

The use and value of research in the field of emergency management

At a recent police research seminar a Deputy Commissioner of Police was asked what he wanted from research, his reply was that whenever he had a need for immediate answers to complex problems, he would go to a researcher and obtain a response that he could easily understand. While this may show a somewhat naive perception of research and how it works, it demonstrates that the approach of research and researchers can be misunderstood even at a senior level.

Research is the use of systematic methods to evaluate ideas or to discover new knowledge. There are two main reasons for conducting research:

- to discover or learn more about the basic laws of nature
- to apply this knowledge to the solution of practical problems, such as a new product or process.

Thus the first is called 'basic' research, and the second is 'applied' research. While most research in the emergency management field would be applied, basic research can still have a profound effect on how we effectively respond to a crisis.

The inter-relationship between the two can be seen in how basic research, such as the examination of methods for more effective fire retardants, may be adapted into applied research, such as the application of the retardant in fires.

Unfortunately, in the emergency management field there has been very little targeted research and little has been incorporated into improving practice and applications. As well, in Australia, research has been fairly narrowly focused on specific hazards or disciplines. This is not a criticism of the research undertaken, but a reflection of the diverse and wide nature of the emergency management field.

The police research seminar highlighted the need to critically evaluate research using seven criteria: objectiveness, rigorousness, relevance, independence, clear application, timeliness, and acceptance in the field. These criteria are all subjective and, while some research may meet most, it is often difficult to meet the last two: timeliness and acceptance. This may be very pertinent

to emergency management agencies in Australia, as there has not been a good track record of embracing or recognising the value of research within the field. There have been times when research was openly discouraged, or at least ignored. There has been a distinct culture of 'anti-research' and there is a very large gap between researchers and practitioners. Academic research is often treated as 'out of touch' with the real world, or even a threat. Researchers themselves are often treated similarly.

The bridge between the research fraternity and the practitioners can, however, be crossed to some degree by educational institutions, who often promote the findings of research and its application in the field. It is through contact with students in an educational process that knowledge can be transferred into the corporate thinking of the students' parent organisations. Another bridge is by publication of findings in journals, and the access to the findings through libraries and the Internet.

It is essential to identify what *is* the current research, issues and trends, and to turn them into practical outcomes and recommendations to enhance emergency management. When research findings are published, emergency management practitioners should assess the research to see if it meets their evaluation criteria and to determine how it could improve management practices in:

- *informing resource allocation* — how to best use what we have, how to obtain resources that we don't have
- *identifying international best practice* — assessing the feasibility of domestic application or implementation
- *identifying what works and what doesn't*
- *identifying emerging trends in emergency management* — so that we can anticipate and manage them rather than responding reactively
- *identifying new ways of looking at issues and problems* — research can identify strategic opportunities that might not otherwise be apparent
- *analysing cases of organisational failure* — essential if we are to learn from our mistakes

- *helping to categorise and organise institutional knowledge* — this is important, given the oral tradition in response agencies and the likelihood that careers in the field are of short duration due to the changing employment practices and conditions.

Perhaps with this perception and recognition of the value of research, it could play a more vital role in enhancing emergency management capability in Australia. Over the last few years EMA has been more vigorous in promoting and supporting research in the field, through the provision of research grants, projects, workshops and seminars.

EMA has provided a forum for publication of research findings and now a directory of research has been established on the Internet in conjunction with the Natural Hazards Research Centre at Macquarie University (<http://www.es.mq.edu.au/nhrc/ema.html>). This provides researchers with access to a database that is unique in Australia. As well it provides valuable information for practitioners as to what research is occurring in the field of natural and technological hazards and who is doing the research. It is readily-available information that we should use extensively. We now need to go one step further and broaden the scope to the full spectrum of emergency management.

EMA has been proactive in establishing access through the Internet to the full range of resources in its Information Centre (<http://www.ema.gov.au/library.htm>). This enables researchers and practitioners to obtain access to research findings, at a time of their convenience, and with no gatekeeping role played by information specialists. Perhaps with a new perception of the value of research within our own field, we should take full advantage of it and turn it into the vital knowledge that enhances Australia's emergency management capability. But it is important to bear in mind that research and data are not always to be found in immediate or easily understood 'quick grabs'. Thus, a bridge between researchers and practitioners is an important link to develop and maintain beyond the traditional educational process.