# The place of schools in building community cohesion and resilience: Lessons from a disaster context

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### Introduction

The concept of community is complex, contested and fluid. It is variously described as a geographical, political, social, cultural and psychological notion. Some definitions focus on the commonalities that bind the members of the community together be they location, history, values, identity, experiences, needs, benefits or responsibilities. Whatever the aspects that make a community identifiable to insiders and outsiders, the sum is greater than the parts. The bonds, relations and connections provide a sense of cohesion that can sustain members through everyday events and build resilience to withstand adversity (Chaskin, 2009; Gordon, 2004; Magis, 2010; Norris, et al., 2008; Pfefferbaum et al., 2013; Wilson, 2012; Zautra, Hall & Murray, 2009).

The notion of community is not always viewed in such a positive light. Mullen and Thomas (2016, p.118) note that:

... belonging to a community can involve the pressure to conform to dominant social norms and values, the suppression of individual will and differences, and constricted freedom of expression ... and in some instances, more severe consequences, experienced by those deemed not to belong.

In recent times, writers in the field of disaster studies have turned their attention to the roles and functions of communities (Gordon, 2004; Thornley et al., 2013). Viewed this way communities are networks of formal and informal groups, organisations and

institutions. When some of the organisational structures are seen to hold a significant position in the community's social fabric, they can be termed community anchors (Community Alliance, 2009). The anchor metaphor indicates that they provide a sense of stability, be it locational or social, to the community's sense of itself especially in times of trauma. Community anchors are easily recognisable and have an identity and reach beyond their immediate members. They might be a church, a cultural centre, a sports club or a workplace. They have formal or informal leaders, a stable infrastructure and provide opportunities for people to connect with others and mark significant events in the community's life (Community Alliance, 2009). This is not to forget that they can also be sites of conformity, restriction or exclusion. The concept of community anchors along with other factors included in a community's natural, human, social, and built assets contribute to community capital (Callaghan & Colton, 2008). Communities that have strong community capital, leadership, infrastructure and connectedness are better able to respond to and recover from adverse events such as disasters (Bonanno, et al., 2010; Chaskin, 2009; Norris et al., 2008; Thornley et al., 2013).

Because of their location, history and links to the community, schools can be viewed not merely as educational institutions that students attend but also places that can act as community anchors. They can provide community facilities, services and a sense of collective identity hence contributing to community connectedness. They *can*, and as the research discussed in this chapter shows, *have* contributed to building community cohesion pre-disaster and sustaining community resilience post-disaster.

While the role of schools in communities is important in and of itself, this chapter focuses more on what can be learned from conducting research with communities in adverse situations such as the aftermath of a disaster. A conceptual model, developed by the author as part of her research into the role of school communities in disaster response and recovery (see Mutch, 2013), is adapted to provide a framework for examining the ways communities can be engaged in research that is about them. Because the research took place in what can be described as a traumatic setting, discussion is also provided about how to conduct research that protects both the researcher and the researched in ways that are sensitive, ethical and reciprocal.

Disaster research tells us that disaster preparedness is more cost-effective, both socially and economically, than dealing with the aftermath (Back, Cameron & Tanner, 2009). With scientists predicting more extreme weather events as a consequence of global warming, it would seem sensible to consider the contribution that schools make to community cohesion and resilience as a policy priority (Wisner, 2006).

### Context

Disasters can strike anywhere at any time but some areas of the world are more prone to natural hazards that cause major damage (Ferris and Petz, 2012). New Zealand, sitting on the Pacific 'ring of fire', is one such place. On 4 September 2010, a 7.1 magnitude earthquake struck the city of Christchurch (population: 450,000) and the surrounding region of Canterbury on New Zealand's South Island. The earthquake caused major damage to buildings, transport links and infrastructure such as electricity, water supply and waste removal. A state of emergency was declared. Fortunately, as the earthquake struck in the early hours of the morning no deaths occurred (Canterbury Earthquakes Royal Commission 2012). Over the next five years a further 14,000 aftershocks including four major quakes (over 6 on the Richter scale) each causing more damage and disruption prevented the mammoth task of removing, repairing and rebuilding from getting underway. The most destructive of the aftershocks occurred on 22 February 2011 – a 6.3 magnitude jolt with an up-thrust of twice the force of gravity. Thousands of people were injured, 185 people were to die, over 100,000 homes and businesses were damaged and the city's central business district was levelled (Canterbury Earthquakes Royal Commission 2012).

Following the September 2010 earthquake many schools became evacuation or dropin centres for local communities. When schools reopened several weeks later they continued to provide support to their students, staff, families and wider communities. When the February 2011 earthquake occurred in the middle of a school day, school personnel played a more immediate role in disaster response as they evacuated, calmed and cared for students until they were collected by family or cared for by the community (Education Review Office, 2013).

As the city began to recover, the researcher, a Christchurch resident and former teacher and teacher educator in the city wondered how she could help. She decided to use her research skills to help schools to record their experiences. This activity would support the emotional processing of the events and also provide a permanent record of this time in New Zealand's history.

### Methodology

Not all the impacts on communities post-disaster are negative, especially in the times when communities pull together in acts of heroism and altruism (Drabek, 1986;

Gordon, 2004) but Van Zijll de Jong et al. (2011) note how little discussion on the realities of working in disaster zones appears in the research literature. They suggest support is necessary for researchers to negotiate topics such as grief, loss, destruction and potential loss of community. While there are clearly established ethical protocols for protecting participants from any harm that might ensue due to their engagement in research (Dickson-Swift et al., 2007; McCosker, Barnard & Gerber, 2001) the physical, social and emotional vulnerability of disaster victims means that researchers must take even more care to act in a safe and ethical manner (van Zijll de Jong, 2011).

In early 2012 the researcher began by approaching a school principal known to her to see if the idea of schools recording their stories might have merit. The principal in turn consulted her staff and school community. At the same time the researcher sought ethical approval from her institution and funding to undertake the project. UNESCO provided seed funding to trial the process and her faculty provided further funding and technical support.

Once the first school agreed to participate other schools gradually came on board. The researcher's aim was to have schools drive their own projects. Each project evolved in a very different way. One school chose to record their stories in book form; another school wanted to create a community memorial; another school wanted its students to make a video and so on. In each case, there were key principles that underpinned the projects – a participatory and facilitative approach; trust and respect between the partners; ethical and sensitive conduct; reciprocity and negotiated ownership; and confidentiality (but not necessarily anonymity). These principles are outlined in Table

1.

Principle	Application
A participatory, facilitative approach	The school and researcher would negotiate the project process, product, roles and responsibilities. The researcher and her team would aim to assist the school and its community achieve their chosen goal in a manner that worked best for them.
Trust and respect	A carefully-staged process ensured that the partners came to know, trust and respect each other. The emphasis was on mutual benefit, goodwill on both sides, regular communication and sensitively negotiating solutions to any issues.
Ethical and sensitive conduct	All participants were assured that involvement was voluntary, that they could stop or withdraw at any time without fear of censure. Support systems were in place (counselling services for adults, school counsellors or teachers for children) in case the re-living of the trauma became too disturbing. In each setting, researchers and/or staff worked in pairs to look out for signs of distress in their participants and to support each other.
Reciprocity and negotiated ownership	Schools could choose how they wanted their project to proceed, who was to be involved, when different parts of the process would take place and how and when the project would be concluded. In return for the school receiving a completed product of their choosing (e.g., book, video, or art work) which they could disseminate as they wished, the researcher retained the raw data for further analysis and publication.
Confidentiality (but not anonymity)	As the final products were narratives of real people in an historical situation that would become part of New Zealand's archival records, participants needed to understand that it would be difficult to guarantee the anonymity of their school communities and themselves. The agreement reached was that the products that the school owned and disseminated would include real names but when the researcher wrote up material for academic dissemination, these would use school pseudonyms and individual codes so the emphasis would be on themes rather than individual attribution.

Table 1: Principles underpinning engagement of school communities in this research

The three case studies that follow later in the chapter provide more detail about how these principles played out in practice. The three case studies also align with aspects of the conceptual framework described below.

### **Conceptual framework**

When theorising about engaging children and young people in disaster research, the author developed a continuum of engagement from researching *for*, *about* and *on*, to *with* and *by* participants (see Mutch, 2013) extending the ideas of other researchers such as Gibbs et al. (2013) and Schäfer (2012). The framework has wider applicability and sits comfortably across a range of types of participants and below is adapted for considering how to engage communities or for reflecting on how communities are engaged in research that is about them (see Figure 1).

Research that is *for* communities (described here as community-*related* research) is research that has as an aim – positive outcomes for communities – but does not necessarily engage communities or community members in the development, implementation or interpretation of the research. An example might be the analysis of existing statistics such as census data to make generalisations about types of communities; or the synthesis of existing research to develop conceptual models to inform understanding of notions of community. The findings about communities might even be incidental to the research topic but nevertheless add to our developing knowledge of community-related matters.

Research *on* or *about* communities (community-*focused* research) has at its heart investigating communities, aspects of communities or even specific communities. The design, implementation or interpretation will engage communities in some way. Examples of this type of research are when the researchers use an advisory committee of community members to guide the design, gatekeepers to assist with access to the community or methods that gather data from community participants. Researchers might also return to the community to check that their findings resonate with the community.

Research *with* communities (community-*centred* or *-guided* research) is more reciprocal and participatory. Whether the need for the research arises in the community or researchers come with a topic to investigate, this type of research is characterised by the two parties having a more equal partnership. The researchers provide methodological expertise, knowledge of the literature and often funding to enable the research to take place. The community (or communities) bring their historical, cultural and contextual understanding to the research – articulating the community's expectations, providing access to participants, helping shape the research design, participating in data gathering, interpretation and dissemination.

Finally, research *by* communities (community-*driven* research) is at the far end of the continuum where the research need arises from within the community itself. They are the major drivers of the research from design to dissemination. They might choose to use researchers from within the community, expert mentors to guide the research or commission external researchers. Even if the research is conducted by external researchers, the community retains oversight. The approach might include a developmental aspect or capacity-building component so that the community becomes less dependent on external expertise in the future.

Research <i>for</i> communities	Research <i>on</i> or <i>about</i> communities	Research <i>with</i> communities	Research <i>by</i> communities
Community- <i>related</i> research	Community- focused research	Community- centred or - guided research	Community- driven research

Figure 1: Continuum of engagement of communities in research

**Findings: Three case studies of school community research in a disaster context** The conceptual framework outlined above sets the scene for discussing the three case studies. They are all drawn from the author's Canterbury earthquake research and illustrate research undertaken with school communities that fits along the continuum at different points (see Figure 2). Each case study took a different approach. School community A engaged willingly but were led by the researcher who had more control over data gathering, processing and production of the findings. School community B had strong ideas about what they wanted to achieve but needed the researcher's expertise and resources to make it happen. School community C wanted the researcher to provide advice on how to get underway and make sense of what they were finding. The latter school community also found that some aspects (such as interviewing traumatised participants) were outside their expertise so requested the researcher undertake these aspects for them.

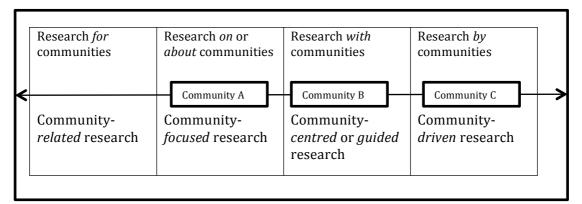


Figure 2: Three case studies located along the continuum of engagement

### Case Study 1: School community A

School community A is an affluent community sitting on the hills above Christchurch's city centre. In the September 2010 earthquake they suffered structural damage to buildings and land, including road damage and loss of power. Families reported getting on with repairs and rebuilding their lives. When the February earthquake hit, much closer and with more force, their homes were more severely damaged. An abiding memory of many people in this community was of looking down on their city and watching it collapse in a cloud of dust in front of them. School community A was the first one approached. The principal understood the importance of recording the school community's stories both as a way of working through their experiences and as preserving these stories for history. Because of the death of a school parent in the February earthquake, the principal needed to approach her staff, school board and parents sensitively. It took five months of meetings between the researcher and the principal, staff and community before the research was undertaken. The school asked that the children participate in small groups – with friends, classmates or siblings. Adults could choose to be interviewed alone or with others. Participants could choose whether they were audio or video-recorded. With children we approached their experiences obliquely - asking questions about how they would describe earthquakes to children who had never experienced them or what stories they would tell their grandchildren about the earthquakes. With adults we needed to do little beyond asking an initial open-ended question. Their stories poured out without much prompting. The interviews were transcribed and edited into coherent narratives. They were then returned to the individual participants (and children's parents) for their amendments before being compiled into a book. The school was given both hardcopies and an electronic version to distribute as they wished

### Case study 2: School community B

School community B is a town north of Christchurch, composed of families across the socio-economic spectrum. It was hardest hit by the September earthquake. Over 800 (one third) of the town's homes were so badly damaged by cracking, slumping and liquefaction that they would need to be demolished and families relocated. The

September earthquake hit early on a Saturday morning. The damage across the region was much worse than anticipated and schools were officially closed for several weeks until they were deemed safe, repaired or relocated. In this town with so much damage and so much fear, people needed somewhere to go and School B was found to be safe enough to act as a community relief centre. When the February earthquake hit, the community was shaken again but not as badly as their neighbouring city of Christchurch. Instead it became a safe haven for people evacuated from the city who came to live with family and friends.

The researcher was keen to gather stories that reflected a range of communities and the principal of School B wanted his school to do something to give back to its community which had been so supportive of the school during its darkest days. He thought a memorial seat where people could sit and reflect might be a good idea but he wanted the school's students to decide. The researcher and a colleague met with a representative group of students and work-shopped their ideas using arts-based activities. Two of the students' ideas cemented the project's direction. One was the idea to make a mosaic out of 'broken bits' of their homes and the other was to tell the community's story of 'sailing through a river of emotions'. Thus began an 18-month journey that involved every child in the school, their teachers, families, over 70 community volunteers, the researcher and an artist who managed the project. The completed product was a circular set of four mosaic panels depicting the town's early history, life before the earthquakes, life during the earthquakes, and their hopes for the future. The mosaic was set amid a garden of plants rescued from red-zoned homes (those zoned for demolition) made from bricks, broken crockery and tiles from their homes or donated by the community. Community volunteers brought a bulldozer to

prepare the site, built a circular seat to go in the centre of the mosaic design, laid the bricks or came and worked alongside the children as they cut and placed the tiles. A local member of Parliament laid the final tile in a ceremony that recognised how far the community had come and how the earthquakes had not dampened its spirit but made it stronger.

#### Case study 3: School community C

School community C is located in the poorer eastern suburbs of Christchurch which were hit hard by each of the large quakes. School C had been around for over 140 years and many generations of the same family had gone to school there. The school was an integral part of the community. A parent described it as 'a little bit of country in the middle of the city'. This school had coped quietly with all that the on-going disaster had thrown at them and had become a hub for post-earthquake services and support. Despite having to teach some classes in the church next door and many families having to relocate, parents remained loyal to the school and found ways to get their children across town to attend a school where they felt they would be cared for.

In September 2012 the school faced what they termed as 'another aftershock'. They were one of 36 schools that would be closed or amalgamated as part of the Ministry of Education's post-earthquake Education Renewal plan (Ministry of Education, 2012). Given what they had already been through, the decision seemed poorly timed and heartless.

The researcher became involved because the school wanted to find some way to help their students process the events. They had heard about a student-led video project we had conducted in another school and wondered if we could help them support their students to create a documentary that celebrated what the school had meant to the community and to capture memories, stories and hopes for the future. The school released a teacher to work with the researcher to get the project underway. The teacher was very comfortable with the technicalities of the video-production and with overseeing the children's work so the researcher played more of an advisory role. As the news of the project and the fact that a researcher was interested in people's stories got around the community, people asked to be involved. Where the school knew that the story someone had to tell was particularly traumatic they asked that the researcher undertake those interviews. This was a sensible move. People came to tell their earthquake stories and to share their anguish over the closure of their school. These interviews were highly-charged emotional events with many tears and had to be carefully handled. They would not have been appropriate for novice researchers or children to undertake.

Despite their best efforts at preventing the closure, at the end of 2013 the school closed and the students were absorbed into a nearby school. On the final day, students, staff and community members rang the school's bell (literally and figuratively) on the school's place in that community's history.

### Methodological discussion: Lessons learned when researching communities in disaster contexts

As noted earlier, researching in disaster communities needs the same ethical and methodological care that a researcher commits to any research but adds an extra layer of sensitivity because of the uncertain and emotional environment. What can be learned from this research? It can best be described by explaining that as the community took greater control or ownership of their project, the researcher took less of a leadership and co-ordination role. This is not to say that at the communityfocused end that the researcher made all the decisions nor at the community-driven end that the researcher's expertise was not needed. In reality, a negotiated approach is more complex and fluid. There is no correct way to do community research but there are important matters to resolve early in the process which are sustained by building trust and maintaining integrity as the research proceeds.

In summary, there are some general points to make about researching communities in disaster contexts including context, approach, roles and responsibilities, ethics and outcomes. Firstly, it is important to understand the context and the composition of the community. There will be a history to this community and it will have evolved into its present form through a convoluted series of events. It will have particular facets that make it unique and identifiable. In disaster research, the community will also have recently experienced a catastrophic event. Doing homework on the community and putting aside pre-conceptions are very important. A gatekeeper can assist with access and if the community has groups unfamiliar to the researcher's background or experience, the use of a cultural mentor can smooth relationship building. That the author had experienced the earthquakes herself and already had community networks certainly helped but it also meant the careful consideration of when she was an insider (earthquake victim) and when she was an outsider (researcher).

Secondly, disaster research literature (see, for example, Spence & Lachlan, 2010) cautions that pre-determining research designs, selecting participants and setting timelines might not work in fluid and volatile contexts. In this project, the researcher took her toolbox of research experiences, expertise and methods in order to present options for the school communities to consider. Yet even that was not enough preparation – when School community B, for example, wanted to make a large mosaic in the school grounds she found herself well outside her comfort zone. Each school-based project took on a life of its own. Each project took much longer than anticipated and required constant re-negotiation and always more funding. A sense of commitment to traumatised communities meant that the researcher felt obliged to see each project through to completion regardless of time, effort or cost.

Post-earthquake the researcher was no longer living in the region and had to travel back and forth. This meant that careful clarification of roles and responsibilities was necessary. With constant aftershocks, relocations and other unexpected events, these required on-going re-negotiation. It helped being able to locate the artist managing the School community B mosaic in the community for extended periods of time. Regular communication about tasks, timelines and expectations required goodwill, patience and humour on both sides.

Because participants were giving freely of their participation, despite the trauma they had faced and the on-going chaos of their lives, the researcher needed to be even more respectful of their rights. It was important to be prepared to let a participant stop or withdraw participation up to a very late stage. With School community A, it was some time between data gathering and providing proofs of its book. Community members were often in different emotional states or places in their recovery and if they wanted to delete or amend material with their names on this was respected. Finally, the notion of outcome took on a different meaning. While the communities had a product that told their earthquake stories and while the researcher had enough raw data to keep her analysing and writing for years, in the end the product was less important than the process. Each community used the opportunity to reflect on their experiences, to re-affirm who they were as a community, to express what they valued, and to look forward to a hopeful future.

## Theoretical discussion: The place of schools in building community cohesion and resilience

This section draws on the findings from the earthquake study to critically examine the place of schools in building community cohesion and resilience and discusses how this links to social capital.

### **Community cohesion**

In New Zealand most children of primary school age attend their local schools. In established communities, links with local schools go back many generations and parental involvement in school activities is encouraged. Communities also make use of school facilities such as the school hall, library, gym, playing fields and swimming pools outside of school hours. Many schools are also designated Civil Defence sector posts. School-community relations are usually very strong. Thus, when the earthquakes hit schools took on many support roles. They were where people went for overnight accommodation, relief supplies, welfare services or just a friendly face. As the city moved into recovery mode a priority was re-opening schools. Creative solutions were found to keep schools running – teaching in tents, church halls, people's living rooms, relocated venues or bussing in one group of students for a morning shift and then a different cohort for an afternoon shift. School personnel managed distraught children and families despite the difficulties in their own lives. Schools provided practical, social, emotional and psychological support. They were both close-knit communities who looked after their members and hubs for wider community members.

When Kearns and Frost (2000) describe a cohesive society, they include these characteristics: common values, social order, social solidarity, social networks and place attachment. Cantle (2005, p. 11) explains that community cohesion initiatives try "to create shared experiences and values, rather than continuing to entrench separation [or] to recognise and reinforce differences." By being viewed as community anchors, schools can play their part in contributing to community cohesion in their neighbourhoods. The findings from the author's Canterbury earthquakes research (Mutch, 2016) show that prior to the disaster schools were significant places in a community facilities and services. As Thornley et al.'s (2013) research on the Canterbury earthquakes found, pre-existing community connectedness was a predictor of a community's ability to cope with and recover from the trauma. How well local schools were integrated into the community's social fabric was an important contributor to this connectedness.

Not everyone sees policy initiatives to enhance community cohesion as unproblematic. Flint and Robinson (2008, p.6) claim this agenda represents, "a neoliberal governance programme of integrationism through which particular norms and values are prioritised." Neo-liberal ideology promotes individuals taking responsibility for their own wellbeing, or in this case communities being responsible for their own social cohesion – a view which presupposes that all communities have access to the same community capital (material and non-material assets and advantages). This deflects responsibility from local or national governments taking action to address historical and systemic injustices and means that some communities will always struggle to achieve sustainable social cohesion.

### **Community resilience**

Thornley et al. (2013) studied the resilience of six Canterbury communities postearthquake and found four key factors influencing a community's ability to respond and recover: (a) pre-existing community connectedness; (b) community participation in disaster response and recovery activities; (c) taking a role in local decision-making; and (d) accepting support from outside their communities, especially from local and national agencies. Schools met each of these criteria. They played a major role in enabling their communities to respond with resilience and hope. They already had historical, social and educational connections with their communities and were seen as safe and accessible. They enabled their communities to engage in response and recovery activities such as the three projects described in this chapter. They held community information and consultation meetings on a range of post-earthquake issues and they were local distribution centres for donated goods and voluntary services as well local drop-in locations for recovery-related agencies.

Developing community resilience is another policy initiative that has been widely promoted but is also being viewed as more problematic than it first appears. Shah (2014) claims that programmes developed to enhance children's resilience in war zones puts the onus on the individual or community to repeatedly cope with the trauma rather than on warring factions to find political solutions to curtail the conflict. Participants in the Canterbury earthquake study expressed similar frustration with being described as resilient because they felt that it meant that they were expected to cope without complaint with broken promises and frequent delays. It also appeared that those with the least, such as those in lower socio-economic communities or in red-zoned areas, were expected to be the most stoic.

### Social capital

Social capital provides a useful lens to explore the nature of underlying injustice and disadvantage. Originating with Bourdieu (see, for example, Bourdieu, 1986), capital (cultural, economic, social and symbolic) explains that individuals have resources or assets that enable them to gain access to certain fields and position themselves advantageously. *Social* capital referred to the social status gained through important social networks, knowledge of the customs and norms, and acceptance by the social elite. At the turn of this century, both Fukuyama (1999) and Putnam (2000) drew on the notion of social capital in order to address social dysfunction and disengagement. Since then, social capital has been used in a more generic way to indicate patterns and strengths of social networks, and collaborative and reciprocal interactions for the collective good based on shared values and mutual trust (Kearns, 2004) or more simply, as the 'social glue' that holds communities together (Morrow, 2005).

Social capital, in its *bonding*, *bridging* and *linking* forms has been used by writers in the disaster field (Hawkins & Maurer, 2010; Lin, Cook & Burt, 2001). *Bonding* social capital refers to relationships in a network where individuals have a lot in common (for example, location, socio-economic status or family ties). *Bridging* social capital is where people build relationships despite differences (for example, differences in age, socio-economic status, race/ethnicity or education). *Linking* social capital is

where individuals build relationships with institutions and people who have relative power over them (for example, with those who provide employment, services or resources).

Social capital can advantage some individuals or communities and disadvantage others. Hawkins and Maurer (2010) found that all levels of social capital collapsed in the immediate aftermath of Hurricane Katrina. Bonding social capital was most important for immediate survival but bridging and linking capital were significant for longer-term recovery. In hindsight, it can be seen how this also played out in the schooling sector in New Orleans Parish. Poorer communities with low levels of linking capital were powerless in the face of the disestablishment of their schools and the firing of their teachers to make way for charter schools (Buras, 2011). The three communities in the Canterbury earthquake study can also be examined through a social capital lens.

### Community cohesion, resilience and capital

Prior to the earthquakes, School community A, in a higher socio-economic suburb, was not a particularly cohesive community. It appeared to have strong linking capital but not as much bonding capital. Families lived behind their high gates and parents commuted to work in other parts of the city. While it was a recognisable locality, it was without a local business hub, sports complex or other community facility that could act as an anchor point. When the earthquakes hit, families relocated to their holiday homes or sent their children out of town to stay with relatives. When children returned to school, they were often less resilient than those who stayed behind. Some children reported that they did not fit in any more. Strong linking capital meant that the community had prompt access to accommodation, goods, services and personnel to speed up their physical recovery but for emotional recovery they needed to strengthen their bonding and bridging capital. They began getting to know their neighbours as they helped each other through the aftershocks and subsequent cleanups. Ironically, it was the death of one of the parents in the school community that bonded them. Community members provided meals and other support for the bereaved family for over six months. The literature suggests contributing altruistically to others is a helpful healing process (Prinstein et al., 1996). These activities aided their own and others' emotional recovery and helped them develop a stronger sense of community.

At the other end of the socio-economic spectrum, School community C displayed strong bonding and bridging capital. The school had been part of the community for over 140 years and the community was immensely loyal to the school. That connectedness enabled them to support each other through the constant aftershocks and the difficult recovery. In the aftermath of the major earthquakes the school was a relief hub. Families could come and shower, do their laundry and access counselling or other post-earthquake support. When school re-opened parents felt that their children were in safe and steady hands, which provided an antidote to the stress and uncertainty in their home lives. Parents also talked about how the school had been such an emotional support for them. The school library was turned into a drop-in centre where parents and community members could have a coffee and talk things over. The school acted as a community anchor for them throughout the recovery process. While the bonding and bridging capital in this community was evident, without strong linking capital reconstruction and repairs in their community were slow. They were also powerless in the face of the government's decision to close their school under the post-earthquake Education Renewal scheme. No amount of community connectedness could save them. They were left with only hard-earned resilience to recover from what the acting-principal called being used as 'collateral damage'. A further disappointment was that after much protest, some schools in other communities did receive reprieves from closure, and unsurprisingly, they were often in higher socio-economic communities with strong linking capital.

Of the three communities in this chapter, School Community B appeared to have strength in each type of social capital. Being part a small town, they had a history of connectedness. Their bonding capital based around anchors such as the school helped community members to support each other. After the September 2010 earthquake the school was set up as a Civil Defence relief centre. The school principal took on a community pastoral care role as he coordinated support for local families. In February 2011 the school community repaid the care shown to them and reached out to support other communities that needed help. They also had good bridging and linking capital that could mobilise personnel and services to make things happen. The school took on an extra 50 children who had left their damaged homes in Christchurch and provided basic needs for these families. The completion of the community mosaic was a good example of all three capitals working in harmony. Bonding capital brought everyone together with a common purpose and the community's participation in the mosaic project reinforced those bonds. Bridging capital meant that they had networks beyond their community to find the resources and services they needed. Linking capital meant that they could link with the local news media, businesses or the member of Parliament to gain support for their venture. School community B's prior

connectedness, on-going cohesion in the face of disaster, along with their use of social and community capital, meant that they appeared to the researcher as the least fragile and most resilient of the three communities in this study.

### Conclusion

This chapter set out to explore the role of schools in building community cohesion and resilience using findings from three school communities affected by the 2010/2011 Canterbury earthquakes. To some extent, the study confirms much of what we already know – that policies designed to enhance community connectedness have a part to play in improving community cohesion and resilience. The three case studies, however, add to our understanding by providing concrete examples of the significant role that schools can play as community anchors both pre-and postdisaster. The methodological discussion outlines important lessons from the study when researching in disaster settings that will have application far beyond this particular context. The theoretical discussion highlights that while policies aiming to promote community cohesion can strengthen a community's resilience and social capital, they can also be highly problematic. A social capital lens reveals the underlying inequalities and injustices that need to be addressed before such policies do little more than exacerbate the status quo. It is important that we collate and synthesise our growing understanding of the nuances of community connectedness and cohesion to support stable functioning in good times and supportive recovery when disaster strikes.

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### References

Back, E, Cameron, C, & Tanner, T 2009, *Children and disaster risk reduction: Taking stock and moving forward*, Brighton, UK: Children in a Changing Climate.

Bonanno, G, Brewin, C, Kaniasty, K, & Greca, A 2010, Weighing the costs of disaster: Consequences, risks, and resilience in individuals, families, and communities. *Psychological Science in the Public Interest*, vol.11,No. 1, pp. 1–49.

Bourdieu, P, 1986, 'The forms of capital' in Richardson, J (ed.) *Handbook of theory* and research for the sociology of education, Greenwood, New York, pp. 241-258.

Buras, K 2011, 'Race, charter schools, and conscious capitalism: On the spatial politics of whiteness as property (and the unconscionable assault on Black New Orleans', *Harvard Educational Review* vol.81, no. 2, pp.296-331.

Callaghan, E & Colton, J 2008, 'Building sustainable and resilient communities: a balancing of community capital', *Environment, Development and Sustainability* vol.10, no. 6, pp. 931–942.

Cantle, T 2005, *Community cohesion: A new framework for race and diversity*. Palgrave Macmillan, Basingstoke, UK.

Canterbury Earthquakes Royal Commission, 2012, *Final Report Volumes 1–7*. Christchurch, NewZealand.

Chaskin, R, 2008, 'Resilience, community, and community resilience: Conditioning contexts and collective action'. *Child Care in Practice* vol. 14, no. 1,pp. 65-74.

Community Alliance, 2009, *Anchors of tomorrow. A vision for community organisations of the future.* UK: Author[1].

Dickson-Swift, D, James, E, Kippen, S, & Liamputtong, P 2007, 'Doing sensitive research: what challenges do qualitative researchers face?', *Qualitative Research*, vol. 7, no. 3, pp. 327-353. DOI: 10.1177/1468794107078515

Drabek, T, 1986, *Human system responses to disaster: An inventory of sociological findings*, Springer-Verlag, New York,

Education Review Office, 2013, *Stories of resilience and innovation in schools and early childhood services. Canterbury earthquakes: 2010–2012.* Wellington: Author[2].

Ferris, E, & Petz, D, 2012, *The Year that Shook the Rich. A Review of Natural Disasters in 2011*, The Brookings Institution, London School of Economics, London.

Flint, J & Robinson, D 2008, *Community cohesion in crisis: new dimensions of diversity and difference,* The Policy Press, Bristol, UK.

Fukuyama, F, 1999, *The great disruption: Human nature and the reconstitution of social order*, Profile Books, London.

Gibbs, L, Mutch, C, MacDougall, C, & O'Connor, P 2013, 'Research with, by, for, and about children: Lessons from disaster contexts', *Global Studies of Childhood*, vol. 5, no.3, pp. 129-141.

Gordon, R 2004, 'The social system as site of disaster impact and resource for recovery' *Australian Journal of Emergency Management*, vol. 19, pp. 16–22.

Hawkins, R, & Maurer, K, 2010, 'Bonding, bridging and linking capital: How social capital operated in New Orleans following Hurricane Katrina', *British Journal of Social Work*, vol. 40, pp. 1777–1793.

Kearns, A, 2004, *Social capital, regeneration and urban policy,. CNR Paper #15*, ESCR Centre for Neighbourhood Research. Retrieved from: http://www.researchcatalogue.esrc.ac.uk/grants/H141251026/read

Kearns, A & Forrest, R, 2000, 'Social cohesion and multi-level urban governance', *Urban Studies*, vol. 37, pp. 995–1017.

Lin, N, Cook, K, & Burt, R, 2001, *Social capital: Theory and research*, Transaction Publishers, Piscataway, NJ.

Magis, K 2010, 'Community resilience: An indicator of social sustainability', *Society and Natural Resource*, vol.23, no. 5, pp. 401-416.

McCosker, H, Barnard, A, & Gerber, R, 2001, 'Undertaking Sensitive Research: Issues and Strategies for Meeting the Safety Needs of All Participants', Forum: *Qualitative Social Research/SozialForschung*, vol. 2, no. 1, Retrieved from http://www.qualitative-research.net/index.php/fqs/index

Morrow, V, 2005, Social capital, community cohesion and participation in England: A space for children and young people?', *Journal of Social Science, Special Issue #9*, pp. 57-69.

Mullen, M & Thomas, K, 2016, 'Collaborative community in creative settings' in O'Connor, P, (ed.), *The possibilities of creativity*, Cambridge Scholars Publishing, Newcastle upon Tyne, UK, pp.117-134.

Mutch, C, 2013a, "Sailing through a river of emotions": Capturing children's earthquake stories', *Disaster Prevention and Management*, vol. 22, pp. 445–455.

Mutch, C, 2016, 'The role of schools in supporting communities through the 2010-2011 New Zealand earthquakes', *School Community Journal* vol. 26, no. 1, pp. 99-122.

Norris, F, Stevens, S, Pfefferbaum, B, Wyche, K. & Pfefferbaum, R 2008, 'Community resilience as a metaphor, theory, and set of capacities and strategy for disaster readiness' *American Journal of Community Psychology*, vol. 41, pp. 127-150.

Pfefferbaum RL, Pfefferbaum B, Van Horn RL, Klomp RW, Norris FH, Reissman DB, 2013, 'The communities advancing resilience toolkit (CART): An intervention to build community resilience to disasters', *Journal of Public Health Management and Practice* vol. 19, no.3,pp. 250-258.

Prinstein, M, La. Greca, A, Vernberg, E, & Silverman, W 1996, 'Children's coping assistance: How parents, teachers, and friends help children cope after a natural disaster', *Journal of Clinical Child Psychology* vol. 25, no.4, pp. 463-475.

Putnam, R, 2000, *Bowling alone: The collapse and revival of American community*, Simon Schuster, New York

Schäfer, N 2012, 'Finding ways to do research on, with and for children and young people' *Geography*, vol. 97, pp. 147-154.

Shah, R, 2015, 'Protecting children in a situation of ongoing conflict: Is resilience sufficient as the end product?' *International Journal of Disaster Risk Reduction*. http://dx.doi.org/10.1016/j.ijdrr.2015.06.003.

Spence, PR, & Lachlan, KA, 2010, 'Disasters, crises, and unique populations: Suggestions for survey research', in Ritchie, LA, & MacDonald, W, (eds.), 'Enhancing disaster and emergency preparedness, response, and recovery through evaluation', *New Directions for Evaluation*, vol.126, pp. 95–106.

Thornley, L, Ball, J, Signal, L, Lawson-Te Aho, K. & Rawson, E 2013, *Building community resilience: Learning from the Canterbury earthquakes. Final report to the Health Research Council and Canterbury Medical Foundation*, Health Research Council, Wellington.

van Zijll de Jong, S, Dominey-Howes, D, Roman, CE, Calgaro, E, Gero, A, Velan,, S, Bird, DK, Muliaina, T, Tuiloma-Sua, D, & Afioga, TL, 2011, 'Process, practice and priorities — key lessons learnt undertaking sensitive social reconnaissance research as part of an (UNESCO-IOC) International Tsunami Survey Team', *Earth-Science Reviews* vol. 107, pp. 174–192.

Wilson, G, 2013, 'Community resilience, social memory and the post-2010 Christchurch (New Zealand) earthquakes', *AREA*, vol. 45, no. 2, pp. 207-215.

Wisner, B, 2006, Let our children teach us! A review of the role of education and knowledge in disaster risk reduction, Books for Change, Bangalore.

Zautra, A, Hall, J, & Murray, K 2008, 'Community development and community resilience: An integrative approach', *Community Development* vol. 39, no. 3, pp. 130-147.