

Wellington resilience workshop: Creating shared ideas and meanings

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Abstract

Co-creation of knowledge is an important method for developing policy and programmes in the disaster space. A workshop that engaged attendees in a highly participatory format was designed to further institutional, academic, and community knowledge acquisition objectives regarding cultural and community resilience by Aotearoa New Zealand's QuakeCoRE Flagship Programme 5. The workshop, which took place in Wellington, New Zealand, in June 2018, brought together members of disaster management organisations and academia, community members, and members of local and central government in a full day of learnings and activities. The aim was co-creation of knowledge in defining cultural and community resilience as well as developing a shared understanding of how to integrate resilience programmes that are meaningful and appropriate for communities in Aotearoa New Zealand.

The contribution of the workshop to the existing literature concerning the role of culture in disasters, beyond the co-creation model, includes a need to emphasise cultural activities during disaster recovery, the value of improving collaboration between stakeholders such

as iwi, hapū, and marae (parts of the indigenous Māori community) in disaster management planning, and the importance of understanding local motivations and needs within our communities when designing and building disaster resilience programmes.

Keywords: Resilience, culture, community, co-creation, participatory

The Aotearoa New Zealand (NZ) centre for earthquake resilience research (QuakeCoRE) convened a workshop designed to co-create knowledge regarding cultural and community resilience. The workshop followed the 11th Australasian Natural Hazards Management Conference held in conjunction with the New Zealand National Emergency Conference. The objectives of QuakeCoRE's Flagship Programme 5 include identifying how societal decisions and choices affect the social, cultural, and economic resilience of communities. The full day workshop developed knowledge in two areas: cultural resilience and community resilience. The workshop, held June 1, 2018 in Wellington, was supported and hosted by QuakeCoRE, the New Zealand Ministry for Culture and Heritage (MCH), and the Wellington Region Emergency Management Office (WREMO) in conjunction with the Natural Hazards Research Platform, Resilience to Nature's Challenges National Science Challenge, and the Rockefeller Foundation's 100 Resilient Cities initiative. This article describes the development, aims, format, and results of the workshop.

The two sections of the workshop, "Understanding Cultural Resilience" and "Community-Based Resilience", were designed to address the research priorities of the Flagship 5 programme. The workshop utilised a co-creation of knowledge approach through a series of short informational talks followed by the 80 attendees undertaking group table-top activities, with the aim that this would lead to innovative new ideas for the development of policy and projects (Frow, Nenonen, Payne, & Storbacka, 2015; Hong, Heikkinen, & Blomqvist, 2010). This article will discuss the process and the knowledge produced during each of the workshop segments which contributes to the literature in the field.

The workshop provided both the MCH and WREMO with the opportunity to generate new ideas and actionable learnings to improve their current perceptions of resilience, as well as aiming to enhance understandings and knowledge for all participants in the event. The data produced by participants can be used to inform policy and contribute to the development of programs to build both cultural and community resilience; some participants commented when interviewed after the workshop that these intended benefits are already manifesting. The workshop provided an opportunity to involve community leaders and members at the policy-formation level in the process of identifying essential learnings. Co-creation of knowledge between experts and potential users considers knowledge as a process rather than something tangible (Roux, Rogers, Biggs, Ashton, & Sergent, 2006). Community involvement in knowledge development can also increase support and create sustained relationships with communities (Roux et al., 2006). The workshop aids in answering the overarching question of: "How does a community make itself resilient to future disasters?" (Wellington Region Emergency Management Office [WREMO], 2014, p. 5). Furthermore, the workshop is a step forward in the creation of participatory policy formation activities and guidelines with opportunities to initiate lasting connections between the creators and users of policies and programmes.

The following brief literature review aims to define key terms used in this workshop. A common understanding of terms is essential to convey data so that they can be similarly and accurately understood by the full variety of interested individuals. However, one of the objectives of the workshop was to gain a personal understanding of resilience as it pertains to culture and community from attendees in order to advance the group's common understanding. Therefore, this review will provide definitions from academia and regional and international initiatives while recognizing that the collecting of meanings from workshop attendees adds to the value of these definitions.

What is Resilience?

The term resilience requires an understanding of parameters to be accurate. In other words, the resilience "of whom" and resilience "to what" (Cutter et al., 2008; Martin-Breen & Anderies, 2011). Resilience is complicated by the understanding that a universal definition is not possible and frameworks need to be customised to specific populations and unique contexts

(Nowell & Steelman, 2013). However, general definitions may serve as a starting point to approach more specific aspects and details of definitions. The United Nations Office for Disaster Risk Reduction (UNDRR, formerly UNISDR) defines resilience as:

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management (UNDRR, 2017).

The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) highlights resilience as a tandem concept to disaster risk reduction, citing reduction of risks as a contributor to strengthening resilience (United Nations, 2015). However, resilience to disasters includes more than preparedness and risk reduction before an event despite these common beliefs, particularly within the government and policy sectors (e.g., Madrigano, Chandra, Costigan, & Acosta, 2017). For example, the emBRACE initiative, in the European Union, describes the importance of learning and innovation in post-disaster settings as critical to adaptation and resilience (emBRACE, 2015). The limitation of the focus of the discussions during the workshop in terms of how resilience relates to each phase of the disaster cycle is elaborated in the conclusion section.

In recognition of the importance of resilience, NZ's Ministry of Civil Defence and Emergency Management (MCDEM) charged the Civil Defence and Emergency Management (CDEM) sector to develop a National Disaster Resilience Strategy designed to encourage an holistic approach to resilience building (New Zealand Civil Defence and Emergency Management [NZCDEM], 2019). This strategy uses a definition of resilience that includes absorbing the effects, minimising disruption, and having the capacity to adapt to the current situation and capture learnings for the future. The National Disaster Resilience Strategy therefore includes preparedness and risk reduction as well as focusing on adaptation and response. For example, the strategy recognises that building resilience offers co-benefits to the community. In addition to addressing risk, investing in resilience nurtures communities by saving costs over the long-term and providing social benefits in the short-term. As an example, the strategy offers development of flood protections that double as pedestrian walkways and community parks (NZCDEM, 2019).

The city of Wellington is one of the Rockefeller Foundation's "100 Resilient Cities"; the Wellington Resilience Strategy defines resilience for the city and develops projects aimed at building resilience in the community (Wellington City Council, 2017). The strategy looks forward to not only Wellington's survival post-event but to the ability of the city to thrive. The strategy is people-centred with a commitment to connect and empower the community, integrate decision-making, and create a robust natural and built environment (Wellington City Council, 2017).

While definitions are nuanced across organisations and disciplines, the heart of resilience remains constant. From the Latin root *resiliere*, meaning jump back, an important inclusion in social science definitions is that jumping back may not be possible or desirable (Paton, 2006). The idea of resilience often includes a *new normal* where entities thrive and push forward from their previous state (Phillips & Moutinho, 2014; Seville, Van Opstal, & Vargo, 2015). To that end, many different types of resilience are discussed in the both the literature and in developed strategies. These include community resilience, social resilience, cultural resilience, economic resilience, infrastructure resilience, and environmental resilience (Cutter et al., 2008; Johnston et al., 2009; Kwok, Doyle, Becker, Johnston, & Paton, 2016; NZCDEM, 2019; Rose, 2006; Wellington City Council, 2017). The complex nature of resilience requires well-defined and narrow parameters when seeking to assess the resilience-building process (Brown, Rovins, Feldmann-Jensen, Orchiston, & Johnston, 2017; Cutter et al., 2008). The workshop discussed here, designed to gain meaningful knowledge, narrows the more generic concept of resilience down to focus on cultural and community resilience.

Cultural Resilience

Culture is a term that has been proven difficult to define (Goldstein, 1957; Spencer-Oatey, 2012; Tharp, 2009). In 1871, Sir Edward B. Tylor defined culture as a "...complex whole which includes knowledge, beliefs, arts, morals, law, customs, and any other capabilities and habits acquired by [a human] as a member of society." (CARTA, n.d.). This definition still grounds many current thoughts about culture (Tharp, 2009). As with other terms, culture is multifaceted and has been debated in the literature (Goldstein, 1957). In an attempt to simplify the debate, Tharp (2009) writes that culture is "...simply what people think, what people do, and what people

make" (p. 3). Defining culture was one workshop topic with which participants grappled.

Some common ideas of culture include that culture occurs at different levels, exists in a space between individuals and human nature, and is "shared" (Spencer-Oatey, 2012). Furthermore, both risk perception and risk-related behaviours can be influenced by culture (Kulatunga, 2010; Spencer-Oatey, 2012). Culture has influenced both "...survival of communities from disasters...as well as being a ...barrier for effective disaster risk reduction activities" (Kulatunga, 2010, p. 304). Defining aspects of culture discussed during the workshop are presented in the following results section.

The National Disaster Resilience Strategy defines cultural resilience as including "cultural values, places, institutions, and practices, our identity as New Zealanders, and our history and heritage" (NZCDEM, 2019, p. 19). This strategy emphasises the importance of cultural norms and values in contributing to resilience. The strategy further emphasises the need to put people at the centre of resilience. The vision of the strategy includes the comment that "People make the connection between resilience and their own culture, values, traditions, and sense of identity and place" (NZCDEM, 2019, p. 24). The Wellington Resilience Strategy calls for a focus on the development of disaster risk management plans for heritage areas, supporting the value that cultural resilience lends to overall resilience (Wellington City Council, 2017).

The SFDRR links reduction of disaster risk to cultural heritage preservation (United Nations, 2015). The framework calls for investment in cultural resilience by, among others, individuals, communities, and nations to protect both cultural heritage and assets; this includes protection of institutions themselves charged with protecting cultural heritage in communities. The framework encourages cultural perspectives to be integrated into all policies and practices.

Community Resilience

Community resilience is a well-documented topic in the literature. The concept includes preventing damage and harm where possible, recovering to the same or better level, and learning from the past to improve future outcomes for the community (Chandra et al., 2011). Lerch (2015) defines community resilience as "the ability of a community to maintain and evolve its identity in the face of both short-term and long-term changes while cultivating environmental, social, and

economic sustainability” (p. 10). Resilient communities have robust social networks that aid them in not only surviving in disaster but thriving (WREMO, 2014). The complex nature of disaster management activities requires relationship-building and network development before a disaster (Doyle, Becker, Neely, Johnston, & Pepperell, 2015). Core features of community resilience include “local knowledge, community networks and relationships, communication, health, governance and leadership, resources, economic investment, preparedness, and mental outlook” (Patel, Rogers, Amiot, & Rubin, 2017, p. 1). The Patel et al. (2017) definition highlights an overlap of culture and community resilience.

The Wellington Resilience Strategy looks at building community resilience through enhancing well-being, empowering communities and innovation, and adding focus on sustainable activities (Wellington City Council, 2017). Leveraging community strengths to enhance resilience, the plan includes ideas for building neighbourhood networks and relationships through activities and space development. Co-benefits of the strategy include building capacities of vulnerable populations which will help to reduce inequality and build social cohesion (Wellington City Council, 2017). Also important is building economic redundancy and improving planning in the private sector, which also contributes to minimising impacts in disruptive events.

The above definitions are provided for general guidance regarding how these terms are viewed. Exercises and activities at the workshop were undertaken to refine views of cultural and community resilience held by relevant stakeholders. Furthermore, through collaborative exercises attendees were able to share personal meanings of resilience which added to the conversations around developing a shared understanding of the concept.

Method

As an objective of the QuakeCoRE Flagship 5 research programme, the development of Wellington case study projects aims to create innovative recommendations and advice for practical implementation of resilience-building within the region. While the majority of participants were from Wellington, several attended from other parts of the country and from national stakeholders, increasing the relevance of what was learned for the entire country. The workshop was developed as an engagement platform (Frow et al., 2015) to invite collaboration and co-creation

of meanings and knowledge around the topics of cultural and community resilience. Similar collaborative case study designs have been used in the development of community resilience frameworks such as emBRACE (emBRACE, 2015). One advantage to this type of co-creation engagement is that stakeholders participate in the process which allows ad hoc peer-review to take place during knowledge development (Regeer & Bunders, 2009). Co-creation of knowledge aids in creating shared visions, expectations, language, and practice (Regeer & Bunders, 2009) and allows for the translation of theoretical concepts into practical and policy applications (emBRACE, 2015).

A priority in developing the workshop was to get a variety of stakeholders to attend. The workshop was scheduled immediately following the 11th Australasian Natural Hazards Management Conference to capitalise on attendees’ presence in Wellington. The conference website was used to publicise the event. Additionally, the mailing list from the conference, Flagship 5, MCH, WREMO, and researchers, networks were utilised to solicit participation from a diverse group. Participation solicitation included representatives from local government, central government, the science and research sector, the private sector, health and emergency management services, and non-governmental organizations. Workshop presenters also demonstrated a diverse range of backgrounds, showcasing members from different CDEM groups throughout the country, academia, local marae, private companies, and public institutions. This offered a plethora of knowledge that helped steer engaging conversation amongst participants.

Workshop Design

The workshop was designed to be highly participative. Presentations were kept to less than 30 minutes with activities promoting knowledge-sharing and innovation following each presenter or group of presenters. When aiming to develop new ideas, it is important to bring together those requiring information and those providing information at many different levels so that all have an opportunity to further their understanding (Regeer & Bunders, 2009). The workshop was conceived and designed by a variety of different stakeholders to produce diverse and high-quality results.

Promotion of Shared Creation of Knowledge

The workshop utilised expert presentations to set the stage for discussion, providing background information

to the groups. This allowed for the development of common understanding from which to start the group discussions. Interactive workshops which present information for participants to expand on or revise are examples of knowledge co-creation (Regeer & Bunders, 2009). There were 10 round tables and the 80 attendees were asked to move around at different intervals of the workshop. Small groups worked together to create common ideas and then shared their outputs with the larger group for additional comment and discussion. Sticky notes with participants' ideas and concepts were collected for further study by the workshop hosts. Morphological analysis then categorised the outputs to create points for further development (Frow et al., 2015). Two artists attended the workshop and used the audible conversation and participants' sticky notes to design a visual representation of the outputs of the workshop (Figure 1). The mural, as a visual reminder of the day, summarized and reinforced the knowledge created by participants. The narrative within the artistry follows a

process reflective of much of Aotearoa NZ's history and culture: storytelling as a communication tool used by communities and individuals for effective information dissemination.

Understanding Cultural Resilience

The morning session of the workshop focused on cultural resilience. The intent was to explore cultural resilience in an Aotearoa NZ context and establish ideas for better integrating the concept into disaster management planning. Themes included the significance of culture to communities, the role of culture in disaster risk reduction, response, and recovery, and the value placed on heritage in recovery from a disaster. The specific topics the group grappled with included "What do we mean by cultural resilience?" and "How do we demonstrate the role of culture in building resilience?" The MCH aimed to generate knowledge during this workshop as the first step of creating an overarching policy approach to cultural resilience, including developing and defining the scope for future projects and collaborations.

Results

What Do We Mean by Cultural Resilience?

The groups developed and shared more than 50 different ideas of what resilience encompasses, including:

- bouncing forward;
- adaptability;
- community cohesion and strength;
- a new normal;
- connections;
- stability;
- redundancies;
- thriving (not just surviving);
- learning from the past;
- evolving, resourcefulness;
- a buffer against external challenges; and
- opportunity in adversity.

These ideas offered by workshop participants broadly capture the themes of resilience offered by the literature. The understanding of adaptation and change were well-documented in the discussion. Participants also discussed the idea that resilience is a process as opposed to an outcome and that bouncing back to the previous state is not the objective. Instead, participants agreed, resilience is finding the new equilibrium in



Figure 1. The mural created live during the workshop summarizing the key aspects of the discussions.

the new environment by incorporating lessons from experiences.

Some participants aligned resilience with recognition of vulnerabilities in a community while others included motivation and willingness as attributes of resilience. Some participants also included drawing support from a collective group in times of stress as a characteristic of resilience. These ideas were developed in group discussions (three to eight people) and communicated with the whole group for further comment and creation of shared meanings. Many group spokespersons commented that their ideas overlapped in a number of places with other groups. From this exercise defining resilience, the whole group was then asked to consider what culture means in relation to resilience.

Groups took different paths in this exercise with some defining what culture meant to the group while others considered how cultural resilience characteristics might be defined. Aspects of culture given by participants included:

- oral histories;
- traditions;
- diversity;
- networks;
- whānau (community);
- identity;
- natural landscapes;
- built heritage;
- tūrangawaewae (places to which people feel empowered and connected);
- values;
- attachments to places; and
- the intertwining of physical, social, geological, environmental, and financial aspects of society.

The workshop participants agreed with definitions of culture from the literature discussed previously, with the exception of their inclusion of natural landscape as an important aspect. Additionally, some participants cited the loss of heritage buildings in the Canterbury earthquakes as a loss of culture to that community while others described culture as not being defined by objects but by *whanaungatanga* (sense of family connection through shared experiences). Groups commented that Aotearoa NZ has rich cultural diversity and noted that different cultures have different levels of resilience.

Ideas of how to express cultural resilience included the need to preserve and protect specific places and objects

which are important to communities. Other participants suggested that cultural resilience should be activated at the community level based on that community's specific views of their culture. There was a consensus that while culture had some different emphases within the diverse group, protection of culture was essential to a community's recovery.

How Do We Demonstrate the Role of Culture in Building Resilience?

The role of culture in overall resilience was presented as the next topic: in particular, how to demonstrate the role of culture in building Aotearoa NZ's resilience to natural hazards. Groups discussed the topic of culture and resilience-building and shared a number of ideas that demonstrate culture as it intersects with resilience.

Community events such as summer concerts provide an opportunity to connect community members, building resilience through cultural activities. Community libraries and sporting events were cited as important to cultural resilience. Others suggested building connections with local iwi, hapū, and marae could link culture and resilience. The role of community leaders in fostering community engagement activities was recognised as vital for developing cultural resilience.

During recovery from a disaster, culture was cited as having key contributions to a community's resilience. Community projects in Christchurch were highlighted as recovery tools; arts and entertainment created through grassroots efforts and the *farmy army* helping to clear debris with farm equipment were two examples given. Many groups echoed the importance of starting up cultural activities following a disaster as soon as possible to relieve the stress of the event and to give people ways to come together and share positive experiences. Engagement in cultural activities was considered to be at least equally important as the restoration of the built environment. A workshop attendee commented that capturing diverse community knowledge and engaging distinct communities in emergency management activities is a core challenge for Aotearoa NZ's emergency managers. Some participants from outside Aotearoa NZ commented that the development of this workshop on cultural resilience shows how far ahead the nation is in development of emergency management compared to some countries which have just begun to consider resilience in relation to disasters.

Culture has a varied meaning for different people, but all participants placed a high value on fostering positive

cultures in communities. The significance of culture was discussed as intertwined with well-being for community members and linked to community resilience. Cultural resilience was thought to encompass the protection of ideas and values as well as heritage sites. As reported by participants, in the days following a disaster, community cultural activities were vital for giving community members opportunities to come together to create meaning from previous events and to develop positive spaces for fellowship.

Community-Based Resilience

The stated aim of the second half of the day was to explore community resilience at multiple levels including national, regional, and local. In recognition of the role that community resilience plays in the ability to withstand and recover from disaster, this workshop sought to present a variety of ideas and projects to spark conversation on this important topic. The groups were asked to consider and discuss the attributes of a resilient community, existing programmes nationwide aimed at developing community resilience, and how national resilience does or should relate to community resilience. Presentations from members of different emergency management groups throughout Aotearoa NZ were designed to provide a basis for group-centred dialogues in the subsequent discussion sessions.

Results

The Attributes of a Resilient Community

The table groups built on the previous cultural resilience discussions when considering community resilience. A focus of many comments included a bottom-up approach as opposed to top-down leadership. Engagement through networking was also advanced as important in community resilience. Community resilience was communicated as needing partnerships and innovators. Groups agreed that the process of defining these terms is important and that agreed-upon definitions should be integrated throughout communities.

Discussions of Existing Programmes to Develop Community Resilience

The groups were presented with programmes aimed at building resilience from five CDEM groups representing different regions in Aotearoa NZ (Wellington, Christchurch, Auckland, Southland, and Hawke's Bay). Programmes ranged from collaborations with groups such as the Red Cross, business associations, and

schools to the development of community hubs for activation during a disaster response. Each presentation discussed the need to engage community members in the development of resilience-building activities. Such input, presenters discussed, helps to create programmes which are meaningful to the community and to enhance engagement from the community in those programmes. Engagement of communities included reaching neighbourhoods, petitioning embassies and consulates for the involvement of diverse communities, and seeking input from new arrivals (e.g., refugees resettled in Aotearoa NZ).

Participants found the discussed programmes to be effective and innovative, suggesting that this platform for sharing success is valuable for positive reinforcement. Groups also commented that emergency management should consider ways to harness existing community synergies to help with developing disaster management activities to build resilience. Group discussion included social capital resource development as critical for building community resilience and that all activities should be designed to strengthen communities on multiple fronts.

How National Resilience Does/should Relate to Community Resilience

During this session, a representative from the CDEM office presented information from the national perspective regarding resilience and the (then) proposed National Disaster Resilience Strategy. The information given included the usefulness of considering national concepts, rather than plans, which could be used to align local strategies. The speaker expressed valuable contributions of resilience development including helping not only to avoid or decrease loss in disaster but also encouraging development with co-benefits of social and cultural enhancements. The national strategy was passed in April 2019.

Many in the room discussed the national strategy as one way to develop consistent vocabulary and professionalism across different regions. Ideas for collaboration aimed at the development of community resilience included national participation in developing baselines for successful engagement, networking regions for sharing ideas and successes, and fostering the inception of national resilience forums and working groups. National input regarding key language and term standardisation, developing datasets to share across regions, and establishing standards for measuring

and evaluating success was also put forth by group participants. Another area of potential value from national contributions was developing platforms to work with social media for improved communication of pre-disaster activities as well as critical data during disaster response and recovery phases.

Participants in the workshop heard stories of resilience from other attendees, including discussions around the 2016 Kaikōura earthquake. One attendee related learning about the community resilience displayed by the business community; businesses assisted each other in operations where once a more competitively focused environment was the norm. Participants also commented that further understanding of the role of marae in community resilience would be mutually beneficial. One participant shared that emergency managers need to learn from Māori communities which have demonstrated resourcefulness in adversity.

Discussion

Abductive research combines data gathered with existing literature-based ideas and can be helpful when advancing current theoretical constructs (Frow et al., 2015). The following discussion will look at outputs from the workshop in relation to literature in the field as a method for validation of knowledge generated through workshop discussions. As one attendee said, having academics and practitioners in workshops together with other members of communities is extremely valuable and an experience from which everyone benefits. One participant commented that “The workshop in association with the conference helped validate the discussion, that cultural practitioners have a legitimate place in emergency management.”

A shared consensus on many topics was not possible. However, for the MCH and the present CDEM groups, in collaboration with academics, the workshop gave the opportunity to widen their views of cultural and community resilience and begin a conversation of ways to continue linking groups together to create strategies that better reflect the communities they serve. The opportunity to gather perspectives and data from and by diverse stakeholders is a step forward for those communities, but also potentially increased resilience through the development of new networks. Consensus regarding the definitions and important aspects of cultural and community resilience gives participating organisations a shared point for forward momentum and sets the stage for future workshops and further

development of co-creation of knowledge in resilience science.

Culture and resilience, as defined by the group, share many similarities with academic references. Resilience as movement forward, not back to a previous state, is a theme found in academic discourse (Patel et al., 2017). Resilience can also describe a group’s ability to come together and work toward a shared objective (Berkes & Ross, 2013). The group’s addition of motivation and willingness as factors is valuable to CDEM programme managers. The importance of understanding that underlying motivations for participation in resilience-building activities may differ between cultures is a key factor for Aotearoa NZ’s diverse populations.

Culture has hundreds of different definitions within academia broadly (Spencer-Oatey, 2012). The aspects of culture given during the workshop, ranging from tangible to intangible, reflect the diversity of the participants and Aotearoa NZ generally. The NZCDEM (2019) strategy states that it aims to “...recognise the importance of culture to resilience, including to support the continuity of cultural places, institutions and activities, and to enable the participation of different cultures in resilience” (p. 28). One of the aims of the strategy is to enhance the understanding of the role culture plays in overall resilience as part of strengthening societal resilience to disasters.

Elements of culture can include norms, language, values, symbols, and tangible creations designed to communicate intangible ideas (Kulatunga, 2010). The idea of the availability of cultural activities being essential to build community resilience before an event and during recovery could be integrated into disaster management planning as a tangible way to work with communities to build their wider resilience. This concept is supported by the idea that a feature of culture is “...a way of life” (Kulatunga, 2010, p. 307). One participant commented that “When disaster brings disruption, cultural life provides an element of certainty/routine.” Participants discussed that activities help to define a community’s culture and give people opportunities to gather as a group for different reasons, both important to recovery. Activities could be local athletic competitions, musical presentations, or any number of locally designed events.

Attendees agreed that developing a national language for disaster management is an important objective. Definitions can change over time but are necessary to develop common understandings (Rockett, 1999).

Development of consistent terminology is just one of the ideas that participants from WREMO and other groups reported taking from the workshop. Another important outcome from the workshop reported by participants was the highlighting of the value of resilience-focused thinking for designing disaster management plans and activities. Building resilience into communities through various methods including cultural activities, networking, and social connection development (Berkes & Ross, 2013) promotes community and emergency management objectives in unison. Community development projects can empower groups through a series of small successes, building cohesion, and setting the stage for future problem-solving (Berkes & Ross, 2013).

The workshop functioned as an opportunity for many different groups to develop new relationships and some cohesive views. The workshop was a resilience-building activity; the event gathered stakeholders, pulled knowledge from a variety of sources, and facilitated the co-development of shared understanding (Berkes & Ross, 2013). The single-day format for this workshop placed certain limits on the depth of conversation possible. However, comments from participants and observations of the authors suggest that the objectives of the event were achieved: developing co-created knowledge in the areas of cultural and community resilience. The information gathered can be utilised by both WREMO and MCH to improve their policy and planning and ultimately add to Wellington's resilience.

Conclusions

Attendees from the workshop, representing people working in the field of community resilience, developed a set of priorities to advance the sector's maturity. It is hoped that this is just one of many workshops to offer a collaborative platform to multiple stakeholders in the disaster management space. Future workshops could focus on other facets of disaster resilience (e.g. economic resilience), developing actionable plans and programmes for different local populations, and establishing commonalities between stakeholder groups as well as points of diversion.

Limitations of the workshop include the development of the topics being participant-led and therefore reflecting participants' biases. Topics developed a response and recovery trajectory with limited discussion in terms of mitigation. Concepts such as community recovery

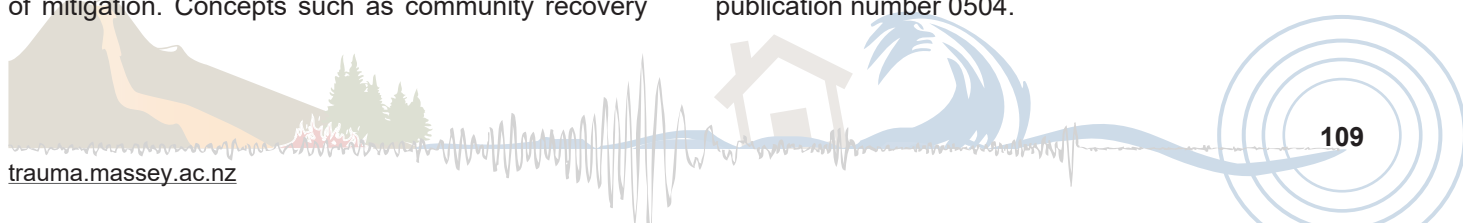
activities could be translated into mitigation and planning; however, the group's focus was not disaster risk reduction oriented. Resilience is commonly conflated with preparedness, particularly from the government and policy sectors (Madrigano et al., 2017); this workshop also had a somewhat narrow view of resilience as comprising mostly one part of the process, though in this case the focus was on response and recovery rather than risk reduction. It is important to ensure that when stakeholders talk about resilience-building they are fully engaging with the breadth of the concept across all parts of the disaster cycle. Furthermore, the majority of the group were New Zealanders, making translation of these results to other regions of the world problematic.

Conversations like those by stakeholders at the workshop allow for response and planning organisations to prioritise key values and needs in their community. Addressing the community members' priorities can help engage communities in resilience-building. Clearly, resilience-building should be done with the community, not to the community. Further, the opportunity for stakeholders to share current and past successes can develop into collaborative follow-on innovations and programmes.

The importance of community activities as a priority for community resilience, before and immediately following a disaster, was endorsed across the range of stakeholders. The need to develop a uniform language at the national level while still involving local stakeholders in plan and policy development was also clearly voiced. Participants had an opportunity to view concepts from multiple perspectives allowing for new shared ideas. The reported value of the workshop is a credit to the participants who gave their time and fully engaged in conversation and debate to improve their personal and organisational understanding of cultural and community resilience.

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References

- Berkes, F., & Ross, H. (2013). Community resilience: Toward an integrated approach. *Society & Natural Resources*, 26, 5-20. doi:10.1080/08941920.2012.736605
- Brown, N. A., Rovins, J. E., Feldmann-Jensen, S., Orchiston, C., & Johnston, D. (2017). Exploring disaster resilience within the hotel sector: A systematic review of literature. *International Journal of Disaster Risk Reduction*, 22, 362-370. doi: 10.1016/j.ijdr.2017.02.005
- CARTA. (n.d.). Cultural transmission. Retrieved from <https://carta.anthropogeny.org/moca/topics/cultural-transmission>
- Chandra, A., Acosta, J., Stern, S., Uscher-Pines, L., Williams, M. V., Yeung, D., . . . Meredith, L. S. (2011). Building community resilience to disasters: A way forward to enhance national security [PDF file]. Retrieved from www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR915.pdf
- Cutter, S. L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., & Webb, J. (2008). A place-based model for understanding community resilience to natural disasters. *Global Environmental Change*, 18, 598-606. doi:10.1016/j.gloenvcha.2008.07.013
- Doyle, E. E. H., Becker, J. S., Neely, D. P., Johnston, D. M., & Pepperell, B. (2015). Knowledge transfer between communities, practitioners, and researchers: A case study for community resilience in Wellington, New Zealand. *Australasian Journal of Disaster and Trauma Studies*, 19(2), 55-66.
- emBRACE. (2015). *The emBRACE Framework of Community Disaster Resilience: Policy brief*. Retrieved from <https://drive.google.com/file/d/0BySVyEajWokmLTIhNEIWYVNPuU3c/view?pref=2&pli=1>
- Frow, P., Nenonen, S., Payne, A., & Storbacka, K. (2015). Managing co-creation design: A strategic approach to innovation. *British Journal of Management*, 26(3), 463-483. doi:10.1111/1467-8551.12087
- Goldstein, L. J. (1957). On defining culture. *American Anthropologist*, 59, 1075-1081.
- Hong, J., Heikkinen, J., & Blomqvist, K. (2010). Culture and knowledge co-creation in R&D collaboration between MNCs and Chinese universities. *Knowledge and Process Management*, 17(2), 62-73. doi:10.1002/kpm.342
- Johnston, D., Finnis, K., Becker, J. S., Leonard, G. S., Saunders, W., Wright, R., . . . Ronan, K. (2009). *Building community resilience through community-based education programmes*. Paper presented at the New Zealand Society for Earthquake Engineering (NZSEE) Conference, 2009, Christchurch, New Zealand.
- Kulatunga, U. (2010). Impact of culture towards disaster risk reduction. *International Journal of Strategic Property Management*, 14(4), 304-313. doi:10.3846/ijspm.2010.23
- Kwok, A. H., Doyle, E. E. H., Becker, J., Johnston, D., & Paton, D. (2016). What is 'social resilience'? Perspectives of disaster researchers, emergency management practitioners, and policymakers in New Zealand. *International Journal of Disaster Risk Reduction*, 19, 197-211. doi:10.1016/j.ijdr.2016.08.013
- Lerch, D. (2015). Six foundations for building community resilience. Retrieved from www.postcarbon.org/wp-content/uploads/2015/11/Six-Foundations-for-Building-Community-Resilience.pdf
- Madrigano, J., Chandra, A., Costigan, T., & Acosta, J. D. (2017). Beyond disaster preparedness: Building a resilience-oriented workforce for the future. *International Journal of Environmental Research and Public Health*, 12, 1563-1576. doi: 10.3390/ijerph14121563
- Martin-Breen, P., & Anderies, J. M. (2011). Resilience: A literature review [PDF file]. Retrieved from <http://opendocs.ids.ac.uk/opendocs/handle/123456789/3692>
- New Zealand Civil Defence and Emergency Management. (2019). National Disaster Resilience Strategy [PDF file]. Retrieved from www.civildefence.govt.nz/assets/Uploads/publications/National-Disaster-Resilience-Strategy/National-Disaster-Resilience-Strategy-10-April-2019.pdf
- Nowell, B., & Steelman, T. (2013). The role of responder networks in promoting community resilience: Toward a measurement framework of network capacity. In N. Kapucu, C. V. Hawkins, & F. I. Rivera (Eds.), *Disaster resilience: Interdisciplinary perspectives* (pp. 232-257). New York, NY: Routledge.
- Patel, S. S., Rogers, M. B., Amiot, R., & Rubin, G. J. (2017). What do we mean by "Community Resilience"? A systematic literature review of how it is defined in the literature. *PLoS Currents Disasters*, 9, 1-38. doi:10.1371/currents.dis.db775aff25efc5ac4f0660ad9c9f7db2
- Paton, D. (2006). Disaster resilience: Building capacity to co-exist with natural hazards and their consequences. In D. Paton & D. Johnston (Eds.), *Disaster resilience: An integrated approach* (pp. 3-10). Springfield, IL: Charles C. Thomas.
- Phillips, P., & Moutinho, L. (2014). Critical review of strategic planning research in hospitality and tourism. *Annals of Tourism Research*, 48, 96-120. doi:10.1016/j.annals.2014.05.013
- Regeer, B. J., & Bunders, J. F. G. (2009). Knowledge co-creation: Interaction between science and society [PDF file]. Retrieved from [www.treccafrika.com/assets/Bunders%20and%20Regeer%20\(2009\)%20Knowledge%20Co-Creation.pdf](http://www.treccafrika.com/assets/Bunders%20and%20Regeer%20(2009)%20Knowledge%20Co-Creation.pdf)
- Rockett, J. P. (1999). Definitions are not what they seem. *Risk Management*, 1(3), 37-47. doi: 10.1057/palgrave.rm.8240003
- Rose, A. (2006). Economic resilience to disasters: Toward a consistent and comprehensive formulation. In D. Paton & D. Johnston (Eds.), *Disaster resilience: An integrated approach* (pp. 226-248). Springfield, IL: Charles C. Thomas.
- Roux, D. J., Rogers, K. H., Biggs, H. C., Ashton, P. J., & Sergent, A. (2006). Bridging the science-management divide: Moving from unidirectional knowledge transfer to knowledge interface and sharing. *Ecology and Science*, 11, 1-20.
- Seville, E., Van Opstal, D., & Vargo, J. (2015). A primer in resilience: Seven principles for managing the unexpected. *Global Business and Organizational Excellence*, 34(3), 6-18. doi:10.1002/joe.21600
- Spencer-Oatey, H. (2012). What is culture? A compilation of quotations [PDF file]. Retrieved from https://warwick.ac.uk/fac/soc/al/globalpad/openhouse/interculturalskills_old/global_pad_-_what_is_culture.pdf
- Tharp, B. M. (2009). Defining "culture" and "organizational culture": From anthropology to the office [PDF file]. Retrieved from www.kvworkspace.com/files/resources/Defining-Culture-and-Organizationa-Culture_5.pdf
- United Nations. (2015). Resolution adopted by the General Assembly on 3 June 2015 69/283: Sendai Framework for

- Disaster Risk Reduction 2015-2030 [PDF file]. Retrieved from www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_69_283.pdf
- United Nations Office for Disaster Risk Reduction. (2017). Terminology. Retrieved from www.unisdr.org/we/inform/terminology
- Wellington City Council. (2017). Wellington Resilience Strategy [PDF file]. Retrieved from <https://wellington.govt.nz/~media/about-wellington/resilient-wellington/files/strategy/resilience-strategyj001767-100-web.pdf?la=en>
- Wellington Region Emergency Management Office. (2014). Community Resilience Strategy [PDF file]. Retrieved from <https://wremo.nz/assets/Publications/Community-Resilience-Strategy.pdf>

