

Tipo de documento: Preprint

Climate Hypocrisy Attacks Are Bipartisan, but Their Impact Is Unequal

Autoría ditelliana: Navajas, Joaquín (*Universidad Torcuato Di Tella. Escuela de Negocios. Laboratorio de Neurociencia*)

Otras autorías: Niella, Tamara; Deroy, Ophelia

Originalmente publicado en: Research Square

Año de publicación: 2024

¿Cómo citar este documento?

Niella, T., Navajas, J., & Deroy, O. (2025). Climate Hypocrisy Attacks Are Bipartisan, but Their Impact Is Unequal.
<https://doi.org/10.21203/rs.3.rs-6031334/v1>

El presente documento se encuentra alojado en el Repositorio Digital Universidad Torcuato Di Tella bajo una licencia Creative Commons Atribución 4.0 Internacional

Dirección: <https://repositorio.utdt.edu/handle/20.500.13098/13329>

Climate Hypocrisy Attacks Are Bipartisan, but Their Impact Is Unequal

Tamara Niella

tamaraniella@gmail.com

Ludwig-Maximilians-Universität München <https://orcid.org/0009-0004-1906-2647>

Joaquin Navajas

Universidad Torcuato Di Tella

Ophelia Deroy

Ludwig-Maximilians-Universität München

Brief Communication

Keywords:

Posted Date: March 4th, 2025

DOI: <https://doi.org/10.21203/rs.3.rs-6031334/v1>

License:   This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Additional Declarations: There is **NO** Competing Interest.

Abstract

In two pre-registered studies (N = 962), we examined moral judgments of environmentally harmful behavior in hypocritical versus non-hypocritical contexts. Hypocrisy was judged more harshly, but this penalty diminished among strong climate policy supporters and when hypocrisy came from one's political ingroup. Our findings highlight the asymmetric impact of climate hypocrisy accusations, with implications for climate communication and political divide.

Introduction

Calling someone a hypocrite—accusing them of saying one thing and doing another (e.g., Barden et al., 2005)—is a frequent move in climate debates. Climate scientists are criticized for flying to conferences, and politicians for supporting oil companies while urging others to reduce fossil fuel use. Such accusations appear in hundreds of news articles (Gunster et al., 2018a, b) and flourish on social media platforms (Falkenberg et al., 2022).

Climate hypocrisy accusations are not one-sided. Across the political spectrum, critics call out contradictions in climate commitments (Falkenberg et al., 2022; Gunster et al., 2018b). But do these accusations affect everyone the same way? More specifically, does sensitivity to hypocrisy depend on one's support for climate policies?

There is a reason to focus on levels of support rather than political ideology. Left-right or liberal-conservative labels are useful proxies for climate attitudes, but not perfect. In the U.S., Liberals and Democrats tend to support climate action more than Conservatives and Republicans, but this divide is less rigid in other regions (Spektor et al., 2023). Even within the U.S., the pattern is more nuanced: the gap is smaller among people of color (Ballew et al., 2021) and shaped by levels of populist sentiment (Huber et al., 2020).

Supporters of climate action may focus on hypocrisy due to credibility concerns, while opponents use it to discredit climate efforts. Examining hypocrisy sensitivity clarifies its psychological roots and impact. Such accusations erode trust, divert attention from solutions, and hinder progress (Attari et al., 2019; McDermott et al., 2015; von Sikorski & Herbst, 2020). Their effect depends on whether supporters or opponents react more strongly. If opponents react more, hypocrisy claims may reinforce resistance. If supporters do, they risk disengagement.

To test these hypotheses, we pre-registered two studies. Prior research shows hypocrisy is condemned more harshly than simple wrongdoing (Barden et al., 2005; Effron et al., 2018; Stone & Fernandez, 2008). We examined the “climate hypocrisy penalty” —harsher judgment of environmentally harmful actions when paired with hypocrisy. Study 1 assessed whether this penalty is stronger among those with low climate change (CC) mitigation support. Study 2 explored whether political identity shapes reactions, comparing responses to hypocrisy from ingroup versus outgroup politicians while also examining its effect on donation behavior and emotions to shed light on its impact.

Does hypocrisy affect supporters and opponents of climate policies equally?

In study 1, we recruited 268 US participants ($n = 256$ after removing attention check fails) using MTurk via Cloud Research. The study had an experimental design with two between-subject conditions.

All groups read four scenarios where a character engaged in environmentally harmful behavior. The actions were identical, but context varied. In the Hypocrisy condition, the character previously advocated for the opposite behavior. In the Mere Harm condition (Control), an unrelated detail about the character was provided. All vignettes were validated (see Supplemental Information). Participants judged the actions on a 7-point Likert scale and answered additional scales on CC attitudes, including a CC mitigation policy support scale.

In this context, we found that climate hypocrisy penalty is significant. Across scenarios' topics ($\alpha = 0.81$), environmentally harmful actions were judged far more harshly when paired with hypocrisy ($M = 2.53$, $SD = 1.15$) than when simply performed ($M = 4.44$, $SD = 1.09$; Wilcoxon test: $W = 14,679$, $p\text{-value} < .001$, 95% CI $[1.75, 2.25]$, $r = 0.68$).

A mixed-effects regression with an interaction term for condition and CC mitigation support ($\alpha = 0.85$), and random effects for vignette topics, confirms our pre-registered hypothesis showing that the climate hypocrisy penalty was stronger among those with low support and decreased as support increased (Est = 0.27, $p < .01$, 95% CI $[0.17, 0.37]$, $d = 0.32$), as depicted in Fig. 1. For more details, see Supplemental Information.

In Study 2 we embedded hypocrisy or mere environmentally harmful behavior accusations of either left or right-wing politicians as social media posts from fictive news sources (all posts were independently validated; Supplemental Information). We aimed to replicate that hypocrisy penalty varied with different CC mitigation support levels while measuring the effect of the target being political ingroup or outgroup. Additionally, we tested whether climate hypocrisy penalty affected people's donation behavior and emotional responses. We surveyed 800 US participants ($n = 706$ after attention-check fails and political orientation filters mismatch exclusions) using MTurk via CloudResearch, balancing our sample between right and left-wing participants (72 participants who identified as 'moderate,' were excluded).

Using a 2x2 between-subjects design, each participant read three different posts on three different topics, pointing that a right or left-wing politician committed an environmentally harmful action (e.g., promoting fossil fuels industry) either while advocating the opposite climate-friendly behavior (e.g., encouraging CO2 reduction) or generic, unrelated goals (e.g., fostering national innovations).

First, we replicated Study 1 results. The climate hypocrisy penalty was significant. Participants found the actions of politicians accused of causing mere harm ($M = 3.49$, $SD = 1.42$) more acceptable than those accused of hypocrisy ($M = 2.83$, $SD = 1.31$; Wilcoxon test: $W = 79,777$, $p < .001$, 95% CI $[0.33, 0.99]$, $r = 0.24$). This pattern held across topics ($\alpha = 0.69$). Similarly, we replicated the finding that support for

CC mitigation policies (Alpha = 0.83) significantly moderates the climate hypocrisy penalty. As support for mitigation increases, the penalty weakens (Est = 0.12, $p < 0.01$, 95% CI [0.04, 0.21], $d = 0.15$). These results remain unchanged when including the politically 'moderate' participants (see Supplemental Information).

As expected, participants judged actions—mere harm and hypocrisy—by the political outgroup as significantly less acceptable than by the political ingroup (Est = -0.57, $p < .001$, 95% CI [-0.72, -0.42], $d = 0.33$; see Fig. 2). Crucially, this bias was significantly influenced by participants' level of CC mitigation support, which moderated the gap between ingroup and outgroup judgments (Est = 0.11, $p < .02$, 95% CI [0.02, 0.19], $d = 0.11$).

Participants with stronger mitigation policies support donated significantly more to environmental causes (Est = 0.09, $p < .001$, 95% CI [0.24, 0.38], $d = 0.66$), suggesting that policy support drives meaningful action. However, accusations of hypocrisy versus mere harm had no significant effect on donation behavior (Est = -0.002, $p = 0.94$), and no significant difference was found between accusations against political ingroups versus outgroups (Est = -0.03, $p = 0.31$). Given that regressions for this behavioral measure did not follow normality of residuals, we used Bootstrapping methods and confirmed these results. For more details, see Supplemental Information.

Finally, participants were asked to rate their emotions—three negative (frustrated, angry, worried; alpha = 0.91) and three positive (proud, enthusiastic, hopeful; alpha = 0.95)—after reading each post. Our exploratory analysis reveals that participants exposed to hypocrisy reported significantly higher negative emotions compared to those who read about mere harm (Est = 10.29, 95% CI [7.34–13.24], $p < .001$, $d = 0.29$). Similarly, participants reading about their political outgroup expressed higher negative emotions than those reading about their ingroup (Est = 9.55, 95% CI [6.60–12.51], $p < .001$, $d = 0.28$). Positive emotions followed the reverse trend, with lower ratings for hypocrisy (Est = -4.67, $p < .001$, 95% CI [-6.92 – -2.43], $d = 0.18$) and outgroup accusations (Est = -5.92, $p < .001$, 95% CI [-8.16 – -3.68], $d = 0.22$). That said, positive emotions were rated uniformly low across all groups, so the latter findings should be interpreted cautiously.

Limitations

Before drawing conclusions about the effects of climate hypocrisy accusations, some limitations must be considered. These studies focused on a polarized United States sample, allowing the testing of ingroup-outgroup effects and accusations against political figures with opposing climate attitudes (Kennedy, 2023). This context may be difficult to replicate elsewhere. However, since the United States is a major contributor to CC (Köne & Büke, 2015), these findings remain significant. While no direct behavioral effects were observed, this does not mean there is no impact. The donation task featured charities unrelated to the accused figures, suggesting that hypocrisy accusations influence emotions and judgments but may require a direct behavioral link to affect actions.

Discussion

Accusations of hypocrisy primarily influence individuals with low support for climate mitigation policies, even when political identity is balanced (Study 2). This suggests an asymmetry: those less supportive of climate policies perceive hypocrisy as justification for their own attitude - where they don't act but at least don't pretend otherwise and are consistent. Conversely, and importantly, stronger supporters prioritize action over discourse, up to making no difference when harm comes with or without well-intended claims. The asymmetrical impact is also robust; as expected from other contexts, political outgroups are judged worse for hypocrisy than ingroups (Silver & Berman, 2024). However, this distinction disappeared among those highly committed to climate mitigation.

These findings highlight key challenges in climate communication and policy framing. Holding leaders accountable for discrepancies between their words and actions remains important (Eckersley, 2013; Platt & Retallack, 2009), yet hypocrisy accusations will amplify negative attitudes and add to existing polarisation among those already doubtful of climate initiatives while failing to move those committed to action.

Methods

Study 1

Pre-registration

The pre-registration can be found here: aspredicted.org/zjyy-9nxy.pdf (anonymized link).

Observations: To deal with non-parametric aspects of the data and match the analysis properly to the pre-registered hypotheses, some adjustments to the originally pre-registered analyses were needed to be made.

Design

We conducted an online survey experiment with 2 between-subject conditions, defined by the content of the vignettes participants would see as stimuli, explained below:

Hypocrisy	Mere harm (Control)
<i>Character preaches to a group about the importance of certain environmental behavior.</i>	<i>Random/neutral fact about the character, not related to any environmental behavior.</i>
+	+
<i>Character acts non environmentally in terms of that specific behavior (does the opposite to what they preached).</i>	<i>Character acts non environmentally in terms of a specific behavior</i>

Sample

Following our pre-registered sample goal, we surveyed 260 US participants (n = 256 after discarding those who did not pass attention checks). Data collection was conducted using MTurk via CloudResearch. Average age was of 41.04 (SD = 11.04), 53.52% Women, 45.70% Men, 0.78% Other. Further demographics are summarized Supplemental Information.

Survey

The study was conducted using an online survey built in Qualtrics with the following structure:

- Vignettes (4)
 - Moral judgment
- Attention Check
- CC Mitigation Policy support measure
- Other measures for future analyses (Environmental values, Moral foundations, Climate change knowledge, Urgent issues rating)
- Demographics (reported in supplemental information)

Vignettes + Judgment

For all conditions, participants were presented with four vignettes. Each focused on a different Climate change action topic (Reducing use of flights, Recycling, Reducing beef consumption, Reducing commute by car). For example, “Last month, Sofia talked to her coworkers about how important it is that they stop using their cars and switch to biking in order to help the environment. Sofia drove her car everyday that same month.” for Hypocrisy condition, and “Sofia lives in an apartment in a city. Sofia drove her car everyday in the past month” for Mere Harm condition. For a complete list of the vignettes refer to Supplemental Information.

- Moral judgment:

After being presented with a vignette, participants were asked to answer how right or wrong they found the character's behavior in the story, using a Likert scale from 1 to 7, from ‘absolutely wrong’ to ‘absolutely right’.

Attention Check

For both conditions, participants were presented with a 5th vignette that worked as an attention check by introducing a trivially right random action for the character in the story. Then, participants who rated it with anything below 4 were excluded. The vignette was as follows:

“Ben lives in a house in a town. Last month, Ben helped a blind person cross the street. “

CC Mitigation Policy Support

Participants are presented with a series of hypothetical policies that are meant to mitigate Climate Change at the cost of some individual benefit (see list below). For each one of them participants reported how much they supported each policy using a 7-point liker scale from ‘Strongly oppose’ to ‘Strongly support’ (4 being ‘Neither support nor oppose’)

Policies:

- Increase taxes on gasoline, making it more expensive to commute by car
- Require electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources, even if it costs the average household an extra \$100 a year
- Changing school menu to all plant-based meals, eliminating all meat and other animal-based options
- Increase taxes on flights, making it more expensive to travel by plane

Other Measures

The survey contained other measures for exploratory analysis purposes which are not covered in the present paper. These measures were: Environmental Values (Ziegler, 2017), a brief version the moral Foundations questionnaire (Crone et al., 2021), and Climate Change Knowledge (Taddicken et al., 2018).

Study 2

Pre-registration

The pre-registration can be found here: aspredicted.org/f9fx-ss2c.pdf (anonymized link).

Observations: To deal with non-parametric aspects of the data and match the analysis properly to the pre-registered hypotheses, minor adjustments to the originally pre-registered analyses were made. Moreover, ‘Climate Change Care’ from the pre-registration was operationalized with what we call the ‘Climate Change Mitigation Policies Support’ measure presented here.

Design

We conducted an online survey experiment with a 2x2 between-subject design, defined by the content of the social media posts participants would see as stimuli, explained below:

	Hypocrisy	Transgression
Right	Preaches green principles but harmful behavior by Right-wing/Conservative/Republican politician	No special principles mentioned but harmful behavior by Right-wing/Conservative/Republican politician
Left	Preaches green principles but harmful behavior by Left-wing/Liberal/Democrat politician	No special principles mentioned but harmful behavior by Left-wing/Liberal/Democrat politician

Sample

Following our pre-registered sample goal, we surveyed 800 US participants (n = 706 after discarding those who did not pass attention checks or did not match the applied cloud research pre-screeners). Average Age was 44.64 (SD = 13), 48.44% Women, 50.42% Men, 1,14% Other. Data collection was conducted using MTurk via CloudResearch, where, to ensure a balanced number of Conservative/Republican and Liberal/Democratic participants, pre-screeners for both political party and political orientation were applied. Participants that in our demographic questions responded with political orientations dissonant with political party affiliations were also excluded since it did not align with the cloud research pre-screener and it could create confusion on the interpretation of results. Further demographics are summarized in Supplemental Information.

Survey

The study was conducted using an online survey built in Qualtrics. It had the following structure:

- Infographics comprehension
- Stimuli (3)
 - Moral judgment
 - Judgment explanation
 - Plausibility
 - Affective reaction
- Donation Activity
- Attention Check 1
- Behavioral Change Intention measure
- CC Mitigation Policy support measure (same as in Study 1)
- Attention check 2
- Demographics (reported in supplemental information)

Infographics Comprehension

To ensure there was an understanding that at least in the view of environmental experts, certain behaviors go against protecting the environment/mitigating climate change, we added a comprehension measure in the survey where participants were presented with three infographics that they were told contained information from professionals on three different topics. After looking at each infographic, participants were asked to answer two questions about the content of the infographics. As a motivator for them to read the infographics carefully, they were told that if they responded at least 50% of the questions correctly, they would be included in a draw of over fifteen \$10 USD gift cards. The topics were: Mental health, Kitchen and food safety, and Climate Change causes. The figure below portrays the climate change infographic and its comprehension questions.

Stimuli + Measures

For all conditions, participants were presented with three stimuli (snapshots of a social media post) each focused on a different Climate change action topic (Fossil fuel industry, Private Jet use, Meat industry), and were told to imagine they entered their preferred social media platform and saw the following post from a news source. The Figure below shows an example of how the stimulus looked like. For a complete list of the stimulus texts please refer to Supplemental Information.

- **Moral judgment:** After being presented with a Social media post, participants will be asked to answer how right or wrong they found the actions of the politician in each story, using a Likert scale from 1 to 7 from Absolutely wrong to Absolutely right with labels for each point in the scale.
- **Judgment explanation:** For exploratory purposes, after answering how right or wrong they found the politician's actions, they were asked to explain why they think that in two lines.
- **Affective reaction:** Participants were asked how the post they just read made them feel. For this, they were presented with a list of 6 emotions (enthusiastic, worried, proud, angry, hopeful, frustrated) and they had to rate each one of them in terms of how much each emotion represented the way they felt. They rated these emotions using a slide bar from 0 to 100 that went from 'Not at All' to 'Extremely'. This was a modified version of the measures tested in Marcus et al. (2017).

Donation Activity

Participants were told to imagine they had 100usd personal budget to donate to charity, and were presented with three different charities (an environmental one, an climate change denial one, and a neutral/non environment related one) among which they could distribute those 100 dollars. The three charities were: Clean Air Task Force (environmental), CO2 Coalition (climate change denying), Goodwill (neutral). Participants were presented with a small description of each charity and a sliding scale for each that allowed them to distribute the imaginary budget among the three of them. Additionally, to ensure participants cared about their decisions in this task, they were told that we would pick one participant at random and perform a donation based on their selection, meaning that their decisions in this task could have real-world consequences.

Attention Checks

Additionally, the survey had two attention checks that worked as stand-alone questions. For example: "Select the option that is NOT a fruit: a. Apple, b. Banana, c. Cookie, d. Peach."

Data Analysis

To analyze the data obtained in both studies, R code was used. The 'lme4' package was used to run all mixed effects models (Bates et al., 2015). Effect sizes were calculated using the 'effectsize' package (Ben-Shachar et al., 2020). used to obtain Eta Squared, and the following formula to calculate the effect

sizes: $\sqrt{\frac{4 * \eta^2}{1 - \eta^2}}$ for the mixed-effects regressions; for the Wilcoxon tests, effect sizes were calculated

with $r = \frac{Z}{\sqrt{(n_1 + n_2)}}$. Linear regressions and other standard statistical analysis were done using the 'stats' package in R (R Core Team, 2022). Bootstrapped linear mixed effects models were calculated using the 'lmeresampler' package (Loy et al., 2023), bootstrapped correlation coefficients were calculated using the 'boot' package (Canty & Ripley, 2022).

Declarations

Ethics

All participants approved an online informed consent statement before taking part in the studies. Protocols for both studies received approval from the Ethics Committee of Faculty 10, Ludwig-Maximilians-Universität München.

Data and Code Availability

All data sets and code for analysis can be accessed with the following (anonymized) link to an OSF folder: https://osf.io/nzvx7/?view_only=e9a6260d4b674401bd02c2fe28dccc9e

Ethics and Inclusion (Authorship)

The research was conducted primarily through online survey platforms (MTurk via CloudResearch) with U.S.-based participants. While the study does not include local researchers from the U.S., one of the authors was based in the U.S. while Study 1 was conducted. Moreover, we consider the external perspective of non-U.S. researchers to be an asset in ensuring objectivity and broadening the scope of climate discourse.

The study examines climate hypocrisy accusations in the U.S., focusing on how reactions to hypocrisy vary based on climate policy support and political identity. While the research was not conducted in

collaboration with local partners, its findings are directly relevant to U.S. climate debates. Additionally, conducting this research as non-U.S. researchers provides a valuable external viewpoint on the topic.

Roles and responsibilities were discussed and agreed upon among collaborators at all stages of the research process. No formal capacity-building plans for local researchers were included, as the study primarily involved survey-based data collection.

The research received ethical approval in Germany, covering all aspects of the study. The study examines moral judgments and climate policy attitudes, topics that could be politically sensitive. However, no personally identifying information was collected, and participants were recruited through MTurk, ensuring anonymity and minimizing risks. As an online study, the research does not pose significant health, safety, or security risks to the researchers.

The paper integrates research on climate communication, moral psychology, and public attitudes, with a strong focus on studies relevant to the U.S. context. One key reason for incorporating climate policy support as a central variable is its potential ability to better capture the diversity of people's attitudes compared to traditional political classifications.

References

1. Attari, S. Z., Krantz, D. H., & Weber, E. U. (2019). Climate change communicators' carbon footprints affect their audience's policy support. *Climatic Change*, 154(3), 529–545. <https://doi.org/10.1007/s10584-019-02463-0>
2. Ballew, M. T., Pearson, A. R., Schuldt, J. P., Kotcher, J. E., Maibach, E. W., Rosenthal, S. A., & Leiserowitz, A. (2021). Is the political divide on climate change narrower for people of color? Evidence from a decade of U.S. Polling. *Journal of Environmental Psychology*, 77. <https://doi.org/10.1016/j.jenvp.2021.101680>
3. Barden, J., Rucker, D. D., & Petty, R. E. (2005). "Saying One Thing and Doing Another": Examining the Impact of Event Order on Hypocrisy Judgments of Others. *Personality and Social Psychology Bulletin*, 31(11), 1463–1474. <https://doi.org/10.1177/0146167205276430>
4. Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting Linear Mixed-Effects Models Using **lme4**. *Journal of Statistical Software*, 67(1). <https://doi.org/10.18637/jss.v067.i01>
5. Ben-Shachar, M., Lüdtke, D., & Makowski, D. (2020). effectsize: Estimation of Effect Size Indices and Standardized Parameters. *Journal of Open Source Software*, 5(56), 2815. <https://doi.org/10.21105/joss.02815>
6. Canty, A., & Ripley, B. D. (2022). boot: Bootstrap R (S-Plus) Functions. *R Package Version 1.3-28.1*.
7. Crone, D. L., Rhee, J. J., & Laham, S. M. (2021). Developing brief versions of the Moral Foundations Vignettes using a genetic algorithm-based approach. *Behavior Research Methods*, 53(3), 1179–1187. <https://doi.org/10.3758/s13428-020-01489-y>

8. Eckersley, R. (2013). Poles Apart?: The Social Construction of Responsibility for Climate Change in Australia and Norway. *Australian Journal of Politics & History*, 59(3), 382–396.
<https://doi.org/10.1111/ajph.12022>
9. Effron, D. A., Markus, H. R., Jackman, L. M., Muramoto, Y., & Muluk, H. (2018). Hypocrisy and culture: Failing to practice what you preach receives harsher interpersonal reactions in independent (vs. Interdependent) cultures. *Journal of Experimental Social Psychology*, 76, 371–384.
<https://doi.org/10.1016/j.jesp.2017.12.009>
10. Falkenberg, M., Galeazzi, A., Torricelli, M., Di Marco, N., Larosa, F., Sas, M., Mekacher, A., Pearce, W., Zollo, F., Quattrocioni, W., & Baronchelli, A. (2022). Growing polarization around climate change on social media. *Nature Climate Change*, 12(12), 1114–1121. <https://doi.org/10.1038/s41558-022-01527-x>
11. Gunster, S., Fleet, D., Paterson, M., & Saurette, P. (2018a). Climate Hypocrisies: A Comparative Study of News Discourse. *Environmental Communication*, 12(6), 773–793.
<https://doi.org/10.1080/17524032.2018.1474784>
12. Gunster, S., Fleet, D., Paterson, M., & Saurette, P. (2018b). “Why Don’t You Act Like You Believe It?”: Competing Visions of Climate Hypocrisy. *Frontiers in Communication*, 3.
<https://www.frontiersin.org/articles/10.3389/fcomm.2018.00049>
13. Huber, R. A., Fesenfeld, L., & Bernauer, T. (2020). Political populism, responsiveness, and public support for climate mitigation. *Climate Policy*.
<https://www.tandfonline.com/doi/abs/10.1080/14693062.2020.1736490>
14. Kennedy, A. T., Cary Funk and Brian. (2023, August 9). What the data says about Americans’ views of climate change. *Pew Research Center*. <https://www.pewresearch.org/short-reads/2023/08/09/what-the-data-says-about-americans-views-of-climate-change/>
15. Köne, A. Ç., & Büke, T. (2015). A Decomposition Analysis of Energy-Related CO₂ Emissions: The Top 10 Emitting Countries. In A. N. Bilge, A. Ö. Toy, & M. E. Günay (Eds.), *Energy Systems and Management* (pp. 65–77). Springer International Publishing. https://doi.org/10.1007/978-3-319-16024-5_6
16. Loy, A., Steele, S., & Korobova, J. (2023, February 11). Imeresampler: Bootstrap methods for nested linear mixed-effects models. *CRAN, R Project*. <https://cran.r-project.org/web/packages/lmeresampler/index.html>
17. Marcus, G. E., Neuman, W. R., & MacKuen, M. B. (2017). Measuring Emotional Response: Comparing Alternative Approaches to Measurement. *Political Science Research and Methods*, 5(4), 733–754.
<https://doi.org/10.1017/psrm.2015.65>
18. McDermott, M. L., Schwartz, D., & Vallejo, S. (2015). Talking the Talk but Not Walking the Walk: Public Reactions to Hypocrisy in Political Scandal. *American Politics Research*, 43(6), 952–974.
<https://doi.org/10.1177/1532673X15577830>
19. Platt, R., & Retallack, S. (2009). *Consumer power—How the public thinks lower-carbon behaviour could be made mainstream*. <https://trid.trb.org/View/913480>

20. R Core Team. (2022). R: A language and environment for statistical computing. *R Foundation for Statistical Computing, Vienna, Austria*. <https://www.R-project.org/>
21. Silver, I., & Berman, J. Z. (2024). What drives disagreement about moral hypocrisy? Perceived comparability and how people exploit it to criticize enemies and defend allies. *Cognition*, 247, 105773. <https://doi.org/10.1016/j.cognition.2024.105773>
22. Spektor, M., Fasolin, G. N., & Camargo, J. (2023). Climate change beliefs and their correlates in Latin America. *Nature Communications*, 14(1), 7241. <https://doi.org/10.1038/s41467-023-42729-x>
23. Stone, J., & Fernandez, N. C. (2008). To Practice What We Preach: The Use of Hypocrisy and Cognitive Dissonance to Motivate Behavior Change. *Social and Personality Psychology Compass*, 2(2), 1024–1051. <https://doi.org/10.1111/j.1751-9004.2008.00088.x>
24. Taddicken, M., Reif, A., & Hoppe, I. (2018). What do people know about climate change — and how confident are they? On measurements and analyses of science related knowledge. *Journal of Science Communication*, 17(3), A01. <https://doi.org/10.22323/2.17030201>
25. von Sikorski, C., & Herbst, C. (2020). Not practicing what they preached! Exploring negative spillover effects of news about ex-politicians' hypocrisy on party attitudes, voting intentions, and political trust. *Media Psychology*, 23(3), 436–460. <https://doi.org/10.1080/15213269.2019.1604237>
26. Ziegler, A. (2017). Political orientation, environmental values, and climate change beliefs and attitudes: An empirical cross country analysis. *Energy Economics*, 63, 144–153. <https://doi.org/10.1016/j.eneco.2017.01.022>

Figures

CC Hypocrisy Penalty

Judgment of Climate Hypocrisy vs Climate Harm, by levels of CC mitigation support

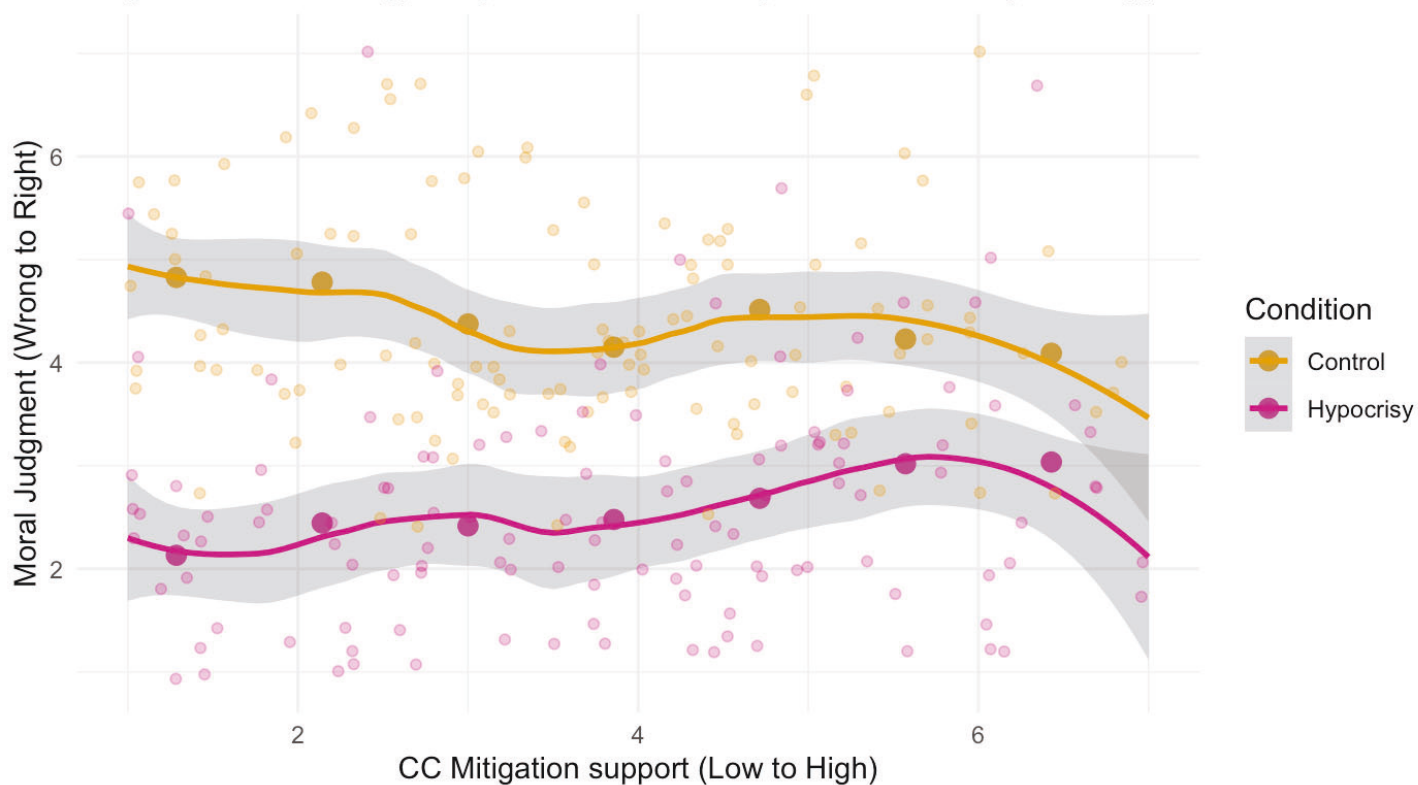


Figure 1

The moral judgment of climate hypocrisy versus climate mere harm (averaged across vignettes, $\alpha = 0.81$) as a function of CC mitigation support. Binned points represent mean judgments across 7 bins of CC mitigation support, while the loess curves illustrate smoothed trends with 95% confidence intervals.

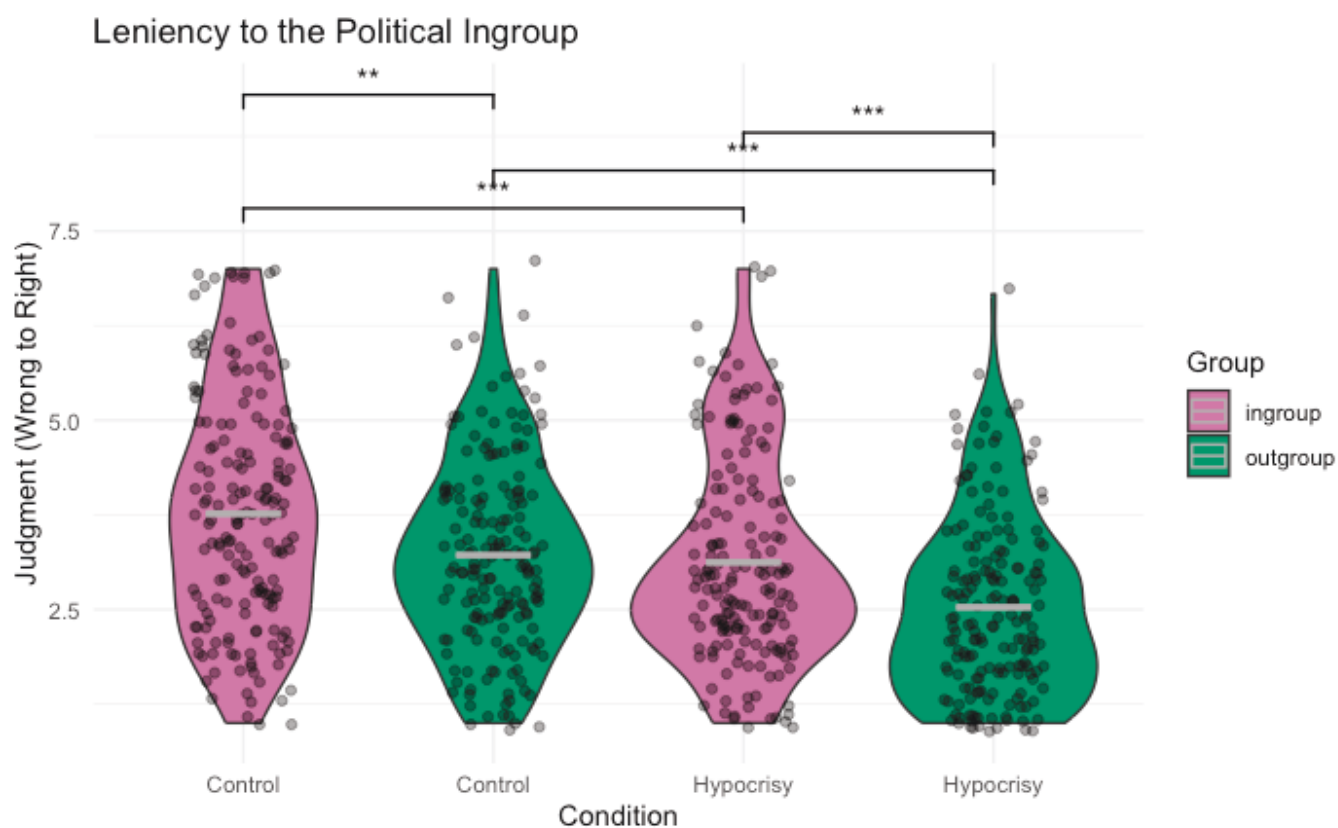


Figure 2

Comparison of moral judgment (averaged across topics, $\alpha = .69$) across conditions and groups. Violin plots depict the distribution of judgments for each group (Political Ingroup and Outgroup) and condition (Hypocrisy and Control). Gray lines represent mean judgment values, and significance levels (calculated using pairwise Wilcoxon rank-sum tests) are indicated above.

Infographic



Questions

According to the infographic, which of these activities are NOT a big driver of climate change? (select all that apply)

- ☐ Deforestation
- ☐ Recycling
- ☐ Waste Accumulation
- ☐ None of the above

According to the infographic, which of these activities are big drivers of climate change? (select all that apply)

- ☐ Meat Industry
- ☐ Fossil Fuels Use (planes, cars, etc)
- ☐ Electric Bikes Industry
- ☐ Vegetable Supply

Figure 3

Unnumbered image in the **Methods** section.



Global News
@Globalnews

...

Left-wing president [REDACTED] commits to important Carbon reduction goals at COP28, the last UN Climate Change Conference. A few weeks after, he passes national bills to make huge investments in the fossil fuel industry.

Figure 4

Unnumbered image in the **Methods** section.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [supplemmentalinfook.docx](#)