



Public Preferences Regarding Preparing for the Possible Effects of Climate Change

National Surveys Explore Effects of Endorsers and Language

Choice of words and those who provide endorsement can affect the degree to which Americans like the idea of preparing for the possible effects of climate change, according to new public opinion research commissioned by the Stanford Woods Institute for the Environment and the Center for Ocean Solutions.

Based on a series of surveys conducted via telephone interviews from January through April 2013, the research assessed how the public responded to (1) the “endorsers” of preparation efforts, (2) the stated goals of preparation efforts, (3) the specific climate change consequences targeted in preparation efforts and (4) the specific words used to describe preparing or not preparing for climate impacts.

About the Researchers

The survey was directed by **Jon Krosnick**, the Frederic O. Glover Professor in Humanities and Social Sciences and Professor of Communication, Political Science and Psychology at Stanford University and a Stanford Woods Institute Senior Fellow (by courtesy), in partnership with **Bo MacInnis**, Stanford University Visiting Scholar; **Adina Abeles**, Director of Education and Training at the Center for Ocean Solutions; **Erin Prahler**, Center for Ocean Solutions Law and Policy Fellow; **Meg Caldwell**, Executive Director of the Center for Ocean Solutions and Senior Lecturer at Stanford Law School and Stanford Woods Institute; and **Debbie Drake Dunne**, Executive Director of the Stanford Woods Institute.



Endorsers and Language Choices

Who Endorses Preparation

- Business leaders
- Religious leaders
- Government officials
- University researchers

Describing Purpose of Preparation

- Reduce risk
- Reduce vulnerability
- Increase resilience
- Increase preparedness
- Increase readiness
- Prevent maladaptation

Possible Consequences of Climate Change

- Damage to people, the environment and property
- Effects on public health
- Impacts to beaches, properties along the coast, seafood supply and wildlife

Words Describing Preparation

- Prepare for
- Plan for

Words Describing Not Preparing

- Adapt to
- Adjust to
- Respond to

Findings: Impacts of Different Communication Strategies

The study yielded six main findings:

- A large majority of Americans (74%) supported taking steps to prepare for possible consequences of global warming rather than waiting for these consequences to occur and dealing with them then.
- Preference for preparation was greatest when no particular group of individuals endorsed such efforts or when such efforts were endorsed by government officials and university researchers. Endorsement of preparation by business leaders or religious leaders reduced preference for preparation.
- More people expressed a preference for preparation if it was described as “planning” rather than “preparing.”
- More people preferred preparation when the alternative was described as doing nothing now and “responding” to the possible consequences of global warming after they occur than when the alternative was described as “adjusting” or “adapting” to those consequences.
- The largest number of people preferred preparation when it was described as “increase preparedness.” The least number of people preferred preparation when it was described as “increase resilience.” Preference for preparation ranked between these two options when it was described as “reduce risk,” “reduce vulnerability,” “increase readiness” or “prevent maladaptation.”
- Public preference for preparation was the same regardless of which of three potential consequences were described: effects of global warming on (1) people, the environment and property; (2) public health; or (3) beaches, properties along the coast, seafood supply and wildlife.



Who Supports Preparation the Most?

- Preference for preparation was greater among females than among males by 7 percentage points.
- Hispanics were 12 percentage points more likely to prefer preparation than non-Hispanic whites.
- Preference for preparation was 4 percentage points higher among adults under age 55 than among older adults.
- Preference for preparation was higher among more educated people. People with some college or college degrees were 5 percentage points more likely to prefer preparation than people with high school degrees or less.
- Preference for preparation was greatest among Democrats and lowest among Republicans, with Independents in between. Among Democrats, preference for preparation was 27 percentage points greater than among Republicans and 16 percentage points higher than among Independents.
- Preference for preparation was equivalent across different regions of the country and across income levels.

Conclusions

Combing across all of the varying characteristics of messages examined, a large majority of people surveyed (74%) preferred preparing now, before the possible consequences of climate change occur, rather than waiting until the consequences occur.

The respondents most supportive of preparing now were those who heard the following:

Many scientists who study the world's climate believe that the earth has been warming over the past 100 years and will continue to do so in the future. These scientists believe that past and future warming will have effects on people and the environment and will change how people live their lives. One option people and organizations have is to wait for these changes to happen and then respond to them. However, people and organizations could instead do things soon to try to plan for these changes before they happen to reduce risk for people and property. If you had to choose, which would you prefer that people and organizations do?



Although the experiments showed some instances in which a change in wording altered the distribution of respondents' answers, we also observed many instances in which wording changes did not change the distribution of

answers. This finding suggests that survey results are not as easily manipulated by wording changes as some critics have suggested.

Preference for preparation varied considerably across question wordings – a range of 61% to 82%. However, a majority of respondents always said they preferred preparation to waiting, no matter how the question was phrased. So majority preference for preparation among Americans appears to be robust to the wording and endorsement variations explored in this project.



Methodology: Four Surveys

In Study 1, respondents were randomly assigned to hear no endorsement or to hear an endorsement by one of four specific sources: business leaders, religious leaders, government officials or university researchers. Study 1 also explored the impact of the stated goals of preparation efforts: to “reduce risk,” “reduce vulnerability,” “increase resilience,” “increase preparedness” or “increase readiness” for the possible consequences of global warming, or to “prevent maladaptation” to the possible consequences of global warming.

In Study 2, researchers investigated the impact of the stated goals of preparation efforts as in Study 1 and also gauged whether people reacted differently depending on which global warming consequences were described:

damage to people, the environment and property; adverse effects on public health in terms of illnesses, injuries and premature deaths; or adverse consequences for beaches and property along the coast, seafood supply and wildlife.

Studies 3 and 4 explored whether people reacted differently to alternative action phrases describing preparing as “prepare for” versus “plan for,” as well as to alternative action phrases describing not preparing as “adapt to,” “adjust to” or “respond to” the consequences of global warming after they occur.

This brief is based on “The American Public’s Preference for Preparing for the Possible Effects of Global Warming: Impact of Communication Strategies,” a report produced by Jon Krosnick and Bo MacInnis. To receive a copy of the full report, including methodology, analysis and citations, contact environment@stanford.edu.

Climate change and energy are the foci of a series of recent surveys commissioned by the Stanford Woods Institute and conducted by Professor Jon Krosnick. His work illuminates Americans’ views on strategies for preventing and adapting to global warming. Learn more at: climatepublicopinion.stanford.edu.

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Stanford Woods Institute for the Environment

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Center for Ocean Solutions

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