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George Mason University
Center for Climate Change Communication

Enhancing public engagement in climate change: Five assertions

2011 Climate Change Communicators of the Year Award Seminar
June 8th, 2011

Edward Maibach, MPH, PhD

Public engagement – both process and outcome

Public engagement – the process

Public engagement – the process

- Providing people with trustworthy information on key policy issues, eliciting their input, and integrating that input into decision-making and social action.

- Three levels of public engagement process:

1. Informing – a one-way process in which government produces and delivers information for use by citizens.

1. Consulting – a two-way process in which citizens' views are sought and citizens provide feedback to government.

1. Actively participating – a partnership in which citizens actively engage in the policy-making process, playing a role in shaping the policy dialogue and potentially proposing policy options.

Sources: Cohen et al (2008) BMC Public Health; OECD (2003)

Public engagement – the outcomes

Public engagement – the outcomes

- Engagement is a state of personal connection with the issue.

- Elements of personal engagement:

1. Cognitive – awareness; knowledge of critical facts; efficacy beliefs (self-, political-, and collective-efficacy).

1. Affective – perceived relevance; concern; priority.

1. Behavioral – personal actions; social actions; societal actions.

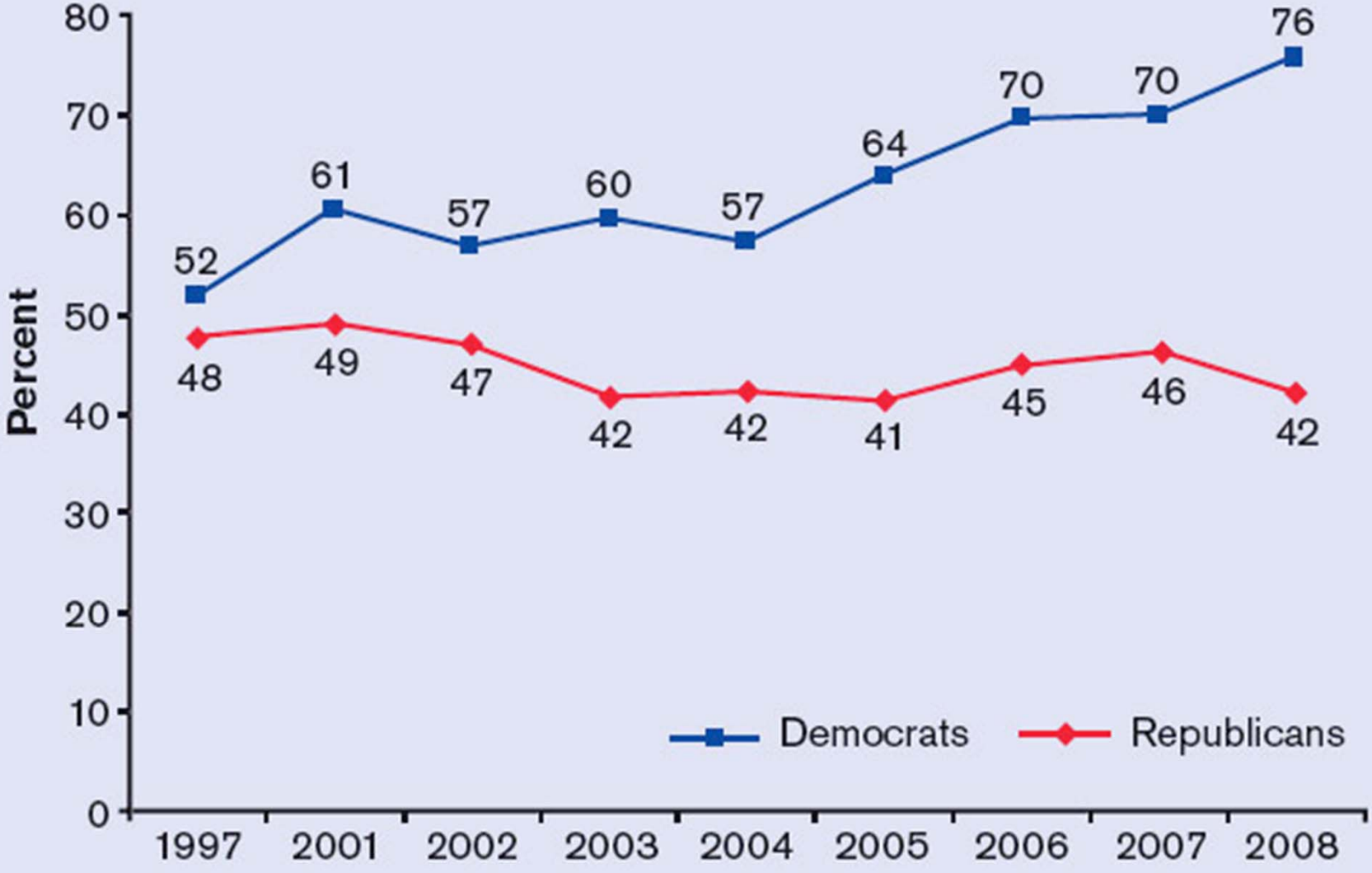
Sources: Lorenzoni et al (2007) Global Environmental Change; Ockwell et al (2009) Science Communication

Assertion #1

- With respect to science-based perspectives about climate change, we don't know nearly enough about:
  - effective public engagement processes
  - the most important public engagement outcomes.

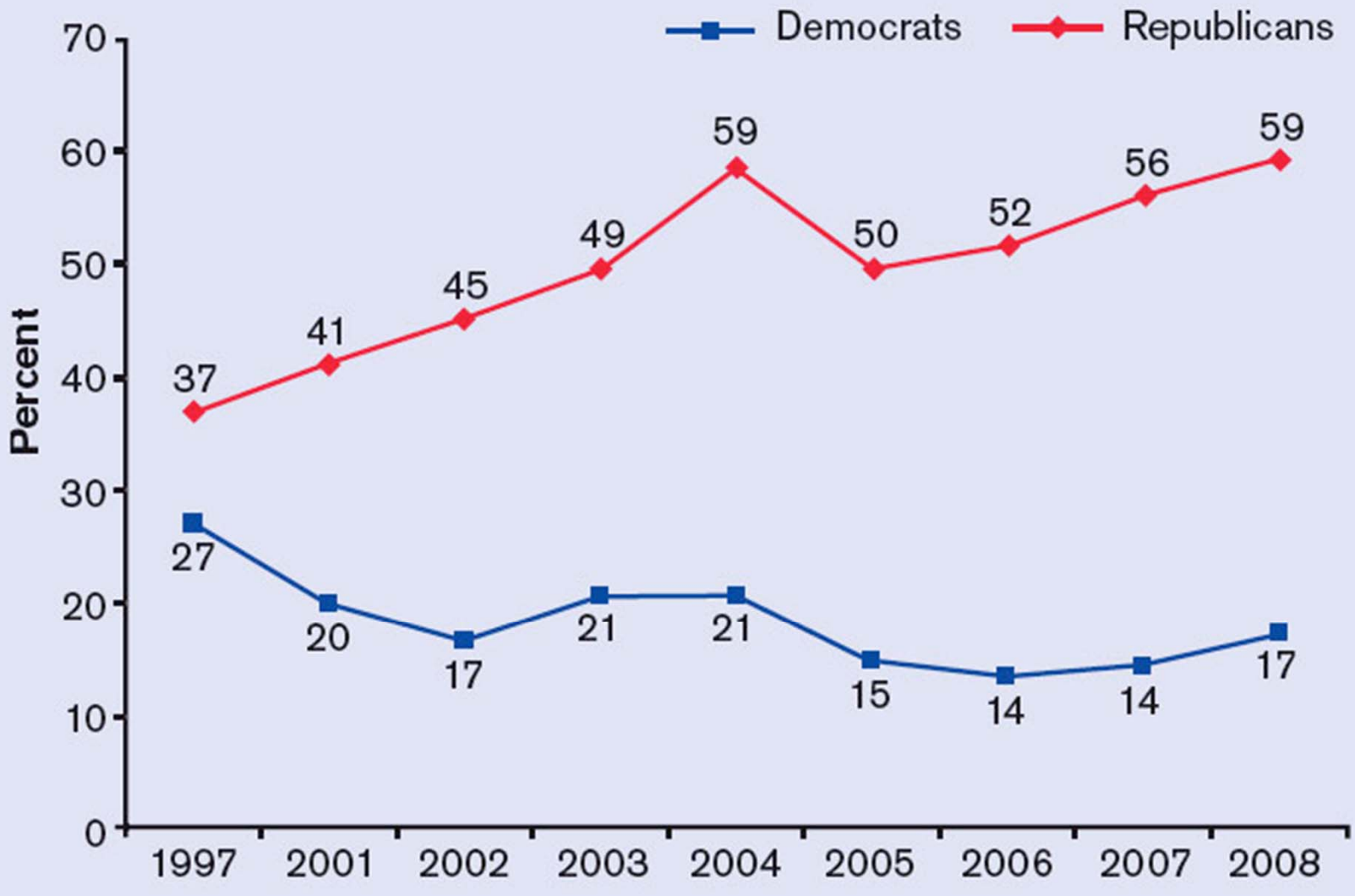
- The evidence for this assertion can be seen clearly in the shifts in public opinion over the past 1.5 decades.

Figure 1. Respondents saying that the effects of global warming have already begun, by party



Source: Dunlap & McCright, 2008, Environment

Figure 2. Respondents saying that the seriousness of global warming is generally exaggerated in the news, by party



Assertion #2

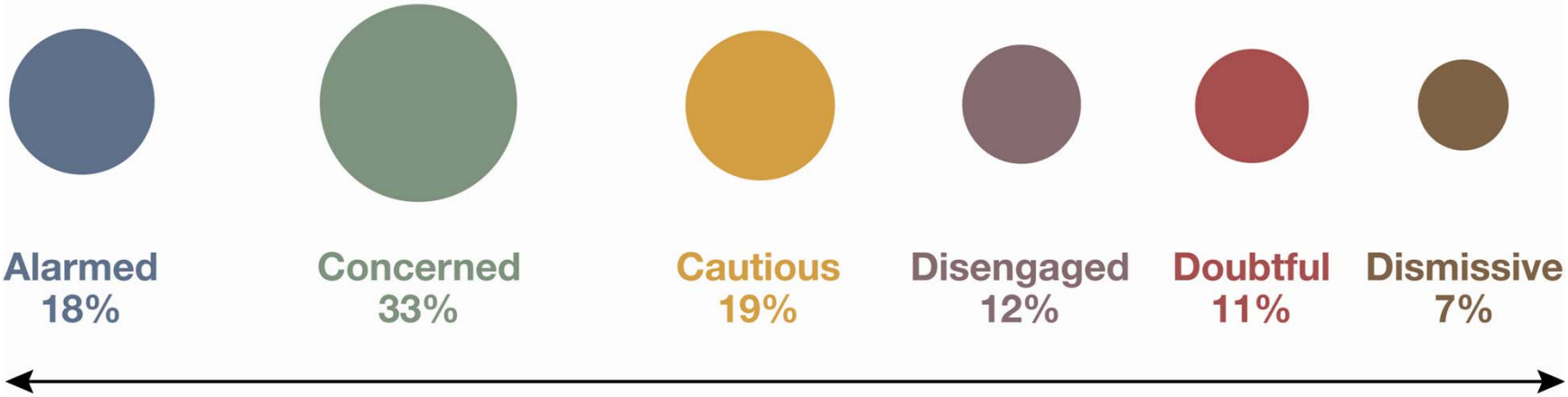
- Two relatively small groups of Americans are strongly engaged in the issue of climate change, having reached completely opposite conclusions, but…

- …the majority of Americas are only modestly engaged in the issue, if engaged at all.

Global Warming's "Six Americas"

Figure 1: Proportion of the U.S. adult population in the Six Americas

Proportion represented by area



n=2,129

Source: Yale & George Mason, 2008

Figure 2: Certainty of belief in the reality of global warming

Do you think that global warming is happening?
How sure are you that global warming is happening? or
How sure are you that global warming is not happening?

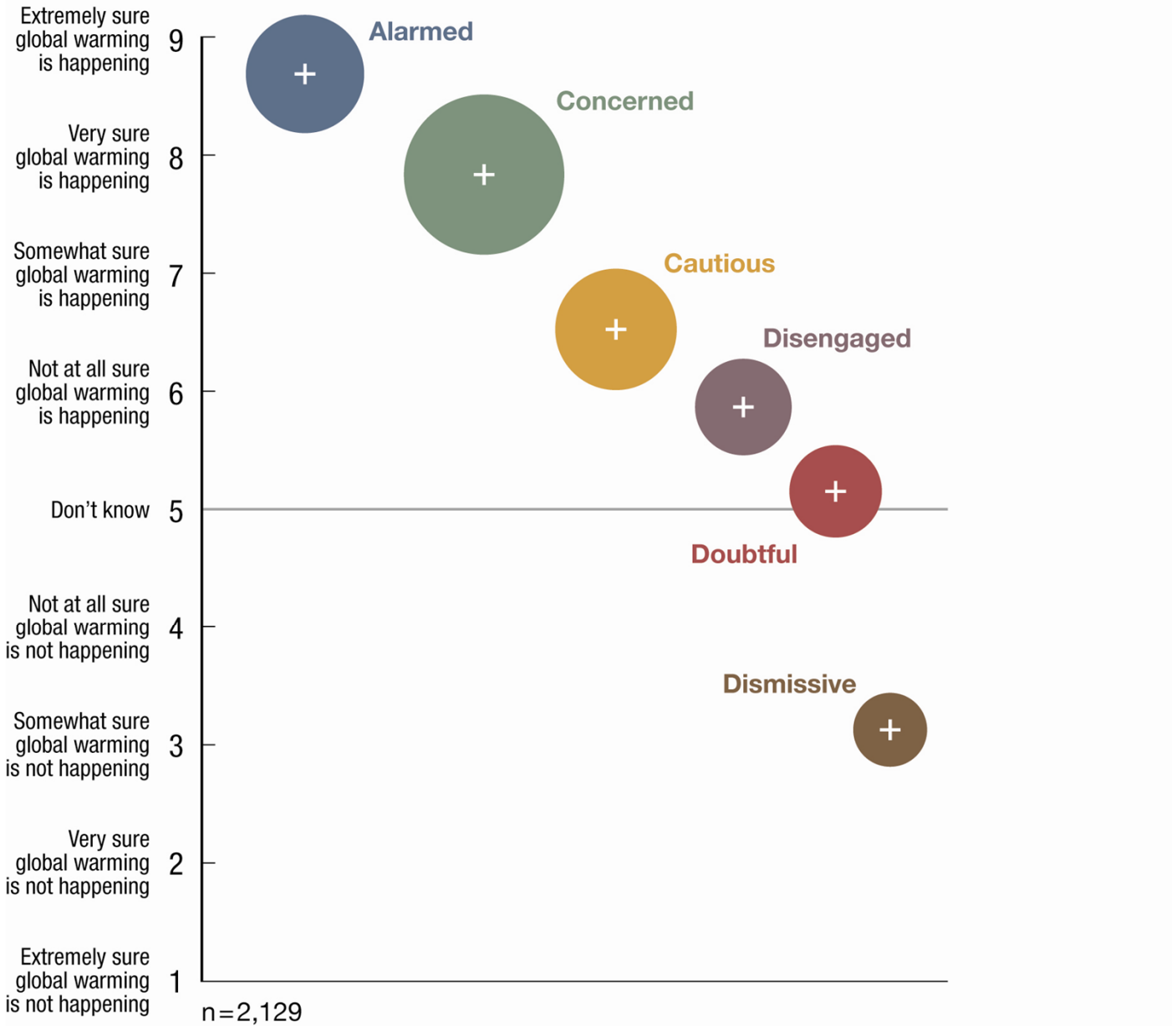
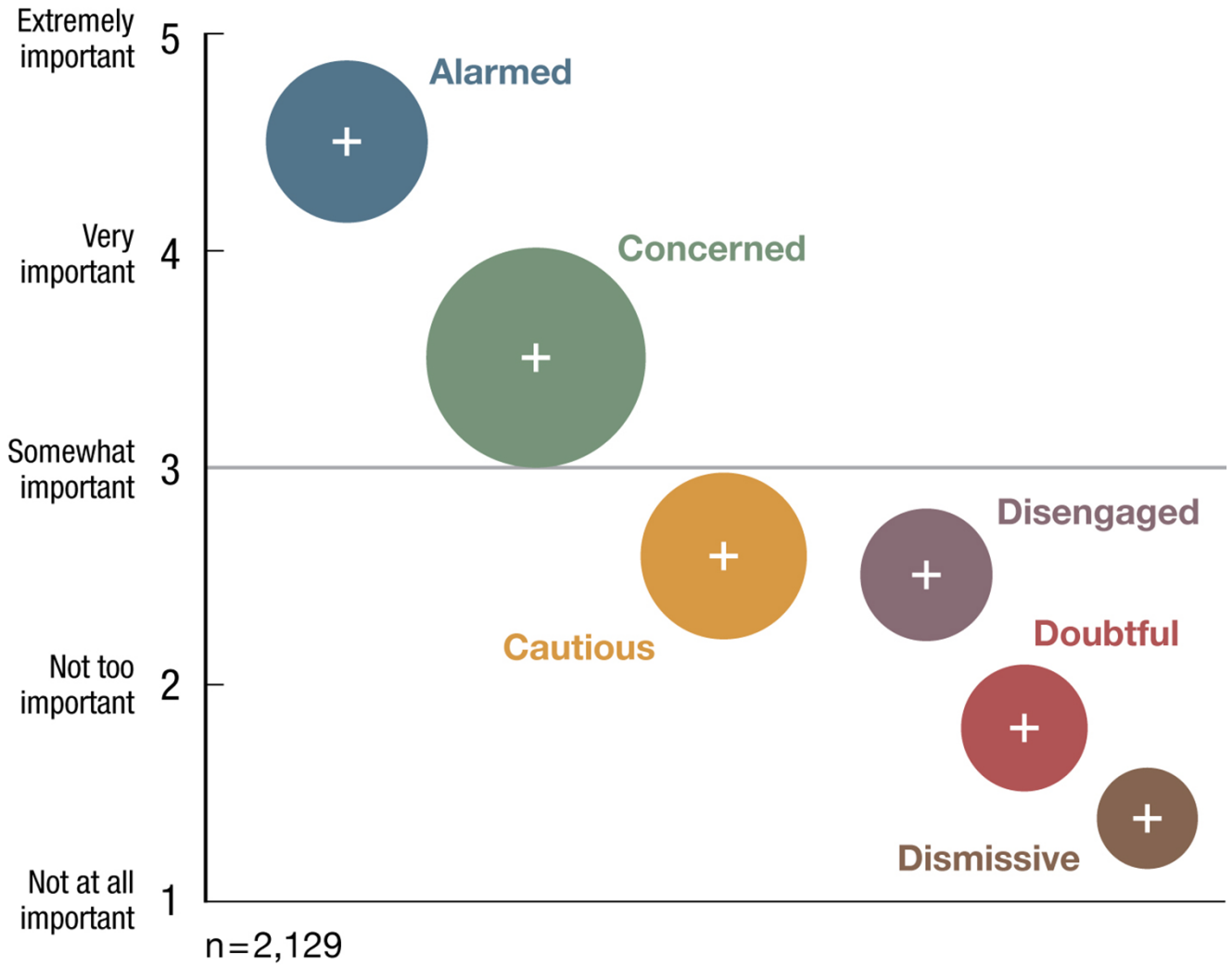


Figure 3: Personal importance of global warming

How important is the issue of global warming to you personally?



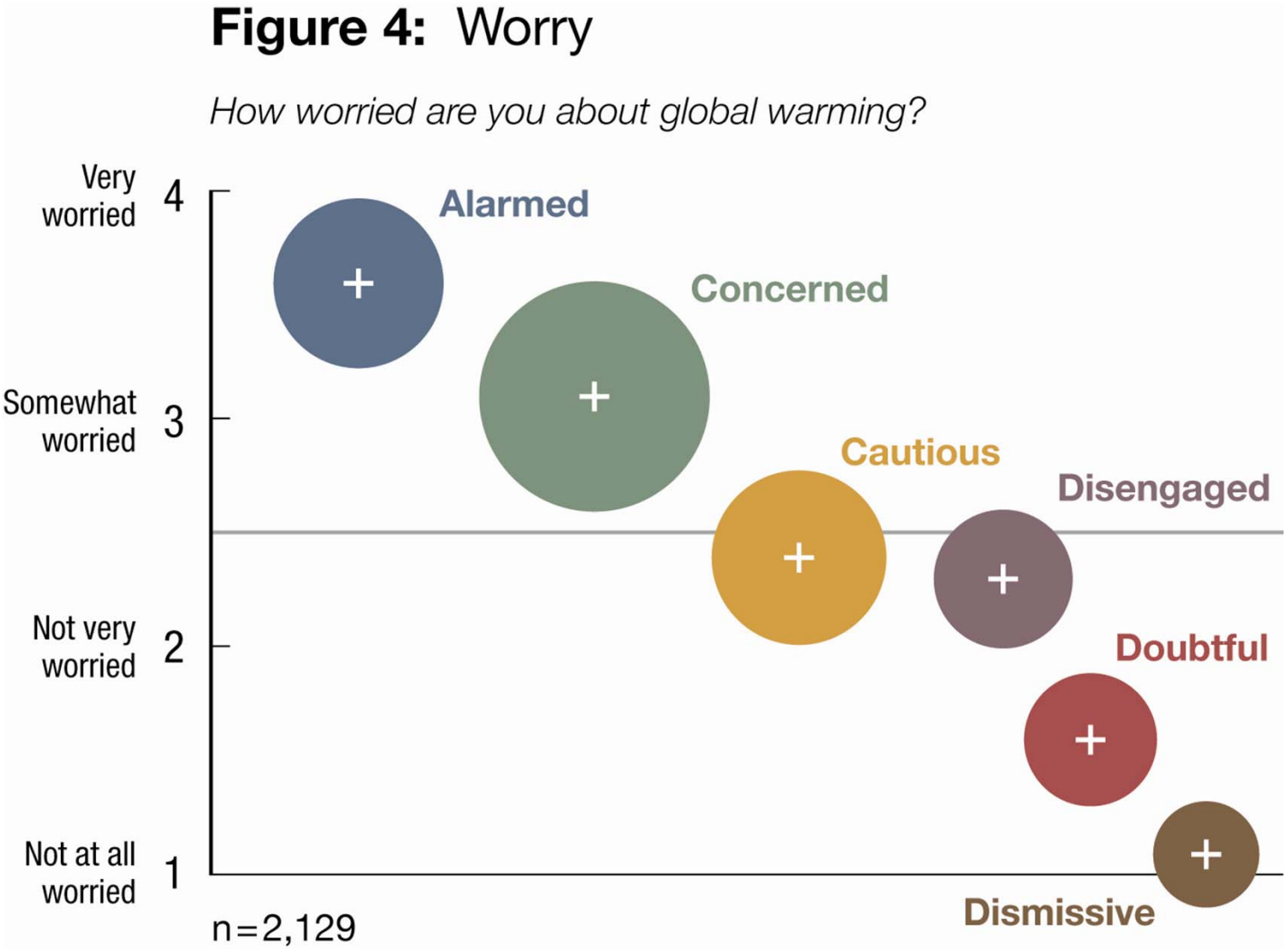


Figure 4: Worry
How worried are you about global warming?
Very worried
4
Somewhat worried
3
Not very worried
2
Not at all worried
1
Alarmed
Concerned
Cautious
Disengaged
Doubtful
Dismissive
n=2,129

Figure 5: Attitudinal certainty

"I could easily change my mind about global warming."

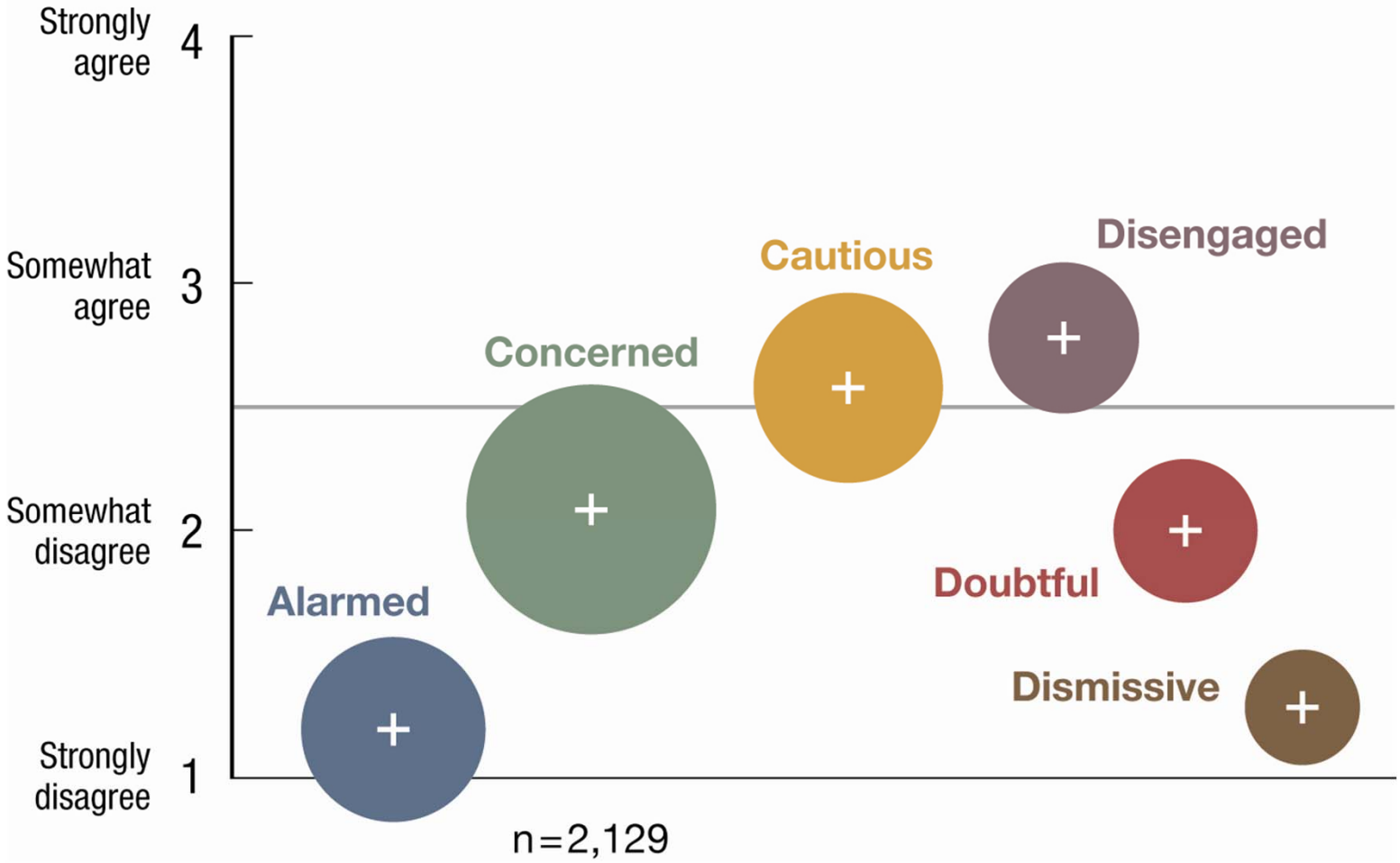
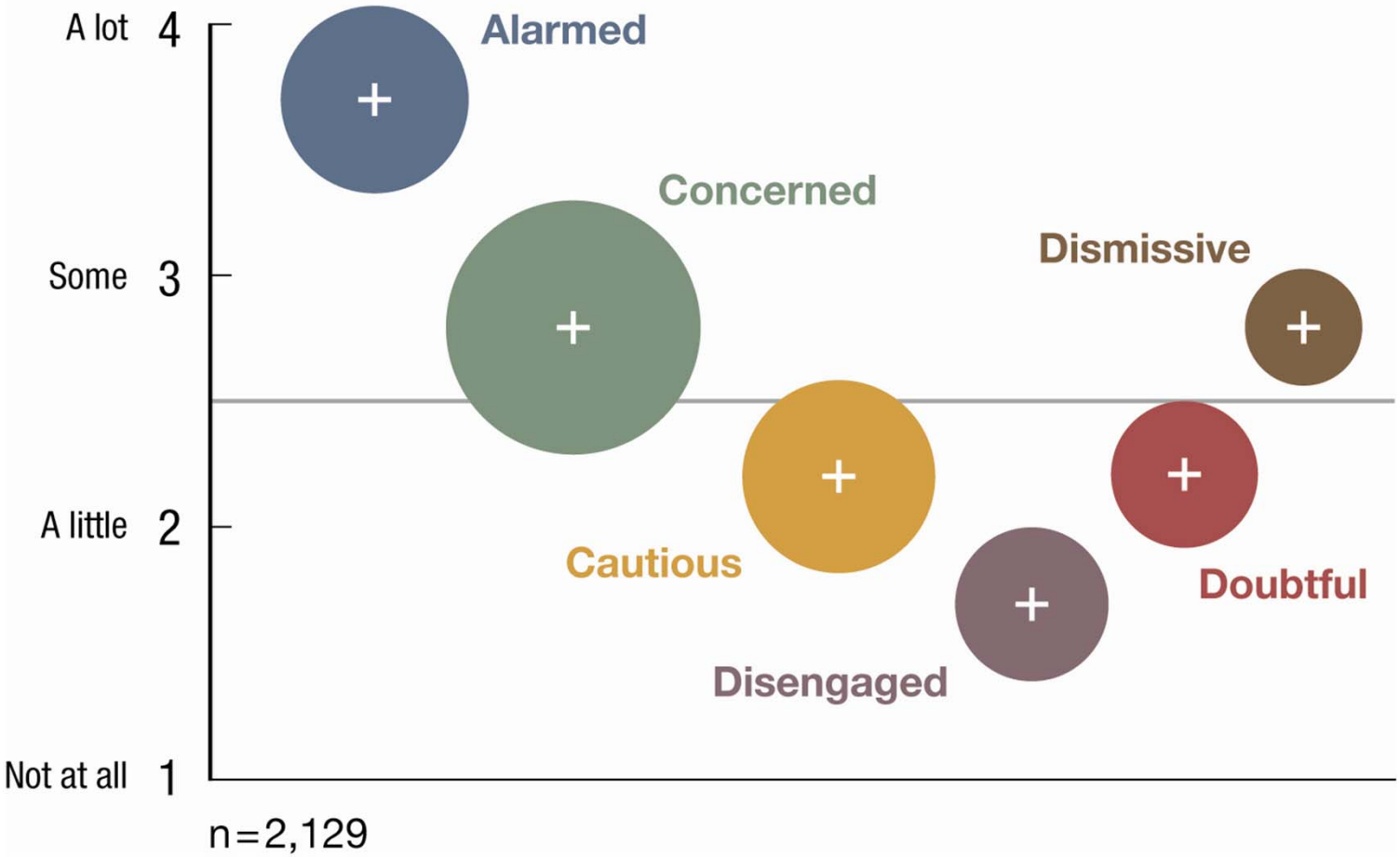
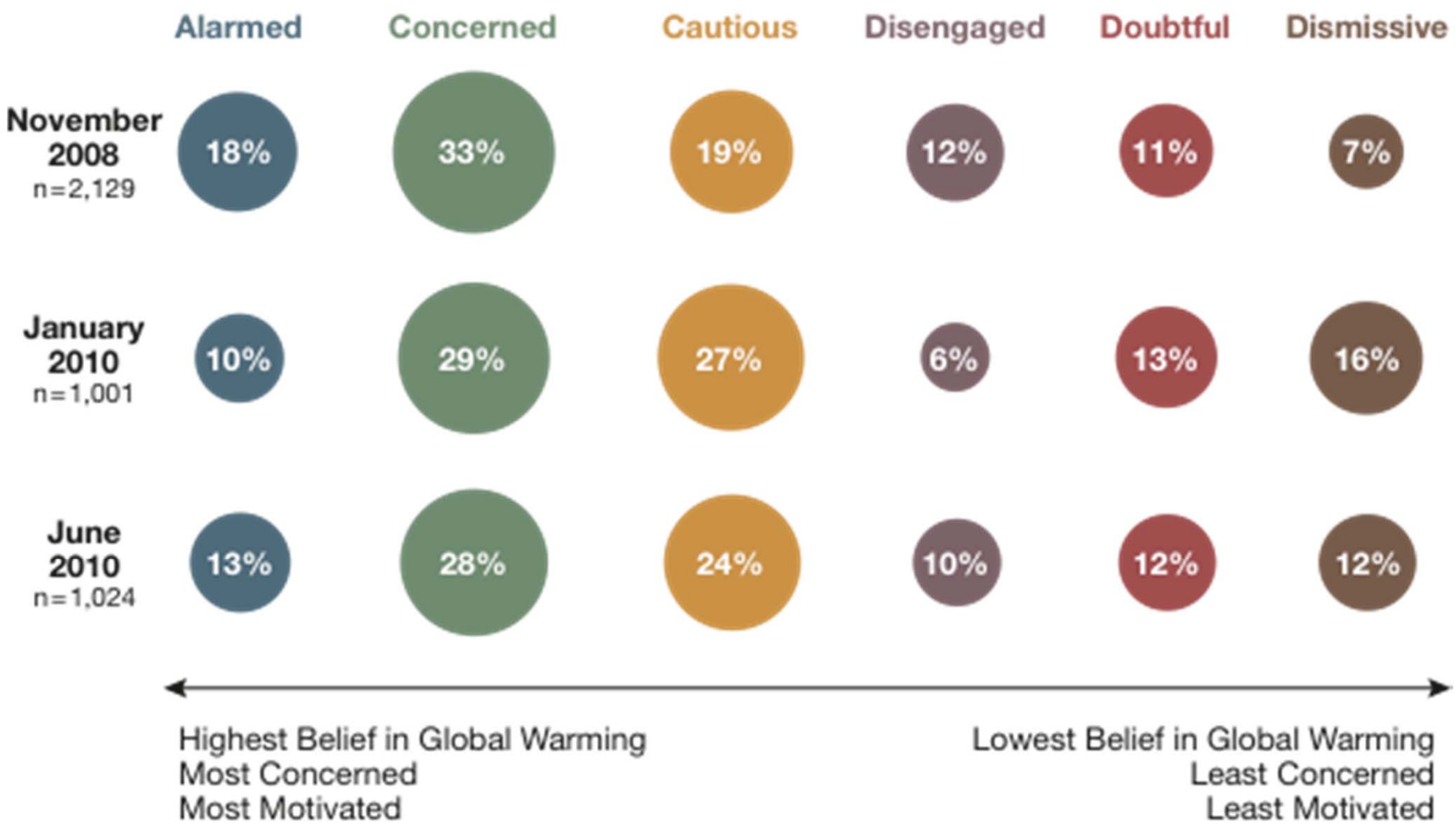


Figure 6: Amount of thought about global warming

How much had you thought about global warming before today?



n=2,129

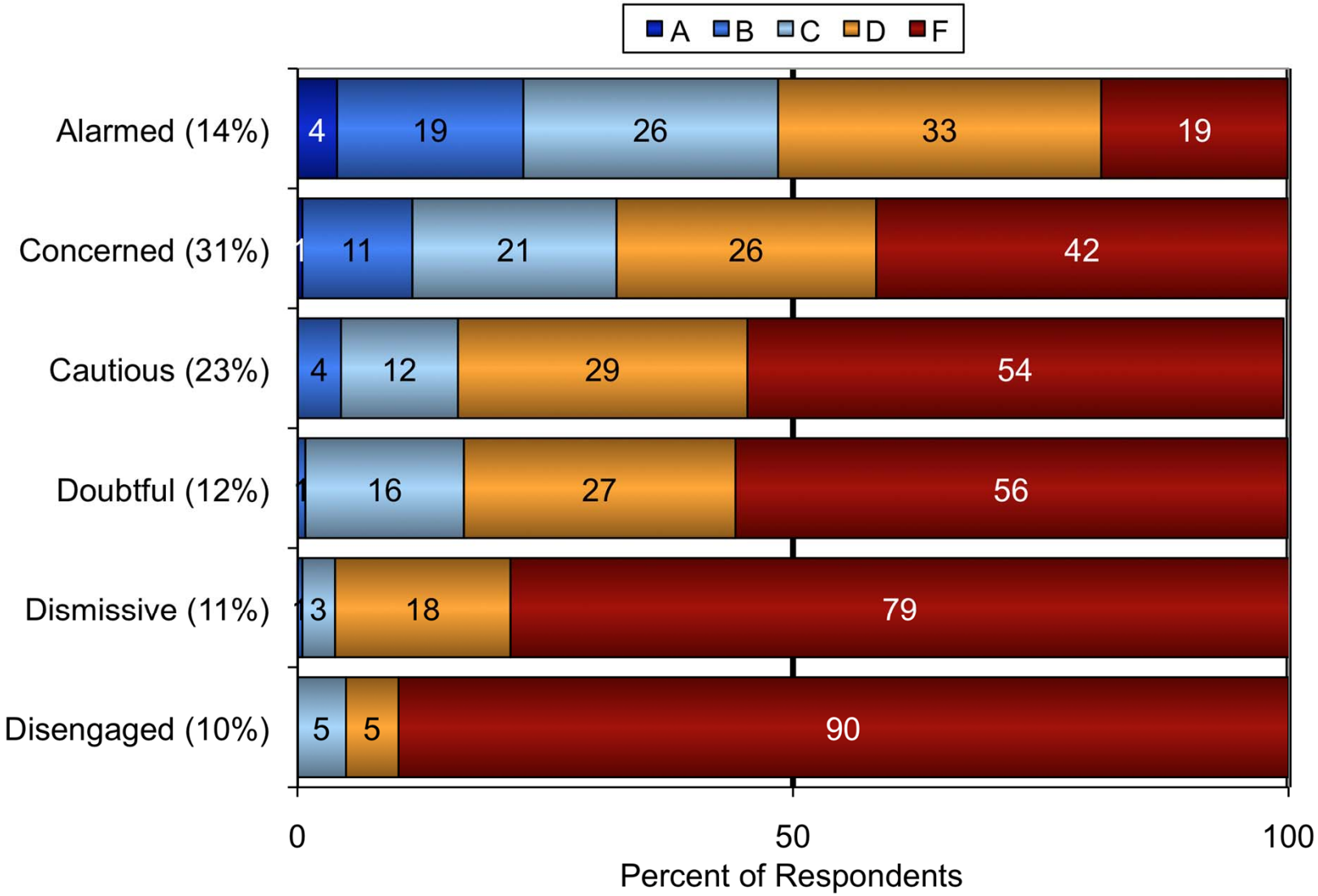


Source: Yale & George Mason, 2008, 2010

Assertion #3

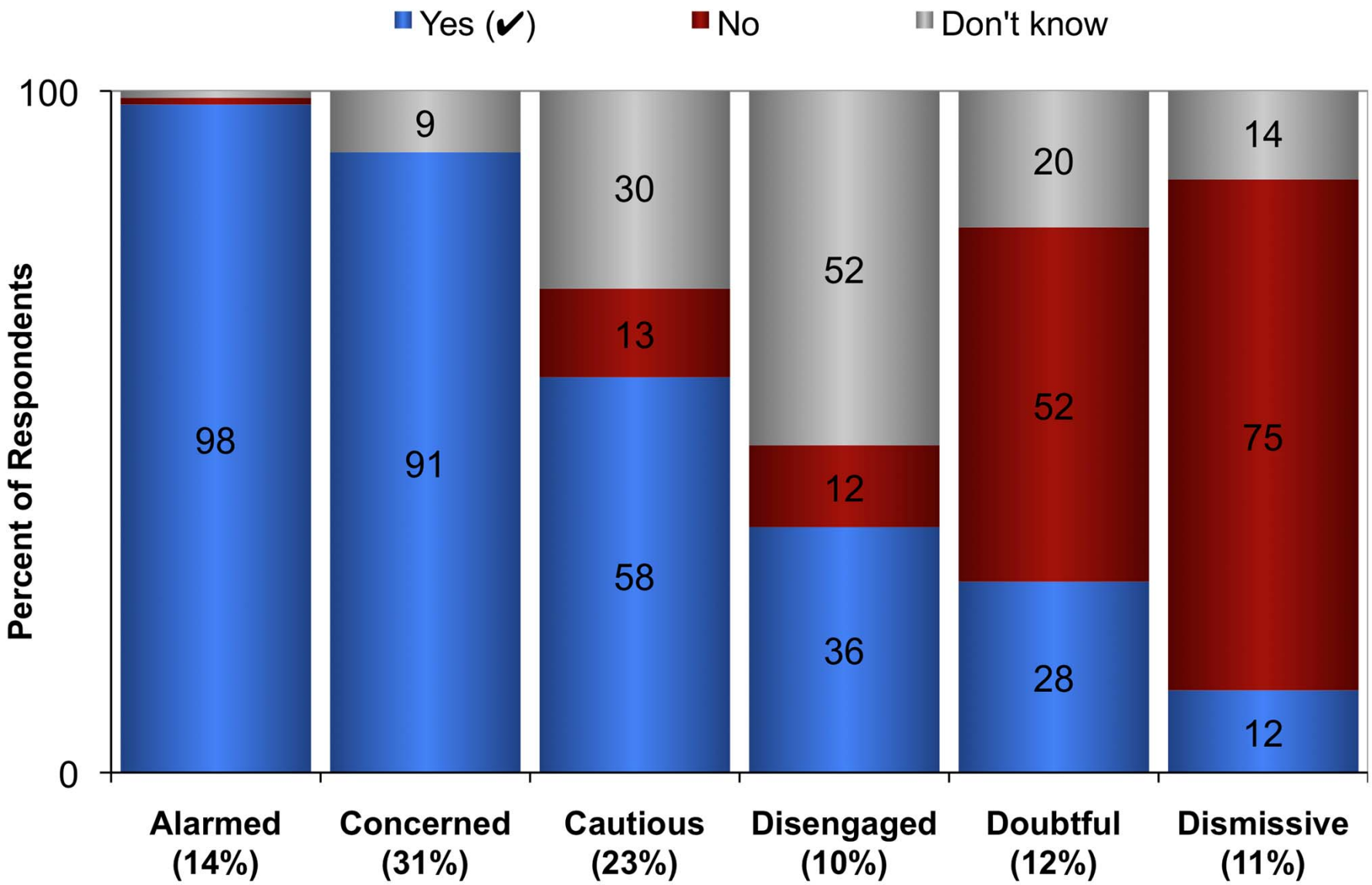
- Knowledge is helpful, but by no means is it sufficient to generate public engagement.
  - Most members of all Six Americas have little climate literacy.
  - An “information deficit” is not the core public engagement challenge.

Knowledge about Climate Change: Straight Scale Grades



Leiserowitz *et al.*, (2010)

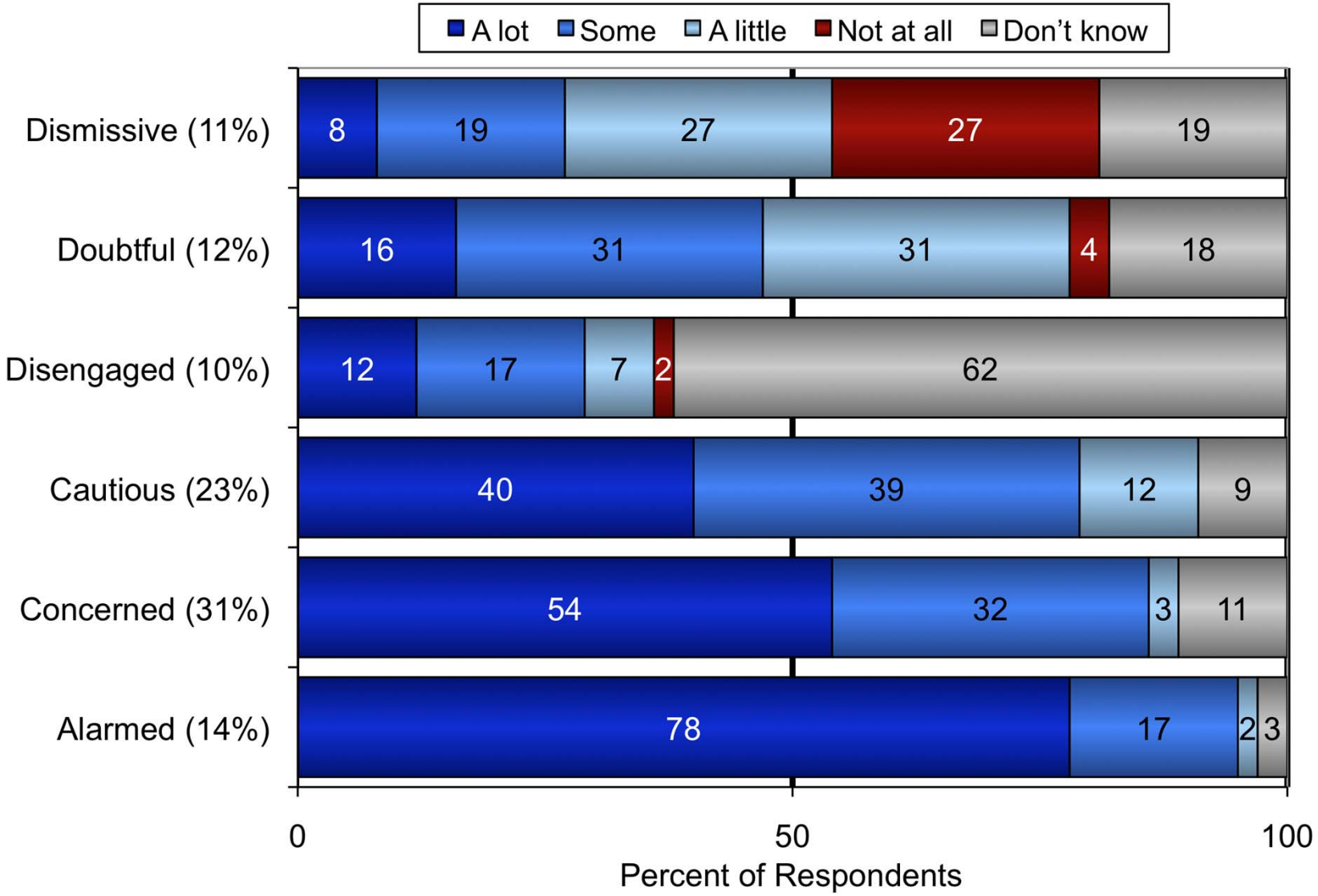
Is global warming happening?



Anthony.Leiserowitz@yale.edu

Source: Yale, July 2010 (*n* = 2,030)

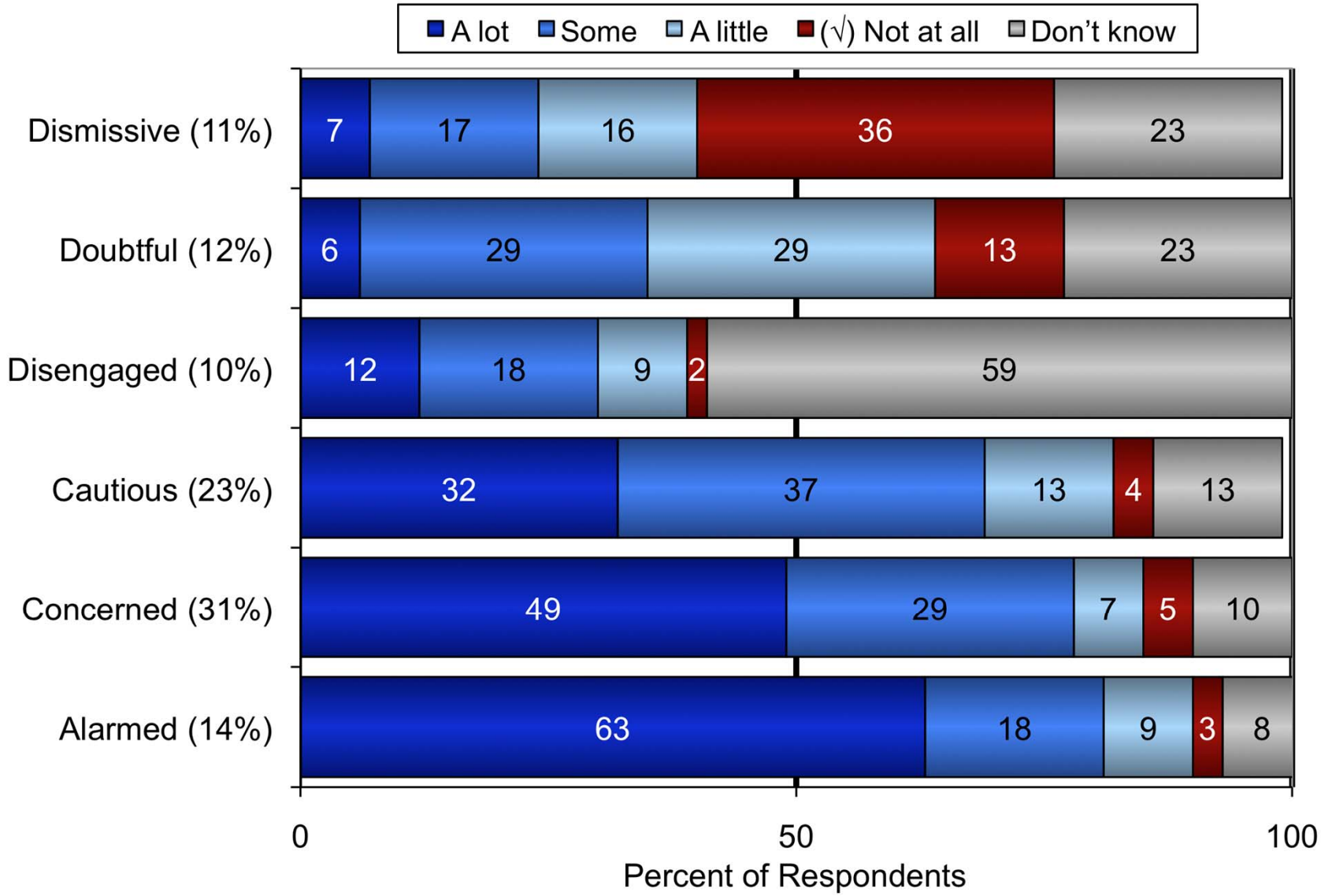
How much does burning fossil fuels contribute to global warming?



Anthony.Leiserowitz@yale.edu

Source: Yale, July 2010 (*n* = 2,030)

How much does the hole in the ozone layer contribute to global warming?



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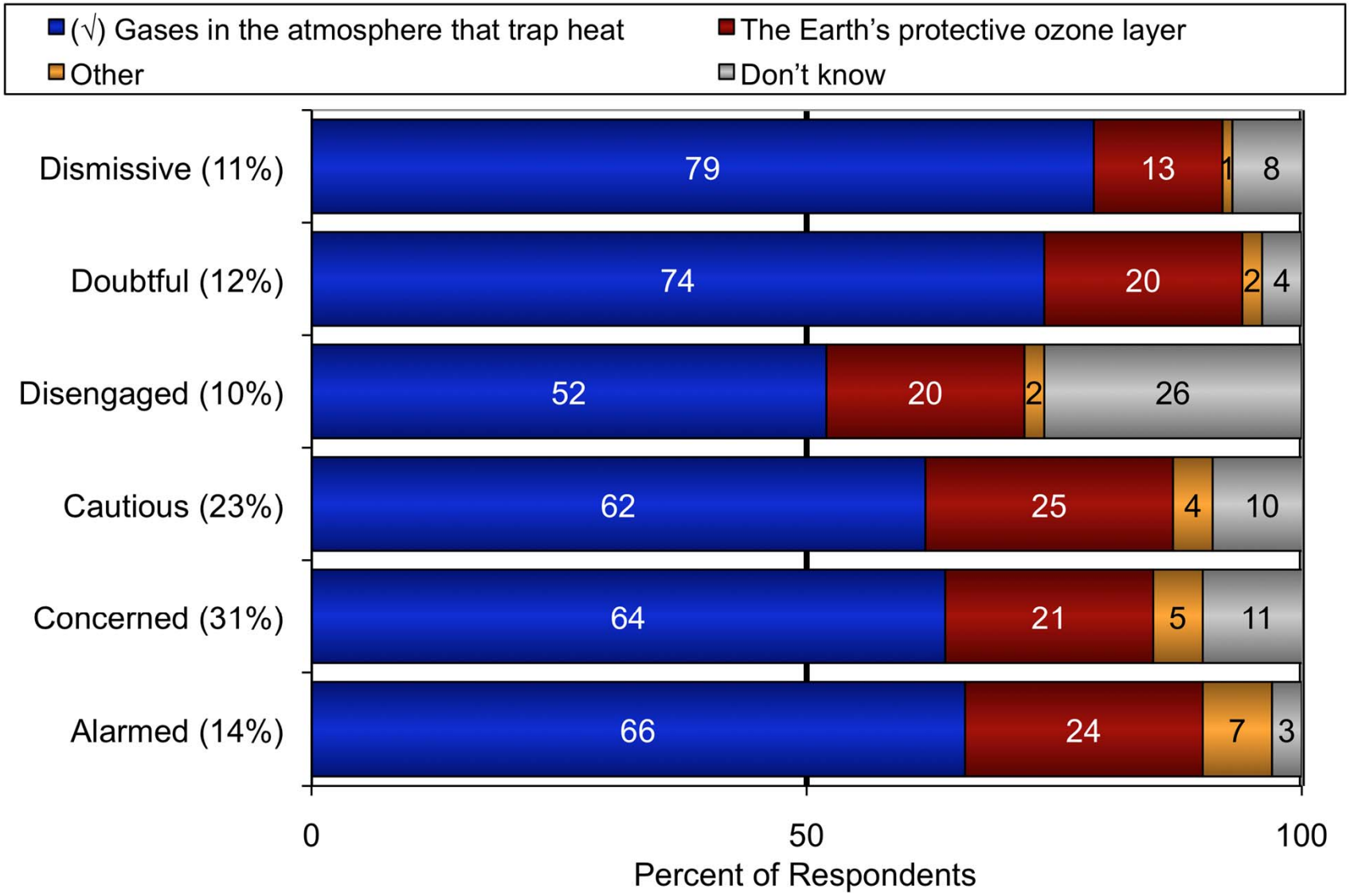
Source: Yale, July 2010 (*n* = 2,030)

The “greenhouse effect” refers to:



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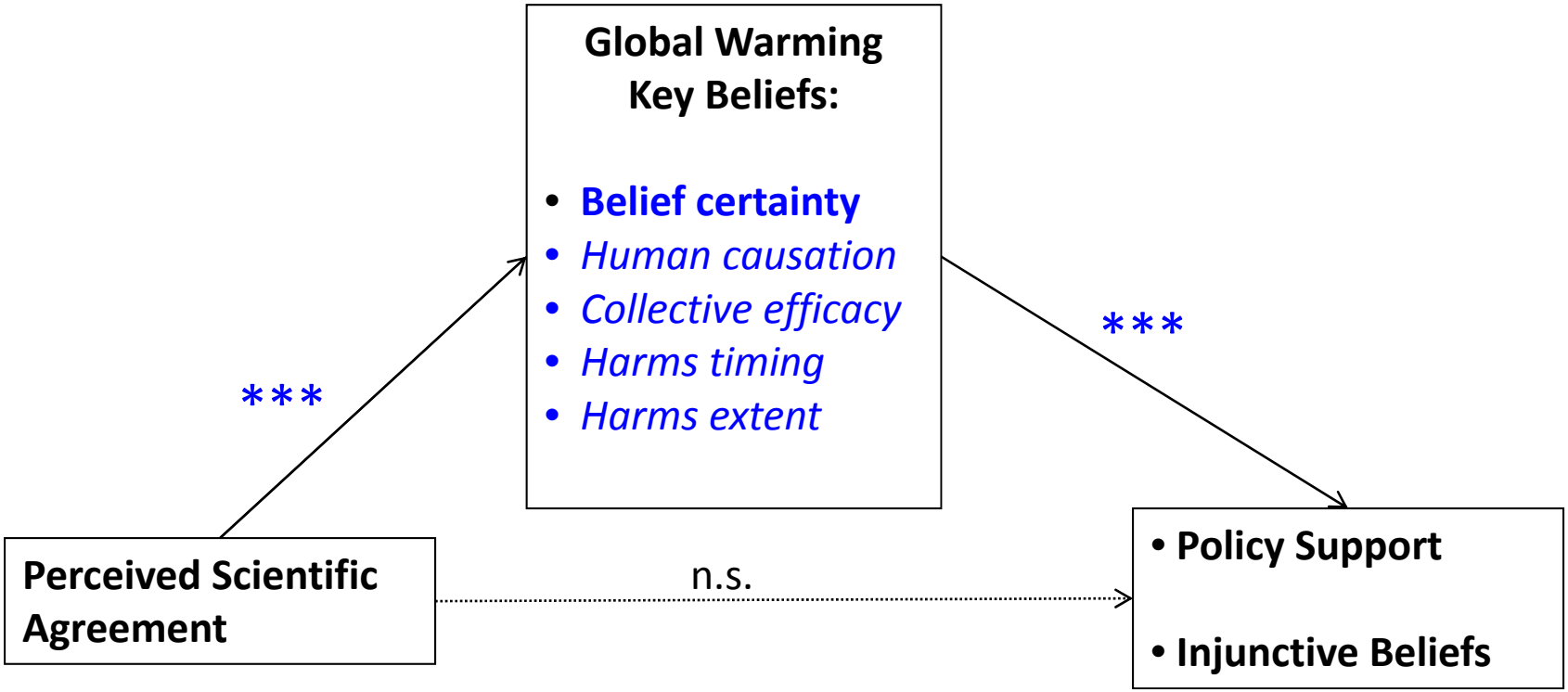
Source: Yale, July 2010 (*n* = 2,030)

Assertion #4

"People simplify. Our job is to help them simply appropriately."

Source: Institute of Medicine (1989) Improving Risk Communication

- "Simple clear messages, repeated often, by a variety of trusted sources" is a powerful formula for influencing the cognitive element of public engagement .
  - This formula is taken more seriously by opponents than proponents of climate action.



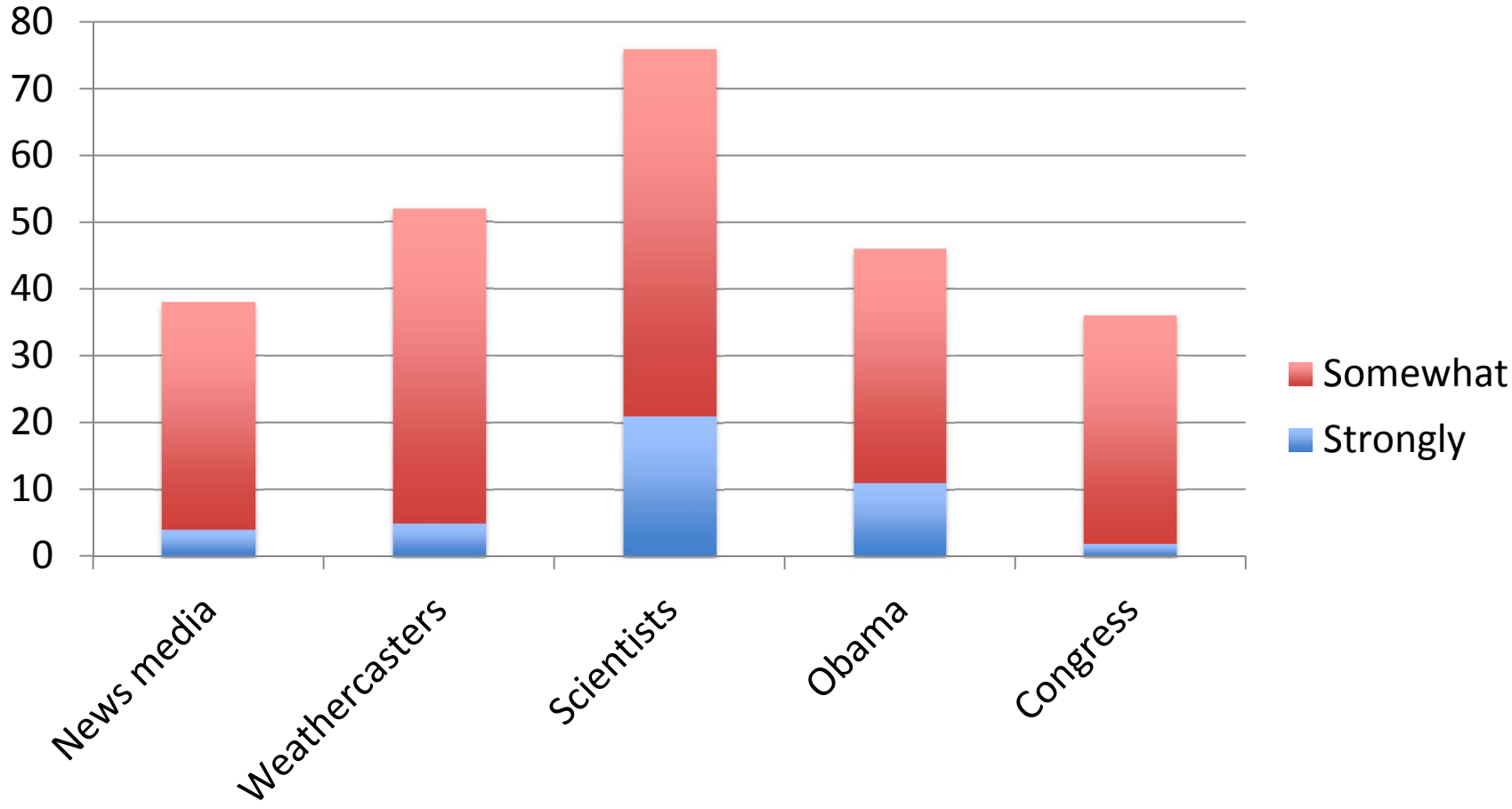
People who believe the myth that "there is a lot of disagreement among scientists about whether or not global warming is happening" are significantly less likely to hold key beliefs (especially certainty that global warming is happening) and to support societal action.

Source: Ding D, Maibach E., Zhao X, Roser-Renouf C, Leiserowitz A. (revise & resubmit). The misperception of scientific agreement on climate change: A myth that matters. Nature Climate Change

Assertion #5

- Trust is the currency through which public engagement is earned.
  - *We tend to trust people and institutions that we feel we personally know (and who have demonstrated their trustworthiness to us) more than people and institutions who are distant to us.*

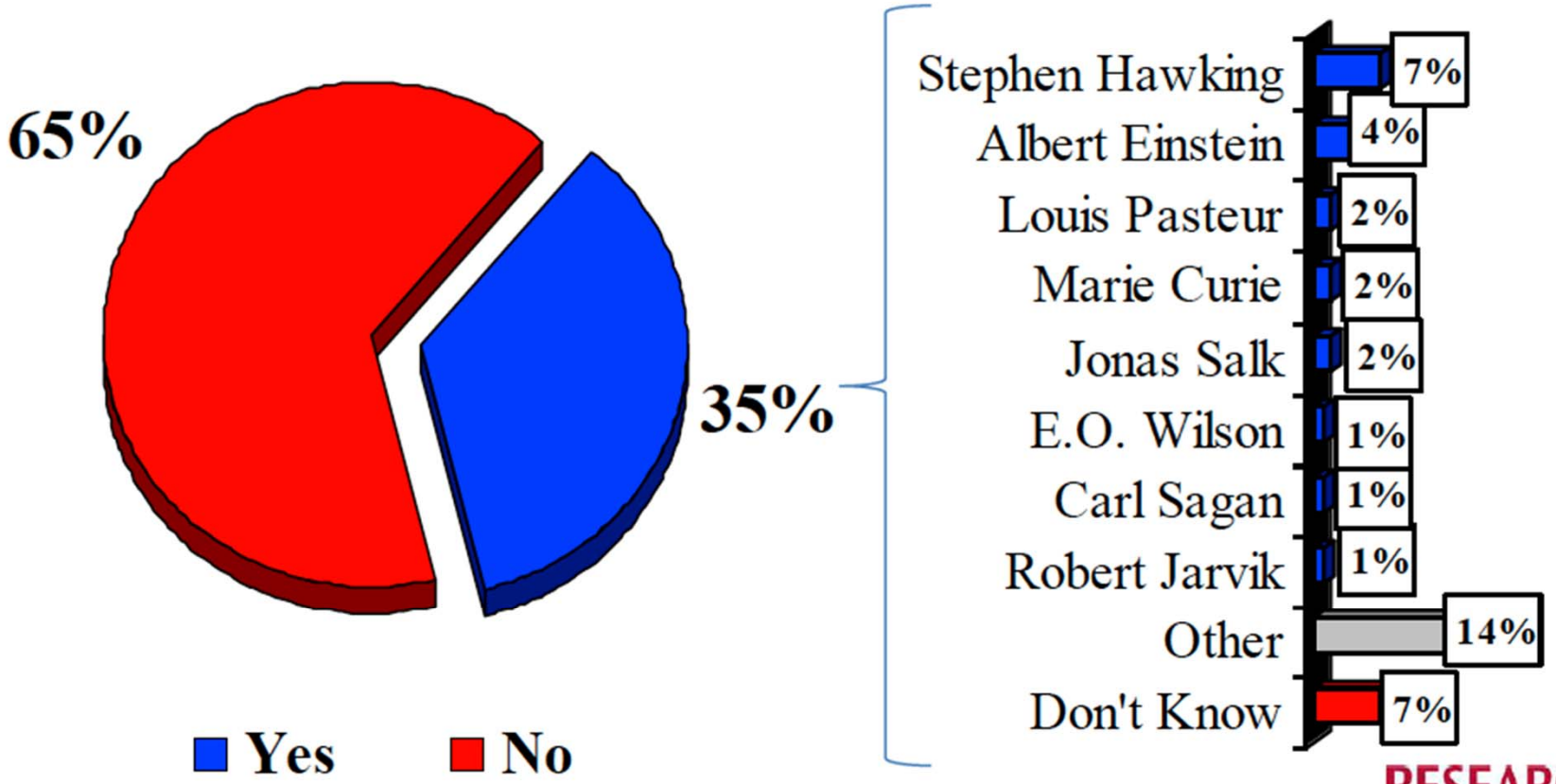
How much do you trust or distrust the following as a source of information about global warming?



May 2011, n=1,010
Source: Yale/George Mason

Most Americans Can't Name A Living Scientist

Can you name a living scientist? (*total mentions n=278*)



Source: Your Congress–Your Health Survey, June 2009
Charlton Research Company for Research!America

RESEARCH AMERICA
AN ALLIANCE FOR DISCOVERIES IN HEALTH

Jim Gandy, Senior Meteorologist, WLTX, Columbia, SC

Conveying the Human Implications of Climate Change

A Climate Change Communication Primer for Public Health Professionals

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Melinda Weathers, MA
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George Mason University

Welcome to *Open Spaces*, a daily blog about news, issues, and people in the U.S. Fish and Wildlife Service.

Starting Earth Day 2011, the U.S. Fish and Wildlife Service and its partners are sharing stories about how accelerating climate change is impacting or may impact fish and wildlife where you live.

Each weekday for 50 consecutive weekdays we are rolling out a new story from a different state.

Our aim is to show the broad scope of changes and emerging trends we're just beginning to understand, as well as collaborative efforts to respond across the nation.

For more information about this blog series, please contact David Eisenhauer at 703-358-2284.

For more information on our climate change work, visit our National Climate Change Site or connect with us on:

Vermont: Climate Change Poses Challenges for the Bicknell's Thrush

Posted At : May 23, 2011 9:41 AM | Posted By : David Yeargin
Related Categories: news_blog, habitat fragmentation, warming, Vermont, high elevations, birds

Bicknell's thrush has one of the most restricted breeding ranges of any North American bird, nesting primarily in stunted spruce-fir forests found at or near the highest elevations of mountains in Vermont and other New England states. These mountain tops are like a chain of islands separated by a sea of habitat that is unsuitable for this species.

As the climate warms and precipitation patterns change, deciduous trees – those that shed their leaves in the fall – are likely to become more prevalent in higher elevations, shrinking the size of the mountain-top evergreen conifer forests that are home to the Bicknell's thrush.

This is just one of many challenges that climate change poses for the rare bird.

Another potential threat is a mismatch between the arrival time in spring of Bicknell's thrush and other birds, which is regulated by day length, and the abundance of insect prey, linked to temperature. If the

Bicknell's thrush nest in mountain-top evergreen forests in Vermont, areas that are shrinking due to global warming. Photo: © T.B. Ryder

Watch a video of a Bicknell's thrush feeding her young.

RECENT ENTRIES

Utah: Managing Water Resources for Fish, Wildlife and People
505050 Week in Review (Week of May 30th)
Maryland: Restoring Native Forests Helps Animals Adapt at Blackwater National Wildlife Refuge
South Dakota: No Ducking Climate Change Impacts to Prairie Pothole Wetlands
Tennessee: Joint Venture Strives to Determine the Effects of Climate Change on Brook Trout

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high elevations (3) [RSS]
idaho (1) [RSS]

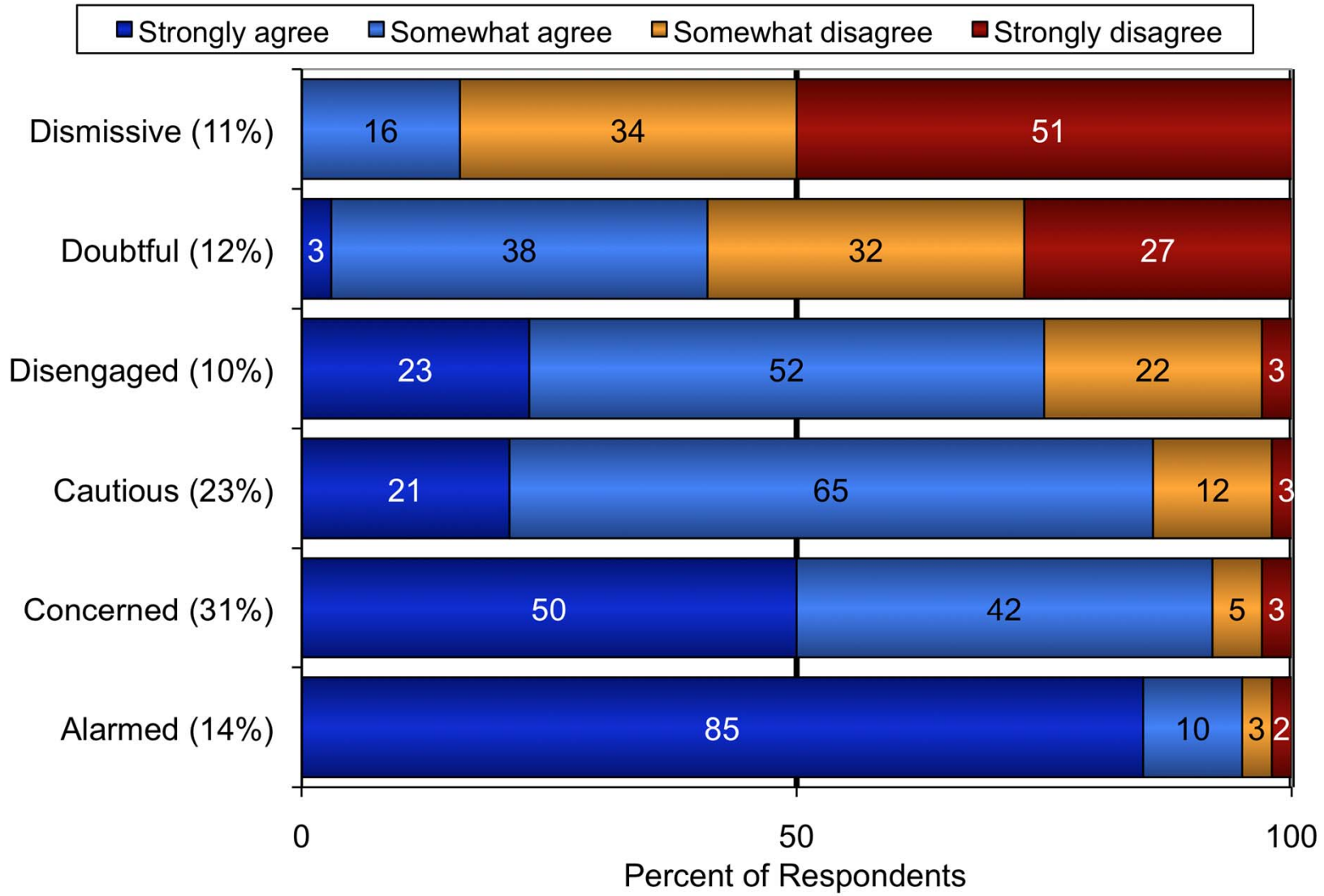
Abstract

Global

Concrete

Local

Schools should teach our children about global warming.



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Source: Yale, July 2010 (*n* = 2,030)

Global Warming's "Six Americas"