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Can a health framing increase public support for climate action?

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Background

- “We call for a public health movement that frames the threat of climate change for humankind as a health issue... **health concerns are crucial because they attract political attention.**” (Costello et al. 2009: 1696).
- “**The health implications could and should be more effectively harnessed to build support** for a stronger response to climate change.” (Watts et al. 2015: 1904)
- What evidence for claims about building public support for climate action through a focus on health?



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Public support for climate action

- Importance of public support for mitigation policies
- Paris Agreement and nationally determined contributions (NDCs) – rely on public engagement and support
- Danger of politicization of net zero targets – (“climate inactivism”)
- Growing attention to public attitudes to climate change



Frames

- Frames as mental structures that allow people to understand reality – structure ideas and concepts, and we perceive, reason, and act (Lakoff 2006)
- Framing refers to the crafting of messages that gives salience to particular aspects of the issue



Why is climate change the greatest threat facing humanity today?

Climate change is a topic that deeply concerns all of us and here is why.

The New York Times

Climate Change Could Cut World Economy by \$23 Trillion in 2050, Insurance Giant Warns

Poor nations would be particularly hard hit, but few would escape, Swiss Re said. The findings could influence how the industry prices insurance and invests its mammoth portfolios.

IDEAS • BOOKS

What the World Will Look Like in 2050 If We Don't Cut Carbon Emissions in Half



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Forbes

Apr 19, 2019, 01:49pm EDT | 5,463 views

Climate Change: The Greatest Opportunity Of All Time

Erik Kobavashi-Solomon Contributor @

EXPRESS



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UK sent dire migrant warning as climate change to create 1 BILLION refugees

Health frame



“...the public health frame makes climate change personally relevant to new audiences by connecting the issue to health problems that are already familiar and perceived as important.

The frame also shifts the geographic location of impacts, replacing visuals of remote Arctic regions, animals, and peoples with more socially proximate neighbors and places across local communities and cities” (Nisbet 2009: 22)



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Evidence on health framing

- Growing calls for greater use of a health framing of climate change to build public support (e.g., Rossa-Roccor et al. 2021)
- Several studies have considered impact of health framing of climate change on public attitudes
- Some find positive impact of health framing on emotional responses (e.g., Maibach et al. 2010; Myers et al. 2012; Semenza et al. 2011)
- Framing fossil fuel burning in terms of health issue compared to climate change issue leads to greater support for mitigation – including more conservative leaning (Petrovic et al. 2014)
- Mixed findings on effect of health frame on public support for climate action – Some find positive effect (e.g., Walker et al. 2018; Amelung et al. 2019) find no significant effect (e.g., McCright et al. 2015; Bernauer & McGrath 2016)



Research gaps

- Methodological (e.g., experimental designs, comparison with other frames, message design, samples)
- Overwhelming focus on ‘Western’ high-income countries, particularly the USA
- Time issues → following notable extreme weather events and media coverage, more focus on health impacts of climate change in past few years
- Inadequate attention of growing divide between climate ‘convinced’ and ‘sceptics’



Study on health and other frames

communications earth & environment

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Positive, global, and health or environment framing bolsters public support for climate policies

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4860 Accesses | **1** Citations | **170** Altmetric | [Metrics](#)

Abstract

Public support for climate policies is important for their efficacy, yet little is known about how different framings of climate change affect public support for climate policies around the world. Here we report findings from a conjoint experiment of 7,500 adults in five countries – China, Germany, India, UK, and USA – to identify climate messages that elicit greater support for policies to tackle climate change. Messages were randomly varied on four attributes: positive (opportunity) or negative (threat) framings, theme (health, environment, economy, migration), scale (individual, community, national, global), and time (current, 2030, 2050). We find that a positive frame, health and environmental frames, and global and immediate frames bolster public support. We examine differences between countries and across



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Key climate frames

- **Valence** – positive vs negative framings of climate as threat/opportunity (e.g., Morton et al. 2011; Spence & Pidgeon 2010; Bernauer & McGrath 2016) .
- **Theme** – health, economic, migration, etc. (e.g., Maibach et al. 2010; Badullovic et al. 2020).
- **Scale** – framing climate change at global vs local (or individual) level (Wiest et al. 2015; Moser 2010).
- **Time** – current or future impacts of climate change (e.g., Graham et al. 2017)



Methods

- Conjoint experiments conducted with representative online panels in five countries: **China, Germany, India, UK, and USA**
- Surveys run in October 2020 by Deltapoll.
- Total sample $n=7,512$ with c. 1,500 in each country
- Conjoint considered four aspects of climate change messaging:
 - **Valence:** threat, opportunity
 - **Theme:** environmental, economic, health, migration
 - **Scale:** individual, community, country, world
 - **Timeframe:** 2050, 2030, now



Conjoint experiments

- Conjoint experiments ask participants to evaluate hypothetical profiles with multiple, randomly varied attributes
- Widely used in marketing and increasingly social sciences to measure preferences, and the relative importance of structural features of multi-dimensional decision-making (Hainmueller et al. 2020)



Conjoint Design

Valence	Threat (negative)		Opportunity (positive)	
Theme	Economic	Environmental	Health	Migration
Scale	World	Country	Community	Personal
Time	Now	2030		2050



Statement A

Climate change is the greatest threat we face because of the associated health problems. This includes rising temperatures and more frequent extreme weather events increasing the spread of infectious disease and worsening well-being. This will make things worse for the world right now.

Statement B

Tackling climate change is the greatest opportunity we have because of the associated economic benefits. This includes greater investment in more efficient green technology and clean reliable energy, and providing more jobs in the renewable energy sector. This will make things better for the UK by 2050.



Survey design

Please read the following two statements on climate change. Indicate which of the two statements would make you more likely to support policies to tackle climate change.

Statement A

Climate change is the greatest threat facing the world right now due to the health impacts. This includes rising temperatures and more frequent extreme weather events increasing the spread of infectious disease and worsening well-being. This is making things worse for the world.

Statement B

Tackling climate change is the great opportunity for the world right now due to the migration benefits. This includes investing in regions that are most impacted by the effects of climate change to help ensure people can continue to live and work in these regions. This is making things better for the world.

CHOSEN Statement

[CHOSEN_WTP] On a scale of £0 and £20 please indicate how much you would be willing to pay each month to support policies that tackle climate change based on this scenario.

o Slider £0 - £20

NOT CHOSEN Statement

[NOTCHOSEN_WTP] Using the same scale how much would you be willing to pay each month to support policies that tackle climate change based on the other scenario.

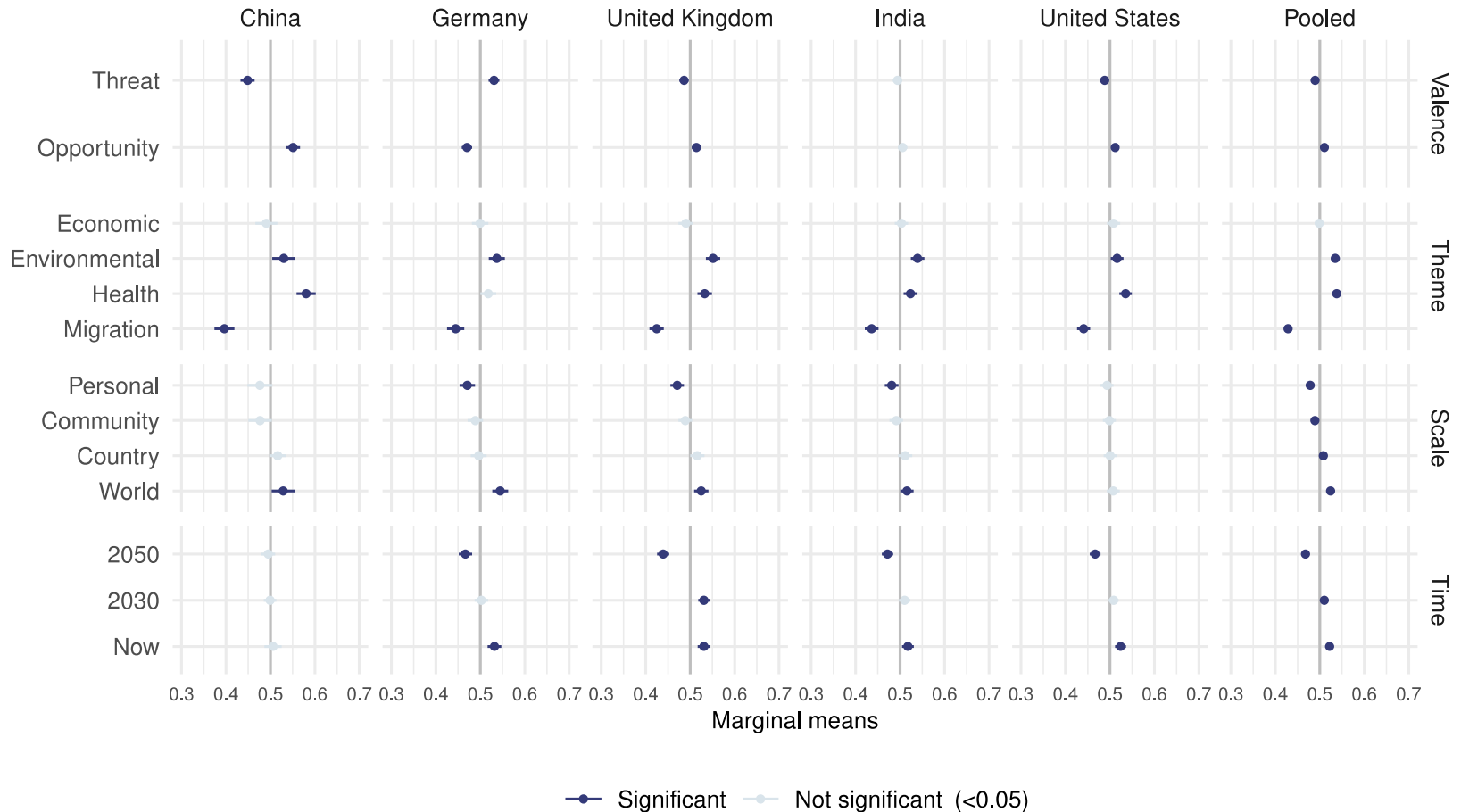
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Results (overall)



Sample size n=7,512 | Data are weighted to be nationally representative | Fieldwork by Deltapoll, September 2020 | Question: Respondents were shown two statements in which the valence, theme, scale, and time frame were varied at random, providing 96 possible permutations. Respondents were asked: Indicate which of the two statements would make you more likely to support policies to tackle climate change.



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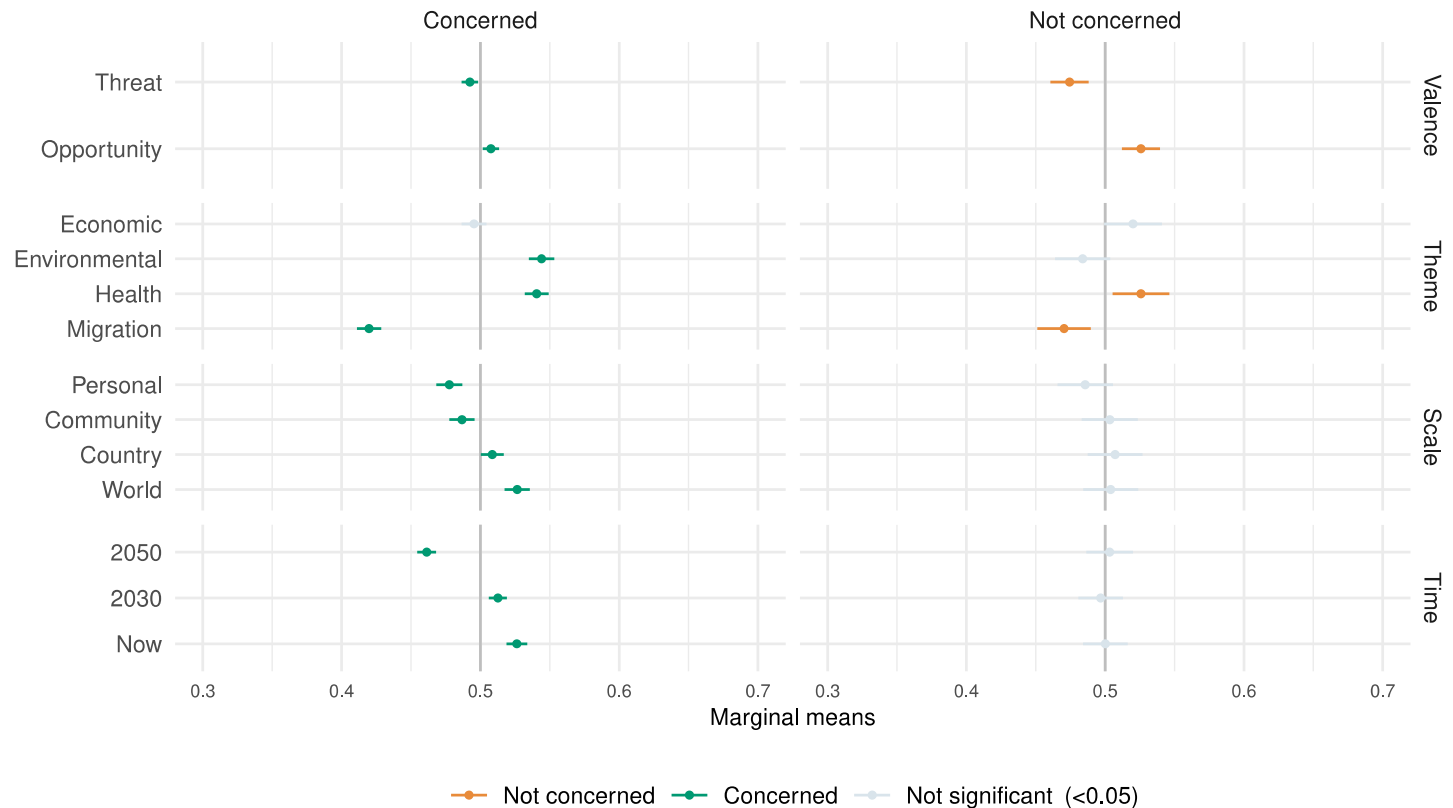
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Findings

- Opportunities work better than threats in increasing public support for climate change policies (except in Germany)
- Environmental and health frames have a positive effect on public support – but migration has a negative effect
- Larger scale has a more positive the effect (i.e., global level), while framing at an individual level has a negative effect
- A more immediate timeframe has a bigger effect on increasing public support



Results (not concerned with climate change)



Sample size n=7,512 | Data are weighted to be nationally representative | Fieldwork by Deltapoll, September 2020 | Question: Respondents were shown two statements in which the valence, theme, scale, and time frame were varied at random, providing 96 possible permutations. Respondents were asked: Indicate which of the two statements would make you more likely to support policies to tackle climate change.



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Results for the ‘not concerned’

- Two aspects increased public support for climate change policies among those ‘not concerned’ about climate change:
 - Presenting climate change as an opportunity
 - Discussing climate change using a health frame
- Results largely driven by effects in China and the USA – this is partly because in the other countries a very small proportion of respondents are ‘not concerned’ about climate change



Additional analysis and limitations

- Pilot study conducted six months produced largely consistent findings
- Alternative dependent variables (sliding scale) as robustness check
- Analysis by other sub-groups
- External validity of analysis
- Attitudinal rather than behavioural measure of support



Implications

- Findings suggest that different frames can influence public support for mitigation policies
- Positive framings, those focused on environmental and health themes, and at the global level at the present time increase public support
- Analysis shows some consistent findings across the five countries – but also points to important country differences (e.g., threat/Germany)
- Positive and health framings of climate change can potentially increase support for climate policy among sceptics
- Impact of the pandemic on salience of health – and on attitudes to climate change going forward
- Further research is key



Country-specific findings

- Framing climate change as an opportunity increases public support in all countries except Germany, where threat is more effective
- Economic framing ineffective in all five countries
- Environmental framing has a positive effect in all countries except the USA
- Health has a positive effect on public attitudes in all five countries
- Migration frame has a strong negative effect in all countries
- Scale has relatively small effects, but individual level has a negative effect, and global level has a positive effect in all countries except the USA
- Timeframe doesn't matter in China. In other countries, we find that using a 2050 timeframe has a negative effect on public attitudes, and talking about climate change as an issue right now has a positive effect

