From skepticism to engagement: Making climate communication relevant to the American public

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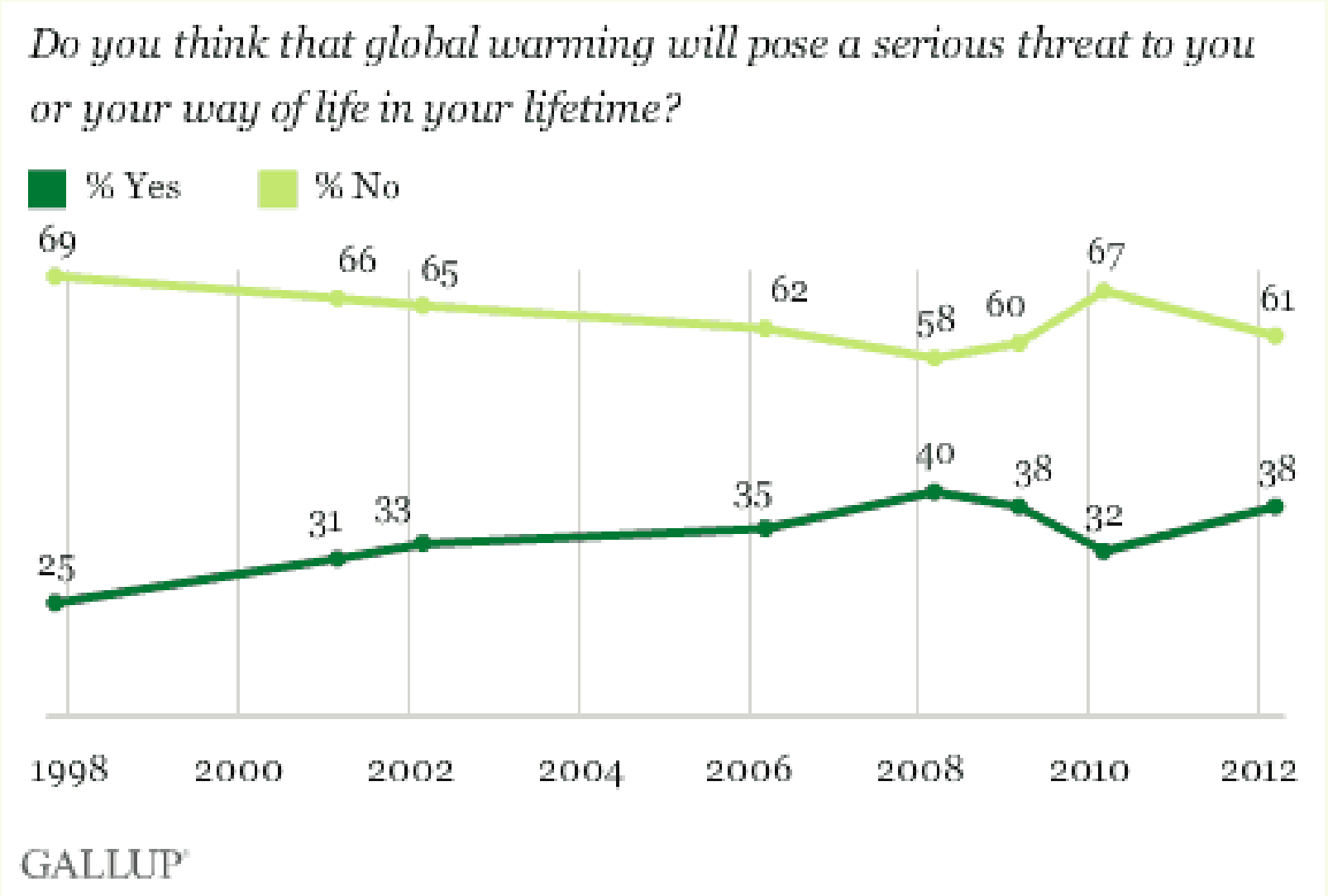
The Problem

- Despite threat of a changing climate and evidence of human contribution to the problem society and individuals are failing to acknowledge or take responsibility for ecological problems

Public responses to climate change

- 36% worry a great deal about global warming
- 58% believe that global warming is the result of human activity
- 6% consider environment a priority in policy

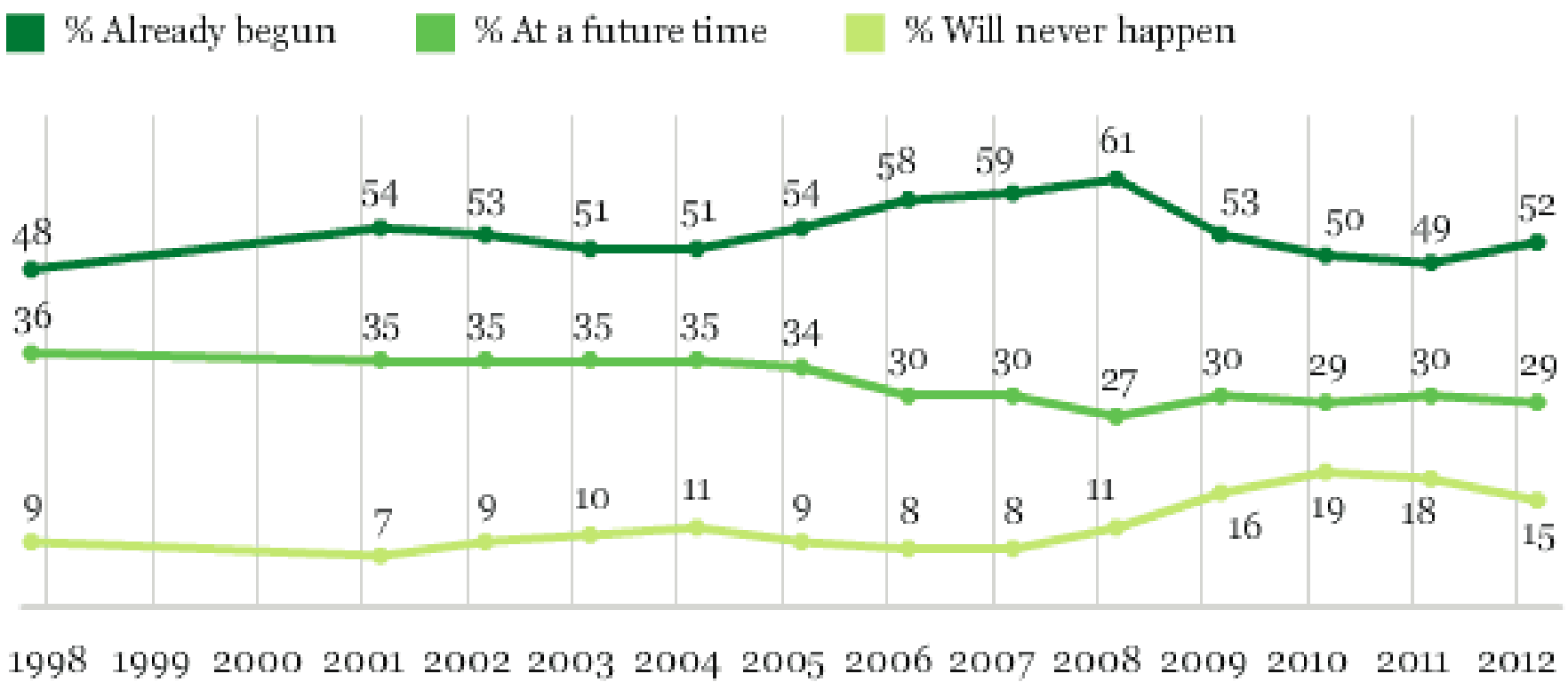
Carroll, 2007; Dunlap, 2008; Gallup Poll, 2009; Stoll-Kleeman, O'Riordan, & Jaeger, 2001; Takacs-Santa, 2007



http://www.gallup.com/poll/153608/Global-Warming-Views-Steady-Despite-Warm-Winter.aspx

Opinion About When Effects of Global Warming Will Happen

Which of the following statements reflects your view of when the effects of global warming will begin to happen -- [they have already begun to happen, they will start happening within a few years, they will start happening within your lifetime, they will not happen within your lifetime, but they will affect future generations, (or) they will never happen]?



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What scientists talk about

- Facts about the climate
  - Impacts of climate change
  - Models and trajectories
  - Causes and consequences

What people care about

- People respond to climate change through the lens of their primary needs:
  - Health
  - Family and children
  - Economic wellbeing
  - Safety and security
  - Country and system
- And the lens of their identities
  - Tribal nature of responses
  - Ideological divide

System concern and justification

- Motivation to defend and bolster the social, political, and economic status quo
- Fulfills three key psychological needs:
  - Epistemic: Certainty, stability, control
  - Existential: Safety and reassurance
  - Relational: Affiliate with other members of system
- Reduce dissonance, anxiety, uncertainty
- Manage threat to status quo and system

Jost & Hunyady, 2005; Jost, Ledgerwood, & Hardin, 2008; Jost, Liviatan, et al., 2009; Jost, Wakslak, & Tyler, 2008

System concern and justification

- Motivation to defend and bolster the social, political, and economic status quo
- Legitimize hierarchy → Opposition to equality
- Uphold the status quo → Resistance to change
- Interferes with:
  - Acknowledging shortcomings in the status quo
  - Forming intentions to correct problems
  - Taking action to improve status quo and the system

Jost & Thompson, 2000; O'Brien & Major, 2005;
Rankin, Jost, & Wakslak, 2009; Wakslak, Jost, Tyler, & Chen, 2007

Current system harmful to environment

- Economy:
  - Destructive industrial practices – depleting of resources; production, transportation, disposal – pollution
  - Market ideology of progress, development, consumption
- Social:
  - Domination by humans of the natural world
  - Technology and human ingenuity prevails
- Governmental and institutional:
  - Environmental issues peripheral and inconsequential
  - Indifference and inaction

Environment: Threat to the System

- Environmental problems threaten the economic, social, and political facets of the current system
  - Cope with threat by denying or minimizing environmental problems
    - Maintain a positive view of the system
  - Resist change in system, fail to alter environmentally harmful behaviors
    - Maintain the status quo

Feygina, Goldsmith, & Jost, 2010; Jost, Blount, Pfeffer, and Hunyady, 2003; Wakslak, Jost, Tyler, & Chen, 2007

Research Findings

- Correlational studies
  - Questionnaire surveys
- Experimental studies
  - Self-report and behavioral measures

- University students
- The general population
- International samples

Research Findings

System Justification

Skepticism toward environmental realities

- Skepticism toward possibility of an ecological crisis
- Refusal to abide by the constraints of nature
- Skepticism that balance in nature is tenuous
- Skepticism of limits to growth

Research Findings

System Justification

Skepticism toward environmental realities

Skepticism that climate change is occurring

Willingness to harm the environment

Less intentions to help the environment

Less priority of environment in policy

Decreased action to address climate change

Group Differences in Attitudes

System justification explains widespread group differences in environmental attitudes:

- Political Orientation (Conservative vs. Liberal)
- National Identification (Stronger vs. weaker)
- Gender (Male vs. female)
- Education (More vs. less)

Jost, Nosek, & Gosling, 2008; Jost & Hunyady, 2002

Motivated Cognition

- Skepticism of climate change is facilitated by:
- Motivated information evaluation
  - Messages disparaging the case for climate change evaluated as more persuasive
  - Evaluated the evidence for climate change to be weaker
  - Perceived Americans as having less control over global climate change

Hennes, Feygina, and Jost (2011)

Motivated Cognition

- Skepticism of climate change is facilitated by
- Motivated information evaluation
- Recall of climate information
  - Misremember details from article just read

Hennes, Feygina, and Jost (2011)

Motivated Cognition

- Skepticism of climate change is facilitated by
- Motivated information evaluation
- Recall of climate information
- Perceived ambient temperature as lower
  - In the park during the summer months
  - A difference of 7 degrees!
  - Mediated relationship between system justification and skepticism about climate change

Hennes, Feygina, and Jost (2011)

Implications for communication

- What Can Be Done?
- Addressing people's needs and priorities

Addressing Need to Protect System

- Reverse the negative association between protecting the social system and protecting the environment
- "System-sanctioned change"
- Reframe pro-environmental change as a way to uphold the status-quo and support, rather than challenge, the system
- Harness system justification motivation to inspire pro-environmental behavior

Feygina, Jost, & Goldsmith, 2010

Addressing Need to Protect System

- "Being pro-environmental allows us to protect and preserve the American way of life. It is patriotic to conserve the country's natural resources"

- Reversed negative effects of system justification
- More system justification ⟶
  - Increased intentions to help environment
  - Increased actions: signing pro-environmental petitions

Feygina, Jost, & Goldsmith, 2010

Addressing Need to Protect System

- Address perceived conflict between needs
  - The need to protect the social system
  - The need to respond to climate change
- Harness system needs towards acknowledgment and action, work *with rather than against* needs
- Make climate communication relevant to people's needs: personal and system-related

Feygina, Jost, & Goldsmith, 2010

Addressing Need to Protect System

- President Obama addressing the need for comprehensive energy reform:

- "This investment will not only help us reduce our dependence on foreign oil, making the United States more secure. And it will not only help us bring about a clean energy future, saving our planet. It will also help us transform our industries and steer our country out of this economic crisis by generating five million new green jobs that pay well and can't be outsourced"

Feygina, Jost, & Goldsmith, 2010; Obama, 2008

Does This Work in the Real World?

- Climate Central *Climate Matters* program
- Broadcast-ready climate information
- Local television meteorologists
  - Trusted messengers
- Air, online, and social media
- Increasing use of Twitter

- How and when do people respond to messages about climate change?
- Does relevance to people's needs make climate messages more appealing?

Methodology

- 2,327 local meteorologists
  - Major TV networks (ABC, CBS, NBC, Fox)
- 8.5 million tweets
  - 1,937 Twitter accounts
  - January 1, 2012 to May 1, 2014
- Outcome: Number of retweets

Findings: Weather vs. Climate

- Keywords used to identify general weather and climate change messages
- Climate change tweets receive greater engagement than weather-only tweets
- More frequent mentions of climate change are associated with more frequent retweeting

Findings: Severe weather

- Severe weather
  - Historical record, 24 types, NOAA
  - 1.2 million events
- *Currently occurring* severe weather - less response to climate change messages
  - Coastal flooding – large increase in CC retweeting
- *Discussion* of severe weather – much more response to climate change messages

Message relevance

- *Perceived risk* - *prospective* threats
  - "concerning", "warning", "vulnerable"
- *Damage* - *retrospective* destruction
  - "havoc", "destroy", "ravage"
- *Economics* - finances and employment
  - "profit", "jobs", "taxes"
- *Health* - health impacts and mortality
  - "illness", "death", "disease"
- *System* – political and legal institutions
  - "governance", "courts", "establishment"

Findings: Message relevance

- Increased responses to climate change messages that discuss:
  - Damage
  - Economics
  - Health
  - Sociopolitical system
- No change for perceived risk
- Emotional valence (positive–negative)
  - Climate messages with more negative valence receive greater response

Findings: Demographics

- Demographics
  - U.S. Census, NIH, presidential election results

Greater response to climate messages in:

- Rural compared to urban areas
- Republican compared to Democrat areas
- When both variables are included rural/urban is the unique predictor

Conclusion

- Responses to climate messaging are driven by underlying needs and motives
- Climate communication is more likely to receive engagement and acceptance if it:
- Is relevant to people's needs to protect themselves, their families, and society
- Can address and harness the power of needs toward acceptance
  - Prioritize needs
  - Reframe around needs


Positive proof of global warming.
18th Century
1900
1950
1970
1980
1990
joe-ks.com

Thank you!