

Small Screen, Big Impact

How *Madam Secretary* Boosted Support for Climate Policy and Climate Justice

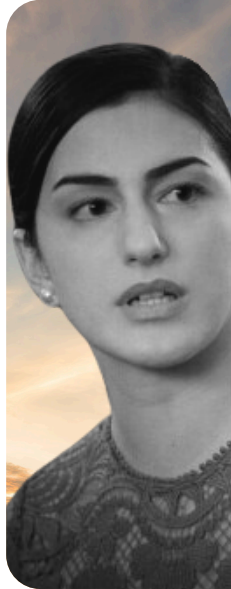
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Overview

Climate change is one of the most pressing global challenges of our time, impacting millions of people around the world. But it's not too late: we have many of the solutions needed to avoid the worst consequences of climate change, and also protect communities at the frontlines of the crisis today and in the future. Still, successful mitigation will require cultural shifts around these solutions, and that includes increased public support for new and existing climate policies and support for broad governmental action on climate change.

Historically, climate politics and climate justice (i.e. addressing the unequal impacts of climate change on marginalized or otherwise vulnerable populations) have been difficult to message to the general public. While we often see these issues in news and documentaries, narrative film and TV may provide a unique opportunity to portray these themes and solutions in interesting and exciting ways to broad audiences. In this study, Rare's Entertainment Lab examines the impact of the CBS political drama *Madam Secretary* on beliefs around key climate concerns and actions.

We found that the show increased support for governmental action on climate change and boosted several hard-to-move attitudes on climate justice. Most exciting: we found that many of the positive shifts in audience attitudes persisted even 10-15 days after viewing the episode - providing empirical evidence that viewing climate-forward content can provide stable shifts in climate attitudes in the short-to-mid term. *Madam Secretary* proves that good storytelling and meaningful issues can blend together to create compelling, thought-provoking drama with real-world impact for audiences at home.



Study Overview

We recruited 1065 U.S. participants from the crowdsourcing platform Prolific to participate in a 3-week longitudinal study. Participants were randomly assigned to a treatment or a control condition. In the treatment condition, participants watched a climate-focused episode of *Madam Secretary* (S5-E16: "The New Normal"). In the control condition, they watched the previous episode from the same season (S5-E15: "Between the Seats"), which focused on US involvement in the Middle East.

To track the impact of viewing over time, we measured audiences at four different points:

- Baseline (2-3 days before watching show) [N=1065]
- Immediately after watching the show [N=789]
- Three days after watching the show [N=690]
- 10-15 days after watching the show [N=722]

At each point, participants completed a survey measuring climate concern, policy preferences on issues relevant to climate change, as well as key psycho-social predictors of individual action. To hide the purpose of the survey, these climate questions were embedded within other decoy-items (e.g. questions about other topics like "international conflict" or "large-scale migration").

Episode Content: "The New Normal"

In this episode, a "super typhoon" threatens to destroy the coral island nation of Nauru. U.S. Secretary of State Elizabeth McCord (Téa Leoni), and her team must figure out how to evacuate and permanently relocate the entire island's population.

The episode lays out a connection between climate change and worsening "super storms," with one character calling super storms "the new normal." The show highlights how polarization can impede political action and directly speaks to the role of the government in addressing key issues surrounding climate change, including hot-button topics like climate migration, emergency support to vulnerable nations, climate reparations (e.g. compensating impacted nations for the damages caused by climate change), unequal impacts of climate change on poorer or less economically-developed countries, and other climate justice themes.

Notably, the episode also questions the roles and responsibilities of the world's biggest emitters, like the United States, to address climate change. In one scene, the president of Nauru points out that the U.S. has significantly fueled climate change, but it's the people of Nauru who suffer the consequences first.

Key Findings

We found robust impacts of watching climate-focused entertainment on key measures. For participants who were randomly assigned the climate episode, we saw a substantial increase in general climate concern including (i) increased worry about climate change and (ii) increased certainty that climate change “poses a significant threat to society.” We also saw some impacts on individual-oriented attitudes, such as one’s willingness to engage in climate action. However, some of the most fascinating insights appear when looking at impacts on climate policy beliefs.

Support for Climate Policy

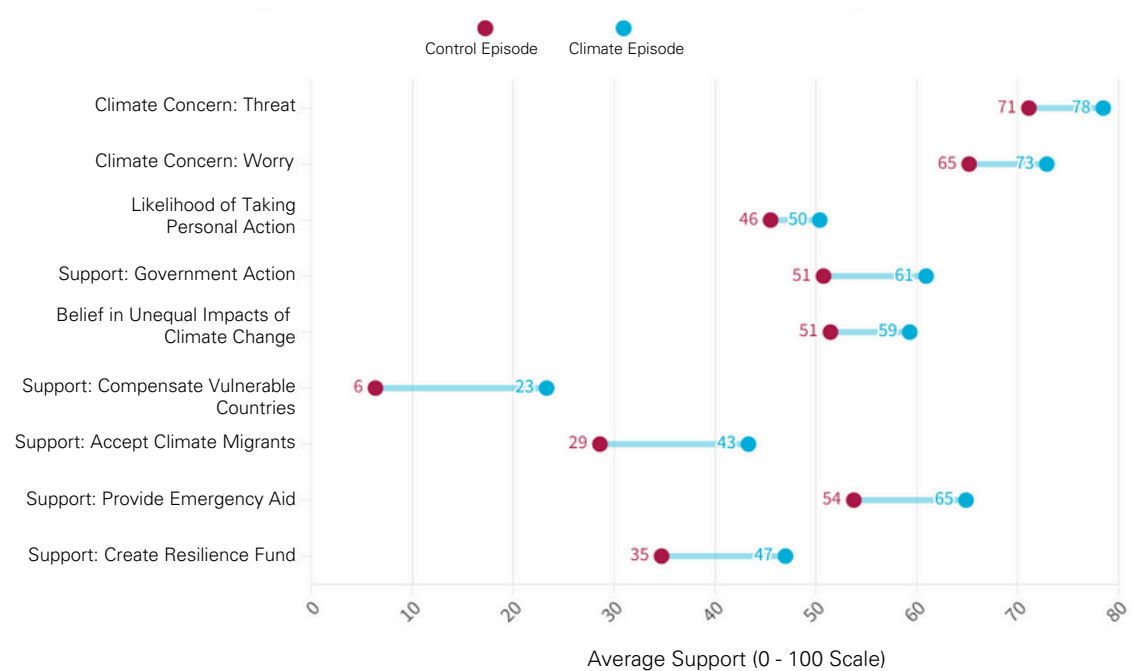
On the policy front, participants who watched the climate episode reported an increase in overall support for “robust government action” to address climate change. They were also more likely to endorse the belief that “smaller, poorer, and developing nations are disproportionately vulnerable to the effects of climate change compared to richer, larger nations.” And, we saw a significant increase in support for hard-to-move climate justice policies, including:

- increased support for compensating vulnerable countries for damages caused by climate change;
- increased support for the U.S. accepting climate migrants;
- increased support for creating a resilience fund to protect from ecological disaster; and
- increased support for providing emergency aid to victims of climate disasters in poorer nations.

Most importantly, immediately after watching the climate episode, participants were nearly **three times** more likely to identify as a climate single-issue voter, meaning they would only vote for a candidate if they were willing to take action on climate change.

Impact of Viewing “The New Normal”

Changes in support for climate beliefs and climate policies



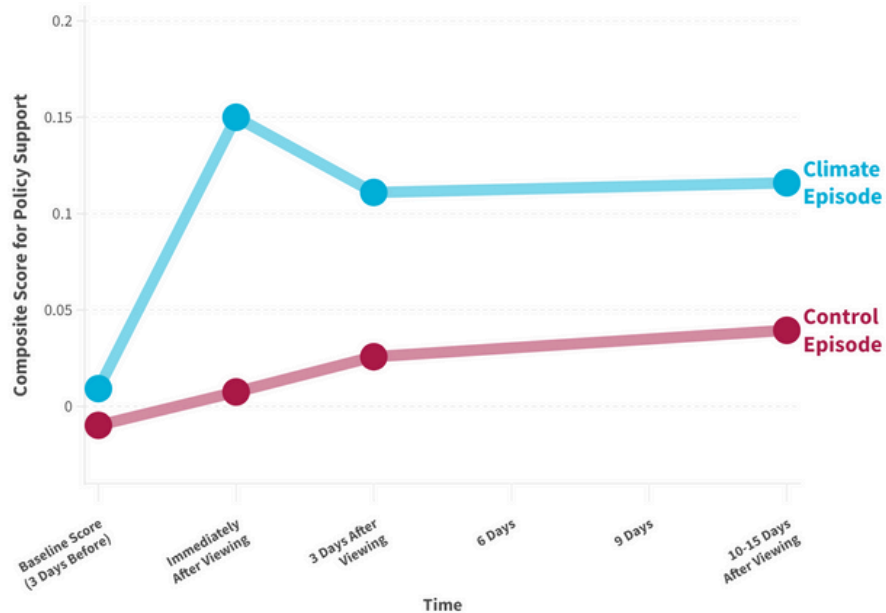
Participants were surveyed immediately after viewing the episode. The red dots show the average level of support for each measure after participants viewed a control video. The blue dots show the average for participants who watched the climate episode, and the line between them shows the difference between the two groups.



How Impact Persists Over Time

Overall, for the 11 measures that showed an increase in support immediately post-viewing, we saw a small drop in gains when measured 3-5 days later. However, for five of these 11 measures (climate worry, threat certainty, providing emergency aid, creating a resilience fund, and single-issue voting), the boost in support stabilized and was significantly higher than baseline even 10-15 days after watching the show. For example, even 10-15 days after viewing, self-identification as a climate single-issue voter remained 86% higher than baseline. One takeaway from these findings is that, in order to maximize impact, it would be ideal to pair exposure to climate content with opportunities for audiences to take action no more than two weeks after viewing.

Impact of Viewing *Madam Secretary* Over Time
Support for climate policy and government action



The following variables were combined to form the composite score: (a) Support for Government Action; (b) Support for Climate Justice Policies (4 Questions); (c) Self-Identification as a Single-Issue Climate Voter. Variables were standardized to create a composite score. The y-axis reflects change from baseline expressed in terms of standard deviations above the mean at baseline.

We see a small upward trend in the control group over time. This is likely to be an artifact of the repeated measures design - where completing a climate-focused survey can make climate-issues salient to participants and thereby produce small, positive shifts in climate attitudes. These trends were not statistically significant, and were adjusted for when performing our analyses.

Social Norms and Perceived Efficacy

The episode focuses on government action, and does not address the role of individuals or model individual action. Therefore, it is unsurprising that watching the climate episode did not impact measures of social norms ("are others currently taking action?"), social expectations ("do others expect me to take action?"), self-efficacy ("can I take actions that make an impact?"), or collective-efficacy ("can we - together - make an impact?"). Nor did it move other measures of behavior adoption (e.g. self-reported willingness to incur costs of climate action; information seeking; willingness to take action).

Despite the episode showing successful government action and trustworthy government officials, watching the climate episode did not boost general trust in government or impact perceptions about government officials. However, we did see an increase in perceived institutional efficacy i.e. the belief that "governments, businesses, and other institutions - by working together - have the ability to make a difference on climate change." This could be due to the episode's conclusion (spoiler alert), in which the government works hand-in-hand with a private citizen to help relocate the Nauru population.

Finally, for measures around social and political polarization, despite a B story or subplot that highlighted growing support for climate action among young evangelicals, we did not see an impact on perceptions about religious conservatives' willingness to act on climate change. Nor did we see an impact on measures of social polarization or on willingness to build coalitions across the aisle. While we can't be sure why these measures were not impacted, it is possible that it may be related to the subplot's conclusion showing an evangelical leader turning away from the climate crisis, or that it was not the most prominent storyline in the episode.

The Role of Research Insights

The entertainment industry has enormous potential to raise public awareness about climate change and reflect emerging social norms around climate action. However, there is limited empirical research that evaluates the impact of programming that addresses these issues. We believe that additional targeted research is needed - not only to measure the impact of existing content, but also to bolster the growing movement of creatives within the industry who want to reflect climate and sustainability on screen. Such research helps expand the field and provides key stakeholders (from creatives and working professionals in entertainment, to climate leaders and social scientists) with valuable insights on the potential impact that film and TV can have on climate policy and climate justice.

Supplementary Materials

[Full Survey Instrument](#)

[Full Table of Results](#)

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Rare's Entertainment Lab supports the entertainment industry to reflect the realities of our changing climate and highlight the sustainability solutions all around us.

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