such as "what have been hard about living here? What do you need and what are some things that would benefit you, to make your life better?" (CSO15) The survey results were presented to the mayor who then "got two refugees that are going to be shadowed by her" (CSO15). Through these kinds of efforts, service providers advocated and created linking social capital for refugees. The connection between refugees and the local elected officials and policy-makers presented opportunities for refugees to be involved in the policymaking and disaster planning process.

In short, service providers utilized their organizational resources to connect refugees with a wide variety of resources where they could obtain information, service, and support. To some extent, service providers served as a medium to connect refugees to the "broader society" (CSO01). While the connections between refugees and service providers created some structural social capital, service providers introduced refugees to more external sources, creating more structural social capital. This kind of "two-step" process was a major method for producing structural social capital.

Cognitive Social Capital

RQ2 was concerned with the development of cognitive social capital. Since cognitive social capital has the strongest positive effects on one's post-disaster experiences (De Silva et al.,

2007; Rung et al., 2017; Wind et al., 2011), it is worthwhile to produce as much cognitive social capital as possible. The following section discusses how service providers helped refugees develop cognitive social capital through providing three types of support: informational, instrumental, and emotional (Harpham et al., 2002).

Informational Support. Since refugees were new to a drastically different country, they were even more vulnerable than local residents when facing a disaster, so “a lot of education is needed” (CSO02). Education was mainly achieved through social adjustment programs. Education enhanced refugees’ knowledge about the available community resources in preparing for and responding to disasters.

Social adjustment programs featured orientation presentations by educational specialists from these organizations or guest speakers. CSO04 was an educational specialist who taught English and civic classes. A recent topic she covered during the social adjustment program was “safety,” including bicycle safety and driving safety. She came up with this topic because she noticed that several refugees had been injured or killed in multiple accidents. Another important topic she covered was financial literacy. Even though few people had identified a causal link between financial situations and disasters, CSO04 believed that one’s financial situation might change during disasters like the COVID-19 pandemic, so people needed to save back money and think about how to handle the financial crisis that disasters might trigger.

In addition to providing specific information to cope with specific disasters, service providers constantly tried to raise refugees’ awareness of disaster preparedness. CSO02, a senior service provider, often encouraged refugees to think about a collection of questions: “if you and your family get sick for a few days, and if you don’t have enough food, what should you do? Who should be the caregiver? If the caregiver is also sick, do you have a plan like who can take care of you?” CSO04 believed that these questions encouraged refugees to think about their disaster coping strategies ahead of time, so they would not be caught off guard when a disaster occurred.

Instrumental Support. Service providers believed that refugees wanted something “tangible” (CSO04). “Tangible” things mainly encompassed specific material and instrumental support. Material and instrumental support was mainly provided during the one-on-one interactions between refugees and service providers. Instrumental support boosted refugees’ capabilities to cope with specific problems.

Service providers taught refugees about how to properly use home devices in their new home, especially those concerned with safety issues, such as fire alerts and smoke detectors. CSO14 noticed that the fire alarms at many refugees’ houses were chirping when they did home visits because the refugees did not know what was going on. During specific disasters like the COVID-19 pandemic, service providers gave detailed instructions to refugees to cope with the health threat. CSO02 said that a considerable portion of refugees had masks available but did not know how to wear them properly. Every time she saw them, she taught them how to properly wear a mask. Similarly, during a blizzard, CSO05 talked to each family he worked with about what they should do to survive a blizzard.

CSO04 taught refugees about fixing their roof damages caused by a tornado: “even if they had insurance, it might take a number of months before they could get them fixed” (CSO04). Therefore, CSO04 found it necessary for refugees to be equipped with those skill sets in advance.

Service providers found that more training would be needed to cope with the possible occurrence of natural disasters. CSO06, for example, had been thinking about developing a plan to train refugees on how to respond to a tornado or active shooting incident. While providing informational and instrumental support, service providers believed that they should not do it in a demeaning way, but they were simply there to “help.” Service providers viewed refugees’ struggles and confusions as nothing more than some “disadvantages” that were caused by “not being an established person in the United States” (CSO02). “They are average persons but need a little bit of guidance,” said CSO09.

Service providers wisely and cautiously encouraged refugees to do something but tried not to achieve their goals in an offensive way. For example, refugees needed to get vaccinated for COVID-19 in order to work at a meatpacking company, but some of them were strongly against vaccinations (CSO05). Simply saying that the company wanted them to do so was not sufficient. Some refugees distrust the government due to their previous unpleasant experiences with their home country governments, so saying “the government wanted you to get vaccinated” would make things even worse (CSO01). However, refugees were more likely to accept explanations like “other people like you have got vaccinated” (CSO04). Service providers quickly adopted the last narrative to encourage refugees to get vaccinated.

Due to language barriers and other cultural, political, and religious considerations, refugees did not always quickly accept the suggestions by service providers. Service providers believed that they needed to be patient throughout the processes (CSO05). They kept talking about and explaining the points they wanted to make (CSO09) and expected refugees to have their “aha moments” (CSO02) one day.

Emotional Support. Emotional support was mainly achieved through reducing refugees’ uncertainty and respecting their original culture. These approaches enhanced the “trust” and “reciprocity” facets of social capital, but might not contribute to the “norms” facet of social capital.

Trust. Service providers wanted refugees to feel “welcomed” (CSO03) and “safe” (CSO05) in their new area of residence. Their ideas touched on two facets of cognitive social capital: “welcomed” resonated with a sense of belonging (Harpham et al., 2002), and “safe” indicated a sense of community and trust (Wong et al., 2019). CSO02 noticed that many refugees had already encountered traumatic experiences before resettlement, making them more skeptical and uncertain about the world surrounding them. To alleviate their anxiety, CSO02 tried every means to deliver the notion that “you are safe” in her conversations with refugees. In addition, noticing that few refugees had personal computers but most of them had smartphones, the refugee serving organization updated their staff members’ devices to make them more approachable (CSO01).

Even though service providers perceived “education” as the main theme of their duties, they all understood that “educating” refugees did not indicate a hierarchical relationship. Arrogant attitudes or discriminations against refugees were not appropriate either. Instead, service providers kept the idea of “always respect[ing] their culture” (CSO02) in mind and adhered to it throughout their conversations with refugees. Service providers demonstrated their respect in different ways depending on their positions and roles in the organization. CSO02 often emphasized that “you are who you are, and we are just to educate you and inform you of what you basically come to.” She also constantly reminded herself and her colleagues that people had their own beliefs, morals, views, and minds, which should be recognized and respected. The main goals of service providers’ communicative activities were to establish a relationship of mutual trust (e.g., CSO02, CSO04, CSO08, CSO13) and be approachable so that refugees would feel comfortable seeking for help. “If they know that we are a trusted source, then they know that the next step is coming here to get the information they need as soon as possible,” as CSO01 concluded.

Reciprocity. Rather than solely being service “providers,” these service providers believed that their experiences were rewarding because they had learned a lot from refugees as well. CSO09 considered her communication with refugees as a mutual process, which was more like exchanging viewpoints. While she taught refugees about many things, refugees were also teaching her. “I get to know how things can be so different than how I would go about things,” said CSO09. She learned from refugees that they cared about their families much more than Americans, which was inspiring to her. Similarly, CSO15 believed that learning about refugees’ cultures enabled her to reflect on herself. CSO13 concluded that the more she knew about refugees, the more she felt that they were similar to each other such that they had identical needs.

Service providers viewed their relationships with refugees as reciprocal. It had two implications. First, even though what service providers “gave” greatly exceeded what they “received,” the process of giving was rewarding. Of more importance, they obtained some new thoughts from refugees. Therefore, their interactions with refugees demonstrated a prominent feature of structural social capital development: structural social capital, especially bridging social capital, is in essence relationship of exchange (Pelling & High, 2005). Second, mutual help and reciprocity are two important facets of cognitive social capital (Wind et al., 2011). It remains unclear if refugees had developed a feeling of “reciprocity,” but service providers had. Feeling reciprocal suggests that service providers developed their own cognitive social capital while they helped others develop cognitive social capital.

Norms. The interactions between service providers and refugees were twofold. On the one hand, service providers took the most initiatives to provide informational and instrumental support. They no doubt played a dominant role in those conversations. On the other hand, however, regarding emotional support, service providers chose to listen to refugees, explain some basic facts, and not attempt to convince them to believe in something. This was not likely to help refugees “being assimilated to the new culture” (CSO09). As a result, CSO10 found that after being resettled for ten years, many

refugees were the same as they were coming from their own countries. Even though CSO10 did not think that refugees had to “Americanize,” it would be necessary for refugees to adopt some values, such as being on top of their own bill payments, in order to adapt themselves to the United States.

The discrepancy in service providers’ communicative activities could be because service providers placed most emphasis on helping refugees resettle and survive, while cultural adaptation or simulation was not their priority. In fact, it might be unrealistic to expect service providers to address all kinds of cultural shocks within a short period of time. As CSO02 mentioned, the goal was to help refugees survive. If refugees decided not to trust or seek help from the refugee serving organization anymore, that would be their major failure.

Nevertheless, being laid back in encouraging refugees to adapt to American culture might impede refugees from obtaining enough relational social capital from groups outside of the refugee serving organizations. Relational social capital encompasses norms, sanctions, obligations, expectations, identity, and identifications of a group (Nahapiet & Ghoshal, 1998), which is also a component of social support in response to disasters (Wind et al., 2011). Issues like “gender separation” indicated drastically different social norms from that of the United States, which were likely to negatively affect refugees’ gaining relational social capital from their co-workers, schools, and local residents. While Preston et al. (2017) found a positive correlation between cognitive and relational social capital in a buyer-supplier relationship, our study showed that regarding the interactions between refugees and their service providers, cognitive and relational social capital might not grow simultaneously.

Strategies of Interaction and Engagement

RQ3 explored the communicative strategies service providers had adopted to advance their missions. The in-depth interviews revealed three common strategies: honoring refugees’ original cultures, understanding the negative emotions refugees expressed, and establishing personal connections.

Honoring Refugees’ Original Cultures. Service providers did not attempt to convince refugees to “become Americans” (CSO13), but tried their best to understand and honor refugees’ cultures. Service providers like CSO13 and CSO14 constantly asked refugees to teach them about something refugees liked in order to deliver the idea that “I’m not superior to you” (CSO14) and to create a sense of “shared honoring” (CSO13).

Of more importance, when encountering a cultural conflict, most service providers chose to yield to refugees’ original cultures. CSO08, for example, found that the Somalian and Muslim families could not accept sending their women and men in the same van to an English class. Even though he did not agree with this kind of “gender separation,” CSO08 chose to respect refugees’ traditions. Similarly, an Afghan lady did not want to meet with a male caseworker due to religious concerns. While no female caseworker was available at that time, the program director decided to go in person and be her caseworker (CSO02).

While service providers emphasized the need to “educate” refugees, they also tried their best to honor refugees’ cultures, which appeared to be a dilemma. “I don’t attempt to convince them of American culture, but [I only] teach them about what they need to know and do only to survive in the United States,” said CSO09. Embracing their own cultures was important and necessary, but some facets of their own cultures, like “gender separation,” often impeded refugees from adapting to the country. Service providers like CSO09 believed that it was necessary to seek a balance between embracing their original cultures and being assimilated to the new one. However, service providers appeared to be struggling with this dilemma. CSO08, for example, believed that some refugees’ perceptions of gender and “gender separation” needed change in order to adapt themselves to the local society, but so far service providers could do nothing other than yield to refugees’ traditions.

Understanding Negative Emotions. The second widely adopted communicative strategy was understanding the negative emotions refugees expressed but never reacting more to them. Service providers listened to their complaints and tried providing some coping strategies, but they were “just hearing it” (CSO02). For instance, when refugees got anxious about not receiving food stamps as quickly as they expected, CSO05 normally did nothing other than ask them to be patient. In this way, service providers set boundaries. They also constantly told refugees that it was okay to be uncomfortable.

In addition, refugees’ past experiences could have resulted in numerous traumatic feelings, which individual service providers could hardly alleviate within a short period of time. Under those circumstances, listening was the most effective communication method (CSO09). Giving them a voice and acknowledging their feelings would help them feel safe in the new country (CSO13).

Establishing Personal Connections. The last strategy was establishing personal connections between refugees and caseworkers. Service providers found building personal relationships more important than providing specific goods (CSO15). They wanted to go beyond maintaining provider-client relationships and develop friendships with refugees (e.g., CSO08, CSO13).

While each refugee family was assigned one caseworker, the caseworker constantly checked in on refugees via email, text messaging, and home visits. Service providers found face-to-face communication achieved through home visits to be unbelievably helpful (CSO04). Simply asking questions like “do you have food” and “are you good” enhanced the relationships between refugees and service providers. To CSO08, developing friendships was as important as providing support. Several service providers (e.g., CSO05) used to be refugees, so they shared this information with new refugees to seek a shared identity.

Occasionally, minor miscommunication incidents did not destroy but enhanced their friendships. CSO07 was aware of his “cultural insensitivity” and had attempted to remove any assumptions because “people in foreign countries are more advanced than you think they are.” CSO06 mentioned a story of his colleague. The colleague went to a Somali Mosque but did not take his shoes off. He felt embarrassed when a guy asked him to take

off his shoes. This minor “mistake” became the starting point of their friendship and they soon became good friends. CSO06 concluded that as long as service providers were flexible and open to other cultures, they could easily develop friendships with refugees.

The above three strategies intertwined and were likely to enhance each other. Building personal connections and even friendships enabled service providers to understand refugees’ cultures (CSO08) and their needs (CSO07), while understanding refugees’ cultures allowed service providers to respond to refugees’ negative emotions more appropriately. With the joint effects of three strategies, service providers developed relationships of mutual trust with refugees, producing more social capital and fostering disaster resilience.

Intersecting Barriers to Community Engagement and Disaster Preparedness

Service providers identified several barriers that prohibited them from effectively achieving their goals (RQ4). Almost all the interview participants mentioned language barriers. Due to language barriers, interpreters were needed to facilitate smooth communication. CSO10 estimated that the refugees received by his refugee serving organization spoke around 32 different languages. It was hard to find enough interpreters speaking “small” languages like Dari and Pashto spoken in Afghanistan and multiple dialects in Africa. In some cases, service providers relied on translation apps to overcome the language barrier. Nevertheless, even with interpreters or translation apps, a lot of meanings could be lost during the translation process, prohibiting service providers and refugees from truly getting each other’s words (CSO08).

The second barrier was concerned with refugees’ existing bonding social capital. Refugees often received conflicting information from service providers and their family members and friends, making them question the credibility of service workers. To make things even worse, their “traumatic experiences” (CSO02) shaped their opinions and attitudes toward people in power, such as government and police officers, which might influence their perception of the information obtained from governmental agencies and authorities. For example, CSO05 said that most of his clients thought the food stamp was from his agency, and they did not understand the agency did not have the authority and “there was no button that you could press and then you got it the next day.” So he had taken much time to explain to his clients the nuances of assistance programs and the public benefits system. Sometimes, when refugees found that their friends had already received food stamps or Medicaid but they had not, they tended to question if service providers had intentionally hidden something from them. This kind of skepticism reflected refugees’ decreased trust in service providers.

The third barrier was the lack of external resources. While service providers helped refugees expand their structural social capital, service providers needed more structural social capital to make their services sustainable as well. Otherwise, their “physical resources would be exhausted pretty quickly” (CSO03). External resources included monetary support like funding (CSO03) and donations of goods from other groups and organizations (CSO05). The refugee serving organizations had been receiving funding from and collaborating with organizations like Federal Emergency Management Agency (FEMA), the

Red Cross, the Salvation Army, and several local businesses and activists (CSO01). However, more support and collaborations between organizations were always needed.

In terms of governmental assistance, participants commented on the challenge of dealing with “the public system and the public benefits system” (CSO02) and the insufficiency of governmental support to meet refugees’ needs. CSO10 noted that the government funding had covered about 60% of the costs needed for refugee resettlement, but “what about that 40%?” According to CSO08, each new refugee came with a budget from their resettlement agency, so there was enough money to purchase the most basic things and address their most urgent needs. Nevertheless, CSO08 found it necessary to mobilize all other resources like donations: “by mobilizing all these donations we could free up a lot of those refugees’ budgets to be spent on the next things they need, which might be groceries in a month, or Internet service for their apartment, or a cell phone.” Service providers found that they were not able to make the best use of governmental resources without community mobilization.

Another form of external resource was volunteers, especially interpreters. Due to the large number of direct conversations involved in their interactions with refugees, volunteers were needed to reduce current staff members’ workload and build connections between refugees and the host community, and interpreters were needed to improve the quality of communication. “Street-level volunteers” would be sufficient, but service providers did not find enough volunteers who were willing to “sit down with each individual family and work with them to see what they actually needed” (CSO07).

Discussion

The research results highlight the vital roles of service providers at CBOs in building social capital and fostering disaster resilience through various communicative activities.

The Interplay of Structural and Cognitive Social Capital

CBOs service providers’ efforts not only expanded the sizes of refugees’ social networks, resulting in more structural social capital (Wong et al., 2019), but they also contributed to refugees’ cognitive social capital. Active interactions with individuals from all walks of life were likely to increase refugees’ sense of belonging (Harpham et al., 2002) to the local community, resulting in higher cognitive social capital. The inherent association between structural and cognitive social capital resonates with existing research: higher levels of structural social capital are associated with higher levels of cognitive social capital (Rung et al., 2017; Wong et al., 2019). Cognitive social capital is likely to be a consequence of the structural aspects of social capital (Rung et al., 2017).

Our research findings further exemplify a complicated process. As service providers introduced refugees to the established ethnic communities (bonding), connected them with various individuals and organizations outside of refugees’ original social networks (bridging), and advocated for refugees’ needs (linking), refugees gained structural social capital. With more structural social capital, refugees were more likely to develop a sense of belonging to

the community and higher levels of trust in community members, resulting in higher cognitive social capital. Higher cognitive social capital could subsequently enhance refugees' confidence in actively seeking more connections, leading to higher structural social capital. Given the interplay between structural and cognitive social capital, we conclude that service providers have cultivated both the tangible and intangible forms of social capital (Claridge, 2018) through the same set of communicative activities, effectively killing two birds with one stone.

Nevertheless, the mechanism of co-occurrence between structural and cognitive social capital is not always positive. It is also necessary to differentiate between the outcomes generated by bonding, bridging, and linking social capital. In particular, bonding social capital enhances ethnic communities' solidarity and cultural practices, but might hinder refugees from participating in collective actions based on the shared norms of the host society. This phenomenon confirms the argument made by Vergani et al. (2021): strong in-group networking discourages immigrants from reaching out to local residents, resulting in social isolation and segregation. While bonding social capital often leads to more social support, security, and stability (Iosifides et al., 2007), which contributes to the growth of disaster resilience, new evidence suggests that bonding social capital could hinder the growth of other forms of social capital. Therefore, the impact of bonding social capital is two-fold. More research is needed to evaluate the overall contribution of bonding social capital to disaster resilience.

In short, we conclude that the growth of social capital is achieved through various forms of communicative activities initiated by service providers, and structural social capital and cognitive social capital interplay with each other. Overall, the growth of structural social capital contributes to the growth of cognitive social capital, and cognitive social capital in turn motivates refugees to seek more structural social capital, resulting in a positive cycle of social capital development. Nevertheless, one form of structural social capital, bonding social capital, is likely to discourage refugees from seeking cognitive social capital. The phenomenon suggests that higher bonding social capital does not always yield better outcomes. It is also reasonable to predict that bridging and linking social capital contribute most to the growth of cognitive social capital, after taking into consideration the negative influence of certain forms of bonding social capital. Therefore, we suggest practitioners make trade-offs in their activities to maximize the positive effects of bridging and linking social capital but minimize the negative effects of bonding social capital. Accordingly, scholars need to differentiate different types of structural social capital in empirical research in order to reveal the nuances of social capital development.

Among various forms of social capital, linking social capital is unique because service providers do not directly "offer" refugees linking social capital. Linking social capital empowers refugees to be proactive in community engagement and local policymaking, and therefore fosters a sense of community belongingness.

In addition, most of the barriers identified by service providers fell into the category of linking social capital. Individual service providers or small CBOs can hardly complete tasks like recruiting more interpreters, seeking more financial support, and finding and training volunteers independently. Instead, interventions from governmental agencies and

large corporations are needed to overcome those barriers. “Those who are in power,” a form of linking social capital (Aldrich & Meyer, 2015; De Silva et al., 2005), largely determines how sustainable the services CBOs can provide.

Building upon the above discussion surrounding the interplay between different forms of social capital, we develop the following figure 1 to illustrate the flow of direct social capital exchange during the disaster resilience cultivation process. CBOs seek linking social capital from powerful external sources to make their services sustainable, and service providers rely on CBOs’ linking social capital to help refugees develop bridging and cognitive social capital, contributing to higher disaster resilience. During this process, bonding social capital both enhances and undermines disaster resilience. We do not intend to argue that linking social capital has been directly “transformed” into bridging or cognitive social capital, but the figure demonstrates a typical process through which social capital is directly exchanged (e.g., Kwok et al., 2019; Paldam & Svendsen, 2000) among members of different social groups.

Cultivating Social Capital and Disaster Resilience

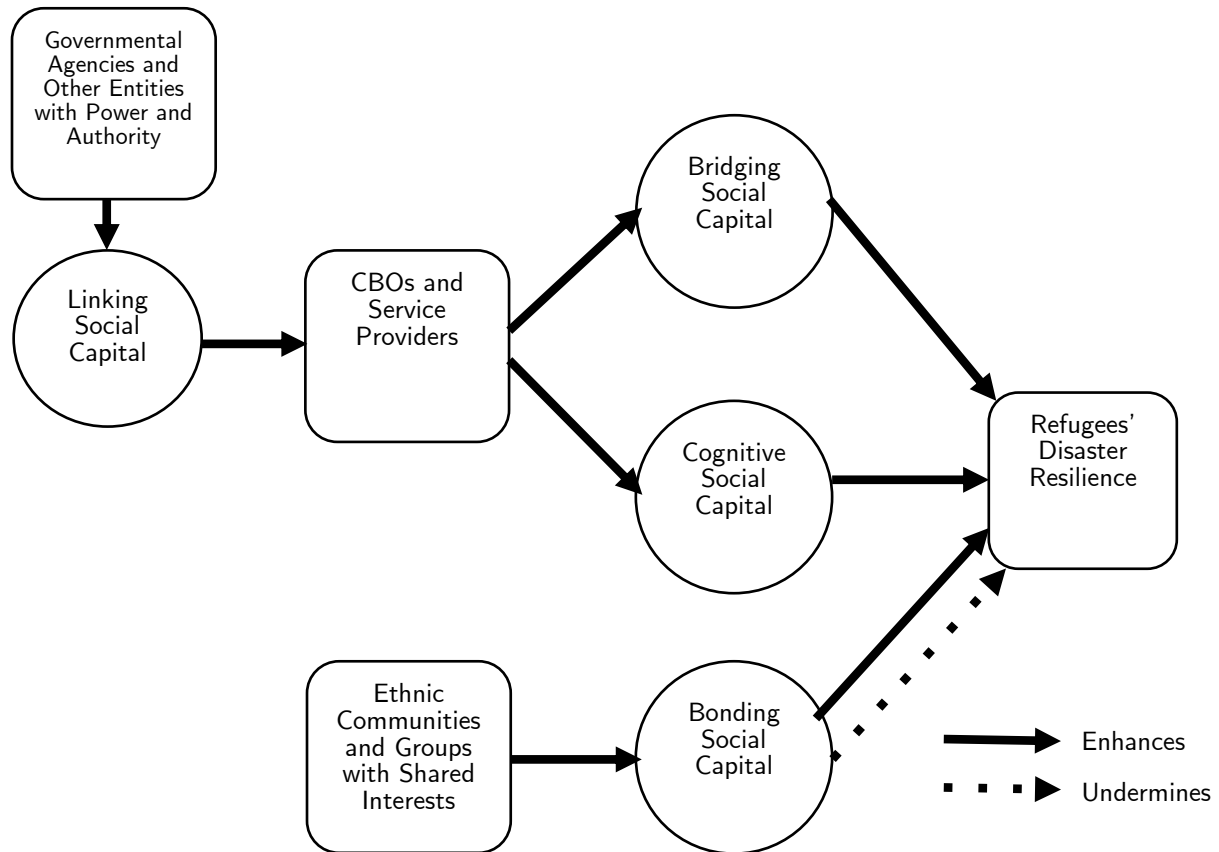
Our research participants’ comments signal the need for proactive discussions about disaster resilience cultivation that are tailored to each individual’s and household’s specific situation and cultural practices (Marlowe, 2015). Refugee communities are always marginalized in the host society, so they need to develop extended relationships beyond their original communities. These extended relationships can result in greater social capital and access to vital resources (Marlowe, 2015). CBOs have a particularly important role in providing necessary support, navigating the complexity of support networks, identifying community leaders, cultivating capacities, and mobilizing the host society. These avenues also affect individuals’ and communities’ disaster planning, preparedness, response, and recovery (Kwok et al., 2019).

CBOs can cultivate community members’ social capital in three ways: providing incentives, organizing social events, and deliberately planning the layout of the community (Aldrich & Meyer, 2015). While these approaches are proven to work at the community level, our study shows that social capital can also be cultivated through interpersonal communicative activities like one-to-one interactions between service providers and refugees and small group communicative activities, such as those between CBOs and refugees. Compared to community-level approaches, interpersonal approaches more directly address the most urgent needs of refugees, which can be more effective in cultivating vulnerable groups’ social capital and, subsequently, disaster resilience within a short period of time.

Community disaster resilience is concerned with a community’s capacity to prepare for, respond to, and recover from disasters (Murphy, 2007). Community disaster resilience is more than an aggregate of individual community members’ disaster coping capacities, but individuals’ levels of disaster resilience largely determine the overall community disaster resilience. Although refugee communities have certain vulnerabilities, CBOs have recognized refugees’ adaptive capacity in dealing with trauma and hardship and have tried their best to

address them (Marlowe, 2015). We conclude that CBOs improve refugee communities' disaster resilience through empowering each individual refugee

Figure 1. Flow of Social Capital and Its Impact on Disaster Resilience



Conclusion

This paper presents a qualitative study on CBOs service providers' perceptions of their roles in cultivating refugees' social capital and disaster resilience. The study has four major findings. First, service providers relied on the resources of their organizations to foster refugees' bonding, bridging, and linking social capital. They enabled refugees to expand the sizes of their social networks and get connected to more resources in society. Second, service providers cultivated refugees' cognitive social capital by providing informational, instrumental, and emotional support. While the trust and reciprocity facets were enhanced, the interactions between service providers and refugees did not contribute to the third facet of cognitive social capital, shared norms. Third, service providers honored refugees' original cultures in their communicative activities, tried to understand their negative emotions, and established personal connections. All these practices enhanced refugees' disaster resilience. Finally, service providers identified several barriers to prohibit them from effectively achieving their goals, most of which were concerned with language barriers, lack of linking

social capital, and refugees' existing bonding social capital. Overall, our study reveals the nuances of social capital production and disaster resilience cultivation at the most micro-level of the refugee resettlement processes, providing a new lens through which to examine emergency management.

This study has several limitations. First, all our research participants were in the rural areas of Texas. More research is needed to investigate to what extent our research findings are applicable to non-rural and other cultural, social, and political contexts. Second, this research focuses solely on the perspectives of service providers. Missing the voices of refugees prohibits us from developing a thorough and all-around picture of refugees' disaster resilience cultivation process through CBOs service providers. It remains unclear to what extent refugees truly gain social capital and develop disaster resilience through the activities service providers have described. We cannot determine if the informational, instrumental, and emotional support by service providers caters to refugees' most urgent needs either. Refugees' perceptions and experiences are equally important, which serve as the final piece to complete the puzzle. In particular, bonding social capital encompasses social relationships of exchange (Pelling & High, 2005), and "exchange" cannot be completed without refugees' active participation. Nevertheless, this project is one of the first projects to map out service providers' experiences and feelings, providing novel and intriguing insights into refugees' social capital development and disaster resilience cultivation. Future research could interview refugees to gather first-hand information about the outcomes of service providers' activities. Third, since the study was conducted during the COVID-19 pandemic, most participants tended to link "disasters" solely to COVID-19. Their "preoccupation" with COVID-19 could have prevented them from thinking of their communicative activities related to a wider variety of natural and public health disasters.

References

- Abrams, J., Davis, E. J., & Moseley, C. (2015). Community-based organizations and institutional work in the remote rural west. *Review of Policy Research*, 32(6), 675-698.
- Airriess, C. A., Li, W., Leong, K. J., Chen, A. C. C., & Keith, V. M. (2008). Church-based social capital, networks and geographical scale: Katrina evacuation, relocation, and recovery in a New Orleans Vietnamese American community. *Geoforum*, 39(3), 1333-1346.
- Aldrich, D. P., & Meyer, M. A. (2015). Social capital and community resilience. *American Behavioral Scientist*, 59(2), 254-269.
- Babcicky, P., & Seebauer, S. (2017). The two faces of social capital in private flood mitigation: Opposing effects on risk perception, self-efficacy and coping capacity. *Journal of Risk Research*, 20(8), 1017-1037.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Greenwood.

- Cheung, L., McColl-Kennedy, J. R., & Coote, L. V. (2017). Consumer-citizens mobilizing social capital following a natural disaster: Effects on well-being. *Journal of Services Marketing, 31*(4/5), 438–451.
- Claridge, T. (2018). Dimensions of social capital - Structural, cognitive, and relational. *Social Capital Research*. <https://www.socialcapitalresearch.com/structural-cognitive-relational-social-capital/>
- Cox, R. S., & Perry, K. M. E. (2011). Like a fish out of water: Reconsidering disaster recovery and the role of place and social capital in community disaster resilience. *American Journal of Community Psychology, 48*(3), 395–411.
- De Silva, M. J., McKenzie, K., Harpham, T., & Huttly, S. R. A. (2005). Social capital and mental illness: A systematic review. *Journal of Epidemiology and Community Health, 59*(8), 619–627.
- Elliott, S., & Yusuf, I. (2014). “Yes, we can; but together:” Social capital and refugee resettlement. *Maui: New Zealand Journal of Social Sciences Online, 9*(2), 101–110.
- Garkisch, M., Heidingsfelder, J., & Beckmann, M. (2017). Third sector organizations and migration: A systematic literature review on the contribution of third sector organizations in view of flight, migration and refugee crises. *Voluntas, 28*(5), 1839–1880.
- Grootaert, C., & van Bastelaer, T. (2001). *Understanding and measuring social capital: A synthesis of findings and recommendations from the social capital initiative*. The World Bank.
- Harpham, T., Grant, E., & Thomas, E. (2002). Measuring social capital within health surveys: Key issues. *Health Policy and Planning, 17*(1), 106–111.
- Hesse-Biber, S. N., & Leavy, P. (2006). *The practice of qualitative research*. Sage.
- Iosifides, T., Lavrentiadou, M., Petracou, E., & Kontis, A. (2007). Forms of social capital and the incorporation of Albanian immigrants in Greece. *Journal of Ethnic and Migration Studies, 33*(8), 1343–1361.
- Jewett, R. L., Mah, S. M., Howell, N., & Larsen, M. M. (2021). Social cohesion and community resilience during COVID-19 and pandemics: A rapid scoping review to inform the United Nations research roadmap for COVID-19 recovery. *International Journal of Health Services, 51*(3), 325–336.
- Jordan, J. (2014). Swimming alone? The role of social capital in enhancing local resilience to climate stress: A case study from Bangladesh. *Climate and Development, 7*(2), 110–123.
- Jouannic, G., Ameline, A., Pasquon, K., Navarro, O., Tran Duc Minh, C., Boudoukha, A. H., Corbille, M., Crozier, D., Fleury-Bahi, G., Gargani, J., & Guéro, P. (2020). Recovery of the Island of Saint Martin after Hurricane Irma: An interdisciplinary perspective. *Sustainability, 12*(20), 8585.
- Koh, H., & Cadigan, R. (2008). Disaster preparedness and social capital. In I. Kawachi, S. B. Subramanian & D. Kim (Eds.), *Social capital and health* (pp. 273–285). Springer.

- Kwok, A. H., Becker, J., Paton, D., Hudson-Doyle, E., & Johnston, D. (2019). Stakeholders' perspectives of social capital in informing the development of neighborhood-based disaster resilience measurements. *Journal of Applied Social Science, 13*(1), 26–57.
- Lemyre, L., Gibson, S., Zlepzig, J., Meyer-Macleod, R., & Boutette, P. (2009). Emergency preparedness for higher risk populations: Psychosocial considerations. *Radiation Protection Dosimetry, 134*(3–4), 207–214.
- Marlowe, J. (2015). Belonging and disaster Recovery: Refugee-background communities and the Canterbury earthquakes. *The British Journal of Social Work, 45*(S1), i188-i204.
- Molden, O., Abrams, J., Davis, E. J., & Moseley, C. (2017). Beyond localism: The micropolitics of local legitimacy in a community-based organization. *Journal of Rural Studies, 50*, 60-69.
- Monteil, C., Simmons, P., & Hicks, A. (2020). Post-disaster recovery and sociocultural change: Rethinking social capital development for the new social fabric. *International Journal of Disaster Risk Reduction, 42*, 1-9.
- Moore, S., Daniel, M., Linnan, L., Campbell, M., Benedict, S., & Meier, A. (2004). After Hurricane Floyd passed: Investigating the social determinants of disaster preparedness and recovery. *Family & Community Health, 27*(3), 204–217.
- Murphy, B. L. (2007). Locating social capital in resilient community-level emergency management. *Natural Hazards, 41*(2), 297–315.
- Myers, N. (2019). Investigating the link between community planning and engagement and the health care delivery using the national health security preparedness index. *Journal of Health and Human Services Administration, 42*(1), 27-57.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review, 23*(2), 242–266.
- Nowell, B., & Albrecht, K. (2019). A reviewer's guide to qualitative rigor. *Journal of Public Administration Research and Theory, 29*(2), 348-363.
- Ozanne, L. K., & Ozanne, J. L. (2021). Disaster recovery: How ad hoc marketing systems build and mobilize social capital for service delivery. *Journal of Public Policy & Marketing, 40*(3), 372–388.
- Paldam, M., & Svendsen, G. T. (2000). An essay on social capital: Looking for the fire behind the smoke. *European Journal of Political Economy, 16*(2), 339–366.
- Pan, H. (2022). Cognitive social capital including family support and its relation with depression among Chinese elderly residents. *Journal of Family Studies, 28*(1), 277-293.
- Patnaik, E. (2013). Reflexivity- Situating the researcher in qualitative research. *Humanities and Social Science Studies, 2*(2), 98-106.
- Paton, D., & Johnston, D. (2006). *Disaster resilience: An integrated approach*. Charles C. Thomas Publisher.
- Pelling, M., & High, C. (2005). Understanding adaptation: What can social capital offer assessments of adaptive capacity? *Global Environmental Change, 15*(4), 308–319.

- Pittaway, E. E., Bartolomei, L., & Doney, G. (2015). The glue that binds: An exploration of the way resettled refugee communities define and experience social capital. *Community Development Journal, 51*(3), 401-418.
- Preston, D. S., Chen, D. Q., Swink, M., & Meade, L. (2017). Generating supplier benefits through buyer-enabled knowledge enrichment: A social capital perspective. *Decision Sciences, 48*(2), 248-287.
- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy, 6*, 65-78.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and Schuster.
- Rauhaus, B. M., & Guajardo, J. M. (2021). The practice of youth inclusion in community planning and resiliency: The case of post-Hurricane Harvey. *Journal of Health and Human Services Administration, 44*(1), 67-85.
- Rung, A. L., Gaston, S., Robinson, W. T., Trapido, E. J., & Peters, E. S. (2017). Untangling the disaster-depression knot: The role of social ties after Deepwater Horizon. *Social Science & Medicine, 177*, 19-26.
- Salami, B., Salma, J., Hegadoren, K., Meherali, S., Kolawole, T., & Díaz, E. (2019). Sense of community belonging among immigrants: perspective of immigrant service providers. *Public Health, 167*, 28-33.
- Simsa, R. (2017). Leaving emergency management in the refugee crisis to civil society? The case of Austria. *Journal of Applied Security Research, 12*(1), 78-95.
- Steimel, S. (2017). Negotiating refugee empowerment(s) in resettlement organizations. *Journal of Immigrant & Refugee Studies, 15*(1), 90-107.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage.
- UNHCR. (2010). *Convention and protocol relating to the status of refugees*. <https://www.unhcr.org/protection/basic/3b66c2aa10/convention-protocol-relating-status-refugees.html>
- UNHCR. (2021a). *Global appeal 2021 update*. The United Nations Refugee Agency. https://reporting.unhcr.org/sites/default/files/ga2021/pdf/Global_Appeal_2021_full_lowres.pdf#_ga=2.2511728.1596093390.1618338580-736681340.1600738176
- UNHCR. (2021b). *Refugees in America*. <https://www.unrefugees.org/refugee-facts/usa/>
- U.S. Department of State. (2021). *Report to Congress on proposed refugee admissions for fiscal year 2022*. <https://www.state.gov/report-to-congress-on-proposed-refugee-admissions-for-fiscal-year-2022/>
- Vergani, M., Yilmaz, I., Barton, G., Barry, J., Bashirov, G., & Barton, S. M. (2021). Bonding social capital, Afghan refugees, and early access to employment. *International Migration Review, 55*(4), 1152-1168.
- Villalonga-Olives, E., & Kawachi, I. (2015). The measurement of social capital. *Gaceta Sanitaria, 29*, 62-64.
- Wind, T. R., Fordham, M., & Komproe, I. H. (2011). Social capital and post-disaster mental health. *Global Health Action, 4*(1), 1-9.

- Wolf, J., Adger, W. N., Lorenzoni, I., Abrahamson, V., & Raine, R. (2010). Social capital, individual responses to heat waves and climate change adaptation: An empirical study of two UK cities. *Global Environmental Change, 20*(1), 44–52.
- Wong, H., Huang, Y., Fu, Y., & Zhang, Y. (2019). Impacts of structural social capital and cognitive social capital on the psychological status of survivors of the Yaan earthquake. *Applied Research in Quality of Life, 14*(5), 1411–1433.
- Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer, 15*(2), 225–249.
- Yong, A. G., Lemyre, L., Pinsent, C., & Krewski, D. (2020). Community social capital and individual disaster preparedness in immigrants and Canadian-born individuals: An ecological perspective. *Journal of Risk Research, 23*(5), 678–694.

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