

# Overcoming adversity from large-scale crises and disasters

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## Abstract

This chapter focuses on how schools help their students, families, and wider communities respond to and recover from large-scale crises and disasters. Examples are drawn from the author's decade of research into large-scale events in and around the Asia-Pacific, from earthquakes in New Zealand and Nepal or tsunami in Japan and Samoa to the Covid-19 pandemic. This chapter will focus on four ways that schools contribute to supporting children through adverse disaster events, through: (a) schools as community hubs; (b) principals as crisis leaders; (c) teachers as trauma workers; and (d) children as active participants.

## Keywords

*Disasters, Crises, Trauma, Communities, Schools, School leaders, Teachers, Students*

## INTRODUCTION

Since the mid-1950s, writers have been examining the impact of childhood adversity on outcomes in later life (e.g., Felitti et al., 1998). Studies cite adverse experiences as physical, psychological, or sexual abuse, and physical or emotional neglect. Children can also be impacted by parental or family factors, such as divorce, death, or abandonment, incarceration, mental illness, or substance abuse (Finklehorn et al., 2015). More recently, adverse childhood experiences were extended to include community and peer factors, such as racism, bullying, and violence. The literature also notes that the impact of adverse childhood experiences can be lessened through family and school-based interventions (Biglan et al., 2017).

Over several decades, we have come to understand more about the impact of natural disasters, conflict, and displacement on children's psychosocial adjustment, educational achievement, and health outcomes. The literature highlights that the trauma caused by such life-changing events is more severe on those who have pre-existing risk factors, such as mental health issues or lowered resilience from adverse prior experiences (e.g., Gibbs et al., 2013). Most children will exhibit some physical, psychosocial, or behavioural issues in response to traumatic events but with a return to a more stable environment, and learning coping strategies, they will recover, but a proportion of victims might go on to have serious long-term issues, such as anxiety, depression, or post-traumatic stress disorder (Prinstein et al., 1996).

Since 2020, the Covid-19 pandemic and subsequent events, such as social distancing, self-isolation, and home learning are also impacting children's mental health, social competence and,

in some cases, physical safety (e.g., Power et al., 2020). We are yet to understand the longer-term implications of the pandemic but already research is providing evidence of the ways in which the pandemic has highlighted social, economic, and educational disparities (e.g., Mutch, 2021).

This chapter argues that schools play an important role in providing the security, stability, and nurturing environment that contributes towards alleviating the multiple adverse experience children might face as they journey towards adulthood. The author's particular interest is in large-scale crises and how schools can help to ease the long-term psychosocial impacts of such events. After outlining the context for the research, the relevant literature is summarised, the methodological approach outlined, and examples of the findings are shared. The findings are grouped under four themes: (a) schools as community hubs; (b) principals as crisis leaders; (c) teachers as trauma workers; and (d) children as active participants. The chapter concludes with a summary of the key ideas, using an explanatory conceptual framework, to discuss the role that schools play in alleviating childhood adversity due to large-scale crises and disasters.

## **BACKGROUND**

Over the past decade, the author has been researching the role of schools in disaster response and recovery. This research began in 2010 when the city of Christchurch in Canterbury, New Zealand, was struck by a series of powerful earthquakes. The author conducted research with five schools as they moved through their earthquake recovery journeys. As schools in disaster contexts had not previously been comprehensively researched, invitations soon followed to visit other disaster settings in the Asia-Pacific. Many of the themes from the Canterbury earthquake study resonated across geographic locations, disaster types, and cultural contexts. As the decade proceeded, Canterbury faced further trauma – another major earthquake in 2016 in the north of the region and, in 2019, a terror attack on Muslims at prayer.

In February 2020, New Zealand was introduced to the Covid-19 virus. What made this crisis different, was that it was not concentrated in a single city or region but affected every person in the country, and indeed, the world. The government acted swiftly and the country went into strict lockdown. Schools were closed and students began learning from home. Suddenly, what we had learned about the role of schools in disaster response and recovery gained heightened interest. How does the role of a principal change? How do teachers keep teaching the curriculum when students are too distressed to focus? How do schools help families whose regular lives are disrupted? How do they support already fragile communities? The purpose of this chapter is to consolidate the findings from this decade of research to highlight the ways in which schools help staff, students, families, and communities cope with their immediate challenges and thrive through adversity.

## **LITERATURE**

Disasters are characterised by the suddenness or lack of preparedness, the unexpectedness of the size of the event and ensuing damage, and the inability of existing systems to cope. There can be a lack of immediate access to food, water, shelter, and medical aid and large-scale death or dislocation. The process of recovery is long and complex. Disasters can also have severe long-

term social, economic, and psychological impacts on communities and nations (Mutch, 2014). Crises can also be sudden and unexpected but might not be as widespread or as long lasting.

A literature review on the role of schools post-disaster, highlighted that there was a large body of literature in the hard sciences on disasters but very little in the field of education (Mutch, 2014). The largest body of research focused on the role of schools in disaster risk reduction. Some small-scale accounts discussed the role of schools in disaster contexts but few focused on the roles of principals or teachers (e.g., Smawfield, 2013). This was surprising, given that getting schools functioning again post-disaster is a top priority of governments and local authorities. It provides educational continuity and is a key psychological factor in contributing to a return to normality. More recent literature advocates for the recognition of schools' significant roles in disaster preparation, response *and* recovery (e.g., Mutch, 2018).

As schools are located in centres of population, large and small, a disaster affecting a community will impact local schools. Schools might be used as emergency shelters, relief hubs, communication centres, or a place to locate support agencies. More significantly than the physical support they provide, they offer a sense of safety and security. Whether people come to sleep in the school assembly hall, collect relief supplies, or register with agencies, schools are seen as places of safety and calm. If school buildings are damaged, teaching still continues in makeshift locations, tents, out in the open, or online (see, Mutch, 2014).

The limited literature highlights how unprepared school leaders were for what they were about to face. While most education systems expect schools to have emergency plans, these are not necessarily at hand, relevant, or well-understood. Principals fall back on their instincts and into a command and control mode to begin the response process. Sometimes instructions are issued from a central authority but most often, principals focus on survival and rescue until they can take stock of the situation. The crisis leadership literature from other fields provides useful insights into the kinds of decisions that principals might make in these situations (see, Mutch, 2015a)

When the study began, it was difficult to find studies of teachers' responses to disaster situations, yet if school was in session when a disaster hit, teachers would be first responders – rescuing, evacuating, and caring for students until help arrived. There were a few insights from teachers, for example, during Hurricane Katrina or the Japanese 2011 triple disaster, but it was difficult to find much that would have prepared teachers for the tasks that they would face (see, Mutch, 2015b). The Covid-19 pandemic has highlighted that there is still more to be done in preparing teachers for such unexpected events.

Disasters can have serious long-term effects on children's physical and psychological wellbeing. The severity of reactions can depend on risk factors or prior experiences, such as previous trauma or mental illness, or the level of exposure to the event, injuries, loss, or dislocation (Gibbs et al., 2013). Supporting children's psychological responses to trauma was one area that was well covered in the literature (e.g., Prinstein et al., 1996). An emerging area of research was around post-trauma programmes to enable children to process the events they had faced, especially through arts-based activities (e.g., Cahill et al., 2010), yet literature on supporting teachers' wellbeing post-disaster was limited (see, O'Toole & Friesen, 2016).

## **METHODOLOGY**

The research approach was emergent, participatory, and qualitative (Denzin & Lincoln, 2011). Methods included semi-structured interviews with school leaders, teachers, parents, and children, and arts-based activities with children. Ethical clearance was given by the University of Auckland and included participant's giving informed consent, and parental consent and children's assent when children were involved. Over 100 interviews were transcribed and triangulated with other data from arts-based methods, observations, school documents, media reports, and official statistics. In post-trauma contexts with vulnerable participants, acting ethically is especially important (Dickson-Swift et al., 2008). Time was taken to build relationships with schools through a sensitively staged approach. Once on site, the research was undertaken with a colleague using warm-up activities and a conversational tone to put participants at ease. Children were usually interviewed in small groups of peers or siblings. Through the interviews or activities, we kept an eye on participants' emotional responses to ensure they did not become re-traumatised. Support systems, such as a school counsellor or trusted adult were always at hand.

Data were analysed through a constant comparative method (Denzin & Lincoln, 2011). Initial codes were extracted from the data for the strength of the idea, pattern of thought, insight, or explanation. When the data reached saturation point, where no new codes were found, we grouped codes into more abstract themes. This chapter includes the latest data from our Covid-19 studies. The participant quotations are chosen to exemplify codes and themes from the data.

## **FINDINGS**

Across all the research settings, including the Covid-19 study, it was clear how much schools contributed to community response and recovery, and how principals and teachers went above and beyond their roles to support students, families, and the surrounding communities.

### **Schools as the hubs of their communities**

Parental involvement in schools varies between educational jurisdictions. Here, a teacher talks about her school in New Zealand:

*It's a great community school. You have people here in and out all day, before school, after school – just huge involvement, not just from current day parents either. It's past pupils, past parents and members of their families and everything.*

A principal talks about how his school's function changed when the 2010 Canterbury earthquake struck:

*We were set up as a Civil Defence base, so for the first week and a half there were families, from not only our community, but the other schools as well coming here to receive support.... There was an overnight area in our hall where people stayed so we were getting a good picture of the needs of our community....*

Even when the physical school is destroyed, new forms of schooling can evolve, as in Nepal:

*We started a mobile school system. Because I saw that my students were frightened and sad. They had no food and nothing to do and their parents were busy with rescue work. I mobilise my teachers and we go to different places for one or two or three days. We let the children do drawing and painting and singing and dancing to make them happy. We feed them a small snack. We did more than 50 places.*

And despite having their own homes and families to worry about, schools supported their communities, as in Vanuatu:

*Another challenge was supporting families. Their first priority was shelter, food and water. Many lost their homes and their jobs. To feed the children, people donated local food and the school paid for meat. The teachers would take the food home and prepare it or show the children how to cook it.*

Once schools were re-opened, they became the safe places, emotionally and physically, for children, as this teacher from New Zealand highlights from her Covid-19 lockdown experience:

*We just needed to open it up for them [students] to talk to each other. It was difficult for them as well... for many students, school is the safe place for them to come out of their families; all families have their own issues and problems...*

A Canterbury teacher explains how schools became support hubs for their communities:

*We were a community... It was also the support centre for all those parents out there who were mainly in a very damaged area. So, it brought them together, we had counsellors on site for them. We were the hub. We liked them to come and talk and get support.*

And a few years later, when several classrooms at one of the Canterbury schools were destroyed by fire, the community reciprocated:

*We're devastated, absolutely devastated, for the children in there, the teachers and the community. ... Our community is devastated, but we're a proud community here and we've got a lot of support from our families. We'll work through it and try our best to support the children when they come back.*

## **Principals as crisis leaders**

Principals most often felt unprepared for what they were about to face. In a fast-moving context, principals went from being educational leaders to crisis managers (Mutch, 2015a). If the disaster happened while children were in school, principals acted quickly. A Samoan principal shares her tragic story:

*The earthquake hit just after 7 in the morning...I started to run so I could get to school before anything happened. At the gate I saw the wave. Many children were already in the classrooms with their teachers. They saw me and started running towards me...I turned away from the school and started running up the hill and they started to follow me. Some were screaming. Some were crying. The tsunami caught the latecomers. It was very sad.*

If the school is damaged, then in a fluid post-disaster context, principals often have to get the repair or rebuilding underway, as in Vanuatu:

*After the cyclone, I have to be a carpenter. I look at the classrooms and make a report. The Ministry came around to assess the damage. I ask parents to assist as I have no handyman. We still have things to be done. We have to spend school money on the roof.*

Principals also took a lead in supporting their staff – finding out about their home situations and whether they were ready to return to school. A Canterbury teacher explains:

*We had a big debrief in the staff room. We had a chance to connect with the other staff to find out about all their different situations as some of the staff had lost homes and really suffered. The session was not just about commiserating, we were also celebrating that we were all still here.*

Principals reconnected with students and their families, as in Nepal:

*Slowly, I started coming to school myself and visiting the parents. I invited them to inspect the school buildings. I made an awareness programme for them of what we would do if there was another disaster.*

Eventually, principals resumed their educational focus but were always aware of the emotional toll on students, staff, and families but not always themselves. A Canterbury principal highlights the stress of trying to juggle multiple tasks:

*I've got colleagues who've been diagnosed with cancer, with stress-related illnesses. They go to the doctor, get medical attention, but still there has been a gradual decline in well-being.*

## **Teachers as trauma workers**

When children returned to school, teachers became trauma workers. They needed to recognise the signs of distress or trauma and, if it was not possible to provide the appropriate support, to refer children on for specialist intervention. If the disaster happened when school was in session, teachers became first responders, in some cases putting their own lives at risk (Mutch, 2015b).

*My thoughts then were never, "We aren't going to get out" or that it would collapse, but my thoughts now when I look back is that the whole place could have fallen in... the lights went out, and the children were screaming. All I remember is the siren noise, and I went and grabbed a few of the Year 4 children ... and I just huddled with them.*

In Japan, this teacher shares what was expected once the students were released after the Tohoku earthquake:

*After the students went home after the earthquake, the teachers stayed to clean up the school. We divided up the tasks. There were cracks in the school and the roof looked as if it would fall in.*

In many of the settings, school staff were also victims of the event, yet they came to school with a positive focus. This principal from Nepal discusses his teachers:

*My teachers co-operated a lot. They understand that for six months we could not provide the proper salary. Some of my teachers had a lot of problems – their house collapsed and they lost everything.*

A Canterbury principal shares her admiration for her teachers:

*Teachers are great. I can't say enough about how much strength, how much integrity, how much they would go the extra mile to drop kids off, to look after kids in their classrooms after school, to buy them special treats...to find clothes for them...*

A Canterbury parent similarly shares her admiration for the teachers at her child's school:

*All these teachers are quiet heroes. I know there are teachers here that have lost their homes and some of them are living in the same situation as we are and they come to work and they get on with it. They do their job as best they can and they never ever show their frustration to the kids.*

A teacher in Vanuatu shares her thoughts:

*We have to be strong. We have to have patience. We give what we can give to the best of our ability to help children so that they feel there is still someone there for them.*

Teachers had to balance getting back into familiar routines with caring for children's psychosocial needs, as this Canterbury teacher outlines:

*As teachers, we didn't really know how to deal with children after a natural disaster, especially after they had had a month off school. So we were worried about how the children were going to be and how much teaching we could do.*

### **Children as active participants**

Children can be extremely vulnerable in a post-disaster context and it is important to protect them. They can face physical injury, death, loss of home and family, psychological trauma, and dislocation (Mutch & Latai, 2019). Here are the translated words of a Samoan student:

*We saw our entire village depleted. People's homes were uprooted and demolished. Cars were smashed and thrown around. People's personal belongings were scattered everywhere. There were piles of dead bodies everywhere.*

Many children exhibit signs of distress or unusual behaviour in the early aftermath. They might experience clinginess, bedwetting or anxiety but with support most will recover over time. This Canterbury teacher recalls:

*The staff got given a list of possible short and long term symptoms or effects of trauma that children can have after a natural disaster. When children were acting out we weren't to automatically assume that they were being naughty. We could consider that their behaviour could be a long term effect of the earthquake.*

By using a range of safe post-trauma emotional processing practices, such as arts-based activities, storytelling or guided discussions, children can begin to make sense of what has happened. A Samoan art teacher explains how her programme helped her community:

*After several months, it was noted that the responses of the children, teachers and parents started to focus on the future. ... Sorrow and grief were important as they provided for the beginnings of hope, rebuilding and moving forward. The colours of the children's paintings revealed lighter tones and the dark expressions started fading away.*

As well as feeling safe and protected, the United Nations Convention on the Rights of the Child (United Nations Office of the Commissioner for Human Rights, 2021) expects that children will be actively involved in decisions that relate to them. Here, a Canterbury primary student stands up for his rights when his school is closed in a post-earthquake merger:

*My younger son had even written a letter to the Queen. He was not going to go just to John Key [Prime Minister] who he blamed for the whole merger. He was going to the top. He thought, well the Queen is in charge of the countries of the Commonwealth, so he wrote to her to ask if she could help.*

Engaging children in projects that took children out of themselves and focused on helping others proved beneficial in the short and long term. A Canterbury principal reflects on how a community-based arts project helped his students and the community come together:

*It was healing for them and healing for us. For the children to see other people from the community, and parents, people from the bank ... it broke down barriers. After the earthquakes, people wanted to help and good things can come out of adversity. That was one of the positive things about our community, that people looked beyond themselves and the children got to see this.*

In our recent study of young people during Covid-19, we found that rather than feeling disempowered, many used lockdowns to educate themselves and engage actively with current issues, such as racism (Mutch & Estellés, 2021). A young person explains:

*I've always been passionate about it [activism], but then this year with Covid, because we've had so many setbacks, rather than letting that get to me, it's kind of fuelled me to keep going with everything.*

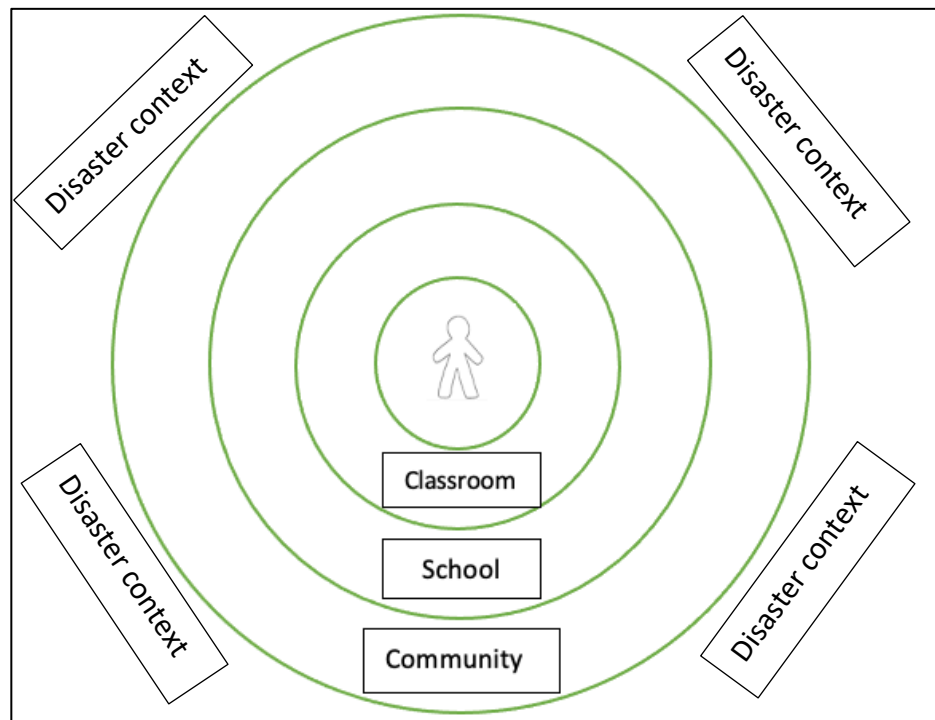
## **DISCUSSION AND CONCLUSION**

What studies across six different countries and multiple disaster types have shown is that schools are integral to supporting children, their families, and communities when they face adversity from large-scale disasters or crises. Bronfenbrenner's socio-ecological model (1979) offers a way to illustrate the findings from the research. Bronfenbrenner places the child at the heart of a set of socio-ecological systems, as in a series of concentric circles. In this chapter's interpretation of the model, the child sits in the classroom environment, consisting of the child's peers and their teacher(s). Surrounding them, is the school ethos, as set by the school principal and leadership team, who play a mediating role between the interlinked ecosystem of the children, teachers, and school, and their relationship with the outer circle, consisting of the school's families and wider



community. This conceptual model helps illustrate how schools are well-placed to exert a positive influence over the immediate systems that surround the children in their care in a disaster context, and also to facilitate a range of support systems for the families and communities that children interact with outside of school hours. Using this model as a guide, the themes from the key findings are explained, from the inner circle outwards.

**Figure 1**  
**The layers of nested school interactions in a post-disaster setting**



### **Circle 1: Children facing adversity**

This research confirms much of the adverse childhood experiences (ACE) and child trauma literature, in that children can face short and long-term adverse effects from large-scale disasters and crises. They might experience physical, emotional, social, and psychological trauma – individually and collectively – and their health and educational outcomes might suffer. For many children, the major effects will recede over time, especially if supported with strategies that build their coping and resilience skills or provide safe opportunities for emotional processing. For a proportion of children, especially those who are more at risk due to prior adverse events or mental health issues, the journey to recovery needs professional intervention beyond the scope of the school. What this research found, that adds to our understanding of children facing adverse events, particularly after large-scale disasters, is that given the right strategies and opportunities, they can actively participate in decision making that aids their own recovery and that of their communities. This is an area that warrants further investigation and theorising.

### **Circle 2: Teachers and the classroom environment**

If a disaster or crisis happens during school time, teachers become first responders. When schools re-open, they become trauma workers, actively supporting children's psychosocial wellbeing while trying to provide educational continuity, often under difficult circumstances. While many school systems have school nurses, counsellors, or social workers, it is still the front-line classroom teacher who deals with children, observing their symptoms, and managing their behaviours, on a daily basis. In a large-scale disaster or crisis context, counselling and other psychological support systems are often stretched beyond capacity. The teachers in my different studies felt ill-prepared and poorly supported, especially over the long term and once emergency support systems were withdrawn. Yet teachers put their own circumstances aside to provide the best care and education they could for their students. Their role as front-line trauma workers needs more recognition, preparation in pre-service and in-service training programmes, and on-going support when a disaster happens – and more available services to refer children to.

### **Circle 3: School leadership and school ethos**

Principals in my study also felt ill-prepared, even if they had faced an emergency before or had evacuation plans in place. They did say that some planning was better than none, but it was not failsafe. They needed to be constantly prepared for the unexpected. Principals did not mention ever receiving training in crisis leadership, either in their principal preparation programmes or through professional development. Based on this research (Mutch, 2015a, 2020), a programme in crisis leadership has been developed based around three crisis attributes – dispositional, relational, and contextual. If the programme proves successful, it might fill a gap in this significant area of principal preparation. What the research also highlights is that when a school has a trust-based ethos and agreed set of values, it is easier to develop and implement a coherent but flexible crisis response and recovery plan.

### **Circle 4: The school as a community hub and crisis recovery centre**

A factor missing from the disaster literature, yet a significant finding was the school as the hub of the community throughout the disaster cycle. This idea figures more prominently in the community development literature where different models of schools as a social hub have been developed. There is a need to recognise the roles that schools play in large-scale disasters and crises. If schools are resourced to build stronger links with their communities, this will enhance community stability in ordinary times, enable them to respond quickly in times of crisis, and sustain their communities through the long journey of recovery.

### **Conclusion**

Drawing on a decade of researching the role of schools in disaster contexts, this chapter has argued that schools play an integral but often unrecognised role in supporting children, families and communities to recover from traumatic experiences. When attempting to alleviate adverse childhood experiences arising from, or exacerbated by, large scale disasters and crises, it is advisable to pay attention to the socio-ecological context of the child, in particular, to how schools, school leaders, and teachers contribute to children's safety, security, wellbeing, and resilience. It is also important to recognise and resource the mediating role that schools play in

supporting and sustaining families and communities through disaster response and recovery, as ultimately it enhances children's ability to thrive despite the odds.

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