

**Culturally constituted understandings of community resilience to natural disasters and
their implications for communication campaigns**

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Abstract

This paper explores how cultural factors determine how community resilience is understood in different national contexts and the implications this has for communication campaigns designed to build community resilience to natural disasters. Community resilience has become a popular topic of research and theorising across many disciplines. Building community resilience involves developing skills and knowledge in communities to enable adaptive capacity in the face of disturbance and change caused by sometimes life threatening events such as natural disasters. It is especially in the areas of disaster and crisis management that there are opportunities to explore the contribution that communication and public relations practitioners can make to building community resilience. To date, however, the concept of community resilience has not been widely explored in public relations scholarship. Furthermore, most resilience literature is grounded in Western and Eurocentric values which fail to reflect on the values of other cultures - especially Eastern cultures.

Based on 50 interviews with disaster management communication experts in Sri Lanka and New Zealand this research demonstrates how economic, spiritual, religious, social, cultural and national biases all influence how communities constitute what resilience means, and how they can build resilience against the often catastrophic impacts of natural disasters such as floods and earthquakes. The research findings provide pivotal insights for those working in crisis and disaster management in terms of how and what they need to take into account when communicating with audiences in terms of appropriate attitudes and behaviours to adopt for developing resilience.

Introduction

Community resilience has become a popular topic of research, discussion and theorising in many disciplines. Yet this concept has not been widely explored in public relations scholarship. Building community resilience involves developing skills and knowledge that enable adaptive capacity. According to Veil (2013) resilient communities “are able to maintain operations or quickly return to normal following a disturbance such as a natural disaster” (p. 793). It is in the areas of disaster and crisis management that there are particular opportunities to explore the contribution that public relations can make to building community resilience. While the frequency and intensity of natural disasters cannot be reduced without significant global environmental changes, as Paton and Johnston have stated, communities’ resilience to disasters “can be increased through improvements in communications, risk awareness, and preparedness” (2006, p. 603). This is a key area for communication professionals since traditional as well as digital media play a major role in facilitating information dissemination before, during, and after disasters.

This paper reports on an investigation into how different cultural contexts impact on the need to communicate differently about how community resilience can be built. The study, which was conducted in Sri Lanka and New Zealand to explore the communication challenges faced by disaster managers in both countries, posed the question: *How does culture inform how community resilience is differently understood and communicated in these national contexts?* The paper identifies differences and similarities in Sri Lanka and New Zealand based on data drawn from 50 in-depth interviews (25 in each country) with communication managers in government and non-profit organizations.

Both Sri Lanka and New Zealand have experienced significant natural disasters including floods, landslides, and earthquakes. A 2004 tsunami in Sri Lanka and a 2011 earthquake in New Zealand, both of which caused significant loss of life and ongoing challenges for local communities, forced the governments of these countries to establish new units to deal with natural disasters, including aspects of communication, in all stages of preparation, management, and recovery.

The findings of this study indicate that Sri Lanka, probably because it is an economically developing country with a majority Buddhist population, adopts a fatalistic approach to disasters and draws on collectivist values that determine how communicators approach campaigns to build community resilience. In New Zealand's developed economy, secular, and individualist culture, the challenge for communicators in building community resilience is in persuading people to seek help from others and familiarize themselves with good sources of information. This research contributes to our understanding of the important role that communicators working for organizations responsible for disaster management have in

building community resilience and the need to consider how socio-cultural contexts impact on message effectiveness.

Literature review

Public relations scholarship rarely discusses community resilience to the adversities involved in natural disasters. The topic of disaster management is often included in the rich literature on crisis management (Coombs, 2007; Coombs & Holladay, 2010; Heath & Coombs, 2006; Frandsen & Johansen, 2017; Lerbinger, 2012). Coombs (2010) distinguishes crisis communication from disaster communication by saying that, though they are interrelated, crisis communication is concerned with an individual organization's reputation, while disasters are managed by a multi-agency network (p. 61). Frandsen and Johansen (2017) identify disaster management as a "related discipline" (p. 11) to crisis management dealing with "severe disruption of the functioning of a society or a community" (p. 11). They list the community emergency response organizations that are involved in disaster management: "the police, fire departments, emergency medical services, home guards, and agencies at the local and/or national level" (p. 11). Discussing similarities and differences between crisis communication and disaster communication Coombs (2010) argues that "Both fields demand an initial response that concentrate on public safety" (p. 61).

Recently public relations scholars Heath, Lee, Palenchar and Lemon (2018) and Heath, Lee and Lemon (2019) analyzed the effectiveness of a cartoon turtle character spokes-person delivering a safety message to residents who were vulnerable to chemical release from a petrochemical facility in a region of Texas. This study examined the communication strategy

aimed at preparing and educating residents about safety. It was conducted over several years and concluded that “strategic emergency response and other risk communication campaigns are increasing public safety” (Heath et al., 2019, p. 136). However, this study discussed community resilience to a potential human-made rather than a natural disaster and in the context of corporate crisis and risk management.

A relevant public relations function that intersects with disaster management’s attempt to empower communities and build their resilience is the area of community relations. The function is identified with the goal of helping organizations to be “welcomed partners in communities where they want to operate” (Dostal Neff, 2013 p. 169). Several public relations theorists identify community building as a public relations practice though not in the context of disaster management (Kruckeberg & Starck, 1988). Hallahan suggests three ways public relations can be used to build communities: Community involvement – participating in an already existing community; Community nurturing – sponsoring community activities; and Community organizing – creating clubs, associations, and societies outside of an organizational context (pp.168-169). This emphasis on public relations practitioners’ role as community builders suggests they also have a role to play in building community resilience to adversity.

Community resilience

The word “resilience” is derived from the Latin word *resilio*, meaning ‘to jump back’ (Klein, Nicholls & Thomalla, 2003, p. 35). It was originally used in physics, ecology, and other fields but especially in disaster management. Manyena (2006) reviewed diverse definitions of resilience, mainly the differences between vulnerability and resilience and concluded that the variety of meanings makes it difficult to reach a consensus on a single definition. The

breadth of disciplinary and theoretical models – ranging from those drawing in risk management frameworks (Paton, Smith and Violanti, 2000), hazard planning and sustainability (Tobin, 1999), and those based in notions of social resilience (Bradely and Grainger, 2004), for examples, all add to the complexity of how the concept of resilience has been researched and applied in different contexts (Manyena, 2006).

In terms of the specifics of community resilience, sociological perspectives are interested in the social process that enable communities to handle adversity – to be resilient in the face of that adversity. Magis (2010) states that it is the “existence, development, and engagement of community resources by community members to thrive in an environment characterised by change, uncertainty, unpredictability and surprise” (p. 401). Similarly, Kulig, Edge, and Joyce (2008) noted that: “community resilience is a social process which strengthens communities to face adversity successfully” (p. 93). In contrast, the psychology and mental health disciplines are usually interested in an individual’s resilience and ability to deal with adversities. However, Buikstra, Ross, King, Baker, Hegney, Mclachlan and Rogers-Clark (2010) contributed a study on community resilience arguing that “connections between individual and community resilience are synergistic and can serve to strengthen communities as well as providing support for individuals within them” (p.976). They researched rural Australian communities’ resilience to draught and tried “to develop, implement, and evaluate a model that enhances psychological wellness in rural people and communities” (p. 978). Based on the study’s findings they identified eleven major resilience concepts: “social networks and support, positive outlook, learning, early experience, environment and lifestyle, infrastructure and support services, sense of purpose, diverse and innovative economy, embracing differences, beliefs, and leadership” (p. 981).

The *World Conference on Disaster Reduction* held in January 2005 in Kobe, Hyogo, Japan was the first to develop a global strategy towards community disaster resilience. It adopted the *Hyogo Framework for Action 2005- 2015: Building the resilience of nations and communities to disasters*. Manyena (2006) noticed that since the adoption of the Hyogo Framework for Action increasing attention has been paid to “the capacity of disaster affected communities to ‘bounce back’ or to recover with little or no external assistance following a disaster. This highlights the need for a change in the disaster risk reduction work culture, with stronger emphasis being put on resilience rather than just need or vulnerability” (p.433). The conference provided an opportunity to promote a strategic and systematic approach to reducing vulnerabilities and risks to hazards. It underscored the need for, and identified ways of, building the resilience of nations and communities to disasters (United Nations Office for Disaster Reduction 2007).

The Hyogo framework’s international strategy for disaster reduction outlined priorities for action that are relevant to communication practices. The most relevant priorities to this discussion are: “Use knowledge, innovation and education to build a culture of safety and resilience at all levels...[and] Strengthen disaster preparedness for effective response at all levels”. The priorities also include: “Dialogue, coordination & information exchange between disaster managers and development sectors [as well as] voluntarism & participation” (UNISDR, 2005). However, it is also vital to consider the role that culture plays in how communities make sense of, prepare for, manage and respond to natural disasters, and how culture constitutes what resilience means.

Culture and the constitution of community resilience

Community's cultural values have been identified as a factor of disaster resilience. Paton & Johnston (2017) relate to the individualism – collectivism (I-C) dimension identified by Hofstede (1997) as one of cultural constructs on a list that includes also power distance, masculinity – femininity, and uncertainty avoidance. For example, Paton & Johnson (2017) described how in individualistic cultures people might act independently and prioritize the achievement of personal goals, whereas in collectivist cultures daily life is predominantly organized around the shared purposes of achieving collective goals (p. 237). Individualistic and collectivistic characteristics of culture influence and constitute the way people interpret disaster preparedness and mitigation. Social and individual factors such as collective efficacy, outcome expectancy, community participation, empowerment and trust affect people's interpretations of risk and decisions related to adopting measures that might increase their disaster resilience (Becker, Paton, Johnston & Ronan, 2012). The commitment to community as a whole is a precondition for building community resilience.

Other disaster management scholars discuss religion as an influential factor on the way people relate to disasters (Sims & Bauman 1972, Alexander, 2005). Generally, the impact of religion on responses to disasters is considered in Western and Eurocentric terms where its influence is regarded as irrational and negative. For example: "Catastrophe is once again an 'Act of God' a punishment for sins committed part of an inscrutable higher plan" (Alexander, 2005, p. 37). This fatalistic religious attitude is represented as failing to encourage communities to build resilience and to be positively prepared for disasters. Yet communication campaigns must be inclusive of different cultural understandings of disasters – simply dismissing attitudes as 'fatalistic' borders on a victim blaming model of

explaining why communities might not be able to adapt to the disruptions that crises and disasters pose to those communities.

In the context of public relations scholarship, the influence and importance of culture has become an increasing focus of investigation in the last decade (See Bardhan & Weaver, 2011; Edwards & Hodges, 2011) According to Srirnaesh (2010), “culture (both societal and corporate) can be viewed as an ‘environmental variable’ that influences public relations practice” (p. 698). Hallahan (2013) noted that “cultural theorists have examined the problems related to universalism versus particularism of public relations practices and how premises of public relations practice must be adapted to particular communities or cultures” (p. 168). Paton, Bakjek, Okada, N. & Mclvor (2010) commented that “irrespective of culture, people’s decisions about hazard preparedness will result from interaction between individual beliefs, collective process and competencies, and the equity of the relationships between people and the civic agencies that provide expert information” (p. 777).

In the next section we outline the method of research used to assess how cultural difference impacts on perceptions, and the management and communication of community resilience building.

Method

We adopted a qualitative approach to exploring how organizations that manage disasters perceive community resilience and use communication to construct resilient communities in different cultures. To assess how culture might impact on the management, communication and construction of community resilience, we conducted the research in two different national contexts: Sri Lanka and New Zealand. This was a convenience sample based upon

the countries of residence of the co-authors, with the first author being a citizen of Sri Lanka, and the second and third authors residing in New Zealand. This choice of national context provided an opportunity to assess how the more collectivist leaning culture of Sri Lanka and the more individualist culture of New Zealand might result in different understandings of, and approaches to, managing community resilience.

A snowball method was used to select interviewees from a list of disaster management organizations in Sri Lanka and New Zealand to ensure that data was representing relevant government and non-profit organizations.

In Sri Lanka the National Disaster Management Act of 2005 established the Ministry of Disaster Management and the National Disaster Management Framework that identified the institutions in charge of disaster response and relief. According to this framework (Disaster Management Center, 2005) the Disaster Management Center (DMC) acts as the agency authorized for managing activities before, during and after disasters. District disaster management units are situated within each district secretariat office. Secondary organisations (police, hospitals, ambulance and fire services), as well as local and international non-government and community organisations, work together with the government to build resilient communities in Sri Lanka.

In New Zealand the Ministry of Civil Defence & Emergency Management (CDEM) is the primary organization in charge of managing disasters. The CDEM is composed of various local and regional coordinators throughout the country. The CDEM has a disaster relief strategy coordinated with the following lead agencies: Ministry of Health, Ministry of Agriculture and Forestry, New Zealand Fire Service, Ministry of Foreign Affairs and Trade, District councils, City councils, Police, Ambulance, Hospitals, Fire services and New Zealand

Red Cross. Other NGOs are likely to respond to a disaster when it happens even though they are not formally identified as involved in disaster relief efforts. The disaster management organizations function as a network that shares information and coordinate activities.

The leading organizations – the Ministry of Disaster Management of Sri Lanka and the Ministry of Civil Defence & Emergency Management in New Zealand provided lists of organizations actively involved in the process of disaster management in the two countries. From these lists, a purposive sample of organizational representatives were selected and approached with invitations to be interviewed. The first author also attended the First New Zealand Conference of Disaster Communication in May 2014, in Auckland, New Zealand and gained access to additional spokespeople. Through these connections a total of 25 interviews were conducted in Sri Lanka in 2014 in Sinhalese and another 25 in New Zealand in 2014. All interviews were conducted face-to-face in the interviewees' offices and lasted between an hour and an hour and a half.

A semi-structured interview method has been chosen as most suitable for this research as it comprises a standard set of questions but also provides an opportunity for further probing questions to build on these (Britten, 1995). Interviews were recorded, transcribed, and translated from Sinhalese to English by the first author. The qualitative data was analyzed thematically with the qualitative software program NVivo 10 (QSR International, 2012). The University ethics committee approved the in-depth interviews throughout the data collection. The findings present quotes from interviewees without identifying them by name. Sri Lankan interviewees are marked SL with a specific number and New Zealand interviewees are marked with NZ.

It is important to acknowledge the limitations of this study. While equating culture with nation makes research feasible in terms of scope, we acknowledge that this has obvious limitations. Many nations are multicultural and any generalization about the specific features cannot do justice to their complex realities (Bhardan and Weaver, 2011). We describe New Zealand's culture as mainly individualistic and part of the Western socio-cultural constructs although 15% of New Zealand population comprises indigenous Māori community who have historically been collectivist in orientation. In Sri Lanka there are three ethnic communities, three religions and two languages. Communicators that try to build community resilience to disasters have to take all different cultures and communities into consideration when crafting interventions and messages.

In the next section we present the analysis of the interview data and specifically focussing on the how culture impacts on how community resilience is understood and communicated in firstly, Sri Lanka, and then, New Zealand.

Findings

The analysis of semi-structured interviews with disaster managers in Sri-Lanka and New Zealand shows that socio-cultural factors strongly influence perceptions and practices of community resilience building. Disaster managers' understanding of the notion of building resilient communities is influenced by economic, spiritual, social, national, and organisational factors. The cultural environment in which disaster managers operate plays a significant role in determining how and what they communicate to the community for building its resilience to disasters.

Findings from Sri Lanka

Sri Lankan participants in this research identified a strong need for community empowerment and the reduction of vulnerability to the effects of natural disasters. This included improving community capacity and resourcing and addressing cultural and social barriers to developing resilience.

Economic development and livelihood

Sri Lankan interviewees were primarily concerned about resources and emphasised the community's most urgent needs as based around economic development, sustainable livelihoods, and the improvement of physical and administrative infrastructures. For these interviewees the economic vulnerability of many Sri Lankans that came with their working as land based labourers, in tea plantations, for example, greatly reduced their resilience to natural disasters. Equally, the lack of infrastructure – communication and administrative systems, water supplies, community centres and heavy plant machinery - meant that communities were unlikely to be able to organise disaster recovery. Consequently these communities are greatly dependent on others, and primarily the national government, to mobilise disaster response. Disaster management literature recognises the importance of adequate resources. According to Hegney, Ross, Baker, Rogers-Clark, King and Buikstra (2008) the availability of infrastructure and support services is key to building resilient communities.

In a less developed country such as Sri Lanka, building community resilience means empowering the communities to be financially strong enough to stand up or bounce back after a natural disaster. SL3, a disaster manager who worked for a government security

forces, stressed the physical strength of having standard basic houses and infrastructure as major components of community resilience:

Being resilient means being resilient to physical destruction, so you need economic ability to be resilient. If you are a poor person and if all your wealth is under the mudslide when an earthquake happens that means you are not resilient. To stand up after the event you need financial resources and most of them don't have that. (SL3)

The view that community resilience depends on economic development as well as livelihood improvements was echoed by other interviewees. Interviewee SL4, a government disaster manager, provided an example for the impact of livelihood challenges on community resilience:

Even if we ask them not to go to a high risk area like a mountain that is predicted to have a landslide, they go, because they have their livelihoods there. So we can't stop them going to these risky areas until sustainable livelihoods are introduced (SL4)

Other interviewees described how during the Meeriyabedda landslide in Sri Lanka, which happened on 29th of October 2014, people ignored early warnings from the government and did not leave their villages because they worked on a nearby tea plantation on which their livelihood depended. (SL5). Eventually the landslide buried 150 houses, resulted in 16 known deaths and many more people who were reported missing but whose bodies were never found.

Sri Lanka disaster managers expected local government to be able to provide the appropriate resources to help the community to recover from the disaster. Poor residents depended on government and help from international non-profit organizations. SL1 explained how disaster managers recognise this constraint and deal with it:

When people live in landslide risk areas and when they don't like to go out of those areas, we support them to build resilient constructions, we first build a house and teach them how to do it. That is better than asking them to leave that area (SL1).

In Asian developing countries, INGOs play a major role in disaster management together with local government. Interviewees emphasised the importance of consulting with local rural communities before designing programs for community resilience. Interviewee SL7 who works for the Sri Lanka government as a disaster manager argued that INGO's impose their views on underdeveloped countries like Sri Lanka. On the other hand, interviewee SL8 who works for an INGO blamed local politicians for not caring and working to protect the local communities. Relating to the Meeriyabedda landslide SL8 said that: "The government officials should have given them safe places to go. It was a preventable tragedy". This same interviewee stated that: "Another problem is the infrastructure; the rural communities don't have a digger, tractor, generator, water pump, a safety place like a community center". In these terms, in a developing country like Sri Lanka, the economy, social development and vulnerability to natural disasters are all interwoven, and communities remain dependent on political authorities and international support

to put the resources and structures in place to help develop their resilience to natural disasters.

Dependency on outside organisations can also negate a community's ability to develop resilience. In Asian countries INGO's are more active in disaster management and many are involved in such programmes in rural areas of Sri Lanka. A government disaster manager explained how INGO's lack of understanding of the community, its cultural needs and environment, can do more damage than good:

If somebody else come from somewhere and do some disaster related work without knowing the environment then what happens? When the local people are not consulted, there is more damage done to the environment and it's the local people who suffer and business and development which suffers. So it is local governments' responsibility to get the people involved, community involved and to suggest and tell the INGOs that these are the best practices which we have had and can you build on this and make use of the existing structures rather than building new structures. (SL7)

According to this disaster manager, INGO's, despite their good intentions, can obstruct the development of local culturally appropriate community resilience. Resisting this from of colonial impact is however, extremely difficult due to the financial support that countries in the global south received from these INGOs.

Mindsets and religion

Sri Lankan disaster managers primarily framed community resilience around two concepts: economic strength and mental and spiritual strength. For them to be resilient meant to be in a mentally healthy position to understand what has happened and be prepared to adapt to change - in some occasions to start life again. Interviewee SL9, a government disaster manager, considered many people as set in their ways and as unwilling to be educated about resilience. He did not see older people as capable of being adaptive and recommended not trying to influence them and instead focus on young people in schools.

According to two government disaster managers, SL11 and SL3 people who practice Buddhist meditation can develop resilience faster than those who do not. For them building resilience is about training the mind to adapt. SL11 commented that:

When people do meditation they are mindful and it helps them to be in the present moment and forget the past. It helps people to be resilient to natural disasters. For me being resilient means to adapt to what is going on. It's adaptation. So I think the best way to create community resilience is to ensure that people are ready to mentally adapt.

For several of the Sri Lankan interviewees, Buddhist principles such as '*anithya*' (the impermanence of material things) helps communities to heal the mental damage caused by a natural disaster as it trains the mind to adopt a positive attitude. This compares with the critical commentary on the impact of religion on response to disasters found in some literature (for example, Alexander, 2005)

Sri Lankan disaster managers also positioned the collectivistic nature of their communities as an asset. They use a strategy called 'community for community' to train communities to

be resilient to natural disasters. SL12, a government disaster manager said, “We train a group of people from each community and we know that they help other people”. She described how they trained a community that was often hit by floods to use boats and rescue the whole village as the area was not accessible for outside help during floods. According to Hegney, et al., (2008), support networks play a key role in building resilience communities. A Sri Lankan disaster management noted that often the villages they need to prepare consist on an extended family strongly related to each other and there was no need for them to build a sense of community.

On the other hand, Sri Lankan disaster managers at times expressed a fatalistic attitude toward what constitutes a natural disaster. For them natural disasters, being unpredictable, cannot be prevented and are something that the community simply had to face. Interviewee SL1, a Sri Lankan government disaster manager said, “Being a resilient community means we have disasters in this world and people have to face them”.

Moving to consider New Zealand based disaster managers experiences provides a different perspective on the challenge of building resilient communities.

Findings from New Zealand

Although building community resilience is described in the literature in general as improving the capacities of *communities* (Landau & Saul, 2004; Kulig et al.,2008; Norris, Stevens, Pfefferbaum, Wyche, Pfefferbaum, 2008; Hegney et al., 2008; Magis, 2010; Ross et al.,2010), for New Zealand disaster managers, building resilient communities meant improving the capacities of *individuals* to withstand natural disasters over and above the collective community group.

Self-reliance

For New Zealand disaster managers, building resilient communities primarily meant focusing their attention on developing the adaptive capacities of individuals. This includes the ability to ask for help from the right people at the right time, connecting with support networks, and, keeping up to date on information. These interviewees operate on the assumption that individual resilience leads to community resilience and promote capacities that enable an individual to withstand natural disasters on his or her own with minimal external support. NZ1, a government disaster manager, stated “How I am resilient as a person with my emotions and with my focus to survive and overcome and restore by myself is the resilience”. Individual resilience was valued by New Zealand disaster managers as the most important asset for community resilience.

Recalling the 2011 Christchurch earthquake, NZ2, who works as disaster manager for a NZ government organization, commented that people do not like to depend on outside support after an earthquake:

We saw in Christchurch that our elderly residents, as well New Zealanders they have been through the war and have lived through wars, they know what it is like to have no power, no heating, no water; they were sitting in their homes without, not asking for help. They were injured, but they didn't want to ask for help, because they just wanted to get on; that was the resilience.

New Zealand disaster managers do not try to cultivate new qualities within individuals, but rather try to enhance the individual's innate quality of self-reliance

and provide necessary tools to build resilience for natural disasters. NZ3, a government disaster manager, explained: “After an incident you have to look after yourself for three days. Nobody will be able to come to you. If you are prepared for that first three days, you are resilient”. Similarly, a disaster manager working for an INGO operating in New Zealand emphasized, “For me, it is like a rubber band. You know after a natural disaster you have to have capacity to bounce back and you have the tools to do that yourself” (NZ4). The disaster managers’ role in this context is to communicate about the tools available for survival - knowing the right people to ask for help, connecting to support networks and having up-to-date information about how to survive the immediate aftermath of the disaster, but it is the individual’s responsibility access these tools. NZ3 described it thus:

We encourage them to be resilient within their own community even if they become isolated, because their roads are blocked, their telecommunications are down [and] no one can get to them. When there is wind, helicopters can’t go; they will know what caused this. They know how to talk to each other when power is off and be able to be in touch. This is what we define as resilience, what we are focusing on is if you got what you got today, how would you cope, what is there for you and how would you use it.

Interesting, in New Zealand and in contrast to Sri Lanka, there was no focus among the interviewees on the challenges communities might experience in maintaining their economic livelihoods after the disaster had occurred. It is also of significant note that after the Christchurch earthquake, there was a discussion about

incorporating Māori indigenous disaster risk reduction characteristics into the main disaster management structure of New Zealand (Lambert & Mark-Shadbolt, 2012). However, none of the disaster managers interviewed for this study mentioned the collectivistic nature of Māori culture and how it might inform community resilience building programmes in New Zealand.

Support Networks

The need for awareness on how to use support networks was a main theme in building resilient communities in New Zealand. For New Zealand disaster managers, building resilient communities means making sure that their communities make best use of available support networks. NZ5, a disaster manager affiliated with an INGO explained the community network role in NZ individualistic culture:

I think being resilient in a natural disaster in terms of the communities is having support networks and having people that you can call upon. So that no matter what happens to you or your family there are relationships that you already have, that you can call upon, and get help through. I think that would probably be the number one thing, having relationships and people that you can call upon.

NZ5 and NZ6 comments align with Chaskin's (2008) notion of "a network of relations" and a "unit of collective action" as essential factors in community resilience (p. 73). Hegney et al (2008) also identified social networks and support as an attribute which creates community resilience to natural disasters. However, in the predominantly individualistic New Zealand

context people might be reluctant to ask for help and disaster managers have to motivate and train New Zealanders to network and seek help from the right people at the right time. NZ2, a government disaster manager explained that “Even when people were injured, they didn’t want to ask for help, because they just wanted to get on. That was the resilience; they just want to be resilient. But we find these people, we tell [them], we can help you”.

Networking is important not only as a means to develop the relationships among the community members, but also as a way to build relationships between the community members and the disaster management agencies, and between the emergency services themselves. In addition to the community neighbourly network, evidence showed the important role of a network of organizations involved in managing disasters. Building community resilience depends on the ongoing effective communication between all organizations that provide emergency services – police, hospitals, councils, transportation services and such.

Using appropriate communication channels

One of the main factors New Zealand disaster managers identified as important in building community resilience was the need to ensure residents know how to communicate with the right support services. They pointed out that ‘communication’ might take on a different meaning at the time of a disaster. While modern communication and information systems are important in a disaster event, digital electronic information and communication systems are not the connection tools that people should rely on when a disaster strikes. NZ3, a government disaster manager said that people should be connected even when there is no power available to run these modern communication devices: “If they know how to talk to each other when power is off and be able to be in touch, this is what we define as

resilience". Traditional media such as radio was mentioned as an effective and reliable channel of communication during a disaster.

New Zealand disaster managers identified having support networks, asking for outside support, and knowing how to use appropriate communication channels to be connected to support networks as essential factors when building resilient communities. These conceptions reinforce the findings in existing literature on building resilient communities, but also develop new perspectives on disaster from the point of view of an individualistic society.

Conclusion

This research demonstrated the significance of culture on perceptions of community resilience in the context of disaster management. It did so by analysing disaster manager's experiences in the different national cultural contexts of Sri Lanka and New Zealand. The study's findings indicate the importance of understanding specific communities' cultures when designing programmes for building community resilience to natural disasters. It also confirms that building resilient communities cannot be the responsibility of one organisation but needs to be a collaborative process involving networks of communities and organisations. In this context, expertise in communication, community relations, and networking – all aspects of public relations practice - are a vital asset for disaster management organizations. However, if and where public relations communicators do become involved in programmes designed to support communities to develop resilience to disasters, they must appreciate how local culture constitutes what resilience is, how it is understood, and how it is influenced by particular values including collectivist and individualistic as well as social-economic and religious beliefs and practices. Hofstede's

(1997) classification of cultures as collectivist vs. individualistic helped explain the different challenges for communicators in different cultural environments. Sri Lanka disaster managers did not feel the need to develop a sense of community because the level of solidarity within their villages was already high; whereas in New Zealand's individualistic socio-cultural environment they focused on encouraging individuals to rely on themselves and at the same time to seek help from neighbors and emergency services.

This research also demonstrates that when communication professionals are working for INGOs or in cultural contexts different to their own, they must avoid imposing conceptions of what resilience is on that local context. Rather, they must work with the local community and support it to self-determine what resilience represents in terms of the long term sustainability, health and wellbeing of its people and culture.

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