# Beyond Politics: Entertainment Figures as Catalysts for Pro-Social Behavior in Digital Spaces

#### Streamlined Abstract

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This study examines whether entertainment figures on social media can mobilize followers toward pro-social behaviors, such as voting or donations, leveraging their unique follower connections. In the 2024 U.S. presidential election, political parties across the spectrum have enlisted entertainment figures for voter outreach, and even the White House reportedly maintains a list of influencers relied upon to foster political engagement. In this study, we draw on insights from marketing and political communication and develop a novel framework to define popular figures' outreach potential. In an observational study, we analyze Instagram posts from American entertainment figures with over 500,000 Instagram followers between 2020 and 2023 assess the propensity and resonance of their calls for pro-social behavior. In a second step, we draw on an experimental study, utilizing generative AI to create experimental treatments that simulate prosocial appeals by various public figures tested on a representative U.S. sample via Prolific. Our findings indicate that entertainment figures's access in fostering pro-social behavior hinges on their communicative style. Figures who cultivate a close and personal" online relationship with followers are particularly effective in prompting behavioral change, these insights highlight entertainment figures' potential as a significant outreach channel for younger demographics, underscoring their emerging role in shaping civic engagement.

#### **Data**

- Instagram Posts from 2000 large entertainment accounts sampled from HypeAuditor, 2020-2023 (ct\_combined\_20-23.csv)
- List of relevant accounts, i.e. excluding entertainment organizations such as sports clubs or movie studios (account\_clusters.csv)
- Sample of LLM-classified cases of "calls for pro-social behavior" (still missing)

#### **Tasks**

### Finding Calls for "Pro-Social Behavior"

Develop a classifier to label "calls for pro-social behavior". Currently, I am using deepseek-r1:14b in Ollama with the following system prompt to create a training set of such posts.

You are a social behavior analysis expert. Read the caption of an Instagram post and determine if it contains a call to engage in prosocial behavior—actions that benefit society, such as voting, donating, volunteering, joining protests, or supporting small businesses. Exclude calls that simply promote product purchases without a social component. Provide a visible chain-of-thought explanation outlining your reasoning. Then, on a new line at the end of your response, state your final determination as either YES (if it contains a prosocial call), NO (if it does not), or NA (if the post is ambiguous). Ensure your entire response does not exceed 1000 characters.

- 1. Jointly validate the LLM-classified examples with Jonathan? what is lightweight supposed to mean?
- 2. Use the validated samples as train/test data to develop a more lightweight classifier. E.g.
  - A simple Transformer-based classifier (Roberta?)
  - A contrastive learning classifier (SetFit). This could be the better choice because the training data will be unbalanced. Among 1000 posts, the LLM currently identifies approx. 60 instances, not all of which are relevant.

3. Apply the developed classifier to all posts.

## **Identify Personal and Engaging Speech**

This is needed to differentiate between entertainment accounts that mostly broadcast from accounts that try to build close connections with followers (think influencers). But I am not really sure about how to do this so far. If you have any ideas, please let me know. Otherwise, we'll have to brainstorm a little bit about that.