

Climate Change Adaptation Research Grants Program

- Social, Economic and Institutional Dimensions Projects

Project title:

What about me? Factors affecting individual adaptive coping capacity across different population groups.

Principal investigators:

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Lead organisation:

University of Western Australia

Objectives:

Little research has examined how people adapt to climate change information & initiatives & most of the existing research is relatively narrow. By creating a consortium of multidisciplinary scholars we will:

- 1) examine how other values, intentions, beliefs & goals affect adaptive coping goals & behaviours;
- 2) examine the full spectrum of adaptive and maladaptive coping behaviours;
- 3) examine how we can improve adaptive coping through
 - a. social norms,
 - b. priming, and
 - c. emotional stress management; and
- 4) examine how these factors operate in different, vulnerable population groups.

Project design and methods:

Stream 1: Climate change coping & the effect of social norms on those with extreme worldviews

Prior research suggests that support for a laissez-faire 'free-market' ideology predicts rejection of climate science. The 1st stream of research aims to investigate whether normative information can mitigate this effect on participants' attitudes towards policy action to reduce carbon emissions. People will be selected from a large pre-tested sample on the basis of their worldviews, with individuals from both extremes of the distribution being recruited. People will be given information about emissions in three different versions. One version (control condition) will be solely descriptive information with no comparative data. The 2nd version will provide social norming data that places Australia among the worst-ranking nations of the world. A 3rd version will provide information only about Australia's position relative to the average without providing rank-based information. After the information is provided, subjects will be asked to indicate their support for various extents of emission cuts indicating their willingness to engage in adaptive coping. We hypothesise that the provision of rank-based information will mitigate the effects of extreme "free-market" world-views on adaptive coping.

Stream 2: Climate change coping & the effect of non-conscious priming in the resources sector

The 2nd stream examines how the goal systems of resource sector employees affect their adaptive coping to organisational climate change responses; employees of mining & energy companies are likely to see themselves as particularly vulnerable to these organisational responses. The 1st study will be a correlational survey designed to identify the relationships between particular goal system patterns & particular coping strategies (both as individuals & in reaction to organisational climate change responses), e.g. we hypothesise that a positive pattern (one that shows dense, positive connections between the person's "green" identity/values & their other values, identities & tasks) will be strongly & positively related to adaptive coping while a negative pattern will be strongly & positively related to maladaptive coping. The 2nd phase will be an experimental study to examine the effects of non-conscious priming to alter an individual's goal system & subsequent effects on behaviour. Participants will be asked to complete survey questions on a computer program: one-third of participants will see a subtle, noninvasive image related to climate change as they answer the questions; one-third will see a subtle, noninvasive image related to the resources sector; & one-third will not have a background image on the screen. We hypothesise that those in the first condition will be more likely to have a positive pattern & more likely to choose to engage in adaptive coping behaviour than those in the 2nd or 3rd conditions; & that those in the second condition are more likely to have a negative pattern & more likely to choose to engage in maladaptive coping behaviour than those in the 1st or 3rd conditions.

Stream 3: Climate change coping & the effect of supraliminal priming & communication amongst the general community

The third research stream will focus on the effects of supraliminal priming (“nudging”) & communication (both content & style) on the appraisal of climate change information & coping behavior. Three studies will be conducted in this stream. The first is a traditional survey of general community members to establish the baseline model & internal relationships to the model. The second will adopt a strategy which studies a sub-sample from the traditional survey & studies them more intensively. Using web based technology incorporating mobile phone messaging “online” surveying will be done regarding perceptions of threat, information sources & coping behaviours. In particular we will measure the number of sources monitored & their impact to assess information utility & assigned weights under different threat conditions. The third component of the research will manipulate message content & monitor its effects on threat perceptions as well as evoked adaptive or maladaptive responses.

Stream 4: Climate change coping & the effect of emotions & emotional stress in hospital employees

The fourth stream of research will involve mixed methods including focus groups, interviews, surveys & a field experiment. In-depth interviews & focus groups will be used to examine the affective components of climate change adaptation as well as the competing goals that employees & managers hold within a hospital context. The interaction between emotional stress & competing goals will also be examined with the aim of identifying coping strategies to reduce stress associated with climate change adaptation. These constructs are not easily identifiable from quantitative methods & therefore qualitative approaches are the most appropriate in this phase of the research. The second phase of the research design will involve an iterative process of facilitating behaviour change in order to engage staff in anticipatory adaptive behaviours. This phase of the research will involve further focus groups & workshops, surveys of staff & objective behavioural data collection. The aim is to facilitate positive change through strategies that engage employees emotionally with climate change adaptation. The final phase of the project will involve a quasi-experimental design within a field setting to test the effectiveness of the program delivery.