

# The Impact of Normative Feedback on Pro-Environmental Intentions and Behaviour

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- ▶ Perceived social norms act as powerful tools in shaping attitudes and behaviour
  - ▶ people behave based on what they perceive to be the 'correct' behaviour, or on what they think other people are doing
- ▶ Power conservation (Allcott, 2009; Ayres et al., 2009; Schultz et al., 2007)
  - ▶ gave people information about average energy consumption rates in their local neighborhood
  - ▶ people reduced their personal gas and electricity usage by 1-3% in response to feedback

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- ▶ We may have a misrepresentation of the degree of consensus with our own beliefs and behaviour
- ▶ Biases in estimating consensus:
  - ▶ *false consensus effect* (Ross et al., 1977)
  - ▶ *false uniqueness effect* (Goethals et al., 1991; Suls & Wan, 1987)
- ▶ Evidence of these biases with regards people's beliefs about climate change...

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  - ▶ I have no idea whether climate change is happening or not
  - ▶ I think that climate change is happening, but it's just a natural fluctuation in Earth's temperatures
  - ▶ I think that climate change is happening and humans are largely causing it
- ▶ People also asked what they think other people think about climate change
  - ▶ respondents asked the % of Australians that would agree with the four above statements

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- ▶ False uniqueness effect
  - ▶ 'happening-human' and 'happening-natural' climate change believers **underestimated** degree of support for their own belief
- ▶ *False uniqueness bias for 'happening-human' climate change believers is a particular concern*

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## Questions:

- ▶ Q1: does the false uniqueness effect for climate change beliefs extend to behaviour?
- ▶ Q2: does corrective normative feedback about beliefs and actions increase pro-environmental intentions and behaviour?

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  - ▶ ask people what they *think others think* about climate change
- ▶ Ask people what pro-environmental behaviours they engage in
  - ▶ ask people what pro-environmental behaviours they *think others engage* in

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# Phase I: Pro-environmental behaviour

## example questions

- ▶ I switch lights off around the house whenever possible
- ▶ I have reduced the amount of water I use around the house and garden
- ▶ I have reduced the amount of gas and/or electricity I use around the house
- ▶ I usually walk/cycle/carpool/take public transport
- ▶ Where possible, I buy products that are locally made
- ▶ Plus others...

# Phase I: Compare perceived and actual beliefs/behaviours

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- ▶ Compare each group's 'actual beliefs' with their 'estimated beliefs' about climate change
  - ▶ 'false uniqueness effect' anticipated
- ▶ Compare each group's 'actual pro-environmental actions' with their 'estimated pro-environmental actions'
  - ▶ 'false uniqueness effect' anticipated



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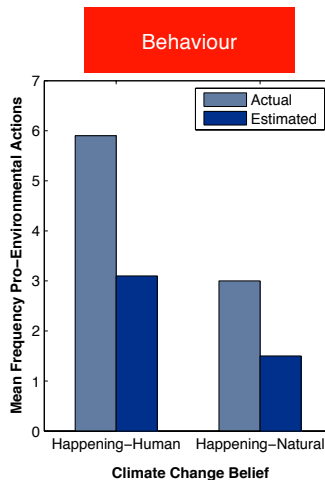
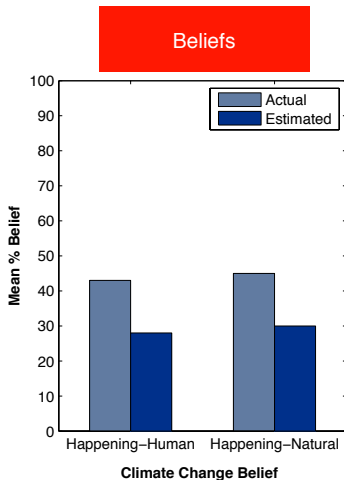
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- ▶ Sub-set of respondents invited back for a second survey
- ▶ Manipulate **climate change belief**:
  - ▶ Happening-Human vs. Happening-Natural
- ▶ Manipulate **normative feedback**:
  - ▶ No Feedback vs. Beliefs vs. Behaviour vs. Beliefs+Behaviour

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Introduction

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CSIRO Survey

Aims

Methodological  
Approach

Phase I: Replicate  
Consensus Biases

Phase II: Provide Normative  
Feedback

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Summary

Thanks!

References

- ▶ Examine impact of normative feedback on climate change beliefs and pro-environmental intentions and behaviour
- ▶ Sub-set of respondents invited back for a second survey
- ▶ Manipulate **climate change belief**:
  - ▶ Happening-Human vs. Happening-Natural
- ▶ Manipulate **normative feedback**:
  - ▶ No Feedback vs. Beliefs vs. Behaviour vs. Beliefs+Behaviour



# Evaluating beliefs and pro-environmental intentions / behaviour

Normative  
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- ▶ Assessing beliefs:
  - ▶ ask people their beliefs about climate change using original CSIRO statements
- ▶ Assessing pro-social intentions / actions:
  - ▶ re-administer pro-environmental behaviours questionnaire
  - ▶ assess people's willingness to donate a % of their honorarium to an environmental cause

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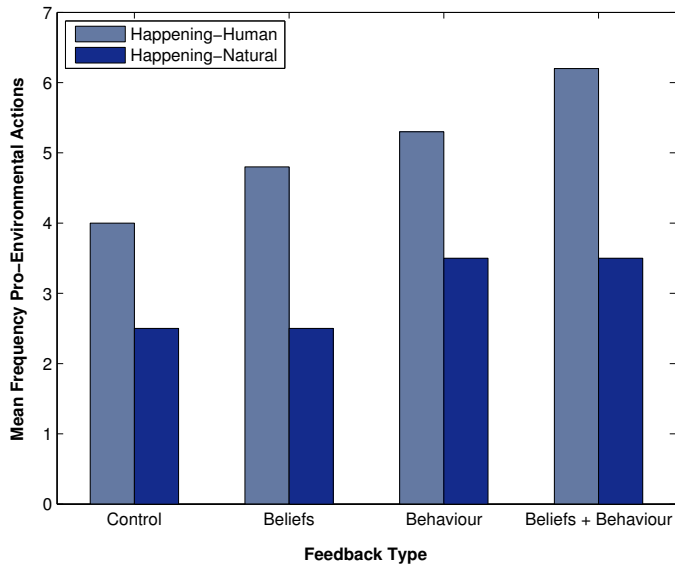
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# Predictions: Intentions



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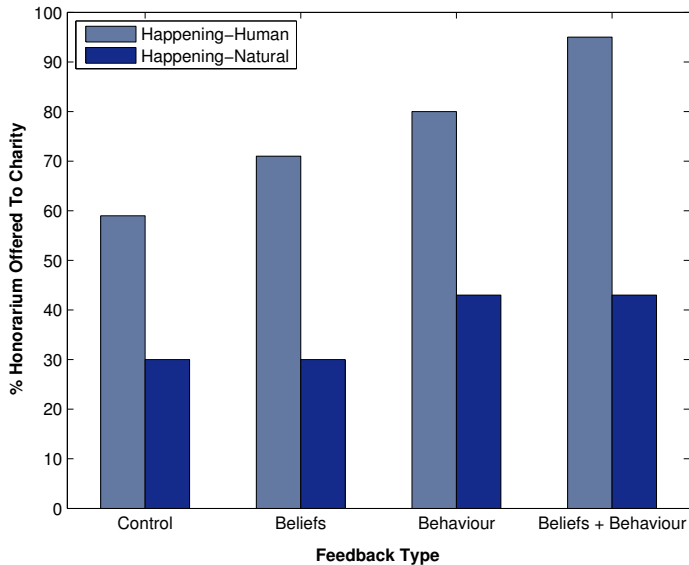
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# Summary

- ▶ Perceived social norms exert a strong influence on attitudes and behaviour
- ▶ But, sometimes our perceptions of how other people think and act are inaccurate
- ▶ Consensus biases in people's beliefs about what others 'think' and 'do' about climate change may contribute to environmental apathy
- ▶ Provision of accurate normative feedback about beliefs and behaviour may mitigate the effects of such biases

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