

# Educating Children About Bushfire Risk and Mitigation

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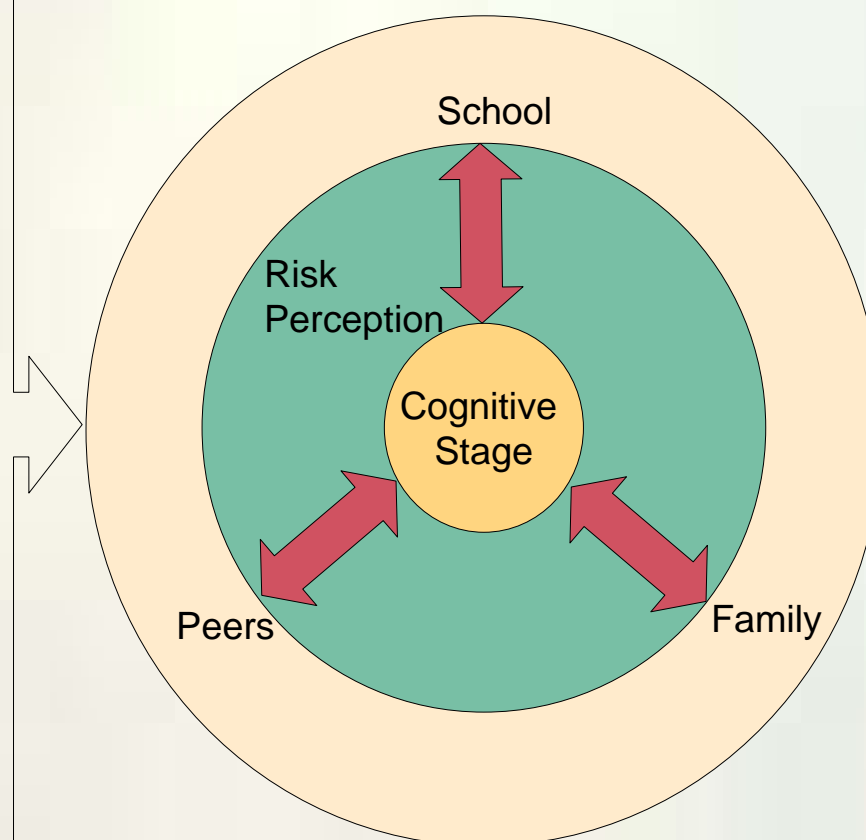
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Recent reports (e.g. COAG) identified a need for more effective risk communication strategies to increase levels of awareness and preparedness in areas susceptible to bushfires. Schools were identified as a major resource for pursuing this objective. However, to utilise this resource effectively it is necessary to understand how children perceive bushfire risk and mitigation, raising two significant issues. Firstly, children's understanding of concepts such as causality and prevention are strongly influenced by age-related changes in cognitive abilities. Secondly, conceptual understanding is strongly influenced by the social context in which it develops. This project will develop a comprehensive theoretical model of bushfire risk perception that integrates cognitive and social perspectives. This model will provide bushfire management agencies with an evidence-based framework within which to design and deliver risk communication programs.

The rationale for examining age-related changes in children's understanding of bushfire risk and mitigation derives from research demonstrating that as children move through childhood and adolescence their concepts of causation and prevention change in systematic ways. These concepts significantly affect risk perception and the kinds of preventive processes children can understand and act on.

Piaget's theory of cognitive development describes cognitive development as progressing through stages, each marked by progressively greater capabilities to understand causation and prevention. This provides a framework for modeling risk perception & communication.

Piagetian theory, however, does not describe cognitive development beyond adolescence, so it must be complemented by other work if a comprehensive model of bushfire risk perception is to be developed.

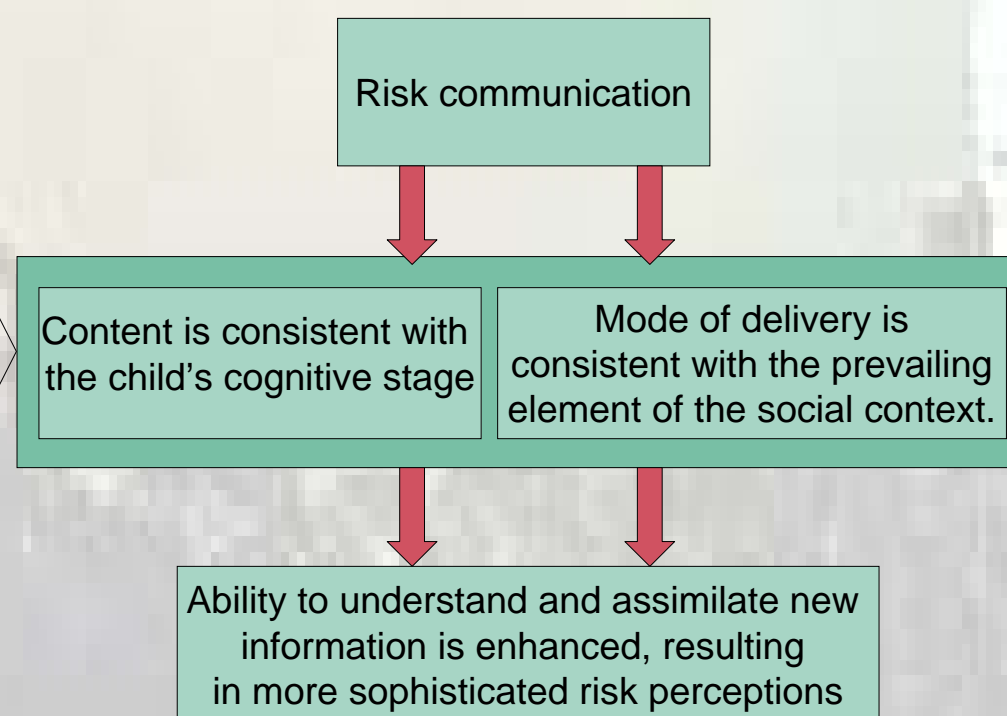


Another limitation of Piagetian theory is its focus on the individual. An extensive literature demonstrates the importance of the social context in conceptual development in a diverse range of domains, including risk perception.

Three elements of social context that can be hypothesised to contribute to children's understanding of bushfire risk and mitigation are the school, the family, and the peer group. An important consideration in the analysis of social context is that the relative influence of each element is not static, but changes throughout childhood and adolescence.

It must also be noted that familial influences on knowledge acquisition are not unidirectional. That is, not only do parents influence their children, but children also influence their parents. This requires investigating children, their parents, and the family context collectively.

By identifying age-related changes in children's understanding of bushfire risk and mitigation it will be possible to accommodate these changes in risk communication programs. A significant finding to emerge from research on health-related risk communication and road safety education is that children's concepts of risk and mitigation are considerably enhanced when programs accommodate their cognitive developmental stage. Moreover, when this occurs, actual behaviour change is more likely.



Research on health-related risk communication and road safety education has shown that children's concepts of risk and mitigation are further enhanced when the mode of risk communication capitalises on prevailing influences within the social context. Identifying the social processes through which children construct their understanding of bushfire risk will enable risk communication to be embedded within these processes, creating more opportunities for risk perceptions to be positively influenced.

## Aims

- Identify age-related changes in children's understanding of bushfire risk and mitigation.
- Identify the role of the school, the family, and the peer group in children's understanding of bushfire risk and mitigation.
- Extend the analysis of age-related changes and social context into adulthood by studying parents.
- Integrate social and cognitive perspectives in the development of a comprehensive, theoretically robust model explaining bushfire risk perception over the lifespan.

## Methodology

Following interviews with children, interviews will be conducted with their parents to explore how children influence parental risk perception and vice versa. For younger children, data will be collected by engaging them in group discussion of bushfire scenarios which will be led by two puppets. This approach to interviewing younger children provides a context in they are more likely to demonstrate their knowledge and understanding.