

Climate Change Adaptation Research Grants Program

- Emergency Management Projects

Project title:

Public understandings, risk perceptions, and responses to climate change and associated natural disasters

Principal investigators: Professor Joseph Reser

Lead organisation: Griffith University

Objectives:

1. To examine public understandings, risk perceptions, concerns, and adaptations to climate change and natural disasters in Australia, as part of an international collaboration invitation and a national database initiative.
2. To identify ways in which public understandings and responses to the threat and impacts of climate change differ across population sub-groups defined in terms of gender, age, urban/peri-urban/rural residence, and other demographic considerations.
3. To examine the extent to which public understandings of climate change and perceived current and future impacts for Australia include natural disaster events and increased intensity and magnitude of such events and their impacts.
4. To examine the relative salience and importance of climate change and natural disasters as interrelated risk domains vis-a-vis other risk domains and areas of public concern.
5. To examine the extent to which natural disasters that have taken place in Australia over the past decade are understood as reflecting the unfolding impacts of climate change.
6. To examine the extent to which risk perceptions and responses alter with systematically varied item framings relating to temporal (present, near future, far future) and spatial (local, national, global) 'distance'
7. To examine the extent to which direct personal experience with events perceived to be associated with the impacts of climate change mediates or otherwise influences risk perceptions, understandings and adaptation responses.
8. To provide a baseline from which the nature, direction, and extent of changes in these community risk perceptions, understandings, and adaptation responses over time can be prospectively examined and documented.

Project design and methods

The project design necessarily coincides in large part with the already finalised national survey design and methodology of the UK study being undertaken by the Cardiff Understanding Risk Research Group. The specifics of the Australian iteration of the survey nonetheless take into account the dramatic differences between Australia and the UK, land mass, geographic distribution of human settlements and population nodes, dramatic differences in regional climates, topographies, and land uses; as well as differing exposures to climate change impacts and natural disaster incidence and impacts. The research involves modification of the Cardiff survey for the Australian context, substituting less relevant content for a strategic examination of comparison risk domains, with particular emphasis on natural disaster risks, and specific differences between understandings and perceptions of climate changes and impacts as contrasted with natural disaster events. The principal methodology is a national survey (n=5000), using random selection within designated postcodes stratified by region, and by gender and age within regions, with probability proportional to size, utilising electronic presentation and completion.

The mode of survey presentation has also been altered to that of an electronic, net-based, survey reflecting obvious distance and logistic constraints, as well as funding availability,

given the very short time frame which has characterised this research opportunity. In addition this research involves components of face-to-face interviews (100) and focus group discussions (10) in the SE corner of Qld, and oversampling of this region (1000) to ensure a finer-grained coverage of a region deemed highly vulnerable to the impacts of climate change and which is currently the focus of a number of other short and longer term climate change studies, maximising the possibility and value of convergent and potentially collaborative research studies and data bases.