



RISK AND PROTECTIVE FACTORS FOR BUSHFIRE RESILIENCE AND RECOVERY

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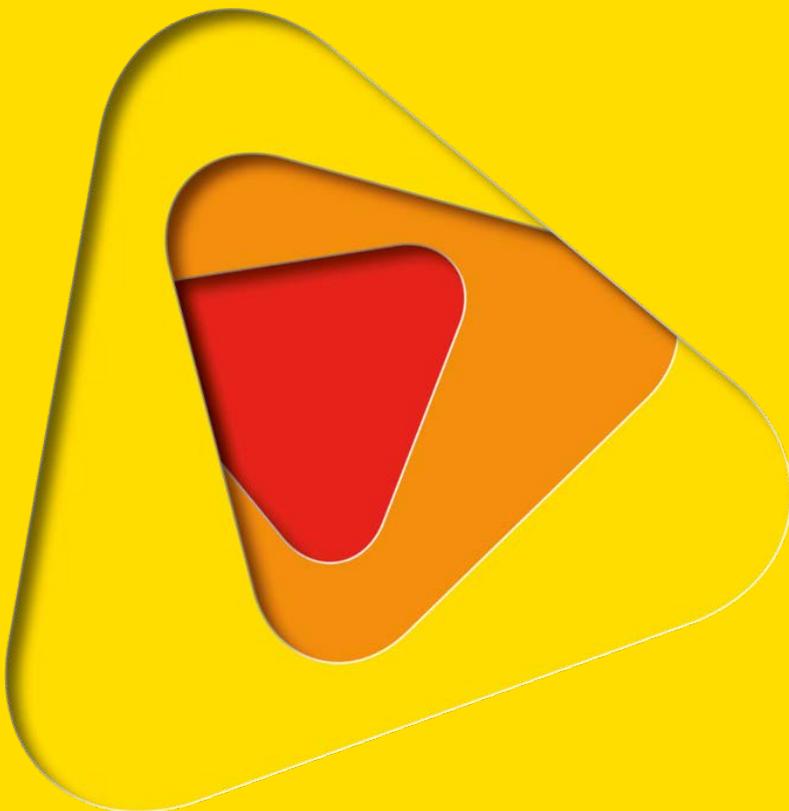
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BACKGROUND

Building an understanding of resilience risk and protective factors is critical to the development and delivery of disaster response and recovery services. The impact of disasters on mental health and on social disruption has been demonstrated [1, 2]. However, there is limited understanding of the interplay between these factors because most of the research has tended to focus on either mental health *or* community impacts, in the short term period after a disaster. Individual capacity to adapt to the trauma event and the dislocating impacts of the disaster is likely to be dependent on the interrelationship between individual psychological functioning, community functioning and social cohesion. This will shift over time with different individual trauma recovery trajectories, changing community profiles, and social networks evolving through the recovery period. This interaction has not been well-captured in disaster research to date. In addition, there is a focus on outcomes for adults in disaster research, with a relative neglect of children and adolescents. This requires further examination because of the potential impact of trauma on the mental health, development, academic and social outcomes for children and young people, and opportunities to promote positive outcomes through community initiatives [3].

The Beyond Bushfires study aims to support the development of evidence-based strategies for promoting mental health, wellbeing and social inclusion of individuals and communities in regions affected by bushfires. The research achieves this by identifying social and community-level factors associated with individual recovery from the recent bushfire disaster in Victoria. This presentation will report on the findings of the Beyond Bushfires study on the impacts of the Black Saturday disaster experience and what made a difference to individual mental health and wellbeing afterwards.

‘BLACK SATURDAY’ FIRES

In February 2009, bushfires raged across the State of Victoria in southern Australia, with the worst occurring on Saturday 7 February, resulting in the ‘Black Saturday’ descriptor. This disaster represents one of Australia’s worst with 173 fatalities, 3,500 buildings damaged or destroyed, significant impact on high value natural environments, and massive adverse impact on community infrastructure [4]. Two townships were completely destroyed, and others had significant damage.

BEYOND BUSHFIRES

The Beyond Bushfires: Community Resilience and Recovery study is a large-scale, multi-method longitudinal survey of community and individual health, wellbeing, and social connectedness in the wake of the ‘Black Saturday’ fires (www.beyondbushfires.org.au) [5]. It involves academic, community, government, emergency and service provider partners and recruited over 1,000 participants originating from 25 bushfire-affected communities in ten locations in rural and regional Victoria. The study explores the medium to long-term impacts of the Victorian 2009 bushfires on individuals and communities. A range of communities was selected to include high-impact (many houses lost plus fatalities), medium-impact (a small number of fatalities or no fatalities but significant property damage), and low-impact (no evidence of fires being present). Community diversity was also sought in terms of population sociodemographics, size of community, and distance from the capital city of Melbourne. The Beyond Bushfires study team commenced regular community visits in 2010 to ensure an understanding of local issues and contextual influences. A survey was administered in 2012 and followed up in 2014 (2014 results not available for this presentation), and in-depth interviews were conducted in 2013/14.



SURVEY

The Beyond Bushfires survey included the following domains, in addition to demographics: individual & organisational support networks; fire exposure; various mental health scales; resilience; attachment; general health; wellbeing; and community hope. The survey participants included 1016 adults (612 females, 404 males) living in the selected communities representing 16% of those eligible. Relative to census data, the sample was disproportionately older, female, and more educated than the general population, which is not unusual in research samples. For further information regarding the characteristics of this sample as a whole, including rates of mental health conditions, see Bryant et al [6]. Methods of analyses varied according to the issue being investigated. They included descriptive statistics, structural equation modelling and social network analysis.

QUALITATIVE INTERVIEWS

The in-depth interviews involved a sub-sample of the survey participants who indicated a willingness to be interviewed. They were purposively selected from high-impact communities with a variety of perspectives sought in terms of demographics and residential location. Interviews were conducted with 35 participants ranging in age from 4-66 years. Participant-guided mobile methods were used to explore participants' current sense of place and community. They involved an in-depth interview with the participant, combined with a walking or car driven tour around their property or local area, guided by the participant, to view and discuss places, things and events of importance to them. Detailed memos were recorded by the interviewers immediately after the interviews to capture initial impressions and learnings from the interview [7, 8]. This supported a subsequent thematic coding of the transcripts jointly by the three interviewers, with differing interpretations discussed until consensus was reached. Coding was conducted concurrently with data collection to allow for exploration of emerging themes through subsequent participant recruitment and interview discussions [9]. Categorized data were then compared and contrasted to develop a conceptual understanding of participant perspectives.

FINDINGS

Extensive findings are emerging from the Beyond Bushfires study relating to the impact of the bushfire experience and identification of factors influencing recovery. This presentation will provide an overview of the findings to reflect patterns of risk and protective factors likely to be relevant to emergency response and recovery services.

The study results show the disaster experience itself can have a direct and prolonged impact on mental health and wellbeing. Several years following the Black Saturday bushfires most people were not reporting severe psychological distress. However, a significant minority were showing symptoms of mental health disorders (25.6% in high-impact communities, 17.2% in the medium-impact and 11.7% in low- impact communities). Severe psychological distress was predicted by fear for one's life in the bushfires and death of someone close. Experiencing anger and major life stressors (e.g. change of income and/or accommodation) also contributed to the mental health impacts of fire experiences. Separation from close loved ones, during and immediately after the fires, was a risk factor for mental health problems, particularly for people who tend to feel anxious about their relationships. Age, gender and living circumstances influenced how the disaster and its aftermath were experienced. Importantly, this means that household and/or family members often differed in their responses to their bushfire experience.

A particularly strong finding in terms of recovery was that social ties matter. People with larger social networks were more likely to report loss of friends and extended family. However, close emotional



ties, social networks and involvement in local community groups and organisations all contributed to resilience and recovery. People who were the most affected by the bushfires in terms of loss were more likely to move to a new community, with mixed experiences. For those who stayed in their community there was generally a stronger sense of community connection. For those who moved to a different community, the impact of subsequent financial and relationship difficulties was often lessened.

CONCLUSIONS

An overview of all of these findings will provide insights into the pattern of influences on resilience and recovery, with implications for future policy and service delivery.

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