

# Sustaining Resilience: Modeling Nonprofit Collaboration in Recovery

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In New Zealand, where nonprofit and government partnerships have been formally developing since the 1990s, pathways for nonprofits to improve outcomes for affected communities were open when a magnitude 7.1 earthquake occurred in rural Canterbury on 4 September 2010. As more than 13,000 aftershocks followed, including a 6.3 magnitude event on 22 February 2011 that caused fatalities and widespread structural damage in the city of Christchurch, significant action was organized in the nonprofit sector to revitalize the city. New nonprofit initiatives emerged in the central business district to address social concerns and foster engagement across the sector. This case study, undertaken three to four years after the most severe earthquakes, compared experiences from thirty-six local nonprofit organizations regarding collaboration within the nonprofit sector. Results showed that integrating nonprofit commitments to and perceptions of demands for social services into representative collective efforts supported sustainable organizational resilience into midterm recovery. Overamalgamation and prolonged restructuring, however, limited some collective efforts. Longitudinal analysis enabled development of a scalable connective structure for sustaining network resilience into long-term recovery, including collective action and collaborative issue assessment groups. Proactive implementation of similar partnerships might facilitate sustainable resilience in other urban multihazard settings. **Key Words:** nonprofit, partnerships, recovery, resilience, sustainable.

1990 年代以降, 新西兰的非盈利组织与政府间的伙伴关系已正式展开, 而 2010 年九月四号在坎特伯雷乡村发生的震度 7.1 级的地震, 则开启了非营利组织增进受影响社区的后果之管道。随着超过一万三千次余震的发生, 包括 2011 年二月二十二日震度达 6.3 级的地震造成基督城广泛的结构损害与伤亡的事件, 非营利部门便开始组织大规模行动来振兴该城市。中央商业区浮现新的非营利倡议, 以应对社会担忧并促进部门参与。此案例研究在最严重的地震发生后的三至四年内进行, 比较三十六个地方非营利组织在非营利部门中的合作经验。研究结果显示, 将非营利组织对社会服务的承诺和对该需求的感知整合进倡议的集体努力中, 将可持续的组织回复力转化为中程复甦。但过度混合和长期的再结构, 却限制了部分的集体努力。长时程分析, 让持续网络回复力的可尺度化连结结构之发展进入长程复甦, 包含集体行动与集体议题评估团体。相似伙伴关系的主动实施, 或可在其他城市的多重灾害环境中促进可持续的回复力。 **关键词:** 非营利, 伙伴关系, 复原, 回复力, 可持续的。

En Nueva Zelanda, donde las asociaciones no lucrativas y gubernamentales han estado ocurriendo formalmente desde los años 1990, los caminos para que las no lucrativas mejoren resultados en comunidades afectadas se despejaron cuando ocurrió un terremoto de magnitud 7.1 en el Canterbury rural, el 4 de septiembre de 2010. En la medida en que al sismo siguieron 13.000 réplicas, incluido un evento de magnitud 6.3 el 22 de febrero de 2011 que causó muertes y daños estructurales por doquier en la ciudad de Christchurch, una acción significativa se organizó en el sector no lucrativo para revitalizar la ciudad. Emergieron nuevas iniciativas sin ánimo lucrativo en el distrito central de negocios para abocar las preocupaciones sociales e impulsar el compromiso a través del sector. Este estudio de caso, emprendido de tres a cuatro años después del más severo de los terremotos, comparó las experiencias de treinta y seis organizaciones no lucrativas locales en lo que concierne a la colaboración dentro del sector no lucrativo. Los resultados mostraron que al integrar los compromisos de las no lucrativas con las demandas de servicios sociales y las percepciones sobre los mismos en esfuerzos colectivos representativos se refuerza una resiliencia organizacional sustentable de la recuperación a plazo medio. El exceso de amalgamación y la reestructuración prolongada, sin embargo, limitaron algunos esfuerzos colectivos. El análisis longitudinal habilitó el desarrollo de una estructura conectiva escalable para sostener la resiliencia encadenada en la recuperación a largo plazo, incluyendo la acción colectiva y la colaboración de los grupos de evaluación. La implementación proactiva de asociaciones similares podría facilitar una resiliencia sustentable en otros escenarios urbanos de riesgo múltiple. **Palabras clave:** no lucrativo, asociaciones, recuperación, resiliencia, sustentable.

The 11 February 2012 earthquake in Christchurch, New Zealand, killed 185 people, displaced more than 7,500 residents from their homes, and irreparably damaged more than 70 percent of the central business district (Chang-Richards et al. 2013; Johnson and Mamula-Seadon 2014). The nonprofit sector, an amalgamation of socially focused institutions that includes nonprofit, nongovernmental, and

partially private or public civil society organizations, operates between and in support of governments, private businesses, and communities (Hudson 2009; Zimmer 2010). Before the disaster and resultant deployment of the Civil Defense, a function of national emergency response, nonprofits in Christchurch bolstered government services for their target audiences. Nonprofits also contributed to

socioeconomic support and community well-being during the recovery alongside the Canterbury Earthquake Recovery Authority, an integrative agency established two months after the earthquake to extend the local operations of the Civil Defense until 2016, well into long-term recovery, due to the severity of the damages (Chang-Richards et al. 2013; Fogarty 2014).

After the disaster, preexisting nonprofit organizations exhibited resilience by altering their operations to share the increased burden of care for migrants, youth, and families among themselves (Hutton, Tobin, and Whiteford 2015b). Cross-sector partnerships for social service production reduced compounded financial and structural strain associated with the earthquake sequence and concurrent recession (Seville et al. 2006; Stevenson et al. 2011). Their emergent counterparts capitalized on postdisaster social cohesion to address community interactions by improving the built environment and providing support for psychological strain (Vallance 2011; Hutton, Tobin, and Whiteford 2016). Although many of these nonprofit operations endured into latter stages of recovery, some discontinued service after the initial relief period (Carlton and Vallance 2014). Those that persisted into midterm recovery benefited from national connections and partnerships (Carlton and Vallance 2014; Hutton, Tobin, and Whiteford 2016). Further analysis of the composition of these collaborative efforts might indicate conditions developed within the sector that fostered sustained network resilience throughout recovery (Smith and Wegner 2007).

This study examined collective strategies to sustain resilience in two ways: (1) appraising resilient and sustainable capacities associated with participation in collective efforts and (2) modeling a structure for nonprofit involvement in collaborative efforts over the course of recovery that contributes to sustainable resilience. It was hypothesized that nonprofit collaborations would evolve over the course of recovery to reflect shifts in the organizational resources and operating environment.

Findings were based on interviews and focus groups conducted in late 2014 with representatives from a total of thirty-six locally operating nonprofits. Shifts in the perceived capacity to provide competitive, comprehensive services were identified in relation to participation in nonprofit sector partnerships. Results were evaluated using Smith and Wenger's (2007) facilitators of sustainable disaster recovery and Kimberlin, Schwartz, and Austin's (2011) key concepts for understanding the organizational histories of pioneering nonprofit human service organizations, to contextualize the contributions of connective structures to sustainable resilience. Longitudinal and categorization patterns of engagement were analyzed. A scalable model for

nonprofit collaboration to support sustainability throughout recovery was proposed.

## **Sustainable and Resilient Strategies in the Nonprofit Sector**

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To sustainably manage their operations, nonprofit organizations must continually balance the interrelated priorities: contributions to their target audiences, allocation of organizational resources, and relationships with influential funders and policymakers in their operating environment (Dattani 2012). Sustainable organizations develop strong structures to adapt to emergent synergies with public and private partners, as well as within the nonprofit sector and among the audiences they serve (Hudson 2009). The organic nature of nonprofit operations facilitates continuity of service provision as economic, social, and environmental conditions fluctuate (Paton and Johnston 2017).

Effective communication and collaborative efforts of redundant organizations bolster continuity following a disaster (Godschalk 2003; Weichselgartner and Kelman 2015). National and local nonprofits' connections elevate preexisting needs and prepare the sector for increased service demands (Parkin 2012; Robinson and Murphy 2014). International relief nonprofits often use preexisting networks to expand their role with emergency management (McLean et al. 2012). Nonprofit organizations that emerge because of a disaster could shift the balance of existing partnerships as they negotiate their role in the recovery process (Simo and Bies 2007). Both new and established connections capitalize on flexible operating structures, diversity, and functional redundancies to be resilient by bouncing back after a disaster (Beatley 2009; Aldunce et al. 2014) and maintaining relevance through reorganization as constraints shift during later stages of recovery (Wisner et al. 2004; Simo and Bies 2007). Appropriate sector-based channels with which to integrate nonprofits into a cohesive collaborative effort that sustains resilience require more research.

## **Nonprofit Contributions to Resilience in Recovery**

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Emergency management encompasses preparation, response, recovery, and mitigation (Paul 2011). Recovery, the phase with the most substantial gaps in the hazards literature (Smith and Wenger 2007), involves multiple phases in and of itself, which might overlap: (1) relief, (2) rehabilitation, (3) reconstruction, and (4) development (Paul 2011). This phase has long-term goals that differentiate it from response activities, which are typically for emergency purposes. The concept of sustainable recovery comes from the application of sustainable development

principles to hazards research, wherein recovery is no longer thought of as a solely linear or technological process because of the social component (Smith and Wenger 2007).

Although recovery is costly and its timeline is difficult to distinguish, there are significant opportunities for locally operating organizations to improve the lives of their target audience to a better state than prior to the disaster (Patterson, Weil, and Patel 2010; Paul 2011). For socially focused nonprofits, this might require a double burden of concurrent provision of relief or rehabilitation services to remain resilient and maintain advocacy for sustainable development goals throughout the recovery (Montz, Tobin, and Hagelman 2017). Breaking down barriers to collaboration with other organizations improves the ability to react quickly and comprehensively in emergencies (Bourk and Holland 2014). This study uses a retrospective approach to capture the adaptive capacities of nonprofit collaborative efforts across various fields of social service.

### Seismic and Nonprofit Activity in the Study Area

As of 2010, Christchurch had the lowest probability of seismic hazard on the east coast of New Zealand (Stirling et al. 2012). The last earthquakes over 6.0 magnitude recorded near the city occurred in 1869 and 1870 (Pettinga et al. 2001). The nearest active fault was 100 kilometers away (Pierpiekarz et al. 2014). This changed on 4 September 2010, when an earthquake measuring 7.1 on the Richter scale occurred 40 kilometers from the city. Three additional 6.0 magnitude and higher events disrupted the public perception of safety (Brookie 2012; Platt 2012). The February 2011 earthquake, which caused fatalities and extensive structural damage to the city, resulted in the first state of emergency ever issued by New Zealand's national government (Fogarty 2014; Johnson and Mamula-Seadon 2014). The scale of recovery efforts strained government and community resources (Platt 2012; Fogarty 2014). Inventories taken two months, one year, and two-and-a-half years after the February earthquake revealed between 92 and 454 community-based and nonprofit initiatives active during recovery (Carlton and Vallance 2014).

The nonprofit sector maintained and expanded social services during response and recovery, particularly as the long-term governance system for emergency management was established (Nicholls 2013). Legislation from the 1980s and 1990s formalized the nation's commitment to nonprofit inclusion in social service provision (Larner and Craig 2005). Similar to other welfare economies, such as England, socially focused nonprofits contributed local knowledge and expanded access for marginalized groups through cross-sector partnerships that coproduced social services with government agencies (Dattani 2012; Phillips

and Smith 2011; Pestoff, Brandsen, and Verschuere 2013; Came 2014).

Even nascent nonprofits had to transition their operations to fit the more partnership-focused operating environment of later recovery phases (Carlton and Vallance 2014; Hutton, Tobin, and Whiteford 2016). After reviewing more than 500 organizations, though, Brown et al. (2014) found social assistance and more broadly community services to be the least successfully recovered aspects of the private sector. This might have reflected amplification of nonprofit and coproduced services after the disaster. There is a gap in the literature regarding the sustainability of collaborative support mechanisms developed within the nonprofit sector to maintain and expand their role in postdisaster settings.

### Concepts for Sustaining Nonprofit Resilience throughout Recovery

To minimize socioeconomic costs and promote sustainability, emergency management efforts should be proactive, comprehensive, and in alignment with the operating environment, institutional resources, and social capacity. The mitigation and preparation phases provide opportunities to preemptively plan for sustainable resilience and the long-term continuation of resilient postdisaster operations of organizations and their agency connections into a sustainable recovery process (Mojtahedi and Lan Oo 2014). The *grounded theory model* identifies another time to develop sustainable resilience, which is toward the end of the rehabilitation phase when nonprofits, including those that emerged postdisaster, proactively realign their operations (Chang and Shinozuka 2004; Doerfel, Lai, and Chewning 2010).

Kimberlin, Schwartz, and Austin (2011) identified pathways to sustainable resilience for nonprofits through organizational leadership, evaluation, and engagement. Smith and Wenger (2007) called for a multilevel approach to sustainable resilience wherein self-determining entities come together in a supportive operating environment to align commitments, leverage resources, and resolve disputes. This study combines these principles to analyze postdisaster nonprofit-sector-based integration for social service provision and develops a model of collaboration involving collective leadership and evaluation to facilitate sustainable resilience.

### Methods

Data were collected from thirty-six social service-oriented nonprofits to model aspects of integration that contributed to sustainable resilience. Participants included thirty-six nonprofits: thirty-four organizations and two agency connection groups. Organizations were recruited in late 2014 from the Community Information Network Christchurch Web site, which lists more than 10,000 locally operating groups

ranging from sports clubs, to semiprivate companies, to big international nongovernmental organizations. Criteria for inclusion were based on (1) formal organization status; (2) location within the central business district or suburbs of Christchurch, New Zealand; (3) financial records from the prior year indicating receipt of philanthropic funds from donors, such as religious institutions, the government, a society, or members; and (4) a mission statement expressing a social service focus.

Of the 108 original organizations approached, twenty-four participated. Some organizations did not respond to the request or declined to participate based on ideological difference with other approached organizations or due to strained resources; others provided relevant contacts at alternate organizations. Centrally located social service-oriented organizations included membership associations and other shared networks; therefore, once initial contacts were established, researchers used snowball methods to recruit twelve additional participants.

Results were categorized for analysis based on characteristics expected to alter operations during recovery, such as field of work, date of emergence, and international or local affiliation (see Table 1; Kimberlin, Schwartz, and Austin 2011; McLean et al. 2012; Brown et al. 2014; Carlton and Vallance 2014). Fields of work included community support, migrant services, sexual health, and international relief. Dates of emergence were recorded as either preexisting, indicated by a date

of formation before September 2010, or emergent, which would have formally organized into a nonprofit after. Although this is a subset of active organizations, the varying characteristics and degrees of connectivity represented by these groups allowed for preliminary generalizations regarding the structure of collaborations appropriate for promoting sustainable resilience among social service nonprofits.

Researchers assessed nonprofit interaction in late 2014 by conducting (1) semistructured interviews with a manager from each organization and group; (2) focus groups of three to five staff members at five of the sexual health, migrant services, or community support organizations; and (3) semistructured reviews of staff responses with management from those involved in focus groups. Focus groups captured variances in experiences attributable to size. In New Zealand, more than five staff indicated a large nonprofit. International relief and emergent organizations did not participate in focus groups due to volunteer reliance.

Questions were framed to longitudinally track variances in collective engagement within the sector. When possible, participants were asked to reflect on changes up to two years prior to the earthquake. Managers responded to background questions regarding the organization's participation in any partnerships. Both manager interviews and staff focus groups addressed similar topics to capture any variance in perceptions based on roles within the sector, including (1) resources available to practitioners for fluctuating

**Table 1** *Case study organizations overview*

	Community support	Migrant services	Sexual health	International relief
Preexisting	<ul style="list-style-type: none"> <li>• Healthy Christchurch</li> <li>• Project Lyttelton</li> <li>• Volunteering Canterbury</li> <li>• Community Garden Association</li> <li>• Neighborhood Trust<sup>a</sup></li> <li>• City Mission<sup>a</sup></li> <li>• Rural Support Trust</li> <li>• Avebury House</li> <li>• Meals on Wheels<sup>a</sup></li> <li>• Public Service Association</li> <li>• Social Service Providers Aotearoa</li> <li>• Council of Social Services</li> <li>• Problem Gambling Foundation</li> </ul>	<ul style="list-style-type: none"> <li>• Refugee Council</li> <li>• Migrants Centre</li> <li>• Pegasus Health</li> <li>• Interpreting Canterbury</li> <li>• First Union</li> </ul>	<ul style="list-style-type: none"> <li>• Youth and Cultural Development Trust</li> <li>• District Health Board Public Health Division</li> <li>• District Health Board Sexual Health Centre</li> <li>• Family Planning<sup>a</sup></li> <li>• Aids Foundation</li> <li>• Prostitutes Collective</li> <li>• Rodger Wright Centre<sup>a</sup></li> <li>• Sexual Health Blood Borne Viruses Group</li> </ul>	<ul style="list-style-type: none"> <li>• The Red Cross</li> <li>• World Vision</li> </ul>
Emergent	<ul style="list-style-type: none"> <li>• All Right Campaign</li> <li>• Ministry of Awesome</li> <li>• Student Volunteer Army</li> <li>• Gap Filler</li> <li>• Greening the Rubble</li> <li>• CanCERN</li> </ul>	<ul style="list-style-type: none"> <li>• Communication Language Information Network Group</li> </ul>	<ul style="list-style-type: none"> <li>• 298 Youth</li> </ul>	

<sup>a</sup>Indicates focus group participation.



demand for services, (2) factors outside of the disaster that changed operations, and (3) impacts of partnerships with other nonprofits on service provision.

A cross-case analysis was conducted. The full set of transcripts from each organization was themed based on nonprofit management, emergency management, and national governance literature to identify functional redundancies and alterations in the operating environment including coproduction (Dattani 2012; Pestoff, Brandsen, and Verschuere 2013; Weichselgartner and Kelman 2015). Instances and the duration thereof were recorded. The collective data were analyzed quantitatively to identify shifts in participation in partnerships, as well as commitment to and demands for services. Descriptive information was incorporated to characterize the perceived contribution of nonprofit collaboration to sustainable resilience. Based on reported participation in collective groups, a conceptual integration model to support sustainable resilience through partnerships has been developed using Smith and Wenger's (2007) facilitators of sustainable disaster recovery and Kimberlin, Schwartz, and Austin's (2011) key concepts for understanding the organizational histories of pioneering nonprofit human service organizations.

### Resilient Capacities and Engagement in Partnerships

Interviews and focus groups assessed the role of partnerships in sustaining resilience based on perceived improvements to partnerships, capacities to address complex cases, and commitments to service provision. Improvements to partnerships that were concurrent with increased capacities and commitments might indicate a capacity for sustainable resilience. Shared resources could engage additional target audiences with complex needs, and coordinated leadership could facilitate shared commitments to service provision (Smith and Wenger 2007; Kimberlin, Schwartz, and Austin 2011).

Fifty percent of all service providers perceived improved partnerships, reinforced commitments, and increased case complexity (see Table 2). Preexisting groups were twice as likely to experience all three indicators as emergent organizations. Although it is possible to assess these organizations collectively, it is also useful to determine variances in experience based on field of work within the social services.

The community support field maintained a large number of emergent organizations, which addressed youth engagement, area-specific community building, and new urbanism. Preexisting organizations included unions, missions, and membership-based organizations. A higher percentage of emergent organizations perceived improvements in partnerships than preexisting ones, but the collective perception remained high at 79 percent. Emergent organizations showed reduced instances of all three indicators, which

brought the results for the whole field to 42 percent (see Table 2).

A nonprofit leader of an emergent community support organization expressed concern that any new idea, referred to here as a "tall poppy" to denote its difference from traditional ideas, was subject to increased public and nonprofit community scrutiny, stating: "The anti-tall poppy sentiment must be changed." A preexisting nonprofit manager reported a different experience: "There is not as much patch protection." Perhaps the relative competition felt by the emergent nonprofit representative was reduced post-disaster, but only the preexisting organizations benefited from this perspective on the role of partnerships in reinforcing commitments. Nonetheless, at least 50 percent of the combined field experienced improved partnerships with increased complexity of cases (see Table 2).

Eighty percent or more of migrant support organizations reported that partnerships improved and commitments were evident. Only 40 percent of the preexisting organizations and no emergent ones experienced increased case complexity (see Table 2), however. This could have changed during later recovery stages when resettlement programs restarted.

The emergent group in the migrant support field, Communication Language Intercultural Network Group (CLING), was a collection of migrant services organizations that took action to ensure that risk communication included translations for local minorities. Their efforts required several years to effect change; consequently, their view of commitment improved over time (Hutton, Tobin, and Whiteford 2015a).

Preexisting organizations accounted for the majority of sexual health providers. These groups include two civil society partners and one group. The Sexual Health and Blood Borne Virus Group promoted collective campaigns and shared resources. Only one sexual health organization, which was associated with youth, was emergent. It existed prior to the earthquakes but had a temporary lapse in funding. All sexual health organizations experienced improved partnerships and evident commitments to care (see Table 2). One manager revealed potential causes of indicator overlap: "The postearthquake era coincides with a lot of necessary change for the organization nationally; ... probably has enhanced collaborative ventures." Disagreement arose considering increased case complexity. The emergent organization reported increased complexities but only 63 percent of preexisting ones identified this change (see Table 2). This might have reflected differences in their original care provision methods.

International relief organizations were all preexisting. All of the indicators were experienced by 100 percent of the field, which is quite different even among preexisting organizations from other fields of work (see Table 2). One representative reflected: "The national board is challenged to understand Christ-church's situation. Mini-partnerships are new as

**Table 2** Environmental influences on organizations engaged in partnerships

	Community support			Migrant services			Sexual health			International relief			Total		
	Preexisting (13)	Emergent (6)	Full field (19)	Preexisting (5)	Emergent (1)	Full field (6)	Preexisting (8)	Emergent (1)	Full field (9)	Preexisting (2)	Emergent (0)	Full field (2)	Preexisting (28)	Emergent (8)	All (36)
Partnerships improved #	10	5	15	4	1	5	8	1	9	2	0	2	24	7	31
Partnerships improved %	77	83	79	80	100	83	100	100	100	100	0	100	86	88	86
Partnerships improved # and commitments to service provision were evident	8	1	9	4	1	5	8	1	9	2	0	2	22	3	25
Partnerships improved # and complexity of cases increased	62	17	47	80	100	83	100	100	100	100	0	100	79	38	69
Partnerships improved # and complexity of cases increased	9	3	12	2	0	2	5	1	6	2	0	2	18	4	22
Partnerships improved # and complexity of cases increased	70	50	63	40	0	33	63	100	67	100	0	100	64	50	61
Partnerships improved, commitments to service provision were maintained, and complexity of cases increased	7	1	8	2	0	2	5	1	6	2	0	2	16	2	18
%	54	17	42	40	0	33	63	100	67	100	0	100	57	25	50

Note: # = total number of organizations reporting experience with the indicator; % = percentage of that type of organization reporting experience with the indicator.

recovery transitions.” These managers adapted their local partnerships to reinforce commitments to providing ongoing relief for increasingly complex cases because the local offices received pressure from the international body to return to traditional operations in support of the overarching goals of the organization.

Three of the five staff focus groups, including representatives from two community support organizations and one sexual health organization (see Table 1), reported improvements in partnerships and service provision. In focus groups, improved service provision was used in lieu of evidence of commitments and increases in case complexity. One focus group from the sexual health field reported no change in either indicator. A group from the community support field perceived diminishing service provision in spite of improved partnerships. These preexisting large organizations did not have dramatically disparate experiences from their field of work as a whole because managers shared these perceptions.

Indicators of sustainable resilience were not always experienced concurrently. Field of work shows variation but does not clearly explain it. Date of emergence provides context for some perceptions but falls short of an explanation for variances. These could result from well-developed versus developing structures for connectivity within each field or the goals of collective groups in each field. Whether the perception of increased case complexity or commitment reinforcement motivated organizations to improve partnerships or resulted from improvements to them is beyond the scope of this study. Regardless, 86 percent of participants perceived improvements in partnerships and over 60 percent reported agreement with an additional indicator as well (see Table 2).

### The Role of Nonprofit Connections in Sustaining Resilience

Collective action addressed changes to two aspects of sustainable nonprofit management: (1) the needs of target audiences and (2) opportunities available in the operating environment (Dattani 2012). The approach to integration incorporated elements of sustainable resilience, such as leveraging resources and skills to maintain services, promoting commitments to holistic care, and referring increased demand to trusted care providers (Smith and Wegner 2007). Various levels of integration and frequency of engagement with collaborative endeavors are denoted in Table 3.

Personal connections with similarly focused existing nonprofits often initially supported emergent organizations (see Tier 1 of Table 3), until competition increased during later recovery stages (Hutton, Tobin, and Whiteford 2016). An emergent community support group described its work as follows: “brings together, provides proof, supports, provides

**Table 3** Organizations reporting connectivity within the nonprofit sector

Tier	Number engaged	Nature
1. Personal connections	25+	<ul style="list-style-type: none"> <li>Partnerships with traditional and unlikely partners formed by staff and management of an organization to facilitate operations</li> </ul>
2. Collective action groups	6	<ul style="list-style-type: none"> <li>Council convened and run by members to address a specific issue</li> <li>Self-run organization convened by civil society partners to address a specific issue</li> <li>Council of grant recipients convened by funders to share resources</li> </ul>
3. Collaborative oversight groups	8	<ul style="list-style-type: none"> <li>Self-run organization that nonprofit organizations can elect to be a member of to benefit from leveraged resources</li> <li>Self-run organization that assesses and provides resources to organizations in the nonprofit sector</li> <li>Council convened and run by members to set priorities for their field and coordinate service provision or advocacy efforts</li> <li>International franchise management</li> </ul>
4. Elected representatives	1	<ul style="list-style-type: none"> <li>Sector-wide representative to the nationally convened recovery authority</li> </ul>

introductions, and mentoring. We developed an Innovation Ecosystem Map. . . .” This resilience in community leadership and engagement (Kimberlin, Schwartz, and Austin 2011) promoted their integration into collaborative efforts after they reorganized (Doerfel, Lai, and Chewning 2010).

Local branches of international nonprofits relied on personal connections with well-established accommodation and food provision agencies to facilitate relief (Brady, Wills, and McNaughton 2012). A representative from a preexisting community support organization noted that local integration was imperative to sustainability: “A lot of services have gone under. . . . Some organizations that planned to restructure before the earthquakes said it was a result of the earthquakes or funding. Larger agencies would bring what they had done in America or England here. . . . It wouldn’t work, but now they are gone and agencies like us are here to clean up.” Additional levels of engagement with partners could provide the coordination needed to evaluate shared priorities and resources for individual organizations to sustain their resources into long-term recovery (Smith and Wenger 2007).

Collective action (see Tier 2 of Table 3) involved representatives of several organizations combining resources. For example, a group of nonprofits organized based on their shared coproduction

commitments to the Ministry of Social Development highlighted evaluation, engagement, and resource sharing, which are resilient and sustainable components of collective action (Smith and Wenger 2007; Kimberlin, Schwartz, and Austin 2011). A representative stated, “We are looking at strong collaborative projects and evaluating together.” Similar groups based on shared coproduction commitments formed and dissolved as needed before and after the earthquakes.

Some groups with shared coproduction commitments also engaged in collaborative oversight (see Tier 3 of Table 3). A government-convened collaborative organization described its role this way: “We continually take the pulse in the interest of stemming need.” Membership-based nonprofits generated from within the nonprofit sector provided this function, too. Nonprofits that contributed to the resilience of their target audiences prior to the establishment of the recovery authority achieved sustainable resilience themselves through collaboration to leverage resources and evaluate needs (Smith and Wenger 2007; Kimberlin, Schwartz, and Austin 2011). Services made resilient by functional redundancies also used collaborative oversight to sustain resources through coordination of care provision for complex cases (Smith and Wenger 2007; Weichselgartner and Kelman 2015).

Representation of the entire sector proved to be more difficult (see Tier 4 of Table 3). A collective meeting entitled One Voice was convened by membership-based nonprofits just months after the February earthquake. After two years lobbying the Canterbury Earthquake Recovery Authority, two nonprofit delegates were incorporated for the nonprofit sector, one specifically representing services for the Maori, the native indigenous population. Nonprofits

showed resilience by gaining an additional means for engagement (Kimberlin, Schwartz, and Austin 2011). Because the sector’s full range of commitments had to be amalgamated, however, it created disputes instead of sustainability (Smith and Wenger 2007).

Participation was highest in Tier 1 (see Table 3) of the engagement structure with twenty-five reports of engagement. Any member of staff or management within an organization could develop personal connections to improve resilience, especially among emergent and international nonprofits, but the dependability of these partnerships could waver over time. Therefore, integration into collective action, collaborative oversight, or both improved the connections that contributed to sustainable resilience. Tiers 2 and 3 included six and eight reports of engagement, respectively (see Table 3), because typically only one or two representatives from an organization were involved. These tiers could be formed and dismantled as needed to coordinate resources and evaluate the operating environment (Smith and Wenger 2007; Kimberlin, Schwartz, and Austin 2011). Representation of the whole sector by one representative (see Tier 4 of Table 3) only lasted until the entity to which the representative was elected dissolved and was not sufficient to achieve sustainability of many social service initiatives (Smith and Wenger 2007).

### Incorporating Multilevel Situational Assessment into Sector-Wide Prospecting

The *proactive recovery transition model* (Figure 1) is based on the nonprofit connections developed in reaction to the February 2011 earthquake. The model engages resilient organizations that have exhibited

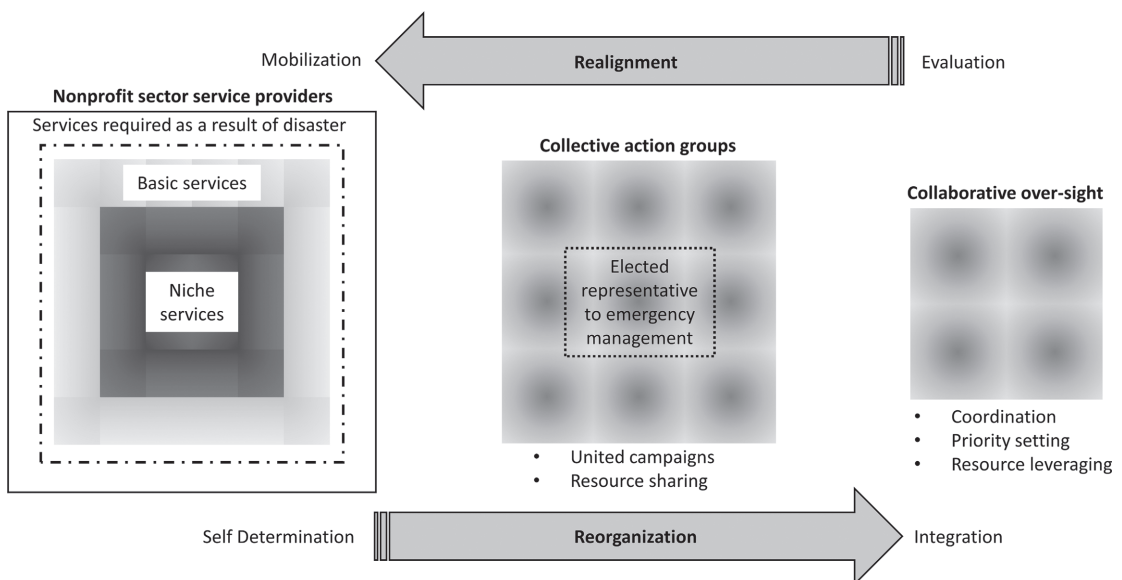


Figure 1 Proactive recovery transition model for varying levels of nonprofit agency connections.



leadership after a crisis to capture expanded services or audiences (Kimberlin, Schwartz, and Austin 2011). It identifies levels of integration with partners that combine resources and commitments as the operating environment transitions to long-term recovery (Smith and Wenger 2007).

Squares represent organizations or groups. The number of squares available at each level of integration indicates the shift from connections available through each staff person to specific representatives of the organization or sector. Shaded areas fade between squares at each level to identify potential for connections across area of origin, size, dates of emergence, and field of work.

The reorganization arrow indicates that as an organization becomes more integrated with personal connections, collective action, and collaborative oversight, it achieves more sustainable resilience. First, personal connections allow the self-determined organizations to expand and establish services for an expanded target audience after a disaster (Dattani 2012). Then, collective action allows for resource sharing to engage in united campaigns. Finally, collaborative oversight sets priorities and leverages resources for broad swaths of organizations (Smith and Wegner 2007).

Forces within the model also operate in reverse to make resilience sustainable. Evaluation conducted collaboratively by the most integrated organizations might lead to realignment of collective action groups and individual nonprofits (Chang and Shinozuka 2004; Doerfel, Lai, and Chewning 2010). For example, shared priorities might foster the creation of an elected representative to act outside the sector to leverage resources to continue expanded services (Smith and Wegner 2007). Dotted lines indicate that these might not be held long term.

Channels for integration can be established proactively, either in preparation for a disaster or when an organization revises its operations toward the end of the rehabilitation phase (Doerfel, Lai, and Chewning 2010; Mojtahedi and Lan Oo 2014). Once established, the model can expand and contract based on the need for action or oversight. It is unlikely that the entire structure would ever be dismantled regardless of the distance in time from the last disaster, because various components of it predate any expectation of risk in Christchurch.

## Limitations

This study had three primary limitations. First, extensive postdisaster research in the area reduced overall participation rates (Paton et al. 2015). National commitments to involve Maori researchers in studies of their own representative organizations also limited researchers without preestablished connections from studying those groups (Whenua 2007). The participating nonprofits represented only the most successful because they had persisted into midterm recovery

(Doerfel, Lai, and Chewning 2010). Supplementing the initial set of respondents with snowball sampling facilitated inclusion of organizations representing marginalized groups, however, overrepresentation of some fields within the social services could have occurred (Sadler et al. 2010). Including more diversity and organizations that closed prior to that time might have altered results. Second, representatives might have misrepresented commitments to and influences of partnerships to promote the organization or protect their position. Further, social desirability could have heightened participants' perceptions of improved partnerships in favor of the current operating environment (Bright et al. 2017). Third, their memories of events from over three years prior could have been incomplete (Podsakoff et al. 2003, 2012). Although interviews and focus groups were confidential and questions were ordered to reduce inferences regarding desirability of a given response, the subjective nature of the questions and small organization sizes could have altered results (Podsakoff et al. 2012). Consequently, direct correlations between involvement with nonprofit networks and sustainable resilience were not determined (Podsakoff et al. 2003). Additional research to address these limitations is needed involving (1) the role of partnerships in nonprofits that closed prior to midterm recovery and those serving indigenous populations and (2) inclusion of objective data that indicate organizational and sector-wide resilience.

## Conclusions and Applications

Following the earthquakes in Christchurch, New Zealand, existing connective structures and mutual understandings of organizational culture contributed to the capacity of various fields of work and the nonprofit sector as a whole to organize. Multiple levels of connectivity allowed for expanded service provision to be sustained through resource sharing and reinforced commitments to care delivery. Although the role of a representative for the entire sector to government-led initiatives was precarious in its capacity to advocate for all issues, membership organizations were in tune with the culture of the sector and successfully leveraged resources and guided expectations to open this channel. Collaborations of organizations with the intent to continuously assess and set priorities captured resilient aspects, such as functional redundancy and diversity, to coordinate initiatives and promote sustainability. Issue-specific collective action campaigns sustained resilient ways to engage target audiences through resource sharing. Individual connections between management and partner organizations assisted in initial mobilization or expansion. For sustainable resilience, however, nonprofits benefited from increased integration with representative groups.

Integrated groups could have supported bold realignments due to their mutual commitments to

service provision. Shared oversight allowed managers to address concerns regarding their operating environment collectively and, thereby, proactively form collective action groups to address issues before the impacts were felt. This also reduced disputes among the organizations whose combined work provided base and niche services for their target audiences (see Figure 1). With reduced competition gleaned from a shared understanding of priorities, the capacity to individually reorganize and collectively realign service provision and campaigns as needed increased.

This case study addressed gaps in the emergency and nonprofit management literature on (1) the role of organizational age, size, and field in facilitating sustainable resilience and (2) the integration of nonprofits into sector-specific partnerships working toward disaster risk reduction and sustainable development. This research analyzed nonprofit connections formed among urban social service providers in reaction to a disaster to propose a conceptual model for sustainable resilience by formalizing pathways of connectivity.

Practitioners can contract and expand the proactive recovery transition model to address natural and technological hazards, as well as other stressors that require nonprofits to practice sustainable resilience, such as an economic downturn. Nonprofits should use this model proactively as a part of disaster mitigation or, in the absence of such planning, during the rehabilitation phase to promote sustainable resilience. The model encourages nonprofits to (1) identify aspects of their operations that contribute to postdisaster resilience, such as the capacity to address more complex cases; (2) leverage agency connections that contribute to sustainable resilience, including political and funding priorities; and (3) mobilize the appropriate tiers of connectivity to increase appropriate representation and manage competition. National and local emergency management agencies have started to prioritize nonprofit engagement with recovery efforts. Utilization of the model would prepare the sector to address and improve opportunities for increased involvement with the appropriate level of collaboration from within the sector. Because this structure was limited to the nonprofit sector, it could be applicable outside of nations committed to coproduction. The model, however, requires refinement through more detailed longitudinal research, identification of geographic contributors to connectivity, application of additional resilience indicators, and testing outside of the social services. ■

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