Risk communication for new and emerging communities: The contingent role of social capital

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ARTICLE INFO

ABSTRACT

This study examines the role of social connectedness, or 'social capital', in mediating the dissemination and interpretation of natural hazards risk information for new migrant communities in South Australia, who have English as a second language. Using a focus-group methodology, analysis shows that intra-group networking, or so called 'bonding' social capital, is key to accessing and making sense of risk information. Settlement agencies and education providers were considered vital in helping new migrant communities check their understanding of risk messages originally sourced from mainstream media. Conversely, analysis shows that not all new migrant community members have access to positive social networks. The effective provision of natural disaster and natural hazards risk information can enhance community resilience and ameliorate social vulnerability, yet for some new migrant communities, salient and targeted messaging that addresses their discrete cultural and communication needs is not assessable, or available. We contend that an interactive, dialogic approach to developing and disseminating risk messages is required, which will go part way to reducing social disparities in natural hazards and disaster preparedness.

1. Introduction

In recent times, natural environmental hazards, such as bushfires, floods, and heatwaves across Australia and the world have highlighted the critical importance of effective risk communication. It is broadly assumed that the publics' willingness to cooperate with emergency services mandates and warnings, and take informed preparatory, self-protective action, is partly predicated on the effective dissemination of meaningful, trustworthy and coherent risk communication before and at the time of an event [1,53]. To this end, mst Australian state government emergency management (henceforth, EM) agencies deliver a spectrum of preparedness and awareness programmes to communities that aim to foster understanding of hazards, encourage preparatory 'adjustments' and safe behaviours (e.g. staying indoors during a storm; preparing a household emergency plan) that mitigate impacts from hazards (e.g. [13,26]). These interventions are considered a cardinal mechanism for building community resilience and responsibility – shared with EM services - for their own safety in bushfires, floods, storms and heatwaves.

No doubt, the task of engaging, educating, and preparing diverse communities for hazards and disasters is profoundly complex - manifold psychological, physical, geographical, and social factors notionally contribute to a person's or households' degree of preparedness, vulnerability, resilience, which together, precipitate their actual behaviour before and during an event. It is unsurprising then, that a recent review of community education and engagement activities in the Australian state of Victoria found that scant evidence exists for the proposition that preparatory programmes lead to enhanced preparedness during disaster and emergency events [26]. This finding is attributed to a lack of procedural 'target setting' for indexing householder preparedness, and programme evaluation measures that could help benchmark community readiness. What can also be drawn from this review is that despite considerable investment and effort, natural hazards and disaster preparatory messaging is not yielding the kinds of preparatory outcomes that are required. Moreover, it is arguable that public environmental hazard and disaster education programmes do not engender greater preparedness because they fail to account for different interpretive processes salient in different communities [43]. This may be particularly true for new migrant communities.

This study examines the 'lived experience' of recently arrived 'new and emerging communities' (henceforth, NEC), who have English as a second language. The current study aims to develop further knowledge

of the sociocultural patterns that interact with the interpretation and dissemination of preparatory risk information in NEC. In particular, this article explores the role of different forms of social networks in the dissemination of risk information, and the function these networks serve in the reception and interpretation of such messages. Our analysis does not aim to derive 'generalizable' findings in the traditional sense. Nevertheless, this study does aim to explore, with analytic depth, NEC experiences, and generate explanatory theory and knowledge that is applicable to similar situations and problems (see [39]). We use these findings as a basis for recommending more effective ways to meet NEC' discrete communication needs in natural hazards and disaster contexts.

1.1. New and emerging communities in Australia (NEC)

It is hard to overemphasise how various waves of immigrants and refugees have shaped Australia's post-colonial history - Australia is, indeed, a culturally heterogeneous society. Australians were born in close to 200 different nations, and more than 300 languages are spoken [4]. In the most recent Census [4], 28% of resident Australians were born overseas. Underpinning this diverse society has been a multi-cultural tenet that - for the most part[1] - encourages ethnic and cultural groups to maintain their unique systems of beliefs, knowledge, values, and practices, whilst simultaneously being expected to integrate into the Australian polity at large. Australia's multicultural doctrine has fostered a richly heterogeneous linguistic, cultural and ethnic population. This diversity is also apparent in the communication needs of different groups, as culture shapes how individuals receive, interpret and share messages. However, current risk communication does not similarly reflect and respect this diversity. Arguably, this inequitable access to critical environmental risk information endangers the health and well-being of Australia's culturally and linguistically diverse (CALD) citizens. For example, during an extreme and unprecedented heatwave in Adelaide, South Australia in 2009, 37% of patients hospitalised with direct heat-related illnesses were born overseas - although this group represented only 25.1% of Adelaide's total population [63].

At particular risk of harm from disasters and extreme weather events are new and emerging communities. For the purposes of the current study, we defined new and emerging communities (NEC) as any non-Anglo-Celtic immigrant group that has experienced a significant population increase over the past 5 years. These communities may be more vulnerable than established communities as they are often lack established family networks [18]. A significant cohort of NEC has entered Australia via the Australian government's Offshore Humanitarian Refugee Programme. New arrivals in Australia are confronted with an array of unfamiliar environmental, social, and cultural contexts. Adjustment to the social and climatic differences in a new country entails a process of 'acculturation': learning new practices including how to access and interpret important information about hazards and risks. This acculturation process can be further complicated by trauma. Those NEC arriving on humanitarian visas have experienced pre- and post-displacement trauma, and many have spent significant time in refugee camps awaiting resettlement [40]. Trauma is a factor that increases risk, however, recent research suggests that it is current social and economic stressors that are more salient issues for former refugees than historical experiences of trauma and dislocation [38,48].

1.2. Risk communication with new and emerging communities

No consensus exists amongst scholars for the definition of risk communication [24]. Here, however, we acknowledge two definitions. First, the traditional definition of environmental risk communication

emphasises a one-way transfer of information from government emergency management agencies to other relevant parties, including the public, with a view to increasing the quality of risk decisions in a hazard setting or emergency e.g. flood, heatwave, earthquake or bushfire [42]. Growing out of the risk perception paradigm (e.g. [52]), the linear communication approach is built on the assumption that 'top down', expert to 'receiver' communication can remedy information 'deficits' and erroneous risk perceptions of lay publics, so they more closely resemble that of experts ([29]. See [27], for a discussion). As a function of this education process, the public are equipped and willing to take measures that will mitigate their risk.

Alternatively, in recent years, public participation in risk communication has been increasingly valorised [55]. Indeed, an interactive (two way), dialogic, participatory, model of risk communication is better suited to constructing and disseminating meaningful risk messages with NEC and thus, enhancing the efficacy of these messages to engender self-protective behaviours [50]. An interactive approach proposes that expert and lay perspectives should inform each other [6]. This mutual communication should be grounded on a democratic process of information sharing between all stakeholders, including lay publics, on any given hazard, its risk, and what should be done to mitigate its impacts. Establishing a two-way line of communication between NEC and government EM agencies can help overcome the inherent problem of risk messages not accounting for public *concern*. Risk messages are likely to fail when they simply disseminate factual, 'expert views', without consideration for what the audience *want to know* [21], and the kinds of existing resources communities can harness to ameliorate their risk. In other words, expert, general representations of hazards and risk are often at odds with the publics' *actual* concerns about the hazard, and their capacity to make mitigation adjustments [37]. Therefore, according to the interactive model of risk communication, to avoid communication disjunctures between 'experts' and 'lay publics', it is imperative that messages relay information that accounts for pre-existing cultural and local knowledges.

An interactive, participatory approach recognises that all communication occurs in, and is mediated by, the social and structural context in which it operates. Social, economic, cultural and experiential factors shape how information is received and moulds social constructs such as risk perception (e.g. Perry, Lindell & Greene, 1982) - it is well documented that if these needs are not met by communicators, inequitable access to crucial risk information will ensue [50].

Overall, in Australia, like many Western countries (see, for example, [36]), NEC are not adequately recognised in terms of environmental risk and preparedness communication programmes [47]. Most risk messages are promulgated on mainstream media or through emergency agencies' websites but, again, predominantly in English. This reflects the assumption that it is generally considered unfeasible in a crisis event for emergency services to communicate quickly and clearly enough in multiple languages. Rather, a dominant language (English) is often employed to transmit the message to as many people as possible in the shortest timeframe.

Those for whom English is their second language, primary access to risk communication is limited to direct translations of English versions of 'fact sheets' accessible on government websites (e.g. [49]), or in a 'flyer' (paper) format. This is problematic for a range of reasons. As research has illustrated, different social groups hold differential conceptions of 'risk' [24,52]. Successful risk communication is more than language – it requires the sender and receiver to share a consensual set of meanings; that is, the signs, symbols, and values of the communication must align with that of the recipient (λ). Lamentably, mainstream construction and dissemination of preparatory and crisis information rarely meets these requirements.

For NEC - some of whom have limited English language proficiency and literacy skills - the importance of effective preparatory risk communication is paramount. The interpretation of, and response to emergency messages are essentially contingent upon the quality of

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[1] It is arguable that this tenet is increasingly being contested, as international terrorism events provide justifications for those wishing to challenge multiculturalism.