Understanding resistance to emergency and disaster messaging

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ABSTRACT

Individuals make decisions and act on them during emergencies and disaster events. Many of those choices are made in accordance with official advice: 'be prepared', 'keep clear', 'watch and act', 'if it's flooded, forget it'. Some of them are not. This paper explores why some people choose not to abide by official safety warnings, the factors involved in their decision making and actions, and what this means for emergency communicators. Through analysis of interviews with people who have made choices that differ from public safety advice, there is a need to better integrate the understanding of human motivation to improve models for communication in emergency and disasters.

Introduction

How to keep people safe is at the core of emergency management. Yet there are some people who disregard disaster messaging, seemingly against self-interest, with sometimes devastating consequences. The tragedy of disasters is not just that loss of life occurs, but that much of this loss is predictable, and hence preventable (Fitzgerald *et al.* 2010, Ryan & Matheson 2010). There is a need to understand how the empirical knowledge of emergency management can assist community members to act in ways that maximise their chances of survival (Gaillard & Mercer 2013, Palttala *et al.* 2012). There has been considerable recent research into channels of communication, emerging and social media, and the applicability of new technologies. However for these to be maximised, developments need to be matched by a deeper understanding of how people receive and make sense of information in ways that inform behaviour (Bushfires and Natural Hazards Cooperative Research Centre 2013). In examining international literature and disaster reports in Australia over the last decade, the question of 'How do we get people to behave appropriately during disasters?' was identified as one of the largest gaps in both national and international research

(Goode *et al.* 2013, p. 56). The research informs the discussion by examining the outliers of communication efforts: those who appear to resist the messaging of emergency management authorities.

Literature review

Emergency communication is informed by multiple overlapping disciplines and perspectives. For clarity these have been separated here as three bodies of research: communication theory, social cognitive theory, and neuropsychotherapy.

Communication theory

The first broad approach is grounded in traditional communication theory and looks at how messages are conveyed and received. It has recently been applied to the role of social media and live data capture in emergency communication. Recent research has considered how people find out about emergencies, who transmits messages and how such messages are received and mediated by receivers (Ryan & Matheson 2010, Spiro *et al.* 2012).

Investments in emergency communication have often focused on the accuracy, timing and appropriate detail level of information, on means of transmission and reception, and on source reliability. Underpinning such investments is the idea that the more information the mass media and citizens have, the better they will be able to react and respond (Wagman 2003, cited Quarantelli, Lagadec & Boin p. 38).

Much valuable policy (for example Attorney-General's Department 2008) responds to Mileti and Sorensen's (1990) focus on the process of hearing, understanding, believing, personalising, confirming and acting. They integrate and enact advice that messages be repeated, simple and clear, accurate, targeted, consistent and include a call to action. Many emergency services organisations in Australia and internationally, such as the United States Centers for Disease Control (2014), use these communication frameworks as the basis of their practice.

Social cognitive theory

The body of work regarding social cognitive models seeks to contextualise meaning-making sociologically and psychologically. Paton (2008) observes that risk communication has focused more on the messages it provides than on the relationship between citizens and the civic agencies responsible for risk communication. Yet it has been demonstrated that simply having information is not enough to change behaviour (Paton *et al.* 2006).

Recovery research has examined the psychological needs of the community in terms of communication (Nicholls & Healy 2008) and the field of environmental sociology has highlighted the essential role of recreancy, discussing the level of trust community members place in organisations and the perceived credibility of official messaging (Tierney 2012).

Emergency organisations have responded to this awareness by reworking strategies to acknowledge and mitigate 'psychological barriers' and build community engagement programs into organisational capacity (Centers for Disease Control and Prevention 2014, p. 23, Australian Red Cross 2010).

Neuropsychotherapy theory

Such insights into the experience of those receiving messages in emergencies are deepened by advances in neuropsychotherapy. At the core of this examination of brain function and its relationship to emotion, cognition and behaviour, is the work of Klaus Grawe (2007). He articulates four basic needs that drive action and choice, particularly at times of stress:

- attachment
- control
- desire for pleasure and avoidance of pain
- the need for self-enhancement and identity.

Neuropsychotherapy provides an additional lens through which to observe communication in the emergency context. It suggests that while repeated, punchy slogans are appropriate aids to memory during emergency, they are only likely to be effective when they sit upon a cognitive structure that connects to the core drivers in each individual and have been built earlier, during periods of relative calm. The present research project complements this body of knowledge by examining how people experienced emergency situations and disasters, how they made sense of their own stories, and what drove their decision to ignore warnings from authorities.

Methodology

The focus of this research is to examine people's stories and perceptions of their choices, thus a qualitative methodology was employed. In-depth, semi-structured interviews were conducted with individuals who had acted counter to official messaging. A regional NSW site was chosen that experienced two recent floods following an extensive drought period.

Participants were recruited via numerous methods including: (largely unsuccessful) attempts to recruit directly through emergency management agencies, a Facebook page, a letter of invitation circulated through networks via email, and an interview by a local radio station, which promoted the project on-air, resulting in a number of follow-up calls. After people were interviewed, they were invited to consider anyone who might also have a story to share, who could, if willing, contact the researchers. Chance encounters while conducting fieldwork also provided subjects, including a taxi driver and a café customer.

Fourteen people volunteered to share their stories, comprising seven men and seven women, with ages ranging from 25 to 61 years.

Two researchers were involved in data collection. Planning and discussion confirmed a unified method and initial interviews were conducted in tandem to calibrate the research process. During interviews, a process of deliberate disconfirmation was employed (Dick 1999). As each theme emerged the researchers would use the subsequent interviews to deliberately probe for disconfirmatory evidence, providing additional rigor for the qualitative study. Thematic analysis was then employed to examine and understand the data.

Findings and discussion

Decision-making in emergency and disaster

The results reported are part of a pilot project and therefore indicative. However there are some useful patterns worthy of reflection that echo work in the field of neuropsychotherapy (Allison & Rossouw 2013).

About the participants: who is resisting disaster communication?

Media reports and industry hearsay would suggest that the majority of people who act counter to emergency messaging are risk-taking males, aged 18-25. However only one male from this age group appeared in the study (a 25-year-old) and the mean age of participants was 40. Furthermore, far from being prone to high-risk activities, the majority of participants, such as Pamela, saw themselves as cautious and thoughtful.

> *'Afterwards I wondered why I did it, because I'm quite a sensible person. I don't take risks.'*
> (Pamela, aged 48)

Participants worked in a variety of mainstream occupations including teaching, farming, telecommunications, administration and firefighting. This suggests that resistance to communication may not belong to any particular cohort, but is person-specific and context-specific.

None of these people required intervention from emergency services personnel, and thankfully, none ended in tragedy. Although, as Natasha observes:

'It was an informed decision but it wasn't the right decision. It worked out all right – but it wasn't right.' (Natasha, aged 36)

As near-misses that 'worked out all right' these incidents are absent from statistics and media coverage suggesting that assumptions about target populations may miss large unrecorded sections of community and that safety messages are 'resisted' more frequently than is currently recognised. This gives additional impetus to better understand the circumstances surrounding these choices.

The pull of attachment

The most common driver exhibited was attachment, which refers to connection and commitment to significant others. This emerged in over 70 per cent of interviews, with people's attachment needs compelling their actions. What was surprising was that contrary to the researchers' expectations, the majority of stories were not cases of reaching loved ones at risk. Penny (aged 29), who said *'I wanted to get home to mum'* later revealed that her mother lived in another town. Action was not motivated by the urge to save someone, but the need to simply be with those they loved at a difficult time. For at least five of the participants this idea went even further: they actually increased their own risk in order to meet the goals of the person they loved.

'Other people were relying on her. When we got there I felt I had fulfilled my mission. I didn't care about the car. I didn't care about me …. I would've carried her through the water… the smile on her face made it all worthwhile.' (Christen, aged 61)

Attachment can include relationships with places, animals and groups of people. For one participant it was her son's attachment to the family pet (as well as hers to him) that guided behaviour.

'I didn't really look at the water around me. I just walked in, with my 11-year-old son alongside me… He kept saying, "Sooty is in the house drowning".' (Pamela, aged 48)

For another participant, his relationship with his house was of greatest value. He ignored evacuation orders and stayed, despite the evacuation of his pregnant partner. As he explained:

'I built it myself… I am quite invested in the house.' (Paul, aged 41)

The need for control

For one-third of participants what was important was the need for control: to be able to exercise agency, to act in accordance with their own perceptions and needs, and perhaps, to influence others.

'They wouldn't have a clue. The rules are worked out by people in Sydney who've never seen a flood. I live [here]!' (Simon, aged 25)

This links with concepts of self-efficacy and the extent to which people trust the institutions providing advice. There was little direct criticism of agencies, but a consistent need as expressed by Marion.

'We don't want to be told to go just because a river is at a certain height. We want the information and then be allowed to make our own decisions.' (Marion, aged 55)

Moving away from hardship towards pleasure

The idea of reckless pleasure-seeking is often discussed as motivation for resistance to messaging. Ubiquitous images of adolescents wake-boarding show up in the media during disaster coverage. In the present research this was not evidenced. However the third theme to emerge from people's stories was that of stress avoidance, which can be seen as the converse of pleasure-seeking. This was most clearly portrayed by a mother reflecting on her drive through floodwaters with her family in the car.

'I had a baby who was asleep but needed feeding and two girls in the back seat. We needed to get them home… Feeding [the baby] was big on my mind… a screaming child in the car would've been awful. Our priority was keeping everyone quiet and getting home to feed [the baby].' (Haley, aged 39)

There is a survival-driven inclination of humans away from things that are unpleasant towards things that give pleasure. For this mother, the floodwaters rising around her were seen as less stressful than her baby waking, hungry and screaming. This inclination also explains why people took risks and put themselves in harm's way, simply to avoid the banality of waiting for the disaster to be over.

'I didn't like the motel. I was tired. I was over it. So I packed up the car with muesli bars and water. I'd had enough of this whole flood thing.' (Natasha, aged 36)

The urge to move away from boredom and frustration was a stronger driver than consideration of any potential risk.

The power of identity

The fourth aspect that arose was that of 'identity'; people's sense of self, and their way of doing and perceiving things. This theme integrated and reiterated many aspects of the other core motivations.

Simon's identity as a farmer, his sense of self-efficacy and his capacity to make hard decisions, was evident.

'You know you've got to respect the flood … but farming is all about educated risk. If I was worried about every risk I wouldn't get out of bed in the morning.' (Simon, aged 25)

The power of identity was revealed within contradictions in people's accounts.

Christen revealed that she was actually very aware of the risk she had been prepared to take to get her daughter to a dance recital.

> 'My daughter was getting more and more agitated… I kept saying to her "I'll get you there I'll get you there." That's what the captain of the Titanic said, I think.' (Christen, aged 61)

Christen's knowledge of risk was, however, overwhelmed by her identity as a good mother, her attachment to her daughter, and her desire to move away from the stress of her daughter's agitation. These were the drivers that motivated her choices, her decision-making, and her actions.

Conclusion

This research speaks to a growing body of interest in emergency communication. As flagged in the literature review, there are numerous conversations about the appropriateness of certain strategies, message delivery, channels, intended audiences and, indeed, the messages themselves. Emergency agencies often create campaigns and messages based on significant audience analysis and strategic and marketing advice.

The problem for practitioners is that many communication strategies rest on assumptions that with the right information, constructed into simple, credible consistent messages conveyed with empathy and commitment to break through psychological barriers, that people will make the 'right' decisions. What this pilot project suggests is that the very question of what is 'right', sits at the heart of the decisions being made. It is not that people do not understand the danger, but rather that they have a different value system at play in assessing the risks. In fact several participants praised the various safety messages and emergency services agencies but simply didn't perceive any relevance to their own particular circumstances or needs.

Frustrations in disaster management often centre on assumptions that those who act against official warnings do so because they are ill-informed, thrill-seeking, or completely incapable of decision-making. The individuals in this study were not simply engaged in moments of spontaneous stupidity. They made conscious choices, weighed pros and cons, evaluated their options and made a decision in favour of urgent motivations of relationship, identity, the need to move away from stress and the need for a sense of control. 'Turn around, don't drown' and 'If it's flooded, forget it' were not powerful enough to override the more innate and often unconscious human drivers.

It is not that such messages are wrong – it would seem that for many people they work. However there are those who can't simply turn around and forget it. They need more than simple slogans. They need feasible options. They also need to understand these options at a deep level and have them integrated into their world view.

Further work is necessary to confirm the findings made here and to create solutions to the challenges arising. Perhaps however, if long-term messaging is constructed that acknowledges and responds to core needs and motivations, we have a better chance to keep people safer in ways that make sense to them.

References

Allison KL & Roussouw PJ 2013, *The therapeutic alliance: exploring the concept of 'safety' from a neuropsychotherapeutic perspective*, International Journal of Neuropsychotherapy, vol. 1, pp. 21-29.

Attorney-General's Department 2008, *Emergency warnings: Choosing your words*. Commonwealth of Australia. At: www.em.gov.au/Emergency-Warnings/Documents/EmergencyWarningsChoosingYourWordsEdition2.pdf.

Australian Red Cross 2010, *Communicating in recovery*. Carlton, Vic. At: www.redcross.org.au/communicating-in-recovery.aspx.

Bushfires and Natural Hazards Cooperative Research Centre (BNHCRC), *Call for Research Proposals*, 2013, p. 15. At: www.aemi.edu.au/bnhcrc/Web [17 May 2013].

Centers for Disease Control and Prevention 2014, *Crisis and emergency risk communication (2014 ed.)*. Atlanta, GA: US Department of Health and Human Services.

Dick B 1999, *Rigour without numbers*, Interchange, Chapel Hill, Brisbane.

FitzGerald G, Du W, Jamal A, Clark MJ & Hou X 2010, *Flood fatalities in contemporary Australia 1997-2008: disaster medicine*, Emergency Medicine Australasia, vol. 22, no. 2, pp. 180-186.

Gaillard, JC & Mercer, J 2013, *From knowledge to action: bridging gaps in disaster risk reduction*, Progress in Human Geography, vol. 37, no. 1, pp. 93-114.

Goode N, Spencer C, Archer F, McArdle D, Salmon P & McClure R 2013, *Review of recent Australian disaster inquiries*, Monash University, Melbourne.

Grawe K 2007, *Neuropsychotherapy: How the neurosciences inform effective psychotherapy*. New Jersey: Lawrence Erlbaum.

Mileti DS & Sorensen JH 1990, *Communication of emergency public warnings*. Landslides, 1(6).

Nicholls S & Healy C 2008, *Communication with disaster survivors: Towards best practice*. Australian Journal of Emergency Management, vol. 23, no. 3, pp. 14-20.

Palttala P, Boano C, Lund R & Vos M 2012, *Communication gaps in disaster management: perceptions by experts from governmental and non-governmental organizations*, Journal of Contingencies and Crisis Management, vol. 20, no. 1, pp. 2-12. DOI: 10.1111/j.1468-5973.2011.00656.x.

Paton D 2007, *Preparing for natural hazards: the role of community trust*, Disaster Prevention and Management, vol. 16, no.3, pp. 370-379.

Paton D 2008, *Risk communication and natural hazard mitigation: how trust influences its effectiveness*, International Journal of Global Environmental Issues, vol. 8, no. 1, pp. 2-16.

Paton D, Kelly G, Bürgelt PT & Doherty M 2006, *Preparing for bushfires: understanding intentions*, Disaster Prevention and Management, vol. 15, no. 4, pp. 566–575.