

Measuring Demand Among US Audiences for Climate-Friendly Content in Entertainment

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This study looks at American opinions about the role of Hollywood in the fight against climate change. Americans have long known and understood that Hollywood is one of the primary reflections and sources of our cultural and social norms. Here, we examine whether they believe that Hollywood should increase the number of climate-friendly actions they depict in TV shows and movies. Our survey of 1200 American adults reveals overwhelming support - with 70% of Americans stating that they would like Hollywood to show more climate-friendly actions in order to help fight climate change. These attitudes appear to be almost wholly predicted by climate concern. Once you account for climate concern, most other demographic variables - including age, income, region, ethnicity - cease to be statistically significant. Other variables like political orientation are only marginally significant, and show negligible effect sizes. Most notably, for the 53% of Americans that count as "Alarmed" or "Concerned," the support for action by Hollywood studios is nearly unanimous (89-95%). These initial data suggest that growing concern among Americans about climate change is creating a robust bed of support and a growing consensus that Hollywood should take an active role in normalizing climate-friendly behaviors.

1 SUMMARY

Climate change is a global crisis with profound implications for human society, our economies, as well the natural environment. As one of the most influential entertainment industries in the world, Hollywood has the potential to raise public awareness about climate change and its solutions through its films and TV shows. However, concerns about audience reception and worries about potential backlash may be a deterrent for studios, creatives, and key decision-makers to include explicit or implicit climate messaging in their content or portray climate-friendly behaviors on screen. In order to address these concerns, Rare's Entertainment Lab has conducted a survey to ascertain audience

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attitudes towards the inclusion of climate-friendly behaviors in Hollywood TV shows and film.

Overall, our findings show robust support for the inclusion of climate messaging across broad swathes of the American public - with 70.15% (95% CI: 67.44% - 72.73%) of respondents saying that they think “Hollywood should include climate-friendly actions on-screen in order to help address climate change.” This brief report summarizes the main findings of our survey.

2 METHODS

2.1 SURVEY RECRUITMENT

As part of this study, 1199 U.S. adults were recruited through the Lucid platform to complete the survey. Recruitment was quota sampled to match the US census on age, sex, Hispanic origin, ethnicity, and census region.

2.2 SURVEY INSTRUMENT

The current survey was specifically designed to measure audience attitudes towards the inclusion of climate-friendly behaviors on screen. To address this, we asked participants whether they thought Hollywood should include climate-friendly actions on-screen to address climate change. Participants responded using a binary scale (“yes” / “no”) to indicate their support. The exact wording of the survey questions are presented below alongside their corresponding results.

Respondents also completed the Yale Program on Climate Change Communications (YPCCC)’s 4-item “Six Americas Super Short Survey (SASSY)” - which was used for segmentation using the YPCCC group scoring tool. In addition, they completed basic demographic questions about their age, gender, ethnicity, Hispanic origin, place of residence, political orientation (using the standard World Values Survey item), and household income. These variables were used for quota sampling, re-weighting of survey responses, and as predictors of audience attitudes towards climate-relevant depictions on screen.

3 RESULTS

3.1 SURVEY REWEIGHTING

To account for any gaps in the recruitment of hard to reach populations, the survey data was additionally weighted to be representative of the US adult population in terms of demographic variables

In this survey, we are interested in your opinion about whether Hollywood should play a role in combating climate change.

Previous research has found that, by showing characters on-screen taking positive actions, Hollywood contributed to:

- reduced rates of smoking
- reduced rates of drunk driving
- increased use of seat belts

Do you think Hollywood should include more climate-friendly actions on-screen in order to help address climate change? *

- Yes
- No

Figure 1: Survey Question for Assessing Public Support for Climate Messaging in Entertainment

(age, sex, Hispanic origin, ethnicity), geographic distribution (census region), political orientation (based on World Values Survey data), and the segments of Global Warming's Six Americas (SASSY) as identified by the Yale Program on Climate Change Communication. It's particularly important to reweight online survey data by political orientation and YPCCC's Six Americas Segment because online samples tend to be more liberal and climate-concerned compared to the broader US public. Unless noted otherwise, the findings presented here are limited to the reweighted data. Note: although these reweighted responses produce more conservative levels of support than the online sample, they are more likely to be reflective of the broader US public.

3.2 OVERALL SUPPORT FOR CLIMATE MESSAGING

To measure audience attitudes towards the inclusion of climate messaging, participants were asked whether they think that "Hollywood should include climate-friendly actions on-screen in order to help address climate change?" To provide some context, we included a brief reference to previous efforts by Hollywood to tackle societal issues, including smoking, drunk driving, and seat belts.

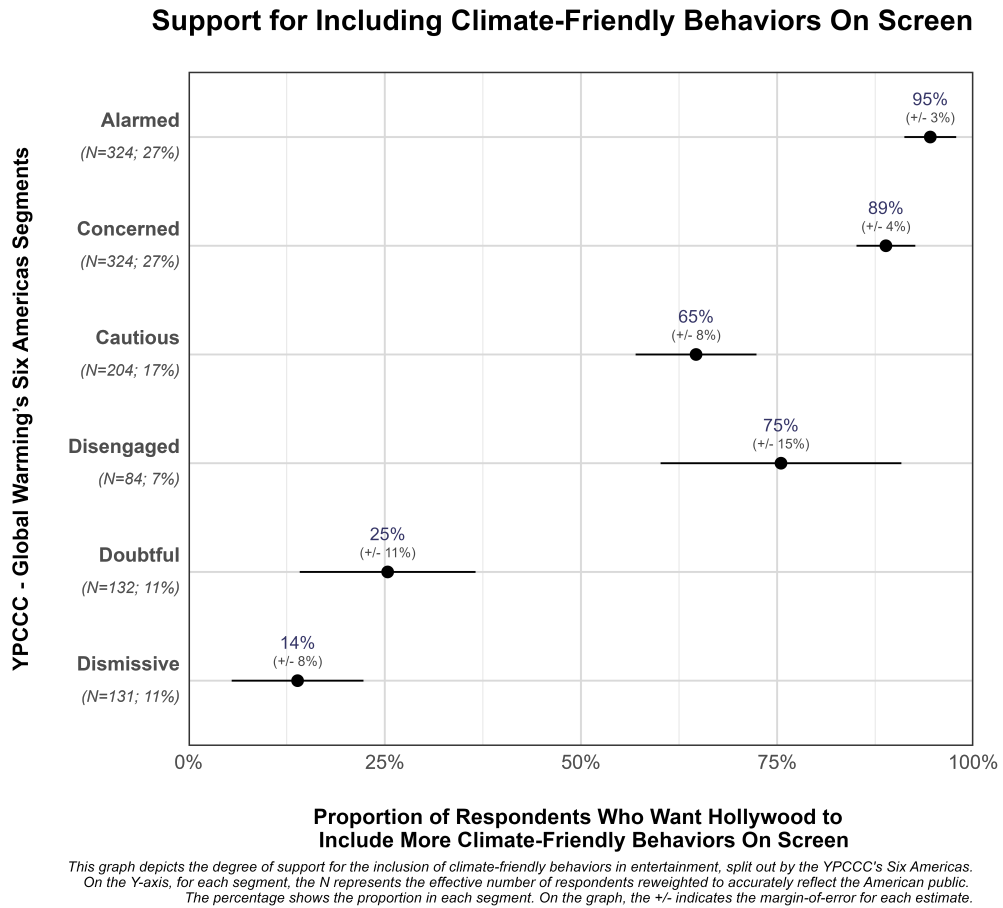


Figure 2: Support for Hollywood’s Role in Combating Climate Change by Climate Concern

Across our sample, we see broad support for the inclusion of “climate friendly actions on-screen”, with 70.15% (95% CI: 67.44% - 72.73%) saying they support the inclusion of such content. However, as the graph below shows, the level of support varies greatly across the different Six Americas Segments. The least supportive segments were the “Dismissive” group, with only 13.89% (95% CI: 5.49% - 22.28%) support (95% CI: 5.49% - 22.28%), and the “Doubtful” group, demonstrating slightly higher support at 25.36% (95% CI: 14.16% - 36.57%). In contrast, the top two segments (representing approximately 53% of America) show near unanimous support for the inclusion of climate-friendly content on screen,

with 88.86% (95% CI: 85.11% - 92.61%) of the “Concerned” segment and 94.52% (95% CI: 91.22% - 97.82%) of the “Alarmed” segment in support.

Importantly, once you account for YPCCC’s Six Americas Segment for a respondent, other basic demographic factors primarily drop off as significant predictors of support. Central demographic variables like household income; region of residence; ethnicity; and age all cease to be statistically significant predictors of support. In places where we did find significant results, the predicted effects were small and unlikely to be meaningful. For example, all else being equal, being male was associated with approximately a 7.5% decrease in your odds of supporting the inclusion of climate-friendly actions on screen, $\beta_{\text{textit{Male}}} = -0.7$; $p < 0.004$; $\exp(\beta_{\text{Male}}) = \exp(-0.7) = 0.925$ (which is interpreted as a decrease in the odds of support by 7.5%). While these differences are statistically significant, they are relatively small and may not have a meaningful impact in practice.

We also see two other marginally significant effects of demographic factors (although given the larger p-values associated with those coefficients, we should exercise caution when interpreting these results). For the variable measuring political orientation (on 0-10 point scale from Left to Right), we see a statistically-significant effect, $\beta_{\text{Political Orientation}} = -0.011$; $p = 0.04$; $\exp(\beta_{\text{Political Orientation}}) = \exp(-0.011) = 0.99$. We could interpret this as saying that - all else being equal - we would predict a 1% decrease in the odds of supporting climate on screen for each each additional unit increase in political conservatism (on 0-10 point scale). To appreciate the tiny magnitude of this effect, it is helpful to consider an extreme case: imagine if someone flipped from being fully left-wing to fully-right wing - all else being equal - our findings predict that this complete reversal in political orientation would be associated with only a 10% decrease in the odds of them supporting Hollywood’s efforts to bring climate solutions into entertainment - which is very small effect, especially given the political polarization around climate change in the US.

By and large, what we see is that climate concern captures almost all the explanatory power when trying to predict people’s attitudes towards this issue. For a more details, please see the regression table on the following page. It includes six models where each one incrementally adds additional demographic factors to the regression. What we see by comparing across the models is that - once you account for the YPCCC segments - there is very little gain in explanatory power by including any other individual-level demographics. Overwhelmingly, almost all the variation in support for the inclusion of climate messaging in entertainment is captured by the respondent’s climate concern.

Table 1: Regression Models

	Simple Regression	Adding Age	Adding Sex	Adding Region	Adding Political Orientation	Adding Hispanic & Ethnicity	Adding Income
Segment: Doubtful	0.115 (0.071)	0.110 (0.070)	0.108 (0.070)	0.111 (0.069)	0.098 (0.069)	0.099 (0.067)	0.109+ (0.066)
Segment: Disengaged	0.616*** (0.089)	0.606*** (0.090)	0.591*** (0.091)	0.590*** (0.090)	0.567*** (0.091)	0.569*** (0.090)	0.580*** (0.088)
Segment: Cautious	0.508*** (0.058)	0.492*** (0.059)	0.487*** (0.058)	0.488*** (0.058)	0.474*** (0.059)	0.467*** (0.058)	0.475*** (0.056)
Segment: Concerned	0.750*** (0.047)	0.729*** (0.049)	0.722*** (0.048)	0.724*** (0.049)	0.702*** (0.051)	0.695*** (0.051)	0.697*** (0.050)
Segment: Alarmed	0.806*** (0.046)	0.788*** (0.048)	0.780*** (0.048)	0.782*** (0.048)	0.755*** (0.052)	0.758*** (0.051)	0.759*** (0.050)
Age		-0.002* (0.001)	-0.002* (0.001)	-0.002* (0.001)	-0.002* (0.001)	-0.001+ (0.001)	-0.001 (0.001)
Sex: Male			-0.064* (0.026)	-0.062* (0.026)	-0.056* (0.026)	-0.073** (0.027)	-0.077** (0.027)
Region: Northeast				0.001 (0.039)	-0.001 (0.038)	0.003 (0.038)	0.003 (0.038)
Region: South				0.004 (0.033)	0.006 (0.032)	-0.001 (0.032)	0.000 (0.032)
Region: West				-0.016 (0.043)	-0.015 (0.043)	-0.026 (0.038)	-0.030 (0.038)
Political Orientation					-0.011* (0.005)	-0.010+ (0.005)	-0.011* (0.005)
Non-Hispanic						-0.094** (0.035)	-0.087* (0.034)
Ethnicity: Black						0.051 (0.114)	0.054 (0.107)
Ethnicity: Other						0.006 (0.113)	0.013 (0.107)

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	Simple Regression	Adding Age	Adding Sex	Adding Region	Adding Political Orientation	Adding Hispanic & Ethnicity	Adding Income
Ethnicity: White						-0.010 (0.103)	-0.012 (0.097)
Income: \$20,000 to \$29,000							-0.048 (0.047)
Income: \$30,000 to \$39,000							0.012 (0.064)
Income: \$40,000 to \$49,000							0.009 (0.046)
Income: \$50,000 to \$59,000							0.053 (0.050)
Income: \$60,000 to \$69,000							0.057 (0.051)
Income: \$70,000 to \$79,000							0.090 (0.056)
Income: \$80,000 to \$89,000							-0.067 (0.071)
Income: \$90,000 to \$99,000							0.000 (0.065)
Income: \$100,000 to \$149,000							0.003 (0.048)
Income: \$150,000 or more							0.074 (0.046)
Num.Obs.	1199	1199	1199	1199	1199	1199	1199
R2	0.396	0.401	0.406	0.406	0.410	0.418	0.425
R2 Adj.	0.393	0.398	0.402	0.401	0.404	0.410	0.413
RMSE	0.33	0.33	0.33	0.33	0.33	0.33	0.33
+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							