



# **What We Think Others Think About Climate Change:**

## **A Multicountry Test of Pluralistic Ignorance and Public-Consensus Messaging**

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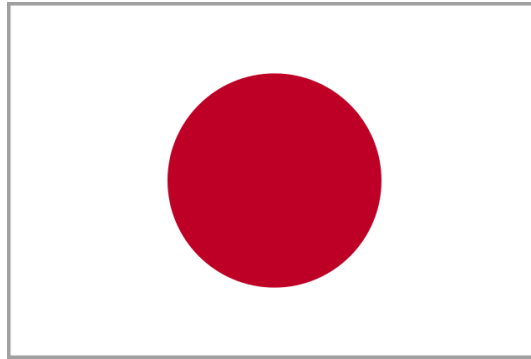
Sandra Geiger (Princeton University) *et al.*\*

\*I'm part of the *et al.* of 10 authors from different countries  
(Nattavudh Powdthavee, NTU)

**What percentage of people in the following countries do you think believe that climate change and its consequences are the biggest challenge for humanity in the 21<sup>st</sup> century?**



Thailand



Japan



Germany

**Is reality better than  
perception?**



- One of the challenges in combating climate change is that if people believe that their pro-climate views only represent the minority views of people in their country, they may not want to widely share their views.
- This further discourages societal discourse around climate change
  - The so-called ‘spiral of silence’
- What could explain this discrepancy between reality and perception, if it exists?

# Pluralistic Ignorance

**Many** members of a group systematically **misperceive** what most others think, in absolute or relative terms.

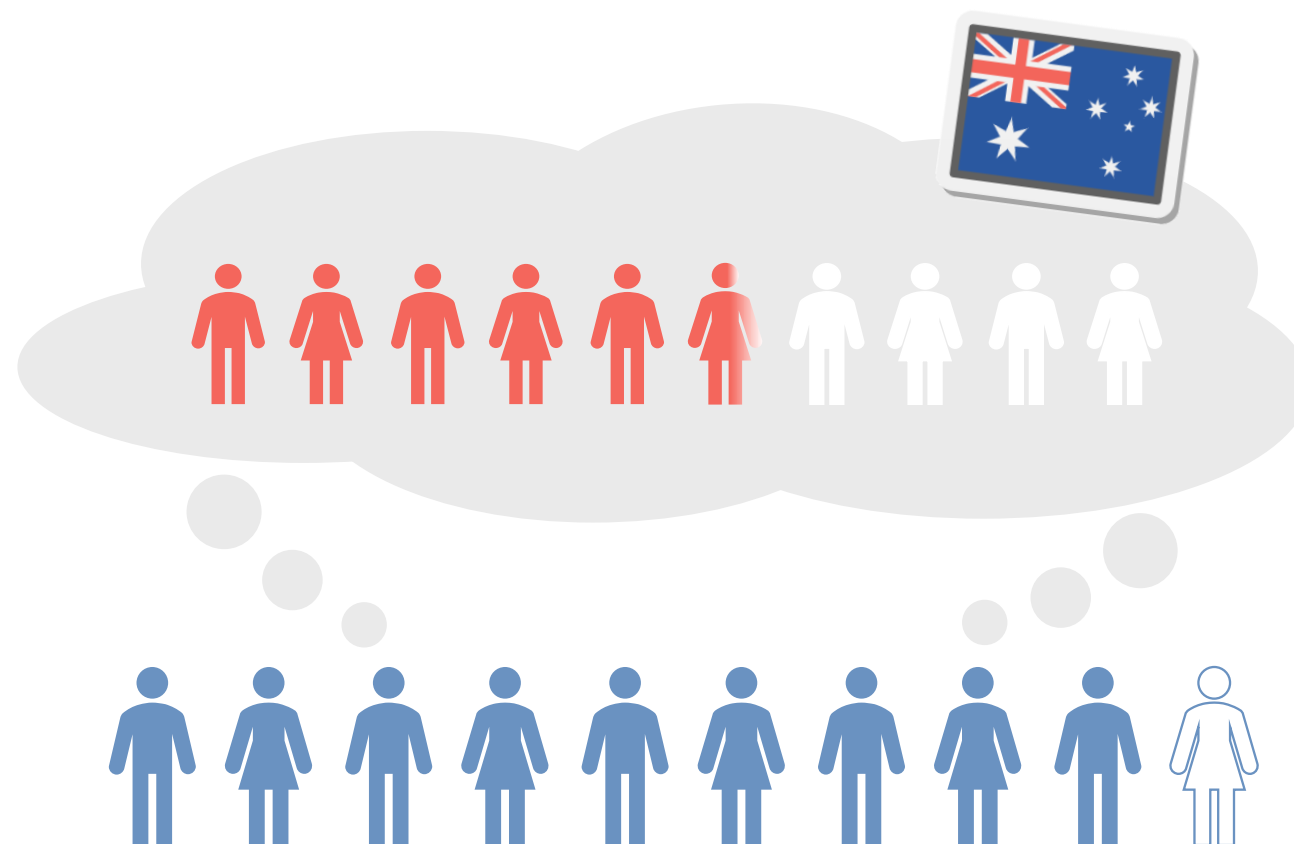


**90%** of Australians believe in climate change ...  
but Australians think only **56%** do.

**Expectation**

VS.

**Reality**





## Aim 1

Does climate change pluralistic ignorance **generalize** to a diverse set of other countries (Brazil, Canada, China, Germany, India, Indonesia, Italy, Japan, Mexico, Poland, and Thailand)?



## Aim 2

Can a **simple disclosure intervention** (providing information on the actual public opinion on climate change) promote factors related to climate action?



Online survey  
experiment across 11  
countries

# The Project Details



Pre-registered and  
peer-reviewed prior to  
data collection (ZPID)



$N = 3,653$  participants  
( $n \approx 330$  per country)

Cross-quota samples  
based on age & sex





## Aim 1

Reality

VS.

Expectation

**In general, which of the following statements, if any, best describes your view?**

- The climate is changing, and human activity is mainly responsible.
- The climate is changing, and human activity is partly responsible, together with other factors.
- The climate is changing but human activity is not responsible at all.
- The climate is not changing.
- I don't know.

**What percentage of [country citizens], do you believe, would think the following ways about climate change?**

Please indicate a number from 0% (no one) to 100% (everyone) for the following statements such that they sum up to 100%.



## Aim 2

### Control

#### Expectation

Previously, you estimated that **[x%] of Indians** believe that the climate is changing and human activity is partly (x%) or mainly (x%) responsible.

VS.

### Intervention

#### Expectation

Previously, you estimated that **[x%] of Indians** believe that the climate is changing and human activity is partly (x%) or mainly (x%) responsible.

#### Reality

You might be interested to know that a recent survey showed that **78%\* of Indians** believe that the climate is changing and human activity is partly (27%) or mainly (51%) responsible.

(\*71% in Indonesia to 88% in Brazil; based on YouGov data from 2020)

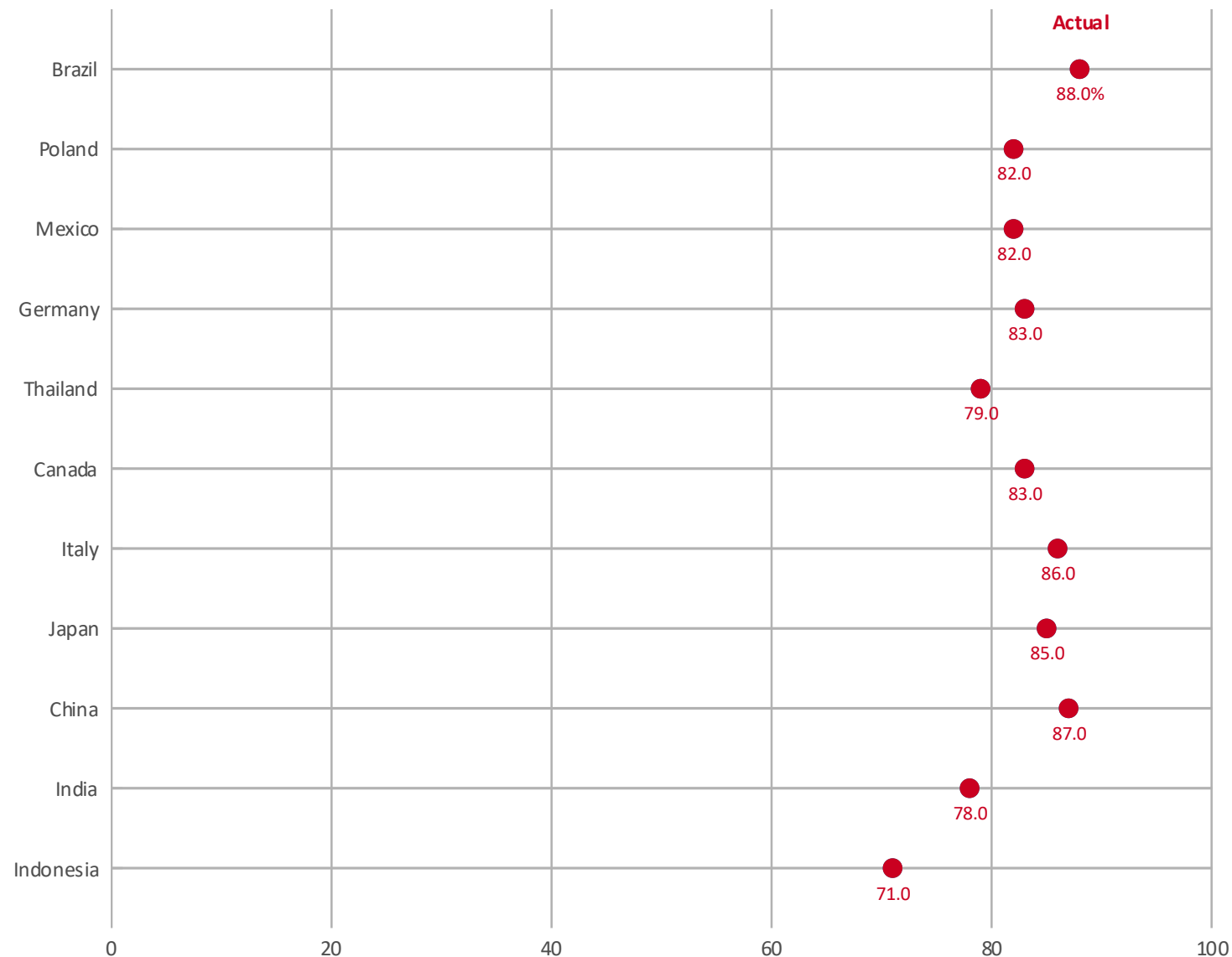
Effectiveness of the intervention	<p>Climate change believers<sup>a</sup> in the intervention (vs. control) condition:</p> <p><b>H3:</b> are more willing to express their opinion on climate change.</p> <p><b>H4a:</b> are more willing to make changes to their lifestyle to mitigate climate change.</p> <p><b>H4b:</b> expect more fellow citizens to be willing to make at least some changes to their lifestyle to mitigate climate change.</p> <p><b>H5a:</b> are more likely to view government action on climate change as a higher priority.</p> <p><b>H5b:</b> are more likely to expect that their fellow citizens view government action on climate change as a high or very high priority.</p> <p><b>RQ2:</b> Do climate change believers in the intervention (vs. control) condition believe more strongly that their country's citizens can contribute to reducing climate change (i.e., group efficacy beliefs)?</p>
Effectiveness of the intervention for different audiences	<p><b>H6:</b> The effects of the intervention on (a) willingness to make lifestyle changes to mitigate climate change and (b) support for government action on climate change are stronger for climate change believers with higher rather than lower national identification.</p> <p><b>RQ3:</b> Is the effect of the intervention on group efficacy beliefs stronger for climate change believers with higher rather than lower national identification?</p> <p><b>Exploratory (not pre-registered):</b> Is the intervention effective among those who underestimated the social consensus prior to the intervention?</p>



# Aim 1

The climate is changing, and human activity is mainly or partly responsible.

*n = 328-354 per country*

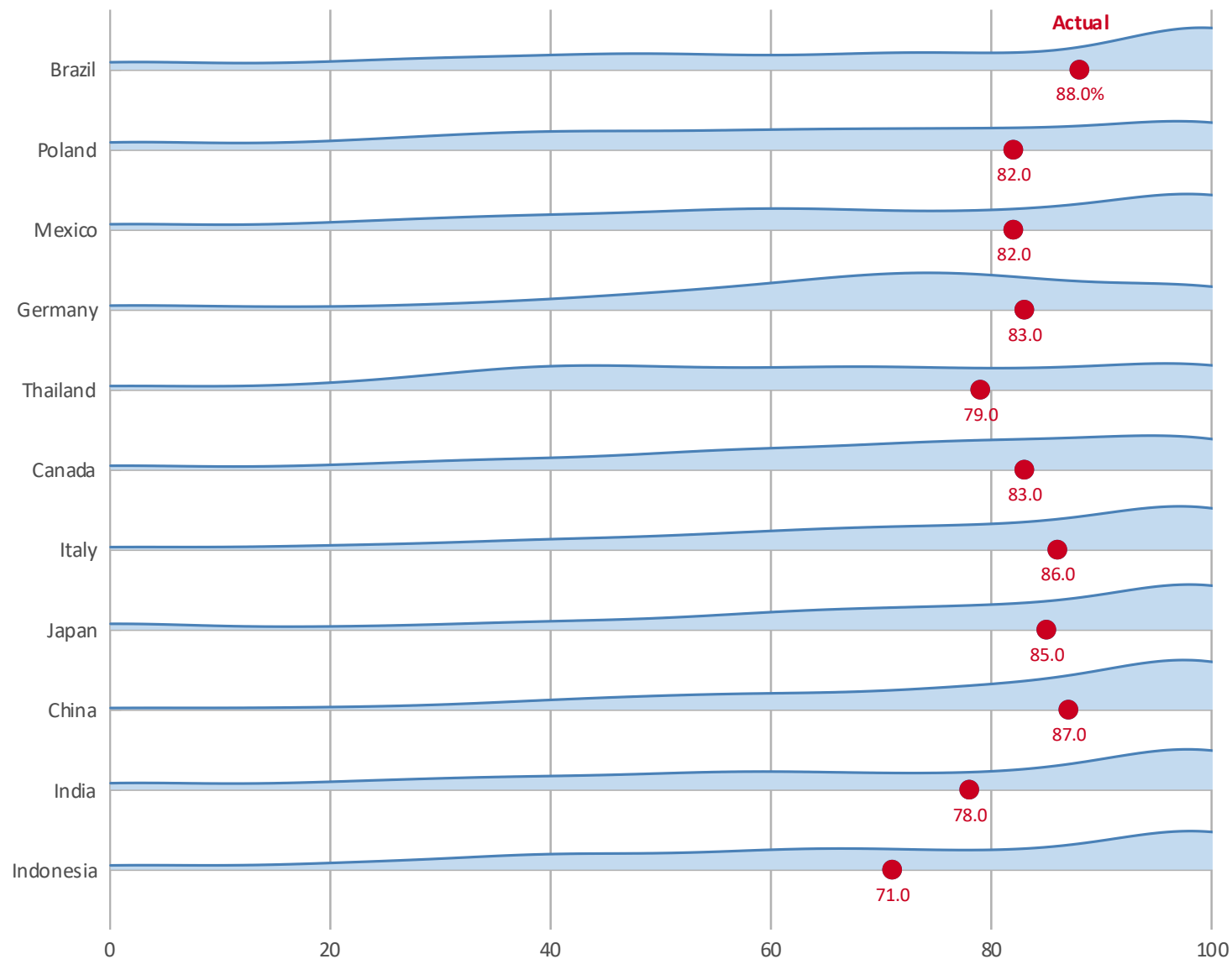




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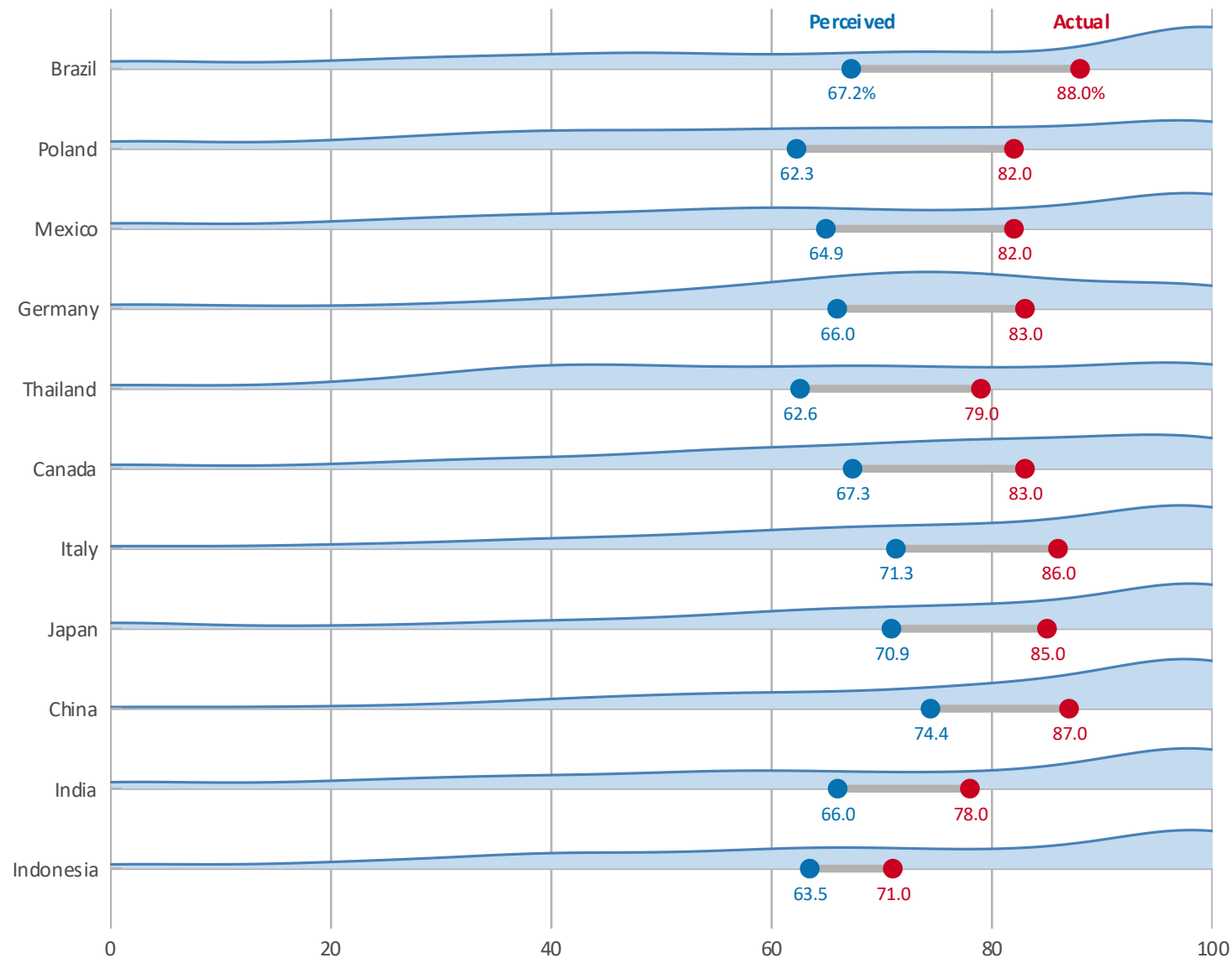




# Aim 1

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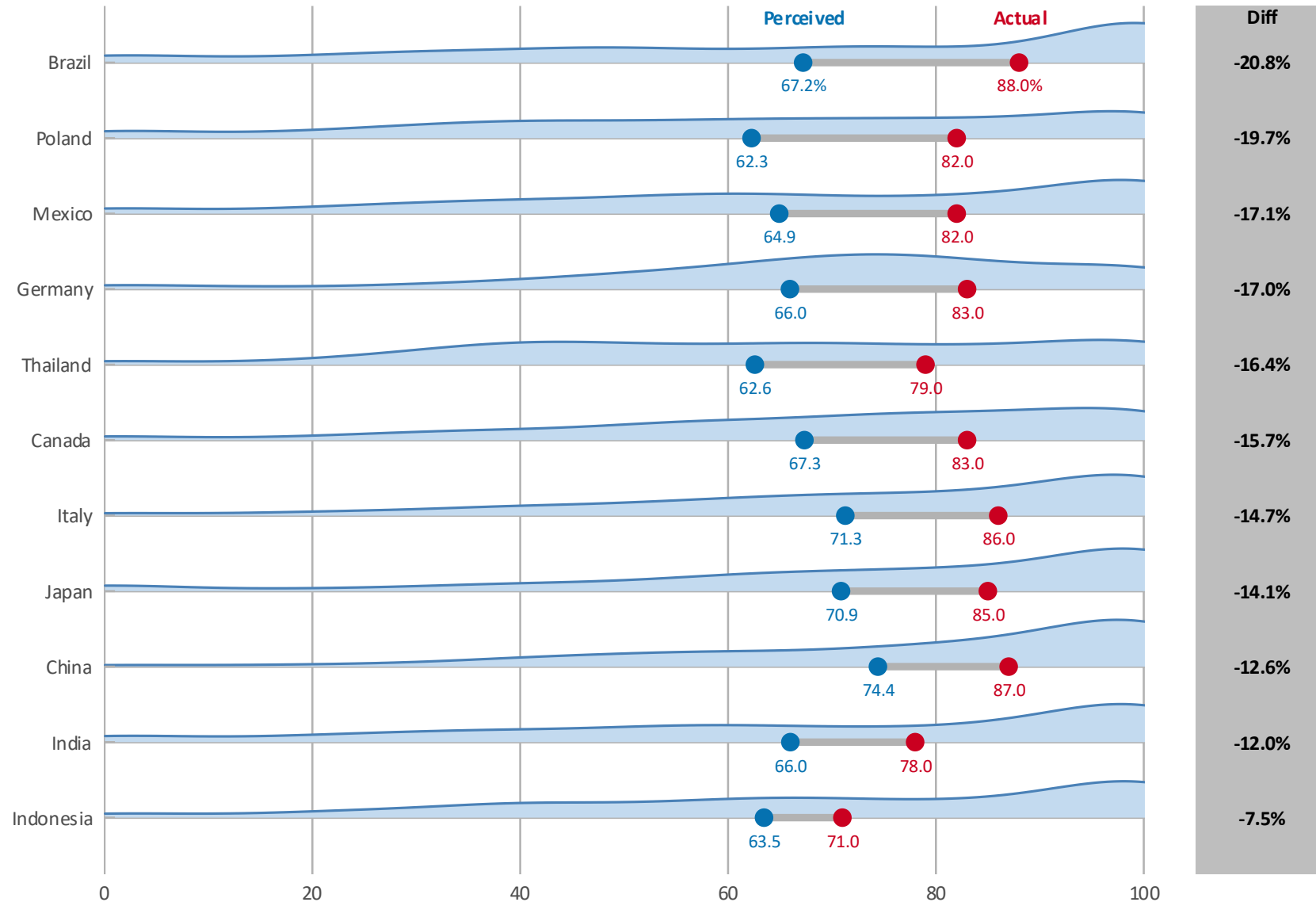
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The climate is changing, and human activity is mainly or partly responsible.

*n = 328-354 per country*



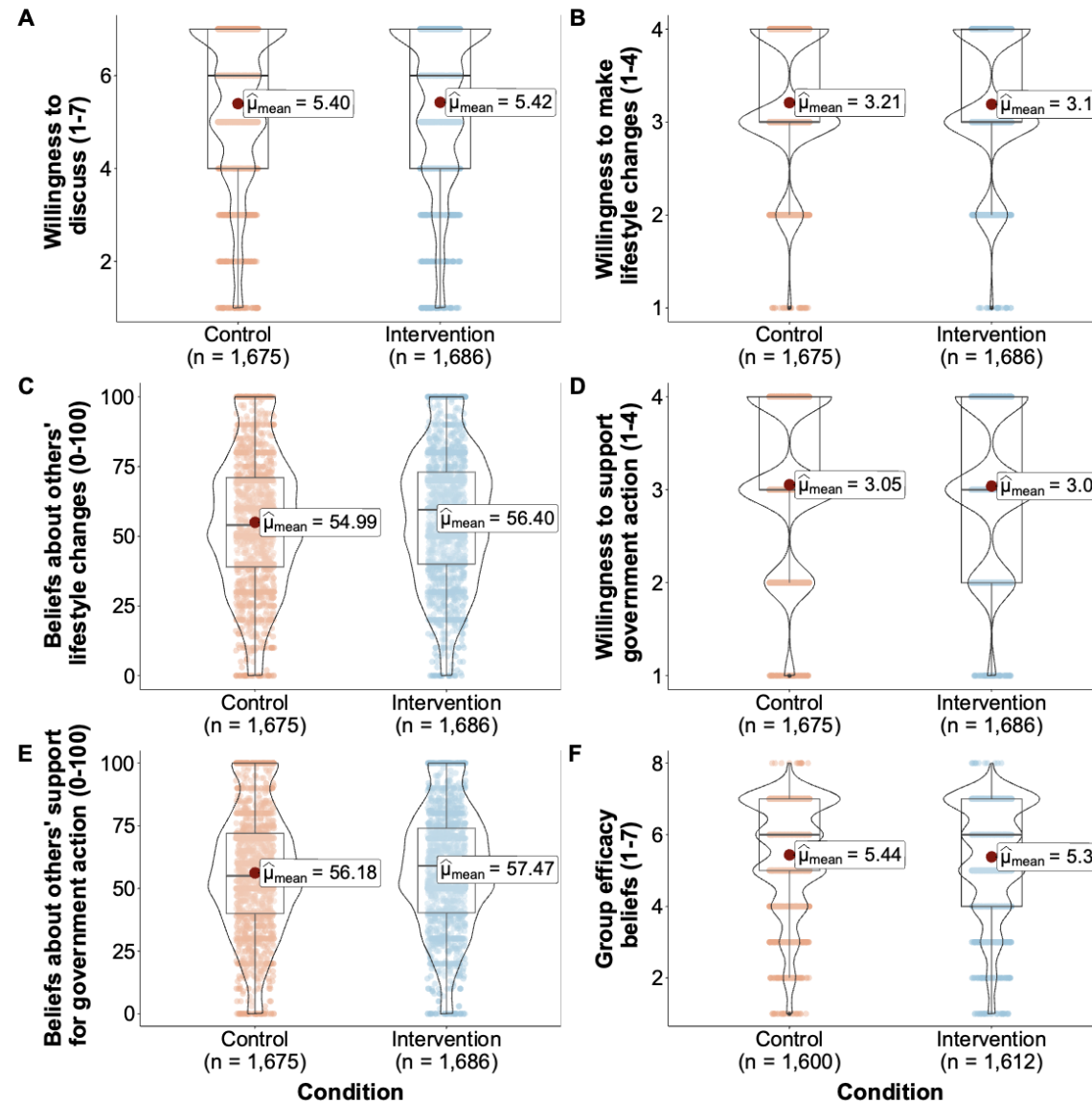
How effective was the intervention aimed at reducing pluralistic ignorance?





## Aim 2

### Comparison of the Control and Intervention Condition on the six Outcomes



Note. The gray line represents the median.

What  
can we  
**learn**



## **Pluralistic ignorance**

- Consistent pluralistic ignorance effects across diverse countries
- Larger in loose (Brazil, Poland) than tight cultures (Indonesia, India, China)

What  
can we  
**learn**



## **Intervention**

- Largely ineffective except for small effects on willingness to express one's opinion
- Questions practical utility of social consensus messaging in online tools  
(e.g., gapminder)

**Correcting pluralistic  
ignorance alone may not be  
sufficient to drive meaningful  
changes in climate action  
behaviours**

# MEET THE TEAM

