# Insights from social sciences for climate change communications

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# **USC Team**



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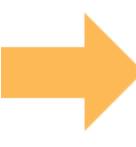


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# Climate change impacts



#### Here's what Vermont is facing:

- → More rain and flooding: Extreme precipitation events, such as those with 2" or greater precipitation in a 24-hour period, will likely increase in frequency. These events could cause flooding that threatens homes, businesses, infrastructure, communication, and transportation systems.
- → Changes to agriculture: Shifts in growing season lengths and more rain will complicate growing conditions for many crops, including apples and maple syrup, increasing the likelihood of crop damage or crop failure. Rising temperatures can also lead to heat-stress for livestock.
- → Different forests: Ecosystems will be increasingly threatened by invasive species and shifts in the seasons.

Source: Vermont Action Plan

# Climate change requires behavior change

#### **Mitigation**

# Reducing emissions from transportation, buildings, energy and products.

#### Adaptation



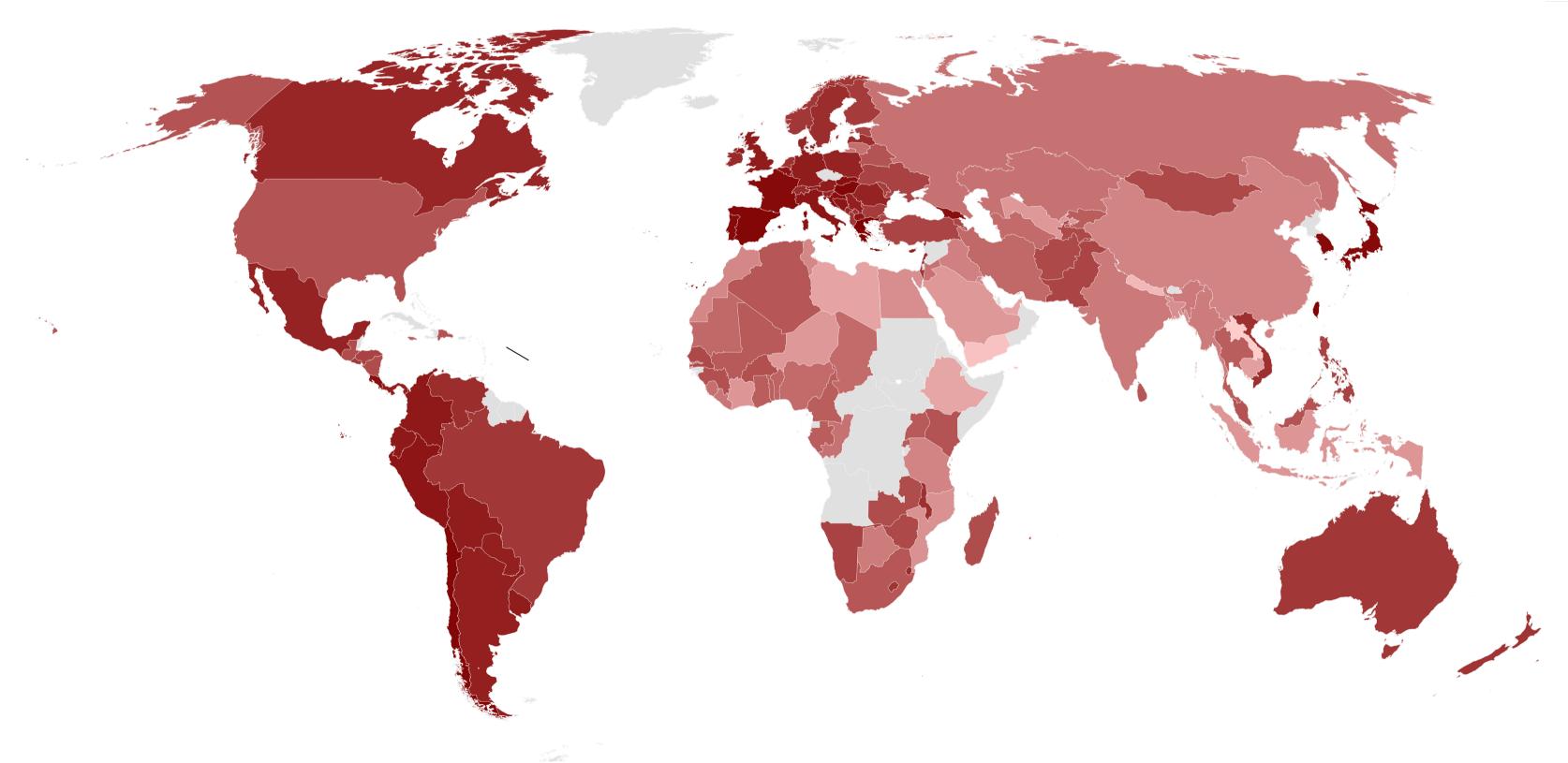
Source: Vermont Action Plan

# Social scientists can help

- How to communicate risk
- How to promote behavior change

# 1. Address motivated majority

73% of people in the US (and 69% in around the world) are concerned about climate change



<u>Data source: Lloyd's Register Foundation World Risk Poll</u>
Bruine de Bruin & Dugan (under review)

# 1. Address motivated majority

Many 'green' consumers do not know most effective actions to take

Home energy use



Air conditioner contributes more than lights to home energy use

Attari et al. PNAS (2010)

Carbon foot print of food choices

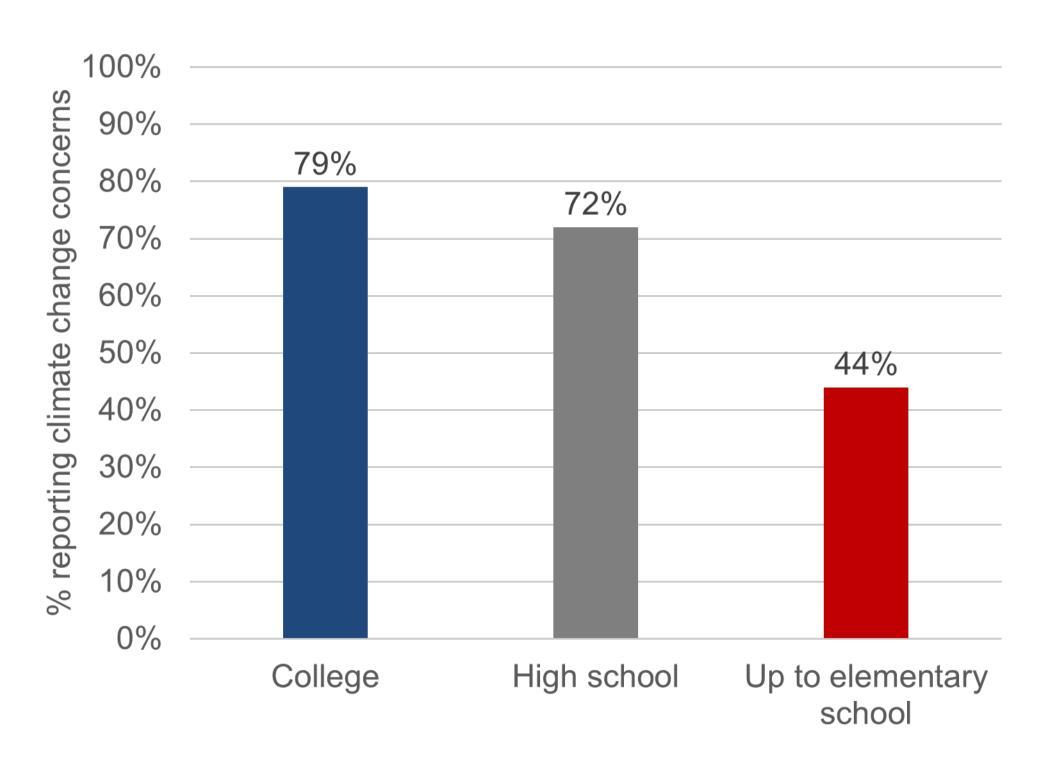


Eating less meat reduces diet carbon footprint more than reducing waste

Kause et al *Environmental Research Letters*(2019)

# 2. Make communications understandable

Education predicts climate change concerns...



# 2. Make communications understandable

Education predicts climate change concerns... likely due to complexity of climate change communications



Bruine de Bruin et al. Climatic Change (2021)

GRAPHIC BY DENNIS LAN

#### 2. Make communications understandable

- Use everyday language without jargon
- Use short words (1-2 syllables) and short sentences
   (Aim for 7<sup>th</sup> grade reading level
   https://goodcalculators.com/flesch-kincaid-calculator/
- Provide examples

### 3. Be concrete: focus on local severe weather

Concerns about severe weather are unrelated to education and political affiliation "flood action plan" may get more support than "climate change adaptation plan"





# Social science insights for communications

- 1. Address the motivated majority
- 2. Make communications understandable
- 3. Be concrete: Focus on severe local weather
- 4. Social scientists can help

## **Contact information**



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