Modeling Nonprofit Resilience in Long-Term Recovery in Christchurch, New Zealand

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Following the 2010–2011 earthquakes in Christchurch, New Zealand, many nonprofit organizations changed or expanded services to address emergent or compounded risks. This research is based on interviews with thirty local community nonprofit managers and discussions with five staff focus groups conducted in 2014. Preexisting nonprofits with flexible organizational structures and emergent nonprofits succeeded in providing services during the emergency response and early recovery phases; nonprofits contracted with the government were better suited for long-term recovery. Shared resources among nonprofit agency connections contributed to successful transitions from response to recovery. Similar organizational resilience factors might occur in other major cities following disasters. **Key Words: disasters, nonprofit, recovery, resilience.**

新西兰基督城 2010 年至 2011 年的大地震过后,诸多非营利组织改变或扩张了既有的服务,以应付突现或复杂化的风险。本研究是根据 2014 年间与三十位地方非营利社区组织管理人进行的访谈,以及五场员工焦点团体的讨论。具有弹性组织结构的既有非营利组织,以及新兴的非营利组织,在紧急回应和早期的复原阶段,成功地提供了服务;与政府签订合约的非营利组织,则较适合协助长期的复原。非营利组织连结之间的共享资源,促成了由灾害回应到复原的成功转变。类似的组织恢复力要素,或许亦存在于其他大地震过后的主要城市之中。**关键词: 灾害, 非营利组织, 復原, 恢復力**。

Luego de los terremotos de 2010–2011 en Christchurch, Nueva Zelanda, muchas organizaciones sin ánimo de lucro cambiaron o expandieron sus servicios para encarar riesgos emergentes o compuestos. Esta investigación se basa en entrevistas con treinta administradores de entes comunitarios locales sin ánimo lucrativo y en discusiones llevadas a cabo en 2014 con cinco empleados de grupos focales. Las entidades preexistentes sin afán de lucro con estructuras organizativas flexibles y las organizaciones emergentes del mismo tipo tuvieron éxito en la prestación de servicios durante la respuesta a la emergencia y en las primeras fases de la recuperación; aquellos entes no lucrativos que contrataban con el gobierno fueron los más idóneos para la recuperación a largo plazo. Los recursos compartidos entre las agencias sin ánimo lucrativo en conexión contribuyeron a transiciones exitosas desde la etapa de respuesta al desastre hasta la recuperación. Similares factores de resiliencia organizacional podrían ocurrir en otras ciudades importantes, inmediatamente después de los desastres. **Palabras clave: desastres, sin afán lucrativo, recuperación, resiliencia.**

The Christchurch, New Zealand, earthquake sequence, which began with a 7.1 magnitude event in rural Canterbury in September 2010, caused significant façade damage in the central business district. In February 2011 a 6.3 magnitude earthquake killed 185 people and slated 70 percent of the inner city and more than 7,500 homes for demolition (Bannister and Gledhill 2012; Johnson and Mamula-Seadon 2014). The 2011 earthquake's proximity in time to the 2010 earthquake and large number of aftershocks provides insight into running response and recovery operations concurrently (Ambler 2012). According to Beavan et al. (2012) there is an area near the city where pressure on the fault has not been released, leading scientists to believe that further activity is possible in Christchurch. Not only must nonprofit organizations in the area respond to their targeted populations and staff needs resulting from the events in 2010 and 2011, but they must also prepare for future disasters (Stevenson et al. 2011).

In the immediate aftermath of the February 2011 event, public facilities, including hospitals and emergency response agencies, maintained many services, although nonprofit organizations provided the majority of social assistance for marginalized communities (Ardagh et al. 2012; Brookie 2012). Unfortunately, poor connections and communications with outlying areas meant limited services in some suburbs, particularly those that were economically marginalized, even under the expanded purview adopted by many nonprofit organizations (Potangaroa et al. 2011; McLean et al. 2012). Further, communication with managers from the emergency authority, tasked with integrating advice from local representatives of at-risk and vulnerable populations into decision-making processes, was limited due to lack of familiarity with nonprofit leaders (McLean et al. 2012). Indigenous agency connections mobilized to provide resources for a variety of ethnic minorities and other vulnerable communities benefitted from voluntary and nonprofit organizations'

actions prior to and in conjunction with government-allocated emergency resources (Thornley et al. 2013; Carlton and Vallance 2014; Kenney et al. 2014). International assistance, especially from similarly governed nations, such as Australia, also aided initial response efforts (Ambler 2012).

Inventories of 92, 106, and 454 nonprofit organizations undertaken by Carlton and Vallance (2014) following the February 2011 earthquake found an attrition of fifty-two organizations. Not surprisingly, the longevity of these nonprofits differed, with preexisting organizations most likely to persist over the two-and-a-half-year study period.

Carlton and Vallance (2014) posited that the beneficial roles and capacities of nonprofit organizations varied from emergency response to the recovery phase and at different stages within the recovery period. The ability to translate organizational resilience from risk reduction techniques to long-term recovery service delivery requires further research focusing particularly on bridging needs of different communities and linking to decision makers through translation of knowledge to advocacy priorities (Vallance 2011; Carlton and Vallance 2014).

The objectives of this study were to (1) identify those elements contributing to integration of nonprofit organizations into emergency management structures and (2) model the resilience of nonprofit organizations during the transition from response and recovery. It was hypothesized that integration into emergency management structures was a function of establishment costs for the organization, the relationship with target populations, and partnerships with government agencies. Nonprofit organizational resilience in the transition from response to recovery was attributable to the capacity to alter production strategies to fit the operating environment.

The study used semistructured interviews with managers of nonprofit organizations that engaged in social service provision and focus groups comprising staff members from a subset of these nonprofit organizations to identify trends in integration into emergency management and successful organizational strategies from response to recovery. Results were analyzed using the International Strategy for Disaster Reduction (ISDR) Framework for Sustainable Development to establish the context in which different types of nonprofits were operating (Birkmann 2013). The structures and partnerships of nonprofit organizations were then examined from the emergency response through long-term recovery phases to identify elements of success. These were then developed into a resilience model for nonprofit management.

Nonprofit Roles in Disaster Resilience

Disaster risk represents a complex interplay of forces that incorporates both physical and human dimensions that must be fully understood if planners and communities are to mitigate disaster impacts and raise resilience (Wisner et al. 2004; Tobin and Montz 2009; Montz and Tobin 2013). Understanding the hazardousness of place, therefore, presents challenges involving (1) geophysical research, (2) vulnerability metrics, (3) behavioral concerns, (4) determination of acceptable levels of risk, (5) local context and the hazardousness of place, (6) an understanding of dynamic systems and new synergies, and (7) attention to personal and community responsibility (Tobin 2014). For areas subject to multiple natural hazards, such as Christchurch, the recurrence of events creates additional problems for disaster recovery by compounding vulnerabilities and causing response and recovery activities to overlap.

The immediate postdisaster phase generally focuses on emergency relief to be followed eventually by a longer term recovery (Rotimi, Le Masuriera, and Wilkinson 2006). It should be noted, though, that the transition between response and recovery phases is dynamic with conditions constantly changing (Comfort, Boin, and Demchak 2010). Depending on the cost and scale of the damages, traditional responders, such as civil defense, might be overwhelmed when response and recovery occur concurrently (Platt 2012; Fogarty 2014). Nonprofit organizations can play a role here; they redistribute power and shift political will through advocacy and partnerships to counter dynamic pressures and unsafe conditions that cause vulnerability in their communities in advance of a hazard and thereby reduce risk (Wisner et al. 2004; Parenson 2012; Parkin 2012). Consequently, nonprofit organizations can take on the double burden of performing risk reduction activities and advocating for marginalized populations over the course of the recovery process (Tobin and Montz 2009).

In welfare economies, such as New Zealand, socially focused nonprofit and nongovernmental organizations operating in what is referred to as the nonprofit sector often partner with government agencies to lend local knowledge or coproduce public services to expand access for marginalized groups (Zimmer 2010; Phillips and Smith 2011; Dattani 2012). Coproduction of social services involves both government and nonprofit organizations providing opportunities for care delivery through formal contracts (Dattani 2012). The degree to which nonprofit organizations integrate with government agencies modifies their organizational culture, pushing them toward increased planning and reporting to sustain government contracts (Hudson 2009; Dattani 2012).

Traditionally, nonprofit organizations have been incorporated into public service as partners to increase community trust and ownership, but involvement in emergency management has generally not been widely successful (Brookie 2012; Parkin 2012). Likewise, nonprofit organizations might be the first responders to engage in risk reduction following a disaster, given their proximity to their target populations (Brookie 2012; Fogarty 2014; Carlton and Vallance 2014). Nonprofit organizations are often able to foster

collective energy following a disaster that emerges from the shared experience due to their close connections to the communities they serve (Oliver-Smith 1999).

It is imperative that services are continued following a disaster to maintain community resilience (Weichselgartner and Kelman 2015). Organizations, therefore, must develop strong organizational structures to prevent staff attrition and adapt to emergent synergies in the nonprofit sector and among the communities they serve (Hudson 2009). Although risk management and strategic planning might not be inherent characteristics of the nonprofit sector following a disaster, it can bolster organizations' abilities to remain relevant throughout recovery (Dalziell 2005; Hudson 2009). To optimize nonprofit resources into recovery and for future response efforts, better agency connections with loosely related target populations and government partners must be achieved (Stevenson et al. 2011; McLean et al. 2012; Parkin 2012).

New approaches are needed to determine the precise impact of postdisaster shifts in the operating environment on nonprofit organizations that go beyond management structures. Research on community benefits of cooperative organizational response in New Zealand is limited (Johnston et al. 2011). To date, the Edgecumb earthquake in 1987 and Te Anau earthquake in 2003 showed that community participation and planning reduce anxiety; the 1995 and 1996 Ruapehu volcanic eruption demonstrated a failure of prescriptive social support; and the 1998 Ohura floods and 2005 Matata debris flow shed light on difficulties in community decision making (Johnston et al. 2011).

Conceptual Approach

According to the ISDR Framework for Sustainable Development (Birkmann 2013), following a disaster impact, interactions occur in a linear manner. Action resulting from the disaster flows as follows: awareness raising, political commitment, application of risk reduction measures, recovery, risk identification, and impact assessment. From risk identification, several pathways may be taken: preparedness; emergency management and readiness building for the natural hazard; knowledge development, which is a terminus; political commitments, which lead back to recovery and risk identification; or awareness raising, which restarts the cycle that initially followed the disaster impact. Risk identification can also be reached by vulnerability and capability analysis or hazard analysis and monitoring to identify risks based on preexisting vulnerabilities and hazards of an area before a disaster occurs.

Nonprofit organizations redistribute power and shift political will through advocacy and partnerships to improve dynamic pressures and mitigate unsafe conditions that cause vulnerability in their communities in advance of a hazard and hence reduce risk (Wisner et al. 2004; Parenson 2012; Parkin 2012). Likewise, given proximity to their target populations, following a disaster, nonprofits could be the first responders to engage in risk reduction (Brookie 2012; Carlton and Vallance 2014; Fogarty 2014). The application of the ISDR framework (Birkmann 2013) to the nonprofit sector could identify different strengths and gaps in integration depending on nonprofit organizations' abilities to navigate traditional pathways.

Methods

Data were collected from thirty nonprofit organizations that provided social services in postdisaster Christchurch. The nonprofits were selected from community, health, and welfare organizations listed on the Community Information Network Christchurch (CINCH) Web site. Although CINCH has more than 10,000 entries for nonprofit, semiprivate, and government-affiliated community resources from sports clubs to hospitals, 108 were identified as pertinent for this study based on their missions and approaches to social support services. Thirty organizations from this list responded to the request for participation in the study.

Nonprofit organizations were further categorized based on date of emergence in relation to the earthquakes and advocacy priorities. These characteristics were expected to affect variations in the emergency management and community capacity building (Alexander 1993; Vallance 2011). Preexisting organizations included Canterbury Community Garden Association, Healthy Christchurch, Social Service Providers Aotearoa, Council of Social Services (COSS), Family Planning, New Zealand Aids Foundation, New Zealand Prostitutes Collective, Pegasus Health, the Rodger Wright Center, Youth and Cultural Development Trust 298 Youth, Avebury House, CanCERN, Neighborhood Trust, Canterbury Refugee Council, Christchurch Migrants Center Trust, City Mission, Interpreting Canterbury, Problem Gambling Foundation, Meals on Wheels, Rural Support Trust, Project Lyttelton, Volunteering Canterbury, Red Cross–Christchurch, and World Vision. Organizations that emerged after the earthquakes included All Right Campaign, Ministry of Awesome, Student Volunteer Army, Gap Filler, Greening the Rubble, and CanCERN. This delineation was used to test whether if the time of establishment of nonprofit organizations altered the means through which they were integrated into emergency management and how they contributed to organizational resilience.

Semistructured interviews were conducted in late 2014 with managers at these nonprofit organizations. Five focus groups were also carried out, each of which involved three to five staff members from one of these participating organizations: City Mission, Neighborhood Trust, Family Planning, Meals on Wheels, and the Rodger Wright Center. Focus group questions

mirrored interview questions to measure consistency and communication within organizational structures. Many organizations could not form focus groups due to limited staff numbers; nevertheless, the final sample did include representation from community-based and advocacy-driven organizations.

Responses from the interviews were themed to identify trends in resources, demand for service, and partnerships. Then, the collective responses were assessed using quantitative methods to identify trends among the nonprofit types. Qualitative detail was included to capture variances among the reported experiences. The data obtained from the interviews and focus groups were analyzed using the ISDR Framework (Birkmann 2013). Through this framework, routes for building nonprofit relationships with donors and authorities for advocacy and internal adaptability were determined. From this a model for nonprofit resilience in developed, urban, postdisaster settings was presented to identify components of success in response and recovery.

Changes in Nonprofit Procedures Identified by Management

The semistructured interviews with nonprofit managers included five sets of questions addressing expanded services, emerging and newly vulnerable populations, partnership formation, staff issues, and emergency plans. The responses of each organization are shown in Table 1. Longevity of operation and funding relationship characteristics of these nonprofit organizations varied, allowing for analysis of different time frames and areas of engagement in emergency management.

The Ministry of Health and Ministry of Social Development contracted with various nonprofit organizations as noted in Table 1 to show linkage capacities of nonprofits with strong government partnerships. This delineation is based on the findings of Kamat (2004) that perceptions of nonprofit contributions to social service provision vary between community-based and nationally contracted, advocacy-focused nonprofits. Although other government agencies and ministries also fund social support services work, these were the ones referenced by participating nonprofits. The Ministry of Health contracted with Problem Gambling Foundation, Family Planning, Pegasus Health, New Zealand Aids Foundation, New Zealand Prostitutes Collective, the Rodger Wright Center, Youth and Cultural Development Trust, and Healthy Christchurch. The Ministry of Social Development contracted with Neighborhood Trust, Project Lyttelton, CanCERN, Migrant Center, Social Service Providers Aotearoa, COSS, and

Table 1 *Manager interview responses by organization*

Organization	Expanded services	Emerging target populations	Engaged in partnerships	Experienced staff turnover	Used emergency plans
Canterbury Community Gardens		X	X		X
Council of Social Services[b]	X	X	X		X
Healthy Christchurch[a]	X	X	X		X
Social Service Providers Aotearoa[b]	X	X	X		
The All Right Campaign[c]	X	X	X		
Family Planning[a]		X	X		X
New Zealand Aids Foundation[a]			X		X
New Zealand Prostitutes Collective[a]	X		X		
Pegasus Health[a]		X	X		
The Rodger Wright Center[a]	X		X		X
Youth Cultural Development Trust[a]	X	X	X	X	
298 Youth[c]	X	X	X		
Avebury House		X		X	
CanCERN[b]	X	X	X		X
Canterbury Refugee Council			X		
Christchurch Migrants Center Trust[b]	X	X	X		
City Mission	X	X	X		
Interpreting Canterbury	X	X	X		
Problem Gambling Foundation[a]			X	X	
Meals on Wheels[c]			X		X
Neighborhood Trust[b]	X	X	X	X	
Rural Support Trust			X		X
Ministry of Awesome	X	X	X		
Project Lyttelton[b]	X	X			X
Student Volunteer Army	X	X			
Volunteering Canterbury[b]	X	X			
Gap Filler	X	X	X	X	
Greening the Rubble	X	X	X		
Red Cross	X	X	X		X
World Vision	X	X	X	X	X

Note: X indicates that the managers perceived the issue to impact operational capacity.
[a]Contracts with Ministry of Health.
[b]Contracts with Ministry of Social Development.
[c]Contracts with both Ministry of Health and Ministry of Social Development.

Volunteering Canterbury. The All Right Campaign, Meals on Wheels, and 298 Youth received funding from both. Rural Support Trust and the City Mission are part of larger national organizations but were not defined here by their government funding. Further, supernational nonprofit disaster relief organizations experience additional support and acclimatization requirements for effective integration into response, often requiring a preexisting agency connection according to McLean et al. (2012) and Alexander (1993). Red Cross and World Vision were internationally driven relief organizations.

Overall, twenty-one nonprofits participating in management interviews reported expansion of their services as a consequence of the earthquakes and twenty-three extended their target populations. The operations of several preexisting nonprofits were more fluid in the initial period following the disaster before the authorities assumed control. This made them approachable for traditional populations as well as related emergent populations.

Twenty-six organizations perceived benefits from partnerships that facilitated their contribution to emergency response and disaster recovery. For example, organizations ranging from the All Right Campaign to the City Mission collaborated across nonprofit and public sectors to meet increased demands for mental health care and shelter provision, respectively. Where possible, the police and local contractors were trained in appropriate social services available to marginalized groups by nonprofit organizations including Prostitutes Collective and Pegasus Health. Going into later stages of recovery, COSS resourced additional building spaces and assets to manage complex needs for partners by keeping the sector informed of shifting building regulations and availability.

Three of the four nonprofits not reporting beneficial partnerships worked in community activism, including one emergent group. Tensions with other nonprofits, short funding terms, and shifting target population concerns threatened the continuation of emergent organizations' activities into long-term recovery. The representative of Gap Filler expressed both frustration with increased competition for funding in the nonprofit sector and hope that political will for emergent nonprofit projects in the city would be sustained. CanCERN's representative also stated her conflicting feelings about

the nonprofit sector: "NGOs [preexisting nonprofit organizations] were in 'fix mode,' not focused on people, which led to missed opportunities to advocate for target populations." Although the scope of work at preexisting, particularly nationally contracted, nonprofits could not change immediately, many incorporated innovative outreach methods to adapt their services to the response and recovery circumstances of their target audiences.

Despite increased work demands on staff, only six managers reported staff turnover directly resulting from the earthquakes, and only one came from the emergent group. Fatigue, however, was common among volunteer reliant and emergent organizations. A mental health promoter for the All Right Campaign captured the desire for public and practitioner mental health support: "There is a hunger for well-being knowledge, like an ache in a muscle you didn't know you had." Well-being tools developed by Healthy Christchurch specifically for the nonprofit sector assisted with staff stress.

Successes in scaling up services and agency connections were not attributable to emergency planning, as just thirteen of the thirty participating nonprofit organizations had these resources in place for the most devastating September 2010 or February 2011 events. Nonprofits improved community resilience through increasing awareness of services available for vulnerable populations, creative use of temporary easements for building permits, and sector-specific organizational vulnerabilities.

Corroboration of Changes in Nonprofit Procedures from Staff

Results from the five focus groups were separated by type of change in service provision, population shifts, the work environment, and future disaster planning (Table 2).

Overall, staff reported similar trends as management, indicating strong communication ties within organizations. Staff agreed that service provision increased at three organizations and only decreased at one. Many nonprofits, including the Neighbourhood Trust and the City Mission, used holistic service provision to ensure that their clients received uninterrupted access. Service delivery often evolved from temporary outreach, to limited-term assistance with

Table 2   *Focus group responses*

Organization	Changed service provision	Target population relocated	Partnerships altered capacity	Work environment changed	Made future disaster plans
City Mission	+	+	+	+	+
Family Planning	NC	–	NC	–	NC
Meals on Wheels	–	–	+	+	+
Neighbourhood Trust	+	+	+	–	NC
The Rodger Wright Center	+	NC	+	+	NC

Note: The signs indicate change as follows: + = positive, increased, or completed; – = negative, decreased, or removed; NC = no change.

navigating relief opportunities, to ongoing community development. Those reporting no change reflected sentiments similar to the Rodger Wright Center staff member who recollected:

> When you wake up and there is a chimney lying next to you or that has come through your roof you kind of start reflecting on things. … It was normal for them to come to us. We do kind of bend to whatever our clients want.

The organic nature of nonprofit organizations presented here allowed staff to react appropriately to the shifting needs of their clients.

Target populations shifted more evenly according to staff than management, which could be attributed to small sample size; two focus groups saw increases and two reported decreases following the earthquakes. Some organizations increased their target populations based on shifting demographics of their service area resulting from rezoning, demolition, and rebuilding (Hutton, Tobin, and Whiteford 2015). Others experienced declines in line with national trends. To an extent, the staff responses of "no change" reflected struggles to adapt outreach approaches over the course of the recovery.

Utilization of services by the target populations improved at all organizations as recovery continued. Any disconnect with services that did occur was attributed to relocation issues, limited access to the city, and national trends in service use. These conditions were somewhat resolved as recovery progressed.

Staff at four organizations believed that partnerships with government agencies assisted their capacity to adapt to recovery needs of target populations. As was the case with many organizations that maintained national or international ties, though, some of this support was short-term. For example, City Mission received increased funding initially but this was not a long-term commitment. Nevertheless, staff also reported increased collaboration with existing partners and those working in similar fields: "There has been a lot of outreach to food banks and working closely with churches." Local collective action among nonprofits offered a more lasting solution to maintaining services for long-term recovery. Partnerships and coproduction with government helped ensure people were not lost in the social service system.

Work environments at three organizations improved following the earthquakes, partially attributable to resource sharing through partnerships. Indeed, all staff agreed that some change occurred in the work environment as a result of the earthquakes. The Neighbourhood Trust noted concerns about greater strain on staff from adapting to the postdisaster operating environment. City Mission believed this to be a potential driver of nonprofit closure following the earthquakes. The most striking account of the burden of care on practitioners came from City Mission staff: "The workload has increased, and the complexity of the clients we are seeing, the issues they have

increased, too—triple-edged sword." Support from management empowered committed staff, however, by allowing them to use creative outreach methods immediately after the earthquakes and providing leniency for extended leave.

Disaster plans were not highly prioritized by staff or management; two organizations undertook revisions of their emergency plans after the earthquakes, City Mission and Meals on Wheels, but the majority did not. These organizations directed staff time to more immediate needs or paid less attention to planning because existing disaster plans were believed to be adequate.

Applications to the International Strategy for Disaster Reduction

Setting nonprofit interactions into the ISDR Framework for Sustainable Development (Birkmann et al. 2013) showed integration points and pathways used by different types of organizations in the nonprofit sector. Interview and focus group responses regarding service provision changes and shifting target populations guided by a disaster plan or influenced by staff resources informed the path derived for the various non-profit types (Figure 1). This figure shows the importance of continuing identification of at risk communities and assessment of programs that may be overlooking the most marginalized members of society before the disaster, during recovery, and as preparations are made for future hazards.

A number of nonprofit organizations formed after the disaster from heightened risk awareness. From their origin, these emergent nonprofits identified risks of and impacts on the communities they served. After solidifying their initial mission, they pursued political commitments to secure temporarily their organizations and then engaged in risk reduction activities for their target populations. Emergent nonprofits did not always persist into the recovery phase due to the nature of their missions; for some their mission was accomplished.

Preexisting nonprofit organizations engaged in vulnerability assessment before the disaster just by the nature of their work with marginalized groups. Further, preexisting nonprofits raised awareness of risks for their target populations immediately following the event. Political commitments were typically already in place for preexisting nonprofits to sustain themselves. Consequently, they often responded to the disaster and began risk reduction activities for their target populations before emergency management authorities were established. As the awareness of the role played by preexisting nonprofits broadened following the disaster, many temporarily expanded their targeted populations to nearby or similarly marginalized groups. These organizations typically continued operations into the recovery phase. Neither emergent nor preexisting nonprofits were likely to engage in
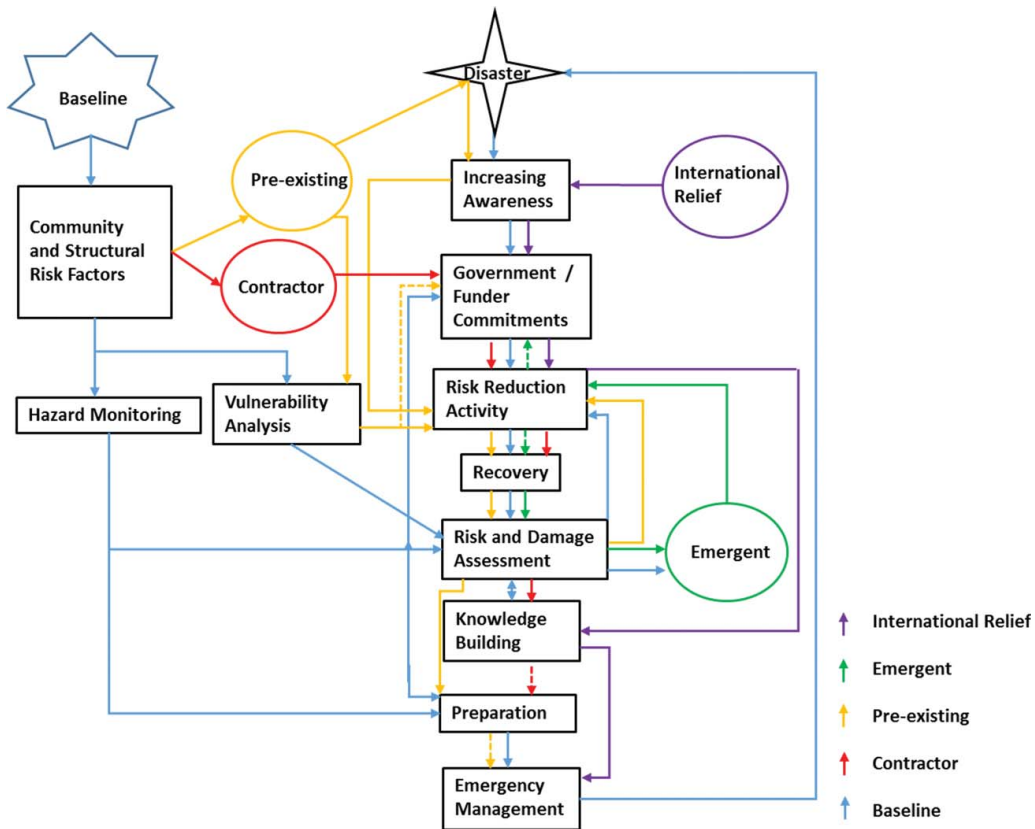
Figure 1 *Non-profit Integration Pathways for Disaster Risk Reduction (Based on non-profit organizations' interview and survey responses). (Color figure available online.)*

knowledge raising due to limited staff resources unless it was part of their direct mission.

Nonprofit organizations with government contractors had for the most part identified vulnerabilities before the disaster occurred. Following the earthquakes, they accessed their political connections and strengthened networks to reduce risk and increase resources for their target populations. Such connections allowed for shared resources. Engagement for most nonprofits with government contractors terminated with preparedness.

Some international relief organizations operating locally had to raise awareness among authorities and partner with nonprofits to gain entry into emergency response in Christchurch. This led to political commitments allowing them to build knowledge among local authorities and participate in emergency management. Other international relief organizations were invited to emergency management forums and had clear plans in place to transition their typical activities to response and recovery.

Collective action was one of the most effective means of political action for nonprofits in Christchurch. As international and national interest waned, advocacy and community action opportunities also changed. This was especially evident in the application

of nonprofit action in the ISDR Framework for Sustainable Development. Analysis of staff focus groups indicated limited time for best practice collection, increasing the utility of the ISDR Framework for temporal modeling of integration.

Modeling Nonprofit Resilience

Although various types of nonprofits engage in disaster risk reduction, strong communication of mission and external partnerships carried nonprofits through the turbulent transition from response to recovery. A model for success in response and recovery environments has been posed for the nonprofit sector in Figure 2.

Two categories were pertinent: means and emphases. The means were based on changes to the work environment, including staffing resources, service delivery, and partnerships, as reported in manager interviews and staff focus groups. The emphases categories were developed from population shifts and flexibility of contract reporting requirements of partners and funders for nonprofits. Success within the model was determined by partnerships and engagement with target audiences.

Non-Profit Resilience in Post-Disaster Urban, Developed Settings
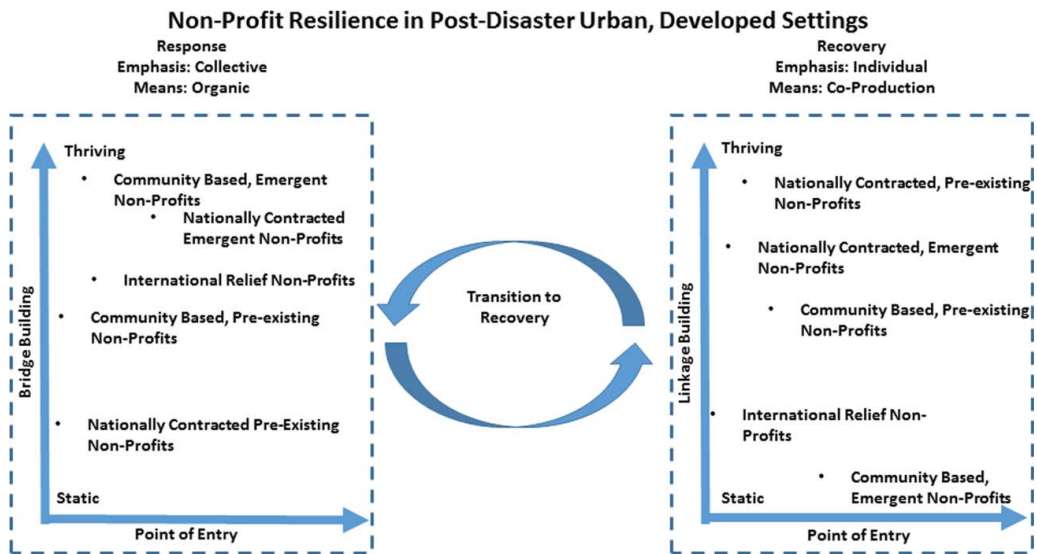
Figure 2 *Nonprofit resilience model for postdisaster developed, urban settings. Developed from interview and focus group responses. (Color figure available online.)*

During the response phase, bridge building to enhance the integration of new and expanded target populations was imperative to the success of nonprofit organizations. Linkage building, the improvement and expansion of partnerships with government and non-profit organizations through contracts and agency connections, became more important during the recovery phase, however. The shift from bridge building with analogous or nearby target populations to linkage building with partners including funders and local and national authorities resulted from a change in emphasis within target communities from a collective perspective immediately after the disaster event to individualistic one in mid- to late-term recovery.

Also, the way in which nonprofits carried out operations changed from organic during the early response phase, before emergency management authorities were established, to a more competitive atmosphere underpinned by traditional coproduction as recovery progressed. The transition to recovery featured a feedback loop indicating that, with multiple hazards, an area might experience setbacks or experience response and recovery operations occurring simultaneously. Nonprofit organizations could have maintained services without adopting these strategies but would have remained somewhat static. Nonprofits that integrated these strategies into their operations during the transition to recovery succeeded, and those that already used these operating procedures before the hazard event thrived.

The model identifies shifting success factors for the response and recovery phases. Often, adaptation of services by extant nonprofits or emergent organizations with niche missions was required for bridge building to address compounded vulnerabilities and shifting demographics of marginalized groups. Non-profits that enjoyed great success in initial response

phases because they unified emergent marginalized groups usually struggled to maintain the same level of success in the recovery phase when partnerships with government and donor agencies were not developed. Likewise, nonprofits that sustained services as usual in the initial response phase thrived in the recovery phase if they maintained linkages to government partners. Because the transition to recovery could cycle between response and recovery, strength in both bridging services and linkages to authorities was necessary to hold ground and continue advocacy as an organization.

Community-based, preexisting organizations arrived on the scene early during the emergency response phase. They embraced emergent target populations, increased advocacy, produced useful well-being tools, and leveraged relocation supplies for their target populations during the response phase. They were not integrated with emergency management until midterm recovery, however, thereby limiting their success over time. Contrastingly, preexisting, nationally contracted organizations benefitted from familiarity among partners and target populations as the recovery began. They sustained increased attention into recovery by creating and continually adapting community-specific access options.

Transition was especially shaped by government partnerships and connectivity with other nonprofits. Organizations with extant government contracts were secure in their funding to maintain services based on reported population shifts, although many with Ministry of Health contracts, such as Family Planning, did not take on additional services. The Ministry of Social Development, however, offered temporary earthquake funds to a variety of welfare-oriented organizations, such as Neighborhood Trust, to facilitate relocation and staff capacity or support community-focused risk reduction activities. Organizations, such as the City

Mission and Meals on Wheels, also benefited from preexisting partnerships with churches, volunteer support agencies, and government partners to address sustained shifts in demand. Regardless of funding type, communication of mission to staff, partners, and the public was imperative to the continuation of organizations.

Emergent, community-based organizations received significant media attention in the aftermath of the February earthquake for their ability to mobilize volunteers but struggled to communicate their mission to funders and target populations as recovery progressed. For example, the Student Volunteer Army and Greening the Rubble experienced immense support from local residents and media during response, but as recovery progressed, interest waned, and their foci had to shift to explore international applications for their work. In contrast, emergent organizations with national contracts, such as the All Right Campaign, experienced a combination of the successes of emergent community-based organizations as they formed during response but did not experience the same drop in organizational success because they formed connections with various levels of government partners to continue the terms of their contracts.

The two international disaster relief organizations, both of which were preexisting, rallied support from their international affiliates and local authorities to establish a role in response but returned to more traditional roles as recovery continued and their expertise could be redirected to international objectives. These organizations had clear transition plans for recovery that allowed them to shift roles relatively smoothly.

Conclusions and Applications

Partnerships and organizational capacity influenced nonprofit contributions to postdisaster risk reduction activities in the ISDR Framework (Birkmann 2013). Emergent organizations had to establish funding before engaging in risk reduction, whereas preexisting organizations were able to engage with their target communities immediately. Also, having partnerships in place before the event facilitated pathways into recovery.

The resilience of various nonprofit types was found to be accessible throughout the emergency response and recovery phases based on incorporation of bridge and linkage building depending on the prevailing operating environment. This expands on the work of Vallance (2011) that suggested that building relationships with emergent vulnerable populations and finding appropriate connections to emergency management are imperative to achieve organizational resilience in the postdisaster Christchurch setting. By combining these local insights with Birkmann's (2013) ISDR Framework, a planning tool was proposed for

nonprofit organizations depending on their type for either improved performance or expectation setting for future disasters.

For Christchurch, the contribution of nonprofit organizations to response and recovery was a success, with all nonprofits involved in this study maintaining or adding services for marginalized groups through staff commitment, partnerships, and adaptive organizational cultures into midterm recovery.

This study contributes to the intersection of nonprofit management and disaster recovery research. Also, results indicate ways to stay relevant to funders and target populations over the course of recovery, such as target population expansion and partnerships. These components are applicable to a range of urban, developed areas with multiple hazards. ∎

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