Bushfire Risk Perception: Perspectives of Children

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Research on risk communication indicates the importance of tailoring messages to fit the perspectives and cognitive capabilities of recipients. This research is investigating children's perspectives on bushfire risk so that agencies can tailor the content of school based bushfire education programs to fit with children's cognitive capacities, promoting the development of accurate risk perceptions, and by extension, increasing opportunities for the adoption of protective behaviours.

Assessing the risk

When assessing bushfire risk for their own homes, children focus their attention on two major categories:

1. Physical exposure factors: Combustibles on or around the house, e.g. leaves, wood, grass, plants, rubbish.

"We have a big tree right next to the house and if it catches on fire it will land on the house and start a fire" ~7yrs, Warrandyte

2. Protective factors: Non-combustible physical barriers that would stop a fire reaching the house, e.g. rivers, bricks walls, roads.

"If my house didn't have stone walls and rocks all around it, then yeah, it'd burn"

~7yrs, Warrandyte

"Near my house, not that far away there's a small river going past and it would probably stop there if it came from that way" ~10yrs Warrandyte

Implications for education

This disconnect has the potential to undermine the success of school based bushfire education. A major predictor of preparedness levels amongst adults is the expectation that preparing will effectively mitigate losses. Should the same apply to children, effective education programs will need to facilitate the development of connections between perceptions of exposure and protection and predictions about potential outcomes.

Ongoing research is exploring the conditions under which children are able to make these connections so that these can be applied in the design and delivery of better bushfire education.

Preparing the home

Children propose numerous measures that could be undertaken to protect their homes from bushfires. Relating directly to their initial risk assessments, these measures focus on:

1. Reducing physical exposure through the removal of combustible fuels

"I would clean up all the leaves, clean out the gutters, cut down a few trees that are close to the house and mow the lawn" ~8yrs, Warrandyte

2. Increasing protection through the building of noncombustible physical barriers such as brick houses, brick walls, metal fences, and waterholes.

"Bricks can't burn so you could block it with bricks. You could make a wall out of bricks"

~6yrs, Warrandyte

"Make a waterhole in front of your driveway. When the fire comes it should get sucked up into the waterhole and stop the fire"

~9yrs, Warrandyte

Efficacy of preparing

When children make predictions about what would happen to their house if a bushfire actually passed over, they disregard the pre-existing physical exposure and protective factors and levels of preparedness and conclude that their house will inevitable be destroyed.

"Even if you do all that stuff, the fire is powerful enough to absorb through the walls... And the fire's gonna be more powerfuller and burn the house down"

~8yrs Warrandyte

There seems to be a disconnect between children's understanding of exposure and protection on the one hand and consequences on the other. The only factor they consider when determining the consequences for the house is the presence or absence of fire alone. This type of thinking is characteristic of primary school aged children whose less sophisticated cognitive abilities prevent them from considering multiple variables when forming hypotheses.

