The Role of Entertainment in Changing Social Climate Norms

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Abstract: Storytelling is a powerful tool for supporting climate literacy. Media can reflect the changes that communities are already making and connect viewers to resources for participating in climate action. This summary provides a touch point for what is currently ongoing in Hollywood as a growing community of practice to include climate mitigation and adaptation information within scripted mainstream media, provide an overview of current challenges, and present suggestions for future work to integrate commercial media into the ecosystem of informal climate education. The new Climate Literacy Guide developed by the U.S. Global Change Research Program can help shape the next decade of storytelling as we build capacity for climate change communication.

Mainstream media and entertainment will be crucial for boosting cultural change and "demand-side" solutions: While there is a growing amount of work supporting climate change mitigation and adaptation, we are still falling deeply short of our planetary targets (NASEM 2023, Lancet Countdown 2023, UNCC 2023). And, while a majority of Americans feel a personal sense of responsibility to help reduce global warming, fewer than half of them perceive social norms for taking action on global warming (Leiserowitz 2023). Cultural changes are needed to support the breadth and scope of institutional and personal changes for achieving climate targets with the necessary speed. Media can support these goals by including pro-social climate norms in entertainment content. These media efforts meet recommendations for informal education guidelines set out in the Climate Literacy Guide developed by the U.S. Global Change Research Program.

American audiences want climate representation in media: A study by Rare's Entertainment Lab (N= 1199 U.S. adults; recruitment quota-sampled to match the US Census on age, sex, Hispanic origin, race, and census region) shows robust support for the inclusion of climate messaging across broad swathes of

the American public. One of their key findings is that 70% of respondents think "Hollywood should include climate-friendly actions on-screen in order to help address climate change."

As the Figure shows, in Rare's study, the level of support varied greatly across the different YPCCC Six Americas Segments. The bottom two segments have very low levels of support, with the "Dismissive" segment showing the lowest support of 14% and the "Doubtful" segment showing only slightly higher support of 25%. 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 89% of the "Concerned" segment and 95% of the "Alarmed" segment in support.

Importantly, once you account for YPCCC's Six Americas Segment for a respondent, other basic demographic factors - including, gender, age, race, household income, and geographical region of residence - all cease to be statistically significant predictors of support. This suggests that concern for climate change is the primary predictor of support for the inclusion of climate-friendly behaviors on screen.

Support for Including Climate-Friendly Behaviors On Screen

Proportion of Respondents Who Want Hollywood to Include More Climate-Friendly Behaviors On Screen
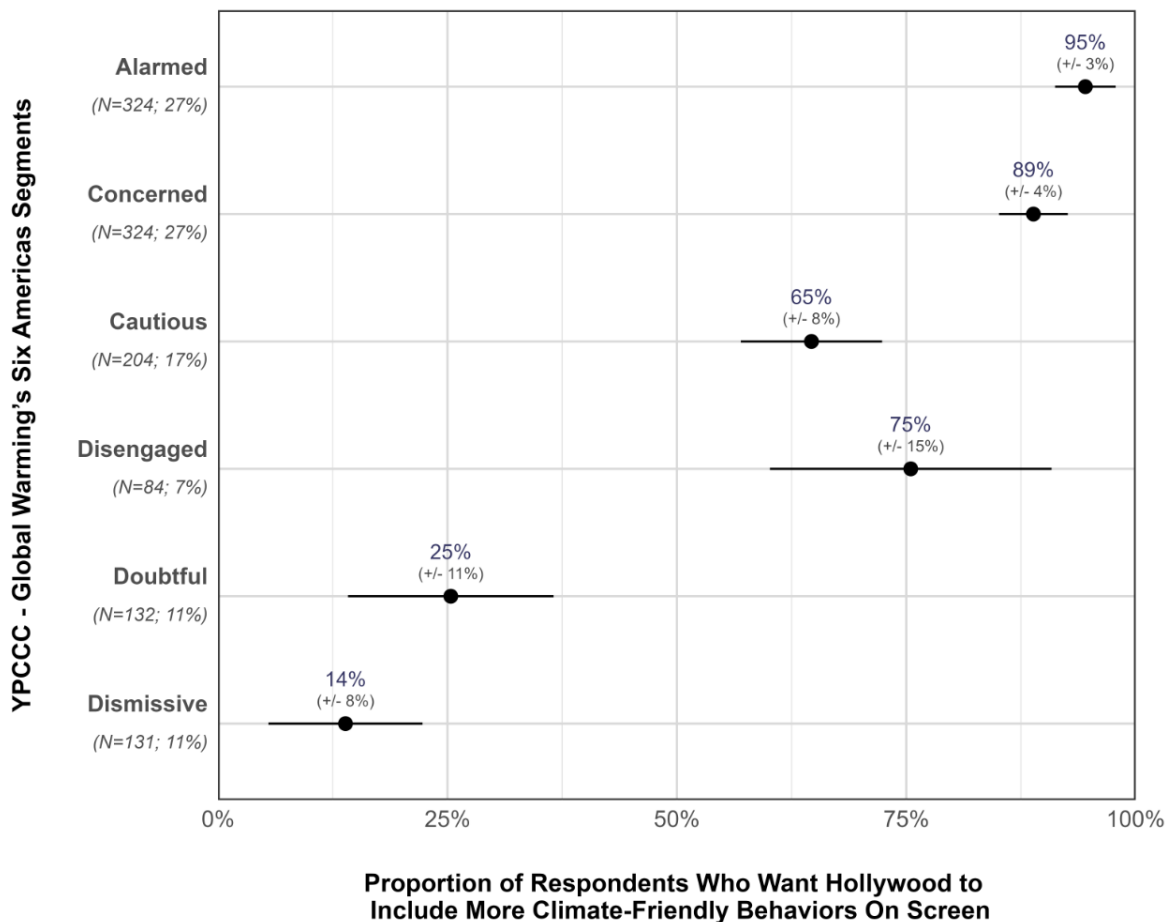
This graph depicts the degree of support for the inclusion of climate-friendly behaviors in entertainment, split out by the YPCCC's Six Americas. On the Y-axis, for each segment, the N represents the effective number of respondents reweighted to accurately reflect the American public. The percentage shows the proportion in each segment. On the graph, the +/- indicates the margin-of-error for each estimate.

Existing media industry programs supporting climate content:
In addition to audience demand for climate change content in media, there is growing support from industry members. For example, a 2023 survey conducted by the Academy of Motion Picture Arts and Sciences reported that 83% of members say it is important for the Academy to facilitate education and engagement for members on sustainability and climate action in the industry (Feinberg 2023). New programs such as the Hollywood Climate Summit (Begalman 2023) are beginning to spring up to meet these needs and an increasing number of Oscar-nominated movies have themes related to climate (Mandel 2023).

The growing community of practice working to improve climate storytelling in media is also visible in the people and programs that have stepped-up to shift media narratives (Townsend 2023) Examples include the WGA/PGA Climate Storytelling initiative of the Inter-Guild Sustainability Alliance (Writers Guild of America East 2023); the GreenerLight Program, which is an initiative focused on embedding sustainability across the entire filmmaking process by the Universal Filmed Entertainment Group (UFEG 2023); and the BBC Climate Creatives conference, which brings together twelve different industry partners to explore the role of the imagination in inspiring a low carbon future (BBC 2023). The Sustainable Production Alliance is comprised of twelve US-based global studios including Village Roadshow Pictures, Viacom/CBS, HBO, AppleTV, Fox, NBC Universal, ABC, Amazon, Sony Pictures, Paramount, Netflix, Warner Brothers, and Disney. This ecosystem of media partners is forming to meet audience demand for climate change content in commercial storytelling.

Next steps: Current challenges to climate integration in media include increasing the volume of climate integration into media while simultaneously meeting the needs of the media industry to produce commercial content that is appealing to viewers. We also need clarification of reference material that originates within the communities depicted in media to ensure the accurate representation of the nuances of regional, cultural, and socioeconomic variability in current climate actions, and connections to linked resources that support behavioral changes.

For future work, we recommend that there be more integration of climate content into commercial media, specifically examples of behaviors that include depictions of both individual and collective agency towards climate mitigation and adaptation (De Meyer 2021). Geospatial tools collecting climate resilience stories at a local level and amplified through media are likely to increase perceived social norms for taking action on global warming (Coren 2021). Evidence-based heuristics for guiding efforts to share science-based information can help media professionals harness the power of communication and behavior science in service of enhancing society's response to climate change (Maibach 2023). We continue to support multidisciplinary partnerships bridging the capacities of government, commercial media production, and non-profits in advancing media methods for the inclusion of climate content in media.

Behavior change is critical. We need adoption and we need it fast…

In 2023, this is what we need entertainment-based messaging to deliver…

Existing climate solutions → Government policy and incentives → Public adoption of climate-friendly behaviors → Emissions reduction from climate policy and solutions

Conclusions: Media plays an integral role in shaping climate action social norms. These types of informal education support the goals of the U.S. Global Change Research Program and its member agencies by improving the social context for climate change within commercial storytelling content. While these programs are a good start, there is much more work to do to scale efforts to meet the national climate literacy goals.

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