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## **SOCIAL IDENTITIES IN TWITTER ISSUE PUBLICS: BIOGRAPHICAL ANALYSIS OF HYPERACTIVE UNCIVIL AND INTOLERANT USERS IN AMERICAN ABORTION DISCOURSE**

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### **Twitter Issue Publics and Hyperactive Users**

In the digital age, platforms such as Twitter foster the emergence of fragmented ‘issue publics’ (Habermas, 2006), intersecting with traditional media and broader national discourse (Bruns & Highfield, 2015). However, these digital public spheres often deviate from ideal speech situations proposed by Habermas, showcasing uncivil discourse and participatory disparities (Oh et al., 2021, 2023; Batos et al., 2013; Graham & Wright, 2014; Krzyżanowski & Ledin, 2017; Weeks et al., 2017).

Previous work highlights a subset of hyperactive users on Twitter who monopolise discussions on contentious topics like abortion, perpetuating intolerance and incivility (Oh et al., 2023). Prior work also distinguishes between incivility and intolerance, arguing that incivility – interpersonal impoliteness, rudeness – can be conducive to democracy as means of political opinion expressions (in limited cases) while intolerance – moral-political disrespect, exclusion – hinders equal participation from radical democratic perspectives (Oh et al., 2023; Rossini, 2020; Young, 2002; Zerilli, 2014).

Furthermore, there are verified influencers who were officially authenticated by Twitter (before the Blue Tick Verification controversy in early 2023), earning higher credibility and engagements from audiences (Morris et al., 2012; Zilinsky et al., 2020). The capacity for these small but influential hyperactive users to shape the wider discourse, coupled with their propensity towards uncivil and intolerant behaviours in the Twitter issue publics, makes the biographies of these users particularly fertile ground for

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analysing the relationship between social identities and anti-deliberative behaviours in abortion issue publics on Twitter.

### **Twitter Biography as Discursive Construction of Social Identities**

This paper adopts a social psychological perspective on social identity, viewing it as a facet of self-representation influenced by social context and group membership. Social identities shape various attitudes and behaviours including inter-group hostility and prejudice, impacting political participation and mobilization (Klein et al., 2007; Mason, 2018; Tajfel et al., 1979).

The paper focuses on discursive positioning, where individuals define their identity through linguistic representation. Unlike fixed sets of characteristics, identities are seen as temporary attachments to subject positions constructed through discourse (Hall, 1996). Twitter biographies serve as proxies for self-representation, akin to the standardised psychological measures of self-attitudes, the Twenty Statements Test (TST) (Kuhn & McPartland, 1954; Rogers & Jones, 2021), allowing us to explore the two research questions:

RQ1: How do hyperactive uncivil and intolerant Twitter users self-describe their identity online, and how do these descriptions differ from each other and from non-hyperactive users?

RQ2: How do hyperactive influencers self-describe their social identities on Twitter? How do their identifications differ from non-hyperactive influencers and from general users?

### **Data Collection**

In 2020, the authors collected over 6 million tweets on American abortion discourse through Twitter API and identified hyperactive uncivil and intolerant users through lexicon-based classification (Oh et al., 2023).

In December 2022, we rehydrated the biographical data of the top 1% of most hyperactive uncivil and intolerant users and a random sample of non-hyperactive users in a similar size for comparison. Most accounts were still available when hydrated in late 2022: 8620 hyperactive intolerant accounts (96%), 9545 hyperactive uncivil accounts (98.24%) and 12721 non-hyperactive accounts (97.91%) are retrieved from Twitter API. User data could not be retrieved from private, suspended, or non-existing accounts.

The time gap between tweet and biographical data collection (2020 to 2022) presents both a limitation and an opportunity for insight into the evolving construction of social identities. We manually inspected a small random sample of user biographies in 2024, comparing them with our data captured in 2022 to demonstrate the longitudinal stability of biographies as a form of social identification.

### **Analysis Methods**

The research uses various natural language processing tools to quantify significant aspects in user biography data, including tf-idf analysis and log-odds ratios of term frequency, word co-occurrence visualisation, LIWC-22 psycholinguistic analysis, and

emoji analysis (Boyd et al., 2022; Silge & Davidson, 2017). Emojis in biography convey diverse social identities including white nationalism and one's support and opposition to abortion rights (Graells-Garrido et al., 2020; Hagen et al., 2019).

## Results

The term frequency analysis provides an overview of commonly occurring words in the Twitter users captured in the dataset. Religious, political, and familial identity markers dominate the discourse, with terms like "god," "trump," and "conservative" being prevalent. Interestingly, these markers overshadow abortion-related identities like "pro-choice" or "pro-life."

The log-odds and tf-idf results further highlight distinctions between the user groups. Hyperactive intolerant users predominantly use words associated with American Republican partisanship, religion, and conservative stances. On the other hand, hyperactive uncivil users tend to employ language aligned with liberal partisanship and activism. It suggests that although both political left and right-wing partisans engage in anti-deliberative behaviours online, these identities might be associated with different set of anti-deliberative behaviours. Non-hyperactive users, however, focus more on apolitical and personal identity markers including one's gender, sexual orientations, and hobbies. Again, abortion-related identity markers are notably absent from the frequent words.

The word co-occurrence network analysis illustrates how social identities interconnect in users' self-identification. Hyperactive uncivil and intolerant users often link pro-life identity with conservatism and Republican partisanship, mediated by religious terms. Non-hyperactive users, in contrast, exhibit a scattered pattern of bigram networks, emphasising non-political personal interests.

The LIWC analysis delves into psycholinguistic features of user biographies. Hyperactive users, both intolerant and uncivil, tend to write longer biographies and use more analytic, emotional language compared to non-hyperactive users. They also exhibit greater use of moralisation language. Differences in the use of religion, politics, and ethnicity-related words further highlight distinct sociocultural interests and linguistic styles between hyperactive and non-hyperactive users. LIWC results also indicate the differences between uncivil and intolerant user biographies.

Analysis of influencers' biographies reveals their emphasis on abortion-related identity, particularly for hyperactive intolerant influencers, who prioritise their pro-life stance. Non-hyperactive influencers, in contrast, focus less on abortion-related terms and more on occupational and familial identities.

Comparisons between general users and influencers who were hyperactive in abortion issue public highlight stark differences in emphasis. While general hyperactive users prioritise religious, political, and familial identities, hyperactive influencers emphasise abortion-related identities. Non-hyperactive users, including influencers, tend to focus more on occupational and familial identities rather than political ones.

Emoji analysis shows the multimodal ways of identity signalling, in which Twitter users creatively communicate their American patriotism, anti-vax and pro-COP stance by combining American national flag right next to an eagle and police officer emojis, a needle with no entry sign emoji.

In summary, the analyses elucidate that those who identify themselves with partisan, religious and other political (e.g., gun control) identity markers are associated with hyperactivity in anti-deliberative behaviours on Twitter, with exhibiting distinct linguistic styles and sociocultural interests compared to non-hyperactive users. Our analysis also suggests the dominance of partisan and religious identities over directly abortion-related identities. These findings offer insights into the broader American political spheres that abortion is more than a single-issue voter matter but connected in the long chain of equivalence in American conservative demands, reflected in the link between Republican partisanship, sociocultural conservatism, religion, gun control, and patriotism.

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