

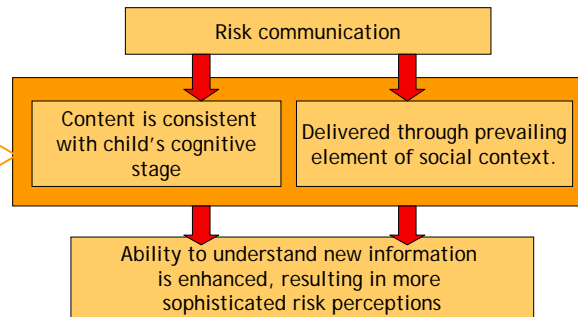
What Do Children Understand About Bushfire Risk?

Briony Towers and Douglas Paton School of Psychology, University of Tasmania

Kevin Ronan School of Psychology, University of Central Queensland

School based bushfire education programs offer a useful approach through which to increase community awareness of bushfire risk and mitigation. To be most effective, however, these programs must address two important issues. Firstly, children's understanding of risk and mitigation is influenced by age-related changes in cognitive abilities. Secondly, the acquisition of knowledge about risk and mitigation takes place in a social context, with some elements of social context exerting more influence than others. This research is exploring both of these issues as they apply to the bushfire context.

The rationale for examining age-related changes in children's understanding of bushfire risk and mitigation derives from the health psychology literature which demonstrates that as children develop, their perceptions of illness causation and prevention change systematically. This research also shows that education programs are more effective when these age-related shifts in children's perceptions are accommodated.



The health psychology research also shows that when education programs capitalise on prevailing influences within the child's social context, children's conceptions of causality and prevention are further enhanced. Elements of social context that might contribute to children's understanding of bushfire risk include the school, the family, and the peer group.



Research Aims

- Identify age-related changes in children's understanding of bushfire risk.
- Identify the role of the school, the family, and the peer group in the development of this understanding.
- Integrate these findings in a theoretical framework that can be used by agencies to develop school based bushfire education programs.



Preliminary Findings

In the lead-up to the 2006/07 bushfire season, 41 focus group interviews were conducted with primary and high school students living in bushfire prone areas across Tasmania. Topics explored included the factors that contribute to and mitigate bushfire consequences and the role of social context in the identification of these factors. Preliminary analyses have identified several major themes relating to perceptions of bushfire risk and mitigation. These themes will be explored in more detail in more focused interviews to be conducted in the lead-up to 07/08 and 08/09 bushfire seasons. Detailed analyses of the more focused interview data will attempt to elucidate age-related changes within these themes.

Factors used to assess risk

Building materials

"And also if you have a wood house, you might be better with a brick house or something else because fires can actually burn wood" 5 yrs Bicheno

"I'd be okay. Our place is brick and there's no way bricks can burn" 11yrs Huonville

"I wouldn't be able to stay. My house is wood so I'd be bugged" 16yrs Huonville

Vegetation

"My house is safe, because it's far away from trees. We've got some trees in the backyard but it's far away from lots of trees" 5yrs Bothwell

"I reckon it'd be safe. It's an urban area. There's no major forest for 400m each way around the house" 16 yrs Huonville

Leaf Litter

"My house isn't very safe cos there's tonnes of dried leaves everywhere" 11yrs Huonville

Drought and dryness

"Everything's dry because of the drought so it's so it's much easier to catch alight" 11 yrs Bothwell

"Around our place is pretty green and green grass doesn't burn so it couldn't get to us" 14 yrs Huonville

Managing Risk: Preparing

Rebuild with brick

"Cut the roof off and then build a brick one" 5yrs Bothwell

"Build another shed, not a wood one, steel or brick" 10yrs Huonville

Reduce vegetation around the house

"Cut down that tree. If the bushfire goes up that tree then it can fall down and go onto the house and then it will start spreading everywhere on top of your wood house" 7yrs Huonville

Keep vegetation green

"Hose our lawn to keep the lawn nice and green" 8yrs Bothwell

"We've got gums and pines and our boss said we can't cut them down so we just keep them really green and put sprinklers on them all the time" 11 yrs Bothwell

Clear away leaf litter

"In bushfire season you've gotta keep your house tidy and stuff. Clean up fallen leaves" 16yrs Huonville

"Gotta get the leaves off the gutter cos they would catch alight" 9yrs Huonville

Mow lawns

"I always get the whipper snipper out and cut all the grass" 11yrs Bothwell

Managing Risk: Emergency Response

Fight the fire

"Try and put buckets of water on it and so if you have a hose, try and put your hose on it. Put the water on it with the hose" 6yrs Bothwell

Call the fire brigade

"Try and protect your house by ringing up firemen and saying where it is and the firemen will come and get the bushfire" 6yrs Bothwell

Evacuate late

"When there's a bushfire you should evacuate when it's caught your house alight"
 "No, when it's nearly about to hit your house not when it's on it. When it's got maybe the other houses alight or it's about 100m away" 9yrs Huonville

"I'd stay and fight until the final hour, when it's actually at the front door step"
 "Yeah, that's when you get in the car and just go" 16yrs Huonville

Undertake emergency house fire plan

"Crawl down low and find the nearest exit or if the doors hot there you get out the window" 9 yrs Huonville

"We all have to get out of the house and meet at the meeting place at the trampoline and wait for the firebrigade" 9yrs Bicheno

Influence of social context

Most knowledge has been garnered from Firefighter visits to school

"I think a few years ago we had fire safety and they talked about bushfires and what we should do if there was one. Like we should evacuate and we should wear protective clothes" 9yrs Huonville

"Well, the firefighters come to the school and they talk to us I think each year and after our teachers usually give a good talk about fires and we do some work about it and some research" 9yrs Huonville

However, children say these visits have focused on house fire safety
 "But yeah they did really focus that on housefires not bushfires. So apart from the tennis ball in the gutter thing there's nothing else really that we were taught" 15yrs Huonville

Discussions within the family appear to be more common when there are bushfire survivors in the family
 "Yeah my granddad was telling me about the 67 fires. He actually heard it coming before he saw it and it was just a series of sort of boom boom boom and it was like a fire ball that was jumping from tree to tree" 16yrs Huonville

Very few children, across age-groups, reported discussing bushfire risk or mitigation with friends.