

Householder bushfire preparation: decision-making and the implications for risk communication.

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Deciding to Prepare

How the individual or family unit perceives risk and reacts to a threat such as a bushfire is complex, dependent on many factors, and poorly understood. Accordingly, developing understandable and meaningful bushfire risk communication information must address individual differences and provide the tools or skills needed by the individual/family unit or community to better prepare given their particular circumstances.



Results

Nineteen semi-structured interviews were conducted in 2006 with consenting survey respondents to explore their preparedness reasoning. Qualitative analyses of these interviews (QSR NVivo 7) yielded a theoretical model (Figure 1) representing a generalised process householders

employ in reaching a decision to prepare or not.

Confirmatory SEM on the substantive model using the 2006 survey data (n=482) showed a strong fit to the model ($\chi^2=8.5$, $df=10$, $p>0.5$, $RMSEA<0.001$, $CFI=1.000$). The model was successfully validated using data collected in 2007 ($\chi^2=10.2$, $df=6$, $p>0.5$, $RMSEA=0.043$, $CFI=0.99$). Values in black (Fig. 1) represent relationship weightings between variables. Values in blue indicate the amount of variance described for each variable.

Factors that increased the likelihood of choosing to prepare included 'Positive Outcome Expectancy', 'Sense of Community', 'Collective Problem Solving' and 'Intention to Prepare'. 'Negative Outcome Expectancy' and 'Preparedness Inhibitors', such as a lack of time or money reduced the likelihood that householders would prepare for bushfire.

Research Objective

This research aimed to improve the bushfire risk communication process by examining and modelling the most important factors that influence the decision to prepare for bushfire.

Methodology

The research was driven by a qualitative methodology of semi-structured interviews to develop a substantive model of bushfire decision making. This model was tested and validated using quantitative data collected using a longitudinal bushfire preparedness survey distributed to peri-urban residents in Hobart, Tasmania.

Implications for Risk Communication

1. Risk communicators must engage with the community - building sense of community, trust, and collective preparedness.
2. Fostering positive preparedness outcome expectancy attitudes among peri-urban residents will encourage more widespread preparedness.
3. Risk communicators should acknowledge that information sharing can be as useful as information dissemination.

Figure 1: Bushfire preparedness decision making process

