

Public risk perceptions, understandings and responses to climate change in Australia and Great Britain

Does the public accept and understand that contemporary climate change is the result of human activity?

A survey undertaken as part of an NCCARF Adaptation Research Grants Program project suggests the answer is a resounding “yes”. Conducted by Joseph Reser and his team at Griffith University in collaboration with Cardiff University, the project generated considerable media interest, attracting 53 news reports around Australia.

The project documents public risk perceptions, understandings and responses to climate change and natural disasters. It represents one of very few cross-national studies addressing public understandings of, and responses to, climate change.

The information was gathered using an in-depth survey. This summary documents the key findings - the full report is available online at www.nccarf.edu.au.

What is the public perception of climate change and risk?

The survey of almost 3100 Australians found that:

- 74 per cent of respondents accept that the world’s climate is changing.
- More than half believe the impacts of climate change are already being felt in Australia.
- 90 per cent accept that climate change is either partly or principally caused by human activities and lifestyles.
- 71 per cent of respondents reported that their concern about climate change had increased over the past two years.
- 78 per cent of respondents consider that if nothing is done to reduce climate change in the future, it will be a ‘very serious’ or ‘somewhat serious’ problem for Australia.
- Many respondents perceived there was a link between climate change and extreme weather events (Figure 1).

Fewer than 6 per cent of Australians surveyed could be called true ‘climate change sceptics’, i.e. disbelievers or strong sceptics with respect to the reality of current climate change. According to the project’s research team, these results suggest public opinion has been greatly misrepresented in the media.

There was a remarkable similarity in public concern about the threat and perceived impacts of climate change in the answers of Australian and British respondents, with levels very high in both nations.

Australian respondents viewed climate change as a more immediate, proximal, and certain threat to their local region and nation. Their British counterparts perceived the problem to be more distant, uncertain, and less familiar in terms of anticipated consequences.

Survey respondents expressed concern and some distress at the threat of climate change. Psychological adaptation and adjustment to the ongoing stress of the threat of climate change and its consequences has been a much neglected component of the climate change challenge, and is likely to be a crucial mediator of individual and community behavioural change.

Who, and what, did the survey ask about?

In Australia, 3096 people answered the survey during June and July 2010. In Britain 1822 people completed the survey throughout January, February and March, 2010. The work was undertaken via an on-line survey for Australian respondents, and computer assisted face-to-face interviews in Britain. The proportion of male and female respondents was similar between locations (Australia 47% male, 53% female; UK 48% male, 52% female). The age profile of Australian respondents was 15 – 24, 7.8%; 25-54, 60%; 55 plus, 31.6%. In Britain, more young people (15 – 24, 15%) and more older people (55 plus, 36%) were surveyed. Table 1. shows the location of Australian respondents.

The survey questions were framed in several ways, to get to the bottom of what people believed and understood. Through a series of structured and open questions, the survey generated information including:

- Documentation of public risk perceptions, understandings and responses to climate change and natural disasters over time.

Overall, how much do you think climate change is influencing the frequency and intensity of weather events like storms and droughts?

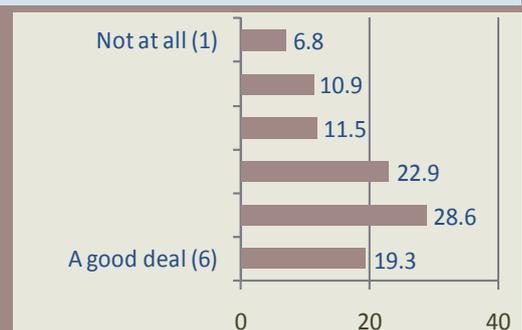


Figure 1. When asked about the influence of climate change on extreme weather events, a large proportion saw a connection.

Location	Number of respondents
New South Wales: Sydney, Albury Port Macquarie, Ballina, Singleton, Bourke	626
Queensland: Brisbane, Gold Coast, Sunshine Coast, Mackay, Townsville, Cairns, Toowoomba, Mount Isa, Longreach, Charleville	917
Western Australia: Perth, Bunbury, Geraldton, Albany, Broome, Laverton	380
Australian Capital Territory: Canberra	82
Victoria: Melbourne, Bendigo, Shepparton, Mildura, Morwell, Bright	494
South Australia: Adelaide, Port Pirie, Ceduna, general state-wide	419
Tasmania: Hobart, Launceston	134
Northern Territory: Darwin, Alice Springs, Katherine	47

Table 1. Geographic make-up of the survey in Australia

- Comparisons of similarities and differences across the very different geographic, demographic, and climatic circumstances of Australia and Great Britain.
- In-depth consideration of public understandings and psychological responses as distinct from cursory polling of opinions, attitudes, and preferences.
- A specific examination of psychological impacts of the threat of climate change.
- Examination of the relative risk domain status of 'climate change' as compared with other chronic and acute environmental threats and stressors.

In order to establish the objective knowledge of respondents, they were asked whether 10 statements about matters relating to the science of climate change and projected impacts were true or false. (e.g. "Climate change is mainly caused by a hole in the ozone layer"; "Australia's average temperature has increased by approximately 1°C from 1910 to 2002"). Their knowledge was modest: on average, they got four to five of the 10 correct. These findings are interesting when compared with respondent self-reported knowledge levels, with close to 75 per cent of respondents feeling that they knew a reasonable amount about climate change.

The confusing landscape of survey findings

Social science research is very different from news corporation or policy think tank polling exercises. It is concerned with the documentation of longer term changes in public understandings and risk perceptions, and substantive change processes and impacts, rather than the immediate political mood or policy preference.

In the present research program the emphasis has been on the investigation and documentation of within-individual changes and adjustments in how Australians are thinking about, feeling about, understanding, and responding to the threat and perceived environmental impacts of climate change.

An important objective of this study was to establish a platform from which to create a national database, and operational survey procedures. These could more adequately document important changes taking place in the human landscape with respect to Australians' understandings of and responses to local and global climate change.

Future directions and significance of the research

While these current findings constitute a snapshot, and provide an in depth and high definition picture, data currently being collected in 2011 will enable the documentation of dynamic changes over time.

The study highlights the nature of public understandings of the climate change phenomenon and threat, as distinct from public attitudes toward, or knowledge of, climate change science.

This type of understanding is crucial for meaningful engagement with the public. The results show that people want the government to do something about climate change and that they feel they themselves have a personal responsibility to act. This research offers a significant development and support for decision makers grappling with climate change mitigation and adaptation public policy.

The interim report and other NCCARF research publications are available at www.nccarf.edu.au. Queries relating to this report can be directed to: Michelle Ellul m.ellul@griffith.edu.au or Joseph Reser j.reser@griffith.edu.au.



Currumbin Beach. Image: Michael Mitchell