# Children's understanding of natural hazards in Christchurch: reflecting on a 2003 study

David Johnston, Kevin Ronan and Sarah Standring revisit their 2003 study and reflect on its continued relevance 10 years on.

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# Children's understanding of natural hazards in Christchurch, New Zealand

By Kirsten Finnis, Sarah Standring, David Johnston, Kevin Ronan

### Abstract

Children need to understand and by prepared for natural Facade neems as much as adults. Children are witten of hasted education, having the ability to obcrast freed encount them. This study inestigated natural hasted into proceptions, levels of preparations of nick proception, levels of preparations of children from a school in Christichusts. New Zealand. Although facand education programmes had level attended by a majority of the children facand awareness was only far and reported levels of hosochild preparedness were low. Continuing hasted, aducation is readed to immers understanding of focuseds and to improve boostendig preparation in the Christichusts.

### Introduction

This is a study of children's natural hazord rish purespicions, levids of preparations and participative in propagations, boths of preparations and participative in observiors, programs. Coliforn here toffeness on their communities, these toffeness on their communities, have administ as which control defence preparations through tensioning them with humovered controls of an adjustment, or greated discussion. Studies evaluating the effectionness of using studies to premiar communities, or greated discussion. Studies evaluating the effectionness of using studies to premiar communities, or shoot corrections to texture awareness endore promote behavioural change among those that studies and their lamifies (Europheed et al., 1990; Mellevitt and Challers, 2000); butter provent this institute to be sectorally anticommunity inflamines and children and primarily anticommunities (Europheed et al., 1990; Mellevitt and Challers) level of levid sevent and primarily anticommunities and their controls and the sectoral communities and their controls and their premises and the media. Challers level of levid sevent and their premises and the media. Challers level of levid sevent and their controls and their controls of medical and controls and their controls and and their controls an

descriming the section and by witnessing a purear distributed by the structure the (Mids will Minly become feeled) (Description 2000). Feeded widelines followed; a clinicist have parents who tend also to report (Allen 4d Rouer 100). Reach of the Rouer 1000, Reach et al. 2000) and fee personned by children (Rouer, 1097) as more feerful.

Educating children on stell delevor matters through hastal education programme is intended to decrease the shift by substantiality and grounts personal, family and constructive productions and suppose of learned, to be constructed to the constructive productive and appropriate processor in contract overs behavior about budy intensity prepare a child for a hastal evers, behavior also despressed which happens and that they have the privace to help threadens. Proceedings of protective behaviors will despray a children threadens. Proceedings of protective behaviors will despray a children threadens. Proceedings of protective behaviors will despray a children and will determ as intelligent threadens. Proceedings on any can be protective behaviors will mention a consistent protective behaviors will increase confidence, and not design gloom in as live and desting without an a vectorial reinspition, as they are insteaded to present design faster rehabitation. Not only done the lettinate resilience in a child and their learned, as they can be resilience to talk and their learned, as they can be resilience to talk and their learned, as they can be resilience to talk and their learned, as they can be treated to their contensiny by reducing the devising of securities intend if literationing more specific. This is tally supplements to the reconstructive more of the price of literation of the process.

This study supplements other movestgatuses recordy undersiden in New Zealand and Woolstageen State than his required to the control of the Co

In 2003 Cobham Intermediate School student, Sarah Standring, teamed up with our research team as part of her school science project, to collect data on her fellow students understanding of natural hazards in Christchurch (Finnis et al. 2004). Using a questionnaire that had recently been used in an Auckland study, she surveyed over 100 of her classmates to investigate natural hazards risk perceptions, levels of preparedness and participation in hazards education programs. The results of the Cobham survey showed students had high awareness of many hazards, with over half ranking earthquakes as one of the two most likely. Over three quarters reported having felt an earthquake in the past.

The school had an on-going hazards education programme and students displayed good knowledge of corrective actions to take during an earthquake. Two thirds of the students identified 'drop, cover and hold' as an action to take during earthquake shaking. We concluded back in 2004 that the school had done well

but there was a continuing need for hazard education that increased understanding of different hazard types, the impacts on the community and, in so doing, this would help improve further household preparedness. Further research in Christchurch prior to the 2010-2011 earthquakes highlighted some community awareness of the potential for damaging earthquakes but less understanding of their consequences, and low levels of household preparedness (Becker 2010).

The impacts of the 2010-2011 earthquakes on the community are complex and research is on-going. Numerous researchers are exploring aspects of the impacts on children, their role in creating the narrative of the earthquake, and role of schools in the response and recovery process (e.g. Taylor 2011 and Much 2013). Much of this research is still incomplete, unpublished or still being designed and implemented. Building on this early research done by Sarah and the rest of us, provides much of the evidence base to further develop effective school-based education programmes to help children and young people prepare for and respond to future hazard events.

## References

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# About the authors

**Professor David Johnston**, GNS Science/Massey University, New Zealand.

**Professor Kevin Ronan**, Central Queensland University, Australia.

**Ms Sarah Standring**, University of Auckland, New Zealand.