Article Title: **Lessons from disaster: The power and place of story**

Author Details Associate Professor Carol Mutch

Dr Jay Marlowe

Author Biographies

Structured Abstract

Abstract – This article argues for taking account of the human stories of disaster response and recovery. It is set the in the context of the 2010/2011 Canterbury, New Zealand, earthquakes which caused major damage to the city of Christchurch and surrounding districts. It outlines the importance of story telling and the ethics of using this approach in sensitive contexts. The articles that follow in this special cross-disciplinary issue are discussed and four themes are examined in depth: response and recovery phases; the notion of community; crisis leadership; and researching in disaster contexts.

Purpose – The purpose was to view the human experiences of the Canterbury earthquakes through a varied set of disciplinary lenses in order to give voice to those who experienced the trauma of the earthquakes, especially groups whose voices might not otherwise be heard.

Design/methodology/approach – The research designs represented in this special issue, and discussed in this introductory article, cover the spectrum from open-ended qualitative approaches to quantitative survey design. Data-gathering methods included video and audio interviews, observations, document analysis, and questionnaires. Data were analysed using thematic, linguistic and statistical tools.

Findings – The themes discussed in this introductory article highlight that the Canterbury response and recovery sequence follows similar phases established in other settings such as Hurricane Katrina and the Australian bushfires. The bonding role of community networks was shown to be important, as was the ability to adapt formal and informal leadership to manage crisis situations. Finally, the authors reinforce the important protocols to follow when researching in sensitive contexts.

Research limitations – The introductory article discusses only the articles in this special issue but it is important to acknowledge that there are other groups whose stories were not shared due to logistical limitations.

Originality/value – This introductory article sets the scene for the articles that follow by outlining the importance of the human stories of the Canterbury earthquakes, through the eyes of particular groups, for example medical staff, schools, women, children and refugees. The approach of viewing the experience through different community voices and disciplinary lenses is novel and significant. The lessons that are shared will inform future disaster preparedness, response and recovery policy and planning.

Keywords   Natural disasters, Canterbury earthquakes, disaster recovery, narrative method, lived experience

Article Classification Commentary

Word count - 4031

Lessons from disaster: The power and place of story

Carol Mutch and Jay Marlowe

Introduction

The Canterbury earthquakes of 2010 and 2011, in which 185 people died and thousands were injured or made homeless, devastated Christchurch's city centre and surrounding suburbs. They severely damaged the region's landscape and infrastructure. These earthquakes have had significant physical, cultural, social and economic impacts on the city and the region. The earthquakes have been of great interest to scientists and researchers across many fields on local, national and international levels. Whilst multiple forms of inquiry are critical to understanding the implications for disaster risk reduction and mitigation strategies, the human stories cannot be left out of such an analysis.

This special issue of *Disaster Prevention and Management* aims to focus on the human stories of disaster response and recovery in order to inform preparedness, prevention, mitigation and management of similar events in the future. This issue brings together papers from researchers working across disciplines, from the humanities and social sciences to emergency medicine and architecture, who have been engaged in documenting the human stories of the Canterbury earthquakes.

On September 4, 2010, the Canterbury region of New Zealand was hit by a magnitude 7.1 earthquake causing widespread damage. On February 22, 2011, as the region was still recovering, a further, magnitude 6.3, earthquake rocked the centre of Christchurch city with far greater devastation, due to its relative shallowness and proximity to the central business district. These events have become New Zealand's largest natural disaster since 1931, when Hawkes Bay was hit by a 7.8 magnitude earthquake that levelled the towns of Napier and Hastings, killing 256 people. From the ensuing devastation, stories of resilience, the overcoming of adversity and forging new solidarities have emerged alongside tragic experiences of loss and trauma. Whilst the total economic cost is still being determined, it is clearly evident that people's voices give these understandings further substance. And it is within these lived experiences that this special issue is targeted.

In order to get inside the lived experiences of the people whose stories are shared in this special issue, most authors, although not all, have used qualitative methods such as semi-structured interviews, personal narratives, arts-based strategies or conversational analysis. As Stuhlmiller (2001) suggests, stories have two functions – they illuminate the personal and make links to the collective:

> Stories provide direct access to the richness of an encounter, including the situations, perceptions and feelings that guided that person. Stories also serve to relate individual experience to the explanatory constructs of society and culture. (p. 64)

Narrative inquiries aim to capture the depth, richness, messiness and texture of a person's story (Etherington, 2007). While a story can capture a point in time it might be only one interpretation within a multiplicity of possible interpretations of people's multi-storied lives (Clandinin, 2006; White, 2004). In the disaster context, it is important that these stories are captured for the participants and for the affected community in order to make sense of the events (Cassim, 2013), for historical purposes (Mutch, in press a), and to contribute to wider understandings of disasters (Gibbs et al., 2013). These stories are numerous and thus inevitably, some stories gain dominance that can render other stories less visible – to the audience and, sometimes, even the narrator. Now more than two years on from the February 2011 earthquake, the sheer devastation and the long road to recovery are often what is focussed on and, as such, have gained primary dominance in understanding the earthquakes' impacts. These stories must be told. However, other stories also need to be voiced and heard.

White (2004) notes that there is an important skill of 'double listening' where practitioners and researchers can look beyond what Geertz (1973) might have described as the 'thin' description of the earthquake's trauma towards developing 'thick' descriptions of people's lived experiences. Included within this understanding is how people have responded to the adversities wrought upon them. These responses inform what White referred to as the other half of the story, and yet, these

responses and sources of resilience can be rendered invisible in the face of such distressingly tragic events. Double listening is not about denying the trauma story or the one of significant adversity. Rather, it is about placing this important story alongside the many other important stories that need to be told (see Marlowe, 2010).

Amongst the adversity contextualised by the earthquakes and thousands of subsequent aftershocks are examples of shared solidarity and sourcing resilience from expected and wonderfully unexpected places. Communities have come together in ways not practised in everyday life before these major events (Christchurch Migrant Inter-Agency Group, 2011). The importance of family and community, formal religion and personal spirituality, organisational response and local initiatives have all played important roles. In the face of adversity, the human spirit found reserves of resilience, bursts of creativity, pockets of hope and snatches of humour. Alongside Civil Defence, Urban Search and Rescue, Red Cross and other first responders, could be found the Student Volunteer Army, the Rangiora Express, the Farmy Army and other spontaneously formed groups bringing help and comfort to people in their darkest days. As the recovery phase began, Greening the Rubble, Gap Filler, Flat Man and the Quake Kid, and other grassroots initiatives continued to bring a smile to the faces of the community and the possibility of a hope-filled future (see Mutch, in press b).

While disasters can cause long-term psychological trauma, this usually only affects a small percentage of the population and often those with low resilience factors, few social networks and other pre-crisis indicators (Bonnano et al., 2010). Community re-bonding (Gordon, 2004, 2007) and emotional processing (Prinstein et al., 1996) are two strategies that assist in aiding social and psychlogical recovery. For those people not suffering from major trauma, telling individual or collective stories is a helpful recovery activity (Cahill et al., 2010). It can put the events into perspective, provide distance between the past and the present and begin the process of sense making. As Stuhlmiller (2001, p. 64) explains, "Narration is the forward movement of a description of actions and events that makes the backward action of self-understanding possible."

The ethics of telling such stories, however, particularly in disaster contexts, warrants further examination. It is well known that disasters can exacerbate and create vulnerabilities within particular communities (Hawkins and Maurer, 2009). The need to remain cognisant of research's capacity to do both great good and great harm is vital. Pittaway et al. (2010), who write about work with refugees and other marginalised groups clearly outlines how research can have unanticipated consequences and that there are also dangers of re-traumatisation when sharing people's profoundly significant stories. Alongside this awareness is the recognition of the histories that people carry with them including cultural and linguistic diversities and representing an important part of developing an effective disaster risk reduction strategy (Mercer et al., 2012).

Documenting people's lived experiences therefore requires caution and, as Mackenzie, McDowell and Pittaway (2007) encourage, ethical research should aspire to go beyond 'do no harm' to trying to incorporate reciprocity. This reciprocity can take many forms from community capacity building, participatory action research, collaborative research designs and a commitment to dissemination so that the research reaches the places it is most needed and remains accountable to the individuals and communities that consented to participate (see Marlowe, 2013). It is in the spirit of this sentiment that the authors contributing to this special issue have conducted their research and

sought to disseminate it to a wider audience so that the voices of their participants can be heard as they share their heartfelt and heartwarming stories.

The articles in this special issue

The first contribution that follows this introductory article puts the stories of ordinary people into the context of disaster response and recovery phases. The author, Libby Gawith, points out that the Canterbury earthquakes were not the most deadly or or costly internationally, but as the most significant event in New Zealand's history in terms of physical damage, social dislocation and economic disruption, they will have a huge impact on the country for some time to come. Gawith uses Myers and Zunin's (2000) phases of psychological recovery (impact, heroic, honeymoon, disillusionment and so on) to frame the stories gathered in the course of research as part of a wider project. By providing concrete examples, Gawith brings the theoretical phases to life in a compelling manner. The articles that follow delve into even more depth into the lives and experiences of the many people, adults and children, affected by the earthquakes.

Sandra Richardson and Mike Ardagh take us into the immediacy of the aftermath of February 22. Their firsthand accounts of medical staff coping with the influx of injured and traumatised patients highlight the responses typical of the heroic phase. The authors make an important point about the difference between responses in disaster settings where medical and other personnel come in from outside and those settings, such as Christchurch Hospital's Emergency Department on that day, where they were also part of, and personally affected by, the events. Depite their own personal concerns, staff let their professional roles take precedence as they acted as front-line responders. It is important, Richardson and Ardagh remind us, to tell these stories in a way that neither mythologises them nor underplays them, but gives them the acknowledgement they are due.

While some research claims that women and children are most affected by disaster (Cahill et al., 2010; Hawkins and Maurer, 2009), Liz Gordon's article highlights the significant roles that women played, often behind the scenes, in keeping the social fabric of the city together as the physical side collapsed. She discusses three themes to come from the Women's Voices project: the roles that women played in holding families together; women working as part of disaster recovery; and women participating in community redevelopment. As the realisation of what had happened to the city started to sink in, many people's first thoughts were of their families. Finding and contacting family members, bringing them together, caring for other people's children, returning to their roles in the caring professions, such as teachers and early childhood workers, were roles mostly undertaken by women. Women went on to organise and support immediate volunteer efforts, such as the Rangiora Express or the Student Volunteer Army, and to create or participate in recovery activities, such as Cancern or Gap Filler. Their time, effort and commitment was willingly given and integral to getting Greater Christchurch back on its feet, although, as Gordon contends, their contribution remains largely invisible and unacknowledged.

Another set of first responders to the February 22 earthquake were the hundreds of principals and teachers across the city. As Peter O'Connor explains, the earthquake hit at lunchtime on a school day and school staff had to act *in loco parentis* until the last child was collected by a parent or carer. As with the staff at Christchurch Hospital, they had to focus on their professional roles, despite their own personal fears and anxieties. The fact that many secondary schools were closed while teachers

attended a union meeting was one reason why there were no deaths and few injuries on school property that day but primary and early childhood education counterparts also played a major role in keeping their children safe and calm on their school sites (Education Review Office, 2013). Schools were some of the first institutions to be up and running post-earthquake and despite damaged buildings, relocations and site sharing, teachers were promptly back at work, settling children into routines, providing physical and emotional reassurance and delivering, as O'Connor notes, a pedagogy of love and care.

The next article by Jay Marlowe reminds us that disasters do not affect everyone in the same way, even within the same location. Marginalised and vulnerable groups are often more strongly affected and for a longer time (Hawkins and Maurer, 2009; Jacobs et al., 2008). The people discussed in this article are refugees re-settled in Christchurch at the time of the earthquakes. Not only are they already displaced from their own country, culture and language, they now find themselves in yet another unfamiliar situation. What Marlowe highlights, however, is that they should not be viewed as victims but as groups with already proven resilience and adaptive capability. Nor should refugees be seen as a homogenous group but as his Afghan, Ethiopian and Bhutanese participants show, as unique communities whose needs might vary as much as any other group in the affected society.

The O'Connor article (in this issue) introduced the role played by school personnel in supporting children on the day of the February earthquake and as they returned to school later. The article by Carol Mutch outlines how schools can also play a part in children's long-term recovery through emotional processing of their experiences and through activities that recognise children's voices and potential as participatory citizens. Mutch uses a continuum of engagement to underpin the discussion of three post-disaster projects undertaken by schools to record their earthquake stories. Each school had children at the centre of their project but engaged them in different ways, from implementing research *about* them, *with* them or *by* them. Her research shows that children in disaster settings, without high levels of post-disaster trauma, are capable and willing to engage in activities that contribute to their own and their community's recovery.

Most of the research in this special issue uses a qualitative case study approach. The next article, however, by Osborne and Sibley, uses quantitative data. The findings provide further empirical evidence to support the individual narratives and collective stories in the earlier chapters. The authors set out to investigate the personal variables, known as the Big Five – openness, conscientiousness, extraversion, agreeableness and emotional stability – and the role these factors might play in individuals' pyschological recovery from trauma. They hypothesised that emotional stability would be a strong predictor of how people would cope in the face of a disaster. They found that the more emotionally stable people were *before* the February 22 earthquake, the less psychological distress they experienced *afterwards*. This has implications for targeting resources towards more vulnerable individuals post-disaster.

Similarly, the article by Bateman and Danby moves away from a case study approach to using a fine-grained linguistic analysis. It resonates with the call in the Mutch article (in this issue) to listen to children's voices and help them make sense of the events around them but does this using a different process called 'respond, renew and recover'. The adults working with these very young children were helping them make sense of events outside their prior experience and enabling them to create more complete stories of what had happened. In each example, while children initiated the

conversation, the teachers used their skills as facilitators to ask questions, prompt new ideas and to create collaborative accounts. In this way, children's experiences are acknowledged and they are supported to come to understand that what they experienced is part of a wider, shared collective memory.

Finally, from the finely nuanced account of children's stories, this special issue concludes with a broader sweep. In the final article, Alex Lee, through the lens of architecture as a social tool, makes links between what happened in Christchurch, Haiti and New Orleans. She highlights that disasters can no longer be viewed as Third World problems but are now affecting more urban settings and developed countries. She notes, as do others in this collection, that the notion of social capital plays out clearly in disaster situations, that is, those with less often fare poorly and those with more fare better. She also reminds us that, in the telling of disaster stories, it is important to move beyond rhetoric and to problematise accounts that are given. What images are portrayed, by whom, to whom, and for whom?

Themes highlighted in this special issue

What can we learn from this collection of stories that celebrate the human side of the Canterbury earthquakes, in particular the February 22 Christchurch earthquake, which shattered an already fragile city? We have chosen to focus on four general themes: the phases of response and recovery; the role of communities; crisis leadership; and researching in disaster contexts.

Firstly, we learn how this earthquake sequence played out against the phases of disaster response and recovery as cited in the literature. The physical reconstruction phases, as outlined by Kates et al. (2006) in their study of Hurricane Katrina, begin with the *emergency response* phase, moving to the *restoration phase*, followed by the *reconstruction phases.* Similarly, the stories portrayed here echo these phases. Richardson and Ardagh's stories from Christchurch Hospital's Emergency Department tell of the chaos of the emergency response phase. The majority of the stories fit the restoration phase as people began to put their lives back together, albeit living and working in less than satisfactory conditions. The city and surrounding districts are only now moving to the reconstruction phases. In terms of psychological recovery, the Myers and Zunin (2000) framework gives a more nuanced appreciation of the early response and recovery phases. The hospital, school and women's stories give an insight into the *impact* and *heroic* phases. The vividness of description brings the voices of individuals alive. There was high optimism in the *honeymoon* phase following the September earthquake and, for a while, after February but the large earthquakes in June and December of 2011, along with the 12,000 aftershocks meant that people quickly moved to the *disillusionment* phase. We get a sense of this in some of Gawith's stories. With the slow pace of development, insurance woes and the tension between local and national government decision making, this phase has become quite prolonged, although current building projects are signalling a *new beginning*.

Secondly, we learn more about notions of community in times of disaster. At any one time, people are members of a range of communities, large and small – their city, neighbourhood, profession, religion, culture and so on. In Gawith's stories, the participants were all connected as part of a school community. In the hospital stories, they were connected by vocation. In Marlowe's article, they were members both of the larger Christchurch refugee community and of their own cultural

groups. The researchers, themselves, were sometimes insiders in the communities they described and sometimes outsiders. After many years' research on bushfire communities in Australia, Rob Gordon (2004, 2007), highlighted the significant role that the 'social bonding' function of communities plays in disaster recovery. In a time of stability, he explains, communities are complex networks of linkages (*bonding*). When a disaster happens, the linkages are broken as people focus on what is immediately around them (*de-bonding*). Sometimes, new communities form based around particular shared experiences (*hyperbonding*). As the recovery becomes more difficult and prolonged, disillusionment sets in, communities can start to become resentful of each other (*cleavage*). In order to return to sound social functioning it is important to reconnect original communities and re-stabilise networks (*rebonding*). The communities and community-minded individuals described in this special issue played a really important part in supporting their members and helping other communities recognize what was important to focus on and how to use their strengths to move forward.

Thirdly, we come to consider the place of leadership in disaster settings. The Hurricane Katrina (2004) response and recovery process was hampered by poor, absent or overwhelmed leadership (Porche, 2009; Wheatley, 2006). The stories portrayed in this special edition on the Christchurch experience provide examples of admirable short-term crisis leadership and longer-term recovery leadership. Whether leadership was part of their professional expectation, as in the principals in O'Connor's article, or emerged within the disaster context, as in the women exemplified in Gordon's article or the community leaders in Marlowe's, it was certainly to the fore. The many stories in this special issue provide examples of the "bundles of potential" described by Wheatley (2006) – the ability to figure out solutions, learn quickly and develop new capabilities. The responses of the medical staff in Richardson and Ardagh's article are obvious examples but the teachers in Bateman and Danby's article also exhibited pedagogical leadership in the post-disaster context. Rego and Garau (2008) discuss the important qualities and behaviours of crisis leaders as being able to simultaneously face emotions, demonstrate respect, focus on principles, be sincere, take action, remain positive and communicate in an emotionally stable manner – the principals in O'Connor's article were able to do this and more, despite worries about their own homes and families. Porche (2009) concludes with four phases of crisis leadership – *pre-crisis* (planning and preparation), *crucible* (the tipping point where leadership becomes essential), *crisis* (managing the immediate and short-term effects) and *post-crisis* (debriefing and envisioning a new future). Again this collection of articles provides concrete examples of these phases. The principals in O'Connor's article had learned from the September earthquake and were better prepared for February. The hospital scenarios and the school responses highlight the crucible phase. The refugee community stories tell of immediate and short-term leadership, as do participants in Gawith's article. The Bateman and Danby article shows teachers helping children debrief their experiences and the Mutch article has children envisioning a new future. The Osborne and Danby article helps us understand people's resilience and where to target resources in the future while the Lee article helps us review the Christchurch experience as part of a the broader field of disaster studies.

Finally, these articles give us insight into conducting research in disaster situations. Each of the authors represented by these articles had a personal connection with Christchurch. Some were living there at the time and experienced the earthquakes first hand, others had already been working on Christchurch-based research prior the earthquakes and yet others came to Christchurch after the

earthquakes to help where they could. That their Christchurch experience touched them deeply is evident in their writing. None were disaster researchers *per se*, rather they were experts in various fields who could see the potential insight that their discipline might bring to the disaster context and vice versa. In an emotionally charged setting post-disaster, it is not ethical, nor often possible, to arrive uninvited from outside and undertake research on fragile communities. Each of the research teams took pains to sensitively tap into existing networks, build relationships or gain access through community gatekeepers. The belief that these were stories worth telling kept the researchers going despite suspicion, refusals, knockbacks and/or delays. Getting ethical approval through relevant bodies was also a hurdle, especially when the researchers wanted to undertake open-ended or participatory research in such an emotional context. The strategies that they undertook to build relationships, engage stakeholders, use participatory methods, ensure participant and researcher safety, build in debriefing and offer reciprocity are all those recommended by writers on researching in sensitive settings (Dickson-Swift et al., 2009; Renzetti and Lee, 1990). That they were successful is evident in the detail, depth and insight contained in these articles.

Conclusion

As the ground continues to settle in the Canterbury region, people's associated experiences provide rich learning that can help inform ways of supporting and empowering local communities in the present. These understandings also provide a potential platform to consider how such studies can be applied to inform disaster risk reduction strategies in the future. New Zealand is situated in a seismically active part of the world. It is not a matter of *if* there will be another major earthquake, tsunami or volcanic eruption. The questions are rather *when* and *what* proactive response strategies are in place as another major event occurs.

People's stories are central to informing this knowledge base and this special issue highlights the value of transdisciplinary scholarship and rigorous research designs that can account for the multitude of diversities characterised by contemporary societies and the contexts in which disasters occur. The process of ensuring that research is informed locally, in partnership where possible, and with ethical insight, provides helpful anchors when researchers are given the privilege to engage with people's stories and the important meanings ascribed within and between them. We thank our authors and dedicate this special issue to all our participants and wish them a positive and hope-filled future.

References

Bonanno, G., Brewin, C., Kaniasty, K. and La 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.

Cahill, H., Beadle, S., Mitch, J., Coffey, J. and Crofts, J. (2010), *Adolescents in Emergencies,* Youth Research Centre, The University of Melbourne, Parkville, VIC.

Cassim, S. (2013), *Re-membering Those Lost: The Role of Materiality in Narrative Repair Following a Natural Disaster,* unpublished master's thesis, University of Waikato, Hamilton, New Zealand.

Christchurch Migrant Inter-Agency Group (2011), *Christchurch Migrant Inter-Agency Group: Lessons Learned Following the Earthquakes of 22 February 2011*, Christchurch Migrant Inter-Agency Network, Christchurch, NZ.

Clandinin, D.J. (Ed.) (2006), *Handbook of Narrative Inquiry: Mapping a Methodology,* Sage, Thousand Oaks, CA.

Dickson-Swift, V., James, E., Kippen, S. and Liamputtong, P. (2009), "Researching sensitive topics: qualitative work as emotion work", *Qualitative Research,* Vol. 9 No. 1, pp. 61-79.

Education Review Office (ERO) (2013), *Stories of Resilience and Innovation in Schools and Early Cchildhood Services. Canterbury Earthquakes: 2010-2012.* ERO, Wellington, NZ.

Etherington, K. (2007), "Ethical research in reflexive relationships", *Qualitative Inquiry,* Vol. 13 No. 5, pp. 599-616.

Geertz, C. (1973), *The Interpretation of Cultures*, Basic Books, New York, NY.

Gibbs, L., Mutch, C., MacDougall, C. and 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 a site of disaster impact and resource for recovery", *The Australian Journal of Emergency Management,* Vol. 19 No. 4, pp. 16-22.

Gordon, R. (2007), "Thirty years of trauma work: clarifying and broadening the consequences of trauma", *Psychotherapy in Australia,* Vol. 13 No. 3, pp. 12-19.

Hawkins, R. and Maurer, K. (2009), "Bonding, bridging and linking: How social capital operated in New Orleans following Hurricane Katrina", *British Journal of Social Work,* Vol. 40, pp. 1777-1793.

Kates, R., Colten, C., Laska, S., and Leatherman, S. (2006), "Reconstruction of New Orleans after Hurricane Katrina: A research perspective", *Proceedings of the National Academy of Sciences of the United States of America,* Vol. 103 No. 40, pp. 14653-14660, available at: doi: 10.1073/pnas.0605726103

Mackenzie, C., McDowell, C. and Pittaway, E. (2007), "Beyond 'do no harm': The challenge of constructing ethical relationships in refugee research", *Journal of Refugee Studies*, Vol. 20 No. 2, pp. 299–319, doi:10.1093/jrs/fem008

Marlowe, J. (2010), "Using a narrative approach of double listening in research contexts", *The International Journal of Narrative Therapy and Community Work,* Vol. 3, pp. 43-53.

Marlowe, J. (2013), "Going slowly slowly: an ethnographic engagement with the South Sudanese Community", *Studies in Symbolic Interaction,* Vol. 40, No.1, pp. 153-173.

Mercer, J., Gaillard, J. C., Crowley, K., Shannon, R., Alexander, B., Day, S. and Becker, J. (2012), "Culture and disaster risk reduction: lessons and opportunities", *Environmental Hazards,* Vol. 11**,** pp. 74-95.

Mutch, C. (in press a). "The role of schools in engaging children in emotional processing of disaster experiences", *Pastoral Care in Education*.

Mutch, C. (in press b). "Citizenship in action: young people in the aftermath of the 2010-2011 New Zealand earthquakes", *Sisyphus – Journal of Education.*

Myers, D. and Zunin, L. (2000), "Phases of disaster", in DeWolfe, D. (Ed.), *Training Manual for Mental Health and Human Service Workers in Major Disasters,* US Government Printing Office, Washington, DC.

Pittaway, E., Bartolomei, L. and Hugman, R. (2010), "'Stop stealing our stories': The ethics of research with vulnerable groups", *Journal of Human Rights Practice*, Vol. 2 No. 2, pp. 229-251.

Porche, D. (2009). *Emergent Leadership During a Natural Disaster: A Narrative Analysis of an Acute Health Care Organisation's Leadership,* unpublished doctoral dissertation, Capella University, Minneapolis, MN.

Prinstein, M.J., La Greca, A.M., Vernberg, E.M. and Silverman, W.K. (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.

Rego, L. and Garau, R. (2008), *Stepping Into the Void,* Centre for Creative Leadership, Greensboro, NC.

Renzetti, C. and Lee, R. (1990), "The problems of researching sensitive topics: an overview and introduction", *American Behavioral Scientist,* Vol. 33 No. 5, pp. 5-10.

Stuhlmiller, C.M. (2001), "Narrative methods in qualitative research: potential for therapeutic transformation", in Gilbert, K. (Ed.), *The Emotional Nature of Qualitative Research*, (pp. 63-81), CRC Publishers, New York, NY.

Wheatley, M. (2006), *Leadership and the New Science: Discovering Order in a Chaotic World* (3rd ed.), Berrett-Koehler Publishers, San Francisco, CA.

White, M. (2004), "Working with people who are suffering the consequences of multiple trauma: a narrative perspective", *The International Journal of Narrative Therapy and Community Work*, Vol. 1, pp. 45-76.