CHILD-CENTRED DISASTER RISK REDUCTION:
A LONGITUDINAL INVESTIGATION OF BUSHFIRE EDUCATION

bushfire&natural HAZARDS CRC

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While it is often assumed that children exert influence over household bushfire preparedness after participating in bushfire education, there is a dearth of systematic or controlled longitudinal empirical research supporting this assumption. The aims of this research project are to establish an evidence-base for a effective, school-based bushfire education programs with children. This includes: quantifying the impacts on children's knowledge and skills and behaviours, and household bushfire preparedness, and identifying the specific mechanisms within school-based bushfire programs that are instrumental to household behaviour change in regards to preparedness, mitigation, and response to bushfire events.

THE PROGRAM

Harkaway Primary School is located in a very high fire risk rural township, in Victoria. The school sits among heavily vegetated landscape, has limited road access, no mains water supply, and is in close proximity to extreme bushfire risk areas. The Black Saturday fires in 2009 came within 400 meters of the school and several of the school's families were directly affected.

Beginning in October 2014, the whole school community will participate in comprehensive, whole school, four year, cross-curricular, bushfire education program on bushfire risk, preparedness and mitigation which is developmentally graduated in complexity and incorporates parent-child interaction. The program will be developed in consultation with the end user agencies and professional teachers. End users of this project include:

▸ Queensland Rural Fire Service

▸ Victorian Country Fire Authority

▸ New South Wales Rural Fire Service

▸ South Australian Country Fire Service

▸ Tasmania Fire Service

▸ Western Australia Dept. of Fire and Emergency Service

RESEARCH QUESTIONS

▸ What curricula and pedagogy most effectively build children's knowledge and skills in the domain of bushfire mitigation and preparedness?

▸ How do children influence household preparedness and mitigation during and after participating in bushfire education?

▸ What specific mechanisms within school-based bushfire programs are instrumental to household behaviour change in regards to preparedness, mitigation, and response to bushfire events?

▸ What is the impact of children's exposure to bushfire education on bushfire related fears and anxieties and more general measures of psychological well-being?

▸ What training, resources and support do teachers require to effectively deliver disaster risk reduction education (DRRE)?

END USER STATEMENT

School-based bushfire education is potentially a very cost effective strategy for increasing community resilience to bushfire risk. This research can show children to be effective risk communicators and catalysts for increased household preparedness for bushfires.

METHODOLOGY

This research project will employ a Participatory Action Research (PAR) methodology and data will be collected using both quantitative and qualitative design and methods with students, teachers and parents to investigate and evaluate the program impacts.

The research will begin with a Delphi Inquiry to establish expert consensus on the key messages for children's primary school bushfire education, upon which the program theory, curriculum, outcome indicators and evaluation framework will be developed.

Educational activities targeting particular outcomes will be selected, administered, and tested against the desired outcomes and followed up with qualitative inquiry into how and why the activity had the impact that it did.

The results of these inquiries will provide data to address the research gap identified by Johnson et al. (2014) on the instrumental activities and mechanisms of change within school based DRRE that improve individual and community disaster resilience.

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