



SOCIAL MEDIA & DEHUMANIZATION



040-IA24

Research Question: What role have social media platforms like X/Twitter played in political dehumanization?

PROJECT DOSSIER

Includes Works Cited, Acknowledgements, etc.
Password: 040-IA24



ABSTRACT

This study will examine in-depth the role of social media platforms like X (formerly Twitter) in political dehumanization to understand how social media platforms and their platform dynamics combined with their algorithms impact dehumanizing rhetoric in political discussions. Especially with heightened political polarization in today's society, there is a looming threat coming from it, and a growing body of research points towards social media for increasing polarization. Considering polarization can embody or facilitate dehumanization, it's important to investigate and understand how social media impacts dehumanization. The hypothesis for this study suggests that social media, through its algorithms and user behavior dynamics, facilitates political dehumanization by pushing polarized and dehumanizing content on their platforms and actively shapes perceptions of opposing groups, promoting alienation and dehumanization. This study will use two methods to increase its accuracy. It will combine sentiment analysis of social media posts with a combination of surveys measuring perceived dehumanization among politically engaged users. Findings from this study could have significant implications for social media regulation, especially in such a polarized society where there's a narrow focus on social media. This research is especially valuable in today's highly polarized climate, potentially contributing insights into how social media affects social cohesion and the increasing political divide.

BACKGROUND

- Online dehumanization correlates with political violence, as seen in events like January 6th (Qi, 2023; Darcy, 2024)
- Engagement-driven algorithms promote alienation by prioritizing dehumanizing rhetoric (Barrett et al., 2024)
- Social media algorithms boost divisive content, reinforcing biases and fostering echo chambers (Barrett, Hendrix, & Kim, 2016)

METHODS

- Survey Approach: Participants reflect on their encounters with politically dehumanizing rhetoric, exposure, and perceptions of opposing groups on social media.
- Content Analysis: Sentiment and bias analysis of tweets of trending political hashtags to identify patterns in polarization and dehumanizing rhetoric (Distilbert, RoBERTa (Twitter), XLM-RoBERTa (Emotion))

SUCCESS CRITERIA

- Survey Approach: +20 Survey Responses
- Content Analysis: +100 posts analyzed

NEXT STEPS

- Investigate impact of different Moderation Policies (content warnings, disclaimers, community notes)
- Compare the difference between anonymous-focused platforms (Reddit, 4chan) differ from public platforms on dehumanization

RESULTS + CONCLUSION

In conclusion, this study demonstrates that social media platforms such as X (formerly Twitter) facilitate political dehumanization by amplifying polarized and emotionally hostile content. Using a mixed-methods design that combined sentiment analysis of tweets with surveys on perceived dehumanization among politically active users, the research confirms that platform dynamics—particularly algorithmic amplification of divisive material—are associated with increased expressions of anger and disgust directed at political outgroups. Both data sources support the hypothesis that online discourse on these platforms can normalize dehumanizing rhetoric, ultimately shaping users' perceptions of outgroup members in more alienating and less empathetic ways. These findings carry significant societal implications: they highlight the urgent need for platform regulation and design interventions to curb extreme polarization and protect social cohesion in an increasingly polarized society.

The sentiment analysis results reveal a strong prevalence of anger and disgust in political tweets—emotions often associated with dehumanizing attitudes. Negative sentiment was not only dominant overall, but it also clustered by partisan alignment. Tweet content from partisan accounts (both right- and left-leaning) skewed far more negative than non-partisan content, with right-leaning tweets in the sample exhibiting the most extreme negativity (scores near the minimum sentiment value). These patterns suggest that the platform's algorithmic amplification and social network dynamics concentrate hostile discourse within like-minded communities, intensifying divisions between in-groups and out-groups. Thus, the data support a mechanism of dehumanization whereby emotionally charged, partisan content—amplified by the platform's dynamics—depicts political outgroups as less than fully human.

How Often Do You See Dehumanizing Political Content?

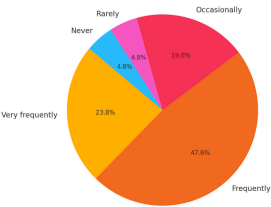


Figure 1

Overall Sentiment Distribution

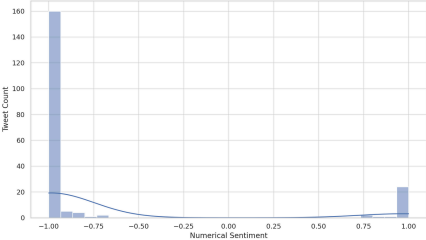


Figure 2

Sentiment by Partisanship (Custom Colors)

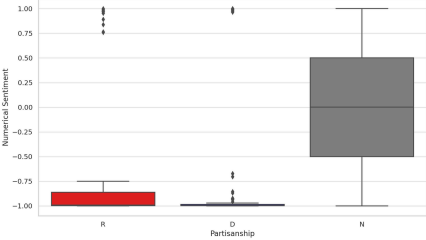


Figure 3

Likes vs Sentiment (Custom Colors)

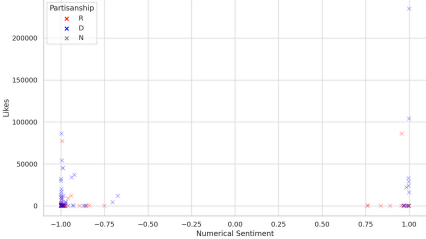


Figure 4

Frequency of XLM-RoBERTa (Emotion) Labels

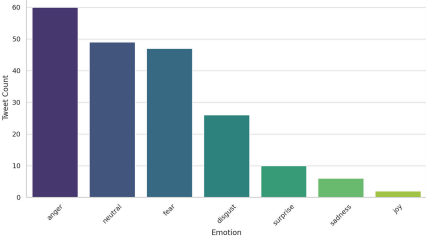


Figure 5