What Do Children Understand About Bushfire Risk?

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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.

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” 16 yrs Huonville
  - “I wouldn’t be able to stay. My house is wood so I’d be buggered” 16 yrs 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” 5 yrs 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” 14 yrs 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” 5 yrs Bothwell
  - “Build another shed, not a wood one, steel or brick” 10 yrs 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” 7 yrs Huonville
- Keep vegetation green
  - “Hose our lawn to keep the lawn nice and green” 8 yrs 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 Huonville
- Clear away leaf litter
  - “In bushfire season you’ve gotta keep your house tidy and stuff. Clean up fallen leaves” 16 yrs Huonville
  - “Got to get the leaves out of the gutter cos they would catch alight” 8 yrs Huonville
- Mow lawns
  - “I always get the whisper snipper out and cut all the grass” 7 yrs Bothwell

Managing Risk: Emergency Response
- Fight the fire
  - “Try and put buckets of water on it and if you have a hose, try and put your hose on it. Put the water on it with the hose” 6 yrs 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” 8 yrs Bothwell
- Evacuate late
  - “When there’s a bushfire you should evacuate when it’s caught your house alight” 8 yrs Bothwell
  - “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” 9 yrs Huonville
  - “I’d stay and fight until the final hour, when it’s caught your house alight” 9 yrs 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” 9 yrs 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” 9 yrs Huonville
- “Well, the firefighters come to the school and they talk to us and 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” 9 yrs 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” 15 yrs 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” 16 yrs Huonville

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