

ABSTRACT

Effective preparedness is often communicated as physical actions such as having a survival plan and an emergency kit or reinforcing, moving and clearing property. However, the physiological responses to an overwhelming threat can disrupt the best-laid preparations and plans. Psychological and emotional preparedness during the response phase of a disaster helps identify and manage fear to reduce the impacts on cognitive and behavioural functioning. Rates of psychological and emotional preparedness are generally lower than for physical preparedness. This presents particular challenges when communicating this type of risk. This paper reports on qualitative research with residents and agencies in south-east Queensland about what psychological and emotional preparedness means to them, what prevents people from engaging with this type of risk and how best to communicate it.

'That psychological bulls**t': surprising findings from community research are improving preparedness communication

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Introduction

Prior to and during threatening, high-risk situations such as a emergencies and disaster events, people can experience high levels of stress and fear that adversely affects adaptive risk perception, decision-making and attention needed to implement plans (Reser & Morrissey 2009). Threats may be overlooked because attention narrows, physical tasks take more time and there is a greater number of mistakes. Intrusive thoughts can distract people from the task at hand and fear can prevent them from remembering survival-related information (McLennan *et al.* 2011).

However, even in the face of such stresses, these effects of the autonomic nervous system on decision-making can be effectively managed, helping people make decisions about safety during disasters (Morrissey & Reser 2003). Psychological preparedness is:

...an individual's anticipated psychological and emotional ability to cope with the threat, uncertainty, unpredictability and confusion that may be experienced in the warning phase and at a bushfire's [or other disasters] point of impact.
(Boylan 2016, pp. 92-93).

A person who is psychologically prepared can have a general understanding of how an emergency situation might 'behave' and the associated risks. They will generally be willing to plan and prepare, anticipate how they can cope with the threat, be able to ward off negative thought patterns and feel they are emotionally supported (Boylan 2016). Being psychologically prepared is linked to greater physical preparedness as well as lower anxiety and greater confidence in adapting to the changing conditions (Every *et al.* 2016, Morrissey & Reser 2003).

Emergencies and disaster events are complex and challenging and the risks and desired responses may be difficult to communicate and can be plagued

with inconsistent use of terminology (Eriksen & Prior 2013). The term psychological preparedness is often used, but other terms including mental preparedness, mental fitness, emotional preparedness, psychological competency and psychological readiness are used. A further challenge is engaging people in an issue that may not feel relevant to them. While physical preparedness is relatively easily understood and conveyed, emotional and mental preparedness is perceived as 'touchy-feely', more complex, less useful and unfamiliar or alien. The question is: how then can we engage people in other aspects of preparedness in ways that are easy to understand and that encourage people to see its value?

Rather than repeat traditional ways of communicating (e.g. from 'experts' to the community) this research took a bottom-up approach. Residents and emergency services personnel in southeast Queensland were asked what they understood by the term 'psychological preparedness', what terms they feel comfortable with and who they would trust to communicate these ideas. It was important to reach people from various age groups and with different education backgrounds to explore the accessibility of current practices. The sometimes surprising, sometimes challenging responses are changing the way psychological preparedness is communicated to better reach people from diverse age groups and education backgrounds.

Method

Data were gathered via interviews and focus groups held in the Bundaberg local government area and in Brisbane in August 2017. Twenty-three residents of Bundaberg and its immediate surrounds were interviewed and 23 employees of emergency, disaster management or community support services in Brisbane participated in two focus groups. Ages ranged from 26 to 78 years with equal numbers of men and women. Participants were recruited using fliers, Facebook advertisements and by local residents and emergency service partners asking their networks of colleagues to participate. All interviews and focus groups were audio recorded.

The interviews and focus groups were semi-structured. Residents were asked for impressions of existing guides to emotional and psychological preparedness. The three guides used as interview reference materials were:

- a two-page text-based fact sheet describing emotional preparedness for cyclones and other disasters produced by the Queensland Government¹
- the *Psychological Preparedness for Disasters* guide produced by the Australian Red Cross that is a 16-page booklet describing how to prepare psychologically for an emergency using related disaster imagery alongside text-based information
- a four-page fact sheet produced by the Australian Psychological Society titled *Psychological Preparation for Natural Disasters*.²

Interviewees were asked to describe their responses to the language, imagery and structure of these materials as well as their comprehension of any central

messages, the intent of the guides, trust and credibility considerations and their perceived usefulness prior to a disaster experience. Interviewees were asked about the ongoing usefulness of the guides as well as what information they would like to see. Emergency service personnel were also asked about their understanding of psychological preparedness, the challenges they faced communicating this and what education they thought could be effective.

Qualitative data were examined using thematic analysis (Braun & Clarke 2006), a technique that involves de-constructing and interpreting the meaning of interview content and expression using multiple codes that identify patterns in content. This is repeated to condense codes and identify relationships between themes (Corbin & Strauss 2008). Analysis involved data familiarisation, broad theme generation, sub-theme identification and pattern description.

Findings

What's in a name: finding the right term

'Psychological preparedness' is currently the most widely used term to describe a person's capacity to anticipate and manage stress during stages of disaster warning and time of impact, particularly in research. However, other terms used in research and community education include psychological preparedness, emotional preparedness and mental fitness.

When participants were asked what term they preferred, the results were unanimous; 'psychological' is not a term with which they resonated.

*...it could be an old bloke that is reading that and he is going, 'psychological bullshit'.
(Female resident, 56)*

*Psychological, please take that out.
(Male resident, 67)*

The term 'emotional preparedness' had fewer negative responses. It was broadly appealing and was considered more relatable to by the participants.

*Most people probably would feel better about their emotions than psychological in the first place, it is just more of a normal word that people feel their emotions from something [...] Emotionally is probably easier to think about than your psychological preparedness
(Male, 46)*

*The psychology word is clinical. This is just emotional, everybody knows what that word means. And we can relate to it on every lives of our lives.
(Female resident, 78)*

1 Queensland Government fact sheet. At: www.bundaberg.qld.gov.au/files/Emotional_Preparedness_Brochure.pdf.

2 Psychological Preparedness for Disasters guide. At: www.redcross.org.au/files/RED_Prep_Psyc_Booklet_F.pdf.

This presents researchers and emergency services organisations with a dilemma; how can research findings and education materials that have used the term 'psychological preparedness' be conveyed to people who don't resonate with this term? This paper has used a combined term of psychological and emotional preparedness to illustrate the terminology challenges. This may not be workable in a community education setting. Better alternatives for referring to the psychological aspects of managing stress without using the term 'psychological' included terms like 'mind' or 'knowing'.

In mind and body. Keep it simple. And then you can either say 'well in mind' 'knowing what you need to do', 'knowing what is coming', or 'having an idea of what is coming'. 'Not allowing your imagination to go over the top'.

(Male resident, no age given)

I use a lot of 'head in the game', so I am touching on this idea that there is something else going on in here that is going to be a factor in whatever comes next
(Emergency manager)

We refer to as 'preparing their mind' so it takes away some of that stigma.
(Emergency manager)

Who you love: trusted sources of psychological preparedness

We asked participants which sources of information they trusted the most. The benefits of communicating any preparedness information through credible authorities are well established. However, who people trust is not always as expected. While the majority of the participants felt the Red Cross was the most trustworthy source for emotional preparedness information, the government was the least trusted source and additionally aroused some strong antipathy.

I think anything government-based is full of shit. [...] It is all fear tactics. [...] I just don't have faith in a lot of their stuff.

(Female resident, 40)

There's a lot of things that people don't like about our government. Yes, they try and prepare us and that kind of stuff, but the logo itself is not always trustworthy.

(Male resident, 41)

That is the government's thing. They do stuff because that is what would make their lives easier.

(Male resident, 26)

I would be wary of anything put out by government
(Male resident, 53)

This finding reflects other population trends that indicate record historical lows of trust in government. Global trends also show governments are the least trusted institution (Edelmen 2017). In Australia, levels of trust in the Australian Government have fallen steadily since 2010, reaching a low in 2016 when 29 per cent of people

felt the government can be trusted most of the time (Markus 2016).

In contrast to perceiving communication from government as reflecting the government's self-interest, the Red Cross was perceived as being experienced in working alongside the community 'on ground level' (i.e. trust was linked to action).

I would trust them [The Red Cross] more over any of the others, to be honest, because they are not someone that sits in an office behind walls and just delegates. [...] The Red Cross is more about people. People helping people, so these are the people that are on ground level, that actually deal with people and have a relationship with people more so and will do the dirty work. I see 'manage your feelings'. These are the people that do the caring.
(Female resident, 40)

Despite their *prima facie* expertise in relation to 'psychological preparedness' and in line with people's concerns about the clinical nature of the term, participants did not perceive the Australian Psychological Society to be a trustworthy source for information.

That [the Australian Psychological Society fact sheet] is coming from a clinical point of view.
(Female resident, 78)

The concerns people expressed about psychology reflect other research findings on trust. In an Australian study, psychology and psychologists were perceived as less accessible and practical for people facing emotional problems and less caring than social workers and counsellors (Sharpley 1986). Rather, people perceived as trustworthy those who had intimate experience of the situation, who worked alongside them like the Red Cross and the local council.

If you put the council one in front of me I would pick that one first because they lived it, they know it, they felt it.

(Female resident, 78)

For communicating psychological and emotional preparedness, using a source that people perceive as active, connected and caring is important.

Reaching young, old and everyone in-between

The primary resources for communicating psychological and emotional preparedness are brochures and websites. For residents who were older, the small size of the text on the brochures and websites made much of the information inaccessible as well as uninteresting.

I wish you had it in a bit bigger...because I forgot my glasses.

(Male resident, 57)

Complex language and long sentences were also inaccessible and uninteresting to many people. It was felt to be particularly problematic in reaching audiences not familiar with emergencies and from different educational backgrounds.

After the 2013 floods, a lot of people were saying that they didn't understand the technical jargon. If it is brought down...to a level they can understand, then they can learn from it [...] people have said to me after [community meetings], 'I didn't understand what you were saying because it was so technical'. (Emergency manager)

All the materials participants were asked to consider did not truly engage them across all ages and education backgrounds. Instead, participants wanted stories; audio and visual resources of real stories and real events that could help them and others 'feel' what might happen to them in a similar situation.

The things we found really useful is sharing anecdotal stories [...] people go 'ah, hang on I can relate to that'. [...] We have found that by sharing those anecdotal stories...actually it resonates with people and it turns it into being real, something that they have never experienced before as being real (Emergency manager)

That sound [of a category five cyclone warning] for 30 seconds for someone just to understand what it is going to be like to be in there. Those sorts of things, I think is the only way really to start doing this, the emotional side of it. (Emergency manager)

Rather than 'facts in brochures', people also suggested using audiovisual material disseminated through forums like social media.

I would go more video. As well put together as those [brochures] were, it's human nature for people to be 'I don't need that'. [...] It would probably be more useful to have a different media type and have more human interaction with it because people will more empathise and respond to that. (Female resident, 38)

There are other avenues that I feel would get that out there better...you could put it on ads or whatever, Facebook or YouTube. [...] A short 10 or 15 second ad on YouTube or whatever...if I see a 30 second long ad I will skip it...but if it is a 10 or 15 second one usually I will sit through it, usually I will wait. [...] Just enough to pique someone's interest, to make them go 'maybe I should, maybe I should think a little bit more about this'. (Male resident, 26)

The importance of using imagery and videos was linked to the need to increase the likelihood that people engage with the issues. Participants felt that emotional preparedness was more challenging to convey than physical preparedness because it requires people to anticipate the physical and sensory stressors of a natural disaster.

People don't know what they don't know. (Emergency manager)

I think it is a really difficult task that we have to try and equip people with the tools and the knowledge that they need to be psychologically prepared for

something that they have no idea what is actually going to look and feel like. (Emergency manager)

The community doesn't understand or see what state they need to be in until they are actually impacted, and then it is too late. [...] It's not real. (Emergency manager)

Improving psychological and emotional preparedness communication

The research described here has changed the practices of the emergency managers who were partners in this study. While traditional approaches such as brochures and text-based web information remain an important part of practice, it is clear that a multi-modal approach, similar to the findings of this research, will help a greater number of citizens.

The Local Disaster Management Group (LDMG) that was a partner in this research, now use better-designed and simpler brochures based on the findings. Existing locally created paper-based products have been redesigned to reduce jargon, increase font size and integrate relevant imagery. The emergency services partners in this research now use non-clinical language when communicating psychological risks and preparedness.

Locally created content now explicitly includes 'emotional preparedness' as an important focus area. Local practitioners are creating a narrative with the community, especially vulnerable groups, that includes what happens in a person's mind and emotions when disasters threaten. Specifically, emergency management staff are helping people 'anticipate stress', 'recognise feelings' and 'manage reactions' as much as they are talking about what to put in an emergency kit or what their evacuation trigger might be.

Enhancing the emotional preparedness of disaster and emergency services personnel has also emerged as a priority. For example, while many of the Bundaberg LDMG members are experienced in emergency management and often have peer-support mechanisms available through their organisations, the greater complexity that a disaster brings magnifies uncertainty, stress and anxiety. Disasters are not the same as emergencies (Quarantelli 1997). Thus, LDMG exercising now includes a component that encourages members to anticipate how they may react emotionally, recognise the feelings as they emerge and to have a plan for how they will manage those reactions. A simple example used in a recent tsunami exercise invited participants to consider whether graphic imagery presented to them effected their emotional state and if that impacted on, say, the rate at which they spoke or the tone they used when exchanging information. An awareness of these effects helped LDMG members moderate their communication styles. This not improves communication within the LDMG and helps LDMG members feel they have control in a stressful environment. This is a positive psychological outcome in and of itself.

It was apparent from the research that people from local organisations are most trusted when delivering disaster-

related information. Thus, local emergency managers have ramped up the co-delivery and co-facilitation of information with local non-government organisations. Representatives from agencies that include Uniting Care, Lifeline, Australian Red Cross and the Salvation Army, with local council officers and regional ABC Radio staff have increased the work they do together, which includes public presentations, media broadcasts and interviews and door-knocking.

A very favourable outcome occurred when Lifeline counsellors were involved in the provision of flood mapping information to vulnerable people. These counsellors helped break down barriers that existed between the community and 'officials' and reduced the technical nature of previous communication efforts. The community had greater confidence that the information was useful. The effect of this activity is measurable in that there has been an observed 20-fold increase in the use of Bundaberg Regional Council's interactive flood mapping in the lead-up to significant rain events.

Conclusion

Findings that visuals and stories are powerful methods to reach the young, old and in-between is compelling for emergency planners. This research has helped emergency managers realise that they need to 'put on a show' of localised resilience that is consistent, factual and engaging, and perhaps entertaining, in order to attract and hold the attention of the community. As such, the Bundaberg Regional Council upgraded its audiovisual equipment to include a large-format interactive touch screen. This has become a vital tool for formal presentations as well as television and internet presentations. Lessons from commercial TV have informed how visual display equipment is used. For example, during the 2018 cyclone season in Queensland, the Bundaberg Regional Council overlaid animated weather models and Bureau of Meteorology cyclone tracking maps on local maps. This type of content is used by regional television stations on the evening news and is popular on platforms such as Facebook Live.

The disaster resilience message is penetrating deeper into community than previously experienced. An offshoot of this study is that emergency managers may need to establish a public profile as sections of communities want to feel that they know and trust the people who are a source of truth during an event. This study shows that ways the ways delivery of emotional preparedness are changing to better involve and prepare communities to build resilience.

References

- Boylan 2016, *The development and validation of the Bushfire Psychological Preparedness Scale*. Phd Thesis, University of Western Australia.
- Edelman 2017, *2017 Edelman Trust Barometer: Global annual study*. At: www.edelman.com/trust2017/.
- Eriksen C & Prior T 2013, *Defining the importance of mental preparedness for risk communication and residents well-prepared for wildfire*. *International Journal of Disaster Risk Reduction*, vol. 6, pp. 87-97.
- Every D, Reynolds A, Clarkson L, Bearman C, Matthews R, Haigh L & Dawson D 2016, *Community Experiences of the Sampson Flat Bushfire*. South Australia Country Fire Authority.
- Markus A 2016, *Mapping social cohesion: The Scanlon Foundation surveys 2016*. At: www.scanlonfoundation.org.au/research/surveys/.
- Morrissey S & Reser J 2003, *Evaluating the effectiveness of psychological preparedness advice in community cyclone preparedness materials*. *Australian Journal of Emergency Management*, vol. 18, no. 2, pp. 46-61.
- Quarantelli EL 1997, *Ten criteria for evaluating the management of community disasters*. *Disasters*, vol. 21. No. 1, pp. 39-56.
- Sharpley CF 1986, *Public perceptions of four mental health professions: A survey of knowledge and attitudes to psychologists, psychiatrists, social workers and counsellors*. *Australian Psychologist*, vol. 21, no.1, pp. 57-6

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