



Community Disaster Resilience: State of Research 2017-2021



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Introduction

This literature review is designed to provide an overview of current and recent research on community disaster resilience in the context of Australia and Aotearoa New Zealand. We have included relevant research from around the world but have been mindful of the very particular ways that local context shapes the ways in which disaster resilience can be supported or hindered. We have also concentrated here on community disaster resilience rather than other aspects of disaster resilience such as infrastructure. The focus is on research published between 2018 and 2021, the period since Torrens Resilience Institute's earlier review (2017).

We reviewed a total of 87 peer reviewed journal articles, 7 books, and 5 research reports, reviews, and policy documents. 37 are included in this literature review based on relevance across key search terms. Initial search terms were "community disaster resilience", "disaster resilience", "community-led disaster resilience", and "measuring disaster resilience". Further documents were identified via a search for publications citing the documents identified through this search. In addition, relevant literature known to the reviewers was included where this had not been identified through the search mechanisms above.

In this review we examine the ways in which research has been understood and enacted in the context of community-oriented disaster resilience. Australia experienced a range of disasters between 2018 and 2021, from the historically familiar (fire and flood) to new challenges (the global Covid-19 pandemic). In some communities, events were experienced sequentially, requiring communities to prepare and respond in the face of a new threat while still dealing with the impacts of a previous disaster event. Other communities experienced multiple events concurrently, such as flooding that occurred during stay-at-home orders due to Covid-19 restrictions. Australia's "future of more frequent, more severe, compounding natural disasters" (Binskin, Bennet, & Macintosh 2020, Foreword) underscores the importance of learning from these communities. By identifying the factors associated with community resilience and developing a deeper understanding about the impact of these across diverse communities, such knowledge can contribute to building, strengthening, and sustaining community resilience into an uncertain future.

"Many policies and services should be 'tailored to meet the needs of people and communities they directly affect' and account for differences in climate, geography, ecosystems, demography, culture, and resources. While natural disasters on a national scale are likely to become more common, all disasters large and small require a local response."

Binskin et al, 2020, p.21

Disaster resilience has been consistently growing as a field of knowledge and practice over the past three years, with a diverse range of research perspectives emerging to conceptualise and mobilise disaster resilience and resilience building across the world. Although some researchers argue that it remains under-researched, under-theorised and under-practiced (Deeming 2019; Adekola, Fischbacher-Smith & Fischbacher-Smith 2020), our review of recent literature indicates that disaster resilience has grown as a field of research and practice across multiple disciplines, both in Australia and overseas.

This review identifies four bodies of literature that speak directly to questions of disaster resilience in communities:

1. Making sense of disaster resilience – complexity, context and community
2. Measuring disaster resilience
3. Resilience, risk, and responsibility: who is responsible for being resilient?
4. Community-led disaster resilience

Making sense of disaster resilience – complexity, context and community

Key learnings

- Multiple definitions of disaster resilience exist and little consensus on meaning is emerging.
- There may be benefits in diverse understandings as they can better fit the local context.
- Resilience building takes place within and between complex social, ecological, cultural, economic, and political systems.

Making sense of what we mean when we talk about disaster resilience, even developing a common language through which all players can act together, has been a focus for several authors since 2017 (Cutter and Derekhshan 2019; Nguyen and Akerkar 2020; Payne, Kaye-Blake, Kelsey, Brown and Niles 2021). A key theme in the research published in the last 3-4 years has been a shift away from single definitions and single framework approaches to disaster resilience. Research literature here offers a critique of common metaphors and frameworks for disaster resilience such as bouncing back (Adekola et al 2020), bouncing forward (Mika and Kelman 2020) or building back better (Mannakkara, Wilkinson, and Potangaroa 2018; United Nations 2015). As more research emerges in this area, we are starting to see a closer examination of the experiences of communities preparing for, responding to, and recovering from disasters, and a more textured analysis of what community resilience looks like on the ground.

What is clear here in the research is a shift away from one size fits all resilience building approaches based on available evidence, towards a recognition that resilience building takes place within and between complex social, ecological, cultural, economic, and political systems. This body of research reveals that different timeframes for recovery (Mika and Kelman 2020), uneven resource distribution to support preparedness, response, and recovery (Jolly 2020), the risk of simplistic resilience messages further entrenching existing inequalities (Mayer 2019; Beilin and Paschen 2021), and the impact of cascading disasters (Adekola et al 2020) are key factors contributing to how we understand and act to build disaster resilience.

In contrast to single definition of disaster resilience, an alternative view where divergent understandings are recognised and utilised may be more helpful for both resilience building action and planning with multi-stakeholders in communities (Adekola et al 2020). Similarly, Mika and Kelman's (2020) exploration of slow healing after a disaster offers an alternative view to bouncing back or forward. This approach recognises the longer-term impacts of trauma and grief on communities who have experienced disasters, directly challenging expectations that communities will quickly recover or bounce forward to a new adapted reality. They describe a process of "(re) assembling life" (p.648) after a disaster. They critique frameworks where fixed stages or cycles with clear starting and ending points characterise individual and community experiences of disaster, arguing that vulnerabilities are ongoing and embedded in daily life. This offers a much more sophisticated understanding of what is involved in supporting resilience building at a local level as the everyday and messy experiences of life between disasters can be acknowledged and recognised as part of resilience work.

Mayer's (2019) review of disaster resilience literature described resilience as most commonly understood as a return to equilibrium in systems. This equilibrium, however, often does not acknowledge existing structural issues within a community. Mayer highlighted the lack of analysis in much of the literature about inequality impacts. He found "[a] lack of overt attention to pre-existing conditions that determine whether communities can even begin to start down the road of resilience. This general tendency to ignore the social vulnerabilities shaping pre-disaster conditions produces what we might refer to as an 'equity gap' in the contemporary resilience literature." (p.168)

Beilin and Paschen (2021), in drawing out differences in the way shared responsibility might be put into practice in communities, identify reactive and relational life as two distinct frames for understanding resilience. They illustrate these differences as follows:

Reactive life focuses on citizens reducing their risk and complying in response to government directives. Together, responsibility and compliance are considered building blocks to community resilience. Reactive life appears logical, hierarchical and ordered. Relational life assumes community is core to emergency response, and citizens may confront standardised expectations from centralised management, re-negotiating these through multiple

lenses as relationships that emerge locally, and construct various understandings of community resilience. These relationships focus on everyday circumstances and community-led agency. Their activities tend to embody arguments associated with a common good and a mutually derived sense of responsibility that can encompass humans and non-humans. Relational life can be viewed as flexible, sometimes pragmatic and to outsiders may appear disordered or uncertain (p.516).

In these studies we see a very clear message that effective support for disaster resilience in communities requires a range of approaches designed by and for the diverse local contexts where disaster impacts are felt.

Measuring disaster resilience

Key learnings

- A range of disaster resilience measurement frames have been developed over the past 3 years.
- Resilience measurement have been critiqued as relying on a set of indicators that are simplified, objective, and context-free.
- Measurement frames are often critiqued due to a lack of focus on the local context, which makes them highly problematic for community-led disaster preparedness.
- Resilience is often assumed to be positive, but this is increasingly contested.

The second body of disaster resilience literature is focused on measurement. While in the previous section research sought to understand the close-grain detail of disaster experience in the context of social, community and individual structures and processes, the resilience measurement literature is focused on broader social and behavioural trends. Research here, however, is also increasingly including more detailed critical analyses of accepted measurement frameworks and assumptions that accompany measurement approaches in disaster resilience (Deeming 2019; Jewett, Mah, Howell and Larsen 2021; Kelly 2021).

The array of measurement frameworks and indicators of resilience being developed worldwide

largely tell a story of resilience as an agreed-upon idea through which communities can be assessed (Mayer, 2019). In this world view there are objective indicators of resilience against which communities must perform in order to demonstrate their capacity to withstand disaster (Hong, Bonczak, Gupta and Kontokosta 2021). Key questions here are about how to agree on those indicators, in order that resilience building activities become more manageable. Multiple frameworks, indicator sets, measures and measurement approaches have developed alongside the increasing interest in disaster resilience (Mayer 2019; Zobel, MacKenzie, Baghersad and Li 2021). Many of these have been focused on simplifying or reducing complexity to a set of understandable indicators (Jewett, Mah, Howell and Larsen 2021).

Mochizuki, Keating, Liu, Hochrainer-Stigler and Mechler's (2018) systematic literature review of community resilience measurement found that a lack of clarity about risk and resilience was contributing to confusion in measurement approaches. They further critiqued the measurement by many studies of resilience in isolation from other social dimensions, as well as a tendency to frame resilience as an inherently positive concept. Mayer's (2019) review on disaster resilience literature also found an increase in the number and range of measurement tools and indicators published. Mayer identified an ongoing lack of agreement on measures, significant challenges in collecting data when a large number of complicated indicators is used, and the need for considerable expertise in consistently collecting and analysing indicator sets.

For these authors, there is a widespread problem with measurement schemes that treat resilience as context free, ignoring the persistence (or resilience) of system problems as well as capacities. Cutter and Derakhshan (2019), who also explored measurement frameworks for community disaster resilience, highlighted challenges that emerge when different conceptual models are used, calling into question whether the same measurements were being used across frameworks.

Key examples of measurement frameworks and approaches published since 2017 include First, Yu and Houston's (2020) Disaster Adaptation and Resilience Scale (DARS), which features individual level measures across physical resources, social resources, problem-solving, distress regulation and optimism, and the work of Hong, Bonczak, Gupta

and Kontokosta (2021) into neighbourhood disaster response and recovery times using large scale mobile phone data. This latter framework measures racial and socioeconomic inequity at the community level.

During this time, several other approaches have begun to engage more effectively with complexity, and to develop frameworks that account for the interaction of multiple processes and factors. In focusing on community disaster resilience, an additional array of complex intersections is added including the operation of power, politics, culture, historical and current relationships and networks.

Examples of measurement frameworks which provide more complex learning include:

- The emBRACE Resilience Framework (Kruse et al in Deeming 2019). This framework is useful in that it recognises the location of community action within a broader policy, political, legal, economic and social context. This is important as it addresses the tendency of some community resilience focused discourse to frame communities as completely responsible for their own resilience. The inclusion of learning as a key element in the framework and a framing of community as an ever changing dynamic rather than a stable entity also provides important ideas which shift disaster resilience measurement towards a more comprehensive approach. While the participatory method which is central to emBRACE works alongside deductive and inductive research methods, this framework does not have much detail in relation to practice on the ground or how community resilience building work takes shape within its boundaries. This is recognised by the authors themselves and their approach to emBRACE as a work in progress is promising as community resilience building knowledge continues to develop.
- Nguyen and Akerkar (2020), through their systematic review, propose a three-step meta approach to community resilience building (measuring, modelling and visualising), through which they synthesised a range of measurement schemes. Their approach is different from many others as it locates the decision-making about what to measure, collection and visualisation of data in the hands of the community. Rather than prescribing set indicators, this approach suggests a methodology for developing a measurement approach built by communities based on meaningful local indicators.
- Jewett et al's (2021) rapid scoping review focused

on recovery from COVID-19, examining the role of social cohesion and community resilience in supporting recovery. Their approach included consideration of intersecting household, community and government systems as key shapers of social cohesion, which, they argued, is critical in supporting effective resilience building. In examining the Index of Perceived Community Resilience, a measure used across a number of studies, they recommended further analysis and research on links to social capital literature, the indicators chosen, community led selection of indicators and applicability across diverse disaster types and scales.

- A study by Payne, Kaye-Blake, Kelsey, Brown and Niles (2021) measuring community resilience in the United States (US) and New Zealand against slower moving disasters such as drought and climate change, interestingly found a very weak relationship between community perception of resilience and resilience indicators measured. They recommended using a range of dimensions to measure resilience rather than a single dimension (none of which correlated with overall community perceptions of resilience in their study) as lower resilience in one dimension was made up for in another. Their study also highlights a disconnect between statistical resilience indicators and community perceptions of resilience. They recommended an approach which works with communities gathering meaningful data on the ground rather than relying on broad scale indicators.

Resilience, risk, and responsibility. Who is responsible for being resilient?

Key learnings

- The literature highlights a tendency in governments to frame resilience as an individual responsibility.
- Placing responsibility for disaster resilience on communities is problematic in the absence of community resources and government support.
- Assumptions that we all have adequate resources to be resilient can further entrench inequalities.

One emerging area of disaster resilience literature draws attention to the implications and impacts of framing resilience as an individual responsibility. In this frame communities are seen as groups of individuals with the responsibility to be resilient landing squarely in the hands of community members. A number of authors critique resilience building policy and programs which shift risk and responsibility towards individuals and communities without providing institutional support.

Croweller and Tschakert (2021a and 2021b) found in their study of 89 disaster management leaders in Australia, New Zealand and the US that there was a tendency, although communitarian framing was used initially in a survey, to emphasise both individualistic understandings of resilience building and to locate responsibility for disaster resilience with individuals. They argued there is a need for a relational and compassionate approach to resilience which emphasises an ethic of care. Their warning that resilience approaches that focus on providing further resources and training to groups in the community who already have resources and power, proactively excludes and amplifies inequality. The impact of structural inequity on disaster resilience discourse and the tendency for victim blaming here was also raised by Mayer (2019).

Jolly (2020) warns against resilience becoming weaponised in a way that blames those most impacted by disasters for a lack of resilience, diverting attention from powerful players who are contributing

significantly to climate change. Drawing on the National Disaster Resilience Index, she argues that the inequity between communities in Australia in terms of capacity for disaster resilience is significant, and must be a focus in thinking about disaster planning.

In a similar way, Uekusa (2018) reminds us of the dangers of attributing social capital to a central role in community resilience building without including a structural analysis of injustice. For Uekusa this is a co-optation of resilience by neo-liberal politics, which expects communities to bounce back or bounce forward with nothing more than a store of social capital. Uekusa argues that while local networks are often strong in socio-economically disadvantaged communities, these communities are not necessarily strong in disaster resilience due to lack of resources and infrastructure. In this research the paradox of resilience is highlighted. That is, some groups, through their vulnerability by exposure to disaster have developed unexpected cultural and social capital supporting disaster resilience. Here their experience of disaster provided practice and skills in drawing on social capital as they had to rely only on their own resources for survival. This forced self reliance, however, left those groups exhausted and with less resources, so with further pressure on already depleted social capital and less other resources than before. For Uekusa, this is dangerous, as resilience responsibility is located solely with individuals and particularly with community members experiencing social exclusion. Those already under pressure are given further responsibility with no new resources. Because they survived last time, they can do so again drawing further on dwindling resources.

Risk management strategies adopted by governments in Australia and internationally have also gained some attention in recent literature. Research has linked the increasing shift towards individual responsibility in disaster management with increasingly centralised risk management approaches in government and emergency services. Results here have been increasing assumption of control by government and emergency services of disaster decision making, planning and response while at the same time individuals in impacted communities are framed as responsible wholly for their own resilience. In Australia the literature is revealing that there is an increasing mismatch between centralised strategies and community experiences in relation to disasters. Drennan (2017) found that government risk management strategies were largely at odds with

the experiences and perceptions of communities. Beilin and Paschen (2021) note a simultaneous escalation in government assurances of certainty and outsourcing the management of uncertainty to community members via shared responsibility. In addition, these researchers characterise resilience in policy discourse and emergency management as a normative imperative, so individuals are exhorted to be resilient as a matter of individual responsibility, with no reference to structural inequity or injustice.

Adekola et al (2020) connect this process of making communities fully responsible for their own resilience with the intense impact of cascading disasters and asks whether it is realistic to expect communities to manage on their own in this context:

“(R)esilience cannot be seen to be an elastic community property that is independent of the task demands generated by the scale and complexities of particular hazards. It will inevitably have its limits in terms of the ability of local communities to cope with the response demands of an event, the skills that they need to deal with those demands, and the role that government should play in building and sustaining resilience”

Adekola et al, 2020, p.3

This body of literature is important for anyone who is interested in supporting communities in disaster resilience work either as a community member, local stakeholder or organisation. As disaster resilience research develops, evidence is revealing the importance of understanding and acting in ways that recognise the dynamics of power in communities, as well as the uneven distribution of resources, which directly and indirectly impacts local resilience building capacity.

Community-Led Disaster Resilience

Key learnings

- Community leadership of disaster resilience is clearly acknowledged, but not yet well implemented.
- The recognition, value and inclusion of local knowledge is central to all levels of resilience building.
- Community-led resilience building requires support from external systems.
- Decision-making and power must be located with communities and shared with government rather than imposed by government.
- Social capital is important, but not the sole factor in successful resilience building.
- Effective community-led resilience building pays close attention to community members who are excluded, and to the structures and processes that exclude.

The Royal Commission into National Natural Disaster Arrangements found broad-based support for community leadership in disaster management.

“The importance of local knowledge to disaster management, and particularly to disaster response, was emphasised by many people we heard from, including firefighters and the public. State, territory and local governments expressed strong support for the principle, and stressed the need for ‘deep engagement’ with affected communities. A locally-led response was described as ‘one of the strengths of the disaster management system’ and a ‘foundational principle.’”

Binskin et al, 2020, p.21 (our emphasis)

Despite this focus, the Royal Commission's extensive recommendations include communities in only two ways: as recipients of information and education, and in terms of design and implementation features of evacuation spaces. This suggests significant scope for further work to recognise and develop community leadership in a more comprehensive and integrated way within overall disaster management before, during and after events.

The body of recent research on community-led disaster resilience is relatively small as yet, however five key themes are emerging.

1. Recognition, value and inclusion of local knowledge at all levels of resilience building is central.

The critical importance of local knowledge and local community members leading resilience building is a consistent learning across the research literature on community resilience building. For example, Ali et al (2021), in their detailed study of two-way partnering with First Nations communities in Australia, found that:

"(F)irst, local Indigenous knowledge and practices strengthen Indigenous people and reduce the risks posed by natural hazards. More specifically, deep reciprocal relationships with country and ecological knowledge, strong kinship relations, Elder's wisdom and authority, women and men sharing power, and faith in a supreme power/God and Indigenous-led community organizations enable DRR. Second, colonizing practices weaken Indigenous people and increase the risks from natural hazards."

Ali et al, 2021, p.1

Darab, Hartmann and Pittaway (2020) further add to a growing body of research about community development approaches and local self-organising in their study of community response and recovery from major flooding in Lismore in 2017. They highlighted the confusing and negative experiences of Lismore residents

relying on remote decision making and information provision from the NSW SES. They contrasted the stories from local people of positive and connected responses from local SES staff and volunteers during the crisis and recovery centres staffed by locals in the aftermath, with inaccurate information and poor support centrally controlled in Wollongong, far from the site of the disaster.

2. Community led resilience building must be supported by government and other infrastructure, services and initiatives.

The danger of offloading responsibility for disaster resilience wholly to communities and absolving other stakeholders, including government, of a role in this work is identified by numerous researchers in Australia (Jolly 2020; McLennan, 2020).

McLennan (2020) nominates the importance of complementarity on any community-led resilience building effort between community members and government. Jewett et al (2021) argue that investment in social cohesion and community resilience prior to a disaster supports more effective recovery as this longer-term work creates resources within communities which are drawn on during crises and materially assist those experiencing disasters. The importance of government system support for community disaster resilience is not a new concept; it was embedded in Twigg's (2009) seminal measurement framework - Characteristics of a Disaster Resilience Community. More recently, however, Mochizuki et al (2018) have critiqued this framework and that of Magis (2010) for providing indicators which do not separate the range of drivers, capacities and dynamics impacting on and within communities in a disaster context.

3. Decision-making and power must be located with communities and shared with government rather than imposed by government.

Handmer and Maynard (2021) In their examination of the mobilisation of community members in response to Cyclone Tracy in 1974, Handmer and Maynard argued that volunteer contributions were widespread and community leadership was clearly evident during that disaster. Expecting to see an increased inclusion of community initiative in current disasters given the strong long-term foundations, their research found instead that governments have become increasingly controlling of civil society disaster activities over time rather than developing collaborative work in this

area. "In other words, a whole of society approach is needed, while ideally emergency services act in a coordinating rather than command and control role (Quarantelli, 1998)" (Handmer and Maynard 2021, p.24)

4. Social capital is important in creating the circumstances in which community-led resilience building can thrive, however, is not the sole factor or explanation for community processes such as self-organising and spontaneous volunteering, or the sole factor underpinning successful and ongoing community resilience.

Social capital and its role in disaster resilience building along with community relationships and dynamics was a key theme in several studies on disaster resilience in the past three years. Ntontis, Drury, Amlôt, Rubin, Williams and Saavedra (2020) argue that more attention to group psychology and social identity provides a broader explanation for community-led response activities and is helpful in designing bottom-up community-led resilience building. Jewett et al (2021) identify social capital as "the most studied concept related to social cohesion within the disaster recovery literature" (p.326). They cite both hurricane Katrina and the Christchurch earthquake as standout examples of social capital in action during disaster response and recovery.

Lismore's Helping Hands Hub illustrates the value of long-term relationship and capacity building in creating stores of social capital which can be drawn on in times of crisis (Darab et al 2020). Helping Hands had been a network which became a social movement mobilising community members to stop coal seam gas exploration in the region for a number of years. The social capital developed through this network was able to be activated quickly and effectively to organise relief, support, and clean-up efforts alongside community members impacted by Lismore's flood in 2017.

Mayer (2019) highlights the significant increase in published research examining links between social capital and community resilience, but argues further work is needed on developing both social capital and community disaster resilience as consistent theoretical concepts to ensure comparisons are of like ideas. All of the studies reviewed here and published on social capital and disaster resilience since 2018 highlight the central role played by social capital in supporting community resilience, but link this closely with other contextual factors in each

community which shaped the scope, focus and impact of social capital in action. For example, in one study, access to communication via social media acted as a conduit for building social capital (Chu, Liu, and Yang 2021). In another the lack of political power in a New Orleans neighbourhood impaired the capacity of social capital to support community disaster recovery (Roberts 2019). For MacGillivray (2018) the role of social capital is ambiguous. He highlights the dangers of bonding social capital in fuelling ethnic tensions and local conflicts post disaster, and argues that we would be better to focus on the quality of networks, rather than social capital, to more effectively support disaster resilience. Similarly, in Bangladesh, Masud-All-Kamal and Monirul Hassan (2018) found that while social capital was important for communities recovering from disaster, existing patronage-based social structures limited the long term impacts due to resources being diverted from communities and the operation of corruption during the recovery.

5. Effective community-led resilience building pays close attention to community members who are excluded and to the structures and processes which exclude.

Redshaw et al (2018), in their survey research in the Blue Mountains, found both network communication (connectedness) and community participation have a significant positive impact on social cohesion. However, they warn of the importance of including community members who are most vulnerable in any efforts to build community cohesion for it to be effective in disaster resilience building. A growing body of research is focused on strategies for supporting disaster resilience in targeted 'at risk' populations. For example, Bennett (2020) found that despite work on progressing the Principles of the Sendai Framework in relation to people with disabilities, further attention was needed to take into account intersectionality, empowerment and cultural change in order to further support existing efforts.

Conclusion

This review demonstrates the considerable growth in literature on community disaster resilience over the past three years. The literature we reviewed demonstrates not only the quantity of research being undertaken in the recent past, but increased attention to a deeper analysis and more nuanced understanding of the characteristics of disaster resilience at a community level, and the factors that shape resilience building. While a clear and consistent definition of disaster resilience remains elusive, the review suggests that this offers opportunities to draw on understandings that fit local contexts. Similarly, recent literature suggests that attempts to settle on a simple, uniform approach to measuring resilience may be unhelpful, and that there is value in drawing on multiple frameworks and tools according to local circumstances. In addition, assuming that resilience itself is an unquestionably positive outcome is open to further debate.

The theme of shared responsibility was evident throughout much of the current literature, as a central but critiqued concept in community disaster research. Several authors expressed concern about the role of power in shaping the ways that shared responsibility was understood and enacted, with the potential to either challenge inequality by inviting individuals and communities to be active in building resilience, or to further entrench social injustices through shifting responsibility in the absence of accompanying supports. In the literature, shared responsibility and community leadership were intertwined, connected by issues of power and vulnerability, connectedness and exclusion. Above all, this review of recent literature has highlighted that community-led resilience building is an area where much has been learned, and a great deal remains to be explored.

References

1. Adekola, J., Fischbacher-Smith, D., & Fischbacher-Smith, M. (2020). *Inherent Complexities of a Multi-stakeholder Approach to Building Community Resilience*. *International Journal of Disaster Risk Science*, 11(1), 32–45. <https://doi.org/10.1007/s13753-020-00246-1>
2. Ali, T., Buergelt, P.T., Paton, D., Smith, J.A., Maypilama, E.L., Yugirra, D., Dhamarrandji, S., Gundjarranbuy, R. (2021). Facilitating sustainable disaster risk reduction in Indigenous communities: Reviving Indigenous worldviews knowledge and practices through two-way partnering. *Journal of Environmental Research and Public Health*, 18, 855. <https://doi.org/10.3390/ijerph18030855>
3. Beilin, R., & Paschen, J.-A. (2021). Risk, resilience and response-able practice in Australia's changing bushfire landscapes. *Environment and Planning D, Society & Space*, 39(3), 514–533. <https://doi.org/10.1177/0263775820976570>
4. Bennett, D. (2020). Five Years Later: Assessing the Implementation of the Four Priorities of the Sendai Framework for Inclusion of People with Disabilities. *International Journal of Disaster Risk Science*, 11(2), 155–166. <https://doi.org/10.1007/s13753-020-00267-w>
5. Binskin, M., Bennett, A., & Macintosh, A. (2020). *Report of the Royal Commission into National Natural Disaster Arrangements*. Commonwealth of Australia.
6. Chu, H., Liu, S., & Yang, J. Z. (2021). Together we survive: the role of social messaging networks in building social capital and disaster resilience among minority communities. *Natural Hazards (Dordrecht)*, 106(3), 2711–. <https://doi.org/10.1007/s11069-021-04562-7>
7. Cretney, R. (2019). "An opportunity to hope and dream": Disaster politics and the emergence of possibility through community-led recovery. *Antipode*, 51(2), 497–516. <https://doi.org/10.1111/anti.12431>
8. Croweller, M., & Tschakert, P. (2021a). Disaster management leadership and policy making: a critical examination of communitarian and individualistic understandings of resilience and vulnerability. *Climate Policy*, 21(2), 203–221. <https://doi.org/10.1080/14693062.2020.1833825>
9. Croweller, M., & Tschakert, P. (2021b). Disaster management and the need for a reinstated social contract of shared responsibility. *International Journal of Disaster Risk Reduction*, 63, 102440–. <https://doi.org/10.1016/j.ijdr.2021.102440>
10. Cutter, S. L., & Derakhshan, S. (2019). Implementing Disaster Policy: Exploring Scale and Measurement Schemes for Disaster Resilience. *Journal of Homeland Security and Emergency Management*, 16(3). <https://doi.org/10.1515/jhsem-2018-0029>
11. Darab, S., Hartman, Y., & Pittaway, E. E. (2020). Building Community Resilience: Lessons from Flood-affected Residents in a Regional Australian Town. *The International Journal of Community and Social Development*, 2(4), 409–425. <https://doi.org/10.1177/2516602620981553>
12. Deeming, H. (2019). *Framing community disaster resilience* (First edition.). John Wiley & Sons, Inc.
13. Drennan, L. (2018). Community Narratives of Disaster Risk and Resilience: Implications for Government Policy: Narratives of Disaster Risk and Resilience. *Australian Journal of Public Administration*, 77(3), 456–467. <https://doi.org/10.1111/1467-8500.12299>
14. First, J. M., Yu, M., & Houston, J. B. (2020). Development and Validation of the Disaster Adaptation and Resilience Scale (DARS): A Measure to Assess Individual Disaster Resilience. *Disasters*. <https://doi.org/10.1111/disa.12452>

15. Handmer, J., & Maynard, P. (2021). Civil society mobilisation after Cyclone Tracy, Darwin 1974. *Environmental Hazards*, 20(1), 23–44. <https://doi.org/10.1080/17477891.2020.1838254>
16. Hong, B., Bonczak, B. J., Gupta, A., & Kontokosta, C. E. (2021). Measuring inequality in community resilience to natural disasters using large-scale mobility data. *Nature Communications*, 12(1), 1870–1870. <https://doi.org/10.1038/s41467-021-22160-w>
17. Jewett, R. L., Mah, S. M., Howell, N., & Larsen, M. M. (2021). Social Cohesion and Community Resilience During COVID-19 and Pandemics: A Rapid Scoping Review to Inform the United Nations Research Roadmap for COVID-19 Recovery. *International Journal of Health Services*, 51(3), 325–336. <https://doi.org/10.1177/0020731421997092>
18. Jolly, M. (2020). Bushfires, supercyclones and “resilience”: is it being weaponised to deflect blame in our climate crisis? *Scottish Geographical Journal*, 136(1-4), 81–90. <https://doi.org/10.1080/14702541.2020.1863607>
19. Kelly, L.M. (2021). A clash of values: Deep-rooted discord between empowering, participatory, community-driven development and results-focused, evidence-based evaluation. *Community Development*, 1–17. <https://doi.org/10.1080/15575330.2021.1936101>
20. MacGillivray, B. H. (2018). Beyond social capital: The norms, belief systems, and agency embedded in social networks shape resilience to climatic and geophysical hazards. *Environmental Science and Policy*, 89, 116–125. <https://doi.org/10.1016/j.envsci.2018.07.014>
21. McLennan, B. J. (2020). Conditions for effective coproduction in community-led disaster risk management. *Voluntas*, 31(2), 316–332. <https://doi.org/10.1007/s11266-018-9957-2>
22. Mannakkara, S, Wilkinson, S, & Potangaroa, R. (2018). *Resilient Post-Disaster Recovery through Building Back Better*. Routledge, Boca Raton, FL.
23. Masud-All-Kamal, M., & Monirul Hassan, S. M. (2018). The link between social capital and disaster recovery: evidence from coastal communities in Bangladesh. *Natural Hazards (Dordrecht)*, 93(3), 1547–1564. <https://doi.org/10.1007/s11069-018-3367-z>
24. Mayer, B. (2019). A review of the literature on community resilience and disaster recovery. *Current Environmental Health Reports*, 6(3), 167–173. <https://doi.org/10.1007/s40572-019-00239-3>
25. Mika, K. & Kelman, I. 2020, Shealing: Post-disaster slow healing and later recovery. *Area*, 52(3), 646–653, doi: 10.1111/area.12605.
26. Mitchell, L. (2019). *Case studies exploring community-led recovery and coordination*. Social Recovery Reference Group, Melbourne.
27. Mochizuki, J., Keating, A., Liu, W., Hochrainer-Stigler, S., & Mechler, R. (2018). An overdue alignment of risk and resilience? A conceptual contribution to community resilience. *Disasters*, 42(2), 361–391. <https://doi.org/10.1111/disa.12239>
28. Nguyen, H. & Akerkar, R. (2020). Modelling, Measuring, and Visualising Community Resilience: A Systematic Review. *Sustainability*, 12(7896), 7896–. <https://doi.org/10.3390/su12197896>
29. Ntontis, E., Drury, J., Amlôt, R., Rubin, G. J., Williams, R., & Saavedra, P. (2021). Collective resilience in the disaster recovery period: Emergent social identity and observed social support are associated with collective efficacy, well-being, and the provision of social support. *British Journal of Social Psychology*, 60(3), 1075–1095. <https://doi.org/10.1111/bjso.12434>

30. Owen, C. (2018). How can governments enable and support community-led disaster recovery? *Australian Journal of Emergency Management*, 33(1), 66–69.
31. Payne, P. R., Kaye-Blake, W. H., Kelsey, A., Brown, M., & Niles, M. T. (2021). Measuring rural community resilience: case studies in New Zealand and Vermont, USA. *Ecology and Society*, 26(1), 2–. <https://doi.org/10.5751/ES-12026-260102>
32. Redshaw, S., Ingham, V., McCutcheon, M., Hicks, J., & Burmeister, O. (2018). Assessing the impact of vulnerability on perceptions of social cohesion in the context of community resilience to disaster in the Blue Mountains. *Australian Journal of Rural Health*, 26(1), 14–19. <https://doi.org/10.1111/ajr.12377>
33. Roberts, P. (2019). Social Capital and Disaster Resilience in the Ninth Ward. *Onati Socio-Legal Series*, 9(9(3)), 400–422. <https://doi.org/10.35295/osls.iisl/0000-0000-0000-1065>
34. Torrens Resilience Institute. (2017). *Contemporary Research and Practice in the Field of Community-based Disaster Resilience*. Flinders University, Adelaide.
35. Uekusa, S. (2018). Rethinking resilience: Bourdieu's contribution to disaster research. *Resilience*, 6(3), 181–195. <https://doi.org/10.1080/21693293.2017.1308635>
36. United Nations. (2015). *Sendai Framework for Disaster Risk Reduction 2015-2030*.
37. Zobel, C. W., MacKenzie, C. A., Baghersad, M., & Li, Y. (2021). Establishing a frame of reference for measuring disaster resilience. *Decision Support Systems*, 140. <https://doi.org/10.1016/j.dss.2020.113406>