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To quit or not to quit Twitter? The interplay of identities, perceptions, and behavioral reactions to changing platform ownership

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ABSTRACT

Elon Musk's acquisition of Twitter (now 'X') raised concerns about its governance and functioning. Using this as a case study, we propose a framework to analyze the interplay of social identities, perceptions, attitudes, and behavioral responses to major platform policy and ownership changes. Analyzing data from a two-wave nationally representative U.S. panel survey, we found that partisanship, after controlling for gender and race, was consistently associated with various perceptions about Twitter. Democrats evaluated Musk's takeover and Donald Trump's account reinstatement more negatively than Republicans. Moreover, we observed 'lagging resistance,' or a 'wait-and-see mindset,' among users: perceptions of negative impact, disagreement with Trump's reinstatement, and distrust in Musk were associated with only intentions to reduce long-term Twitter use, not actual use after the takeover. Furthermore, our analysis revealed no clear differences across identity groups in platform migration, despite the tremendous attention it received after Musk's takeover.

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Twitter; social identity; disconnection; Elon Musk; lagging resistance

Twitter, now 'X,' has influenced public discourse in the United States for two decades. However, its acquisition by Elon Musk in 2022, coupled with mass layoffs, the turbulent launch of Twitter Blue, and the reinstatement of accounts of controversial figures such as Donald Trump, raised concerns about governance and the quality of public discourse on the platform. #BlackTwitter and other underrepresented groups expressed worry about the impact on their online communities, given the surge of hate speech reported on Twitter after Musk's takeover (Frenkel & Conger, 2022). In response, some users called for quitting Twitter and migrating to alternative platforms (He et al., 2023).

Musk's purchase of Twitter provides an opportunity to examine how individual-level perceptions and attitudes interact with structural changes at the platform level to shape user responses, whereas past studies of social media non-use focused more on user agency in social media detoxing (Ng, 2023; Portwood-Stacer, 2013). Given the increasing

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controversies in platform ownership and policy changes (e.g., the sale of Parler, WhatsApp's privacy policy change, and debates surrounding TikTok's ownership), it is necessary to understand such structural factors' implications for user reactions, similar to studies on changes in news media ownership (Wagner & Collins, 2014).

Using Musk's takeover as a case, we propose a framework to examine the interplay between *social identities*, *perceptions*, *attitudes*, and *behavioral responses* to structural changes in the policies and control of social media platforms. Integrating the identity-based motivation (IBM) model (Oyserman, 2009) with platform disconnection scholarship (Hesselberth, 2018; Light, 2014), we examine how partisanship, gender, and race shape perceptions of platform changes and attitudes toward ownership and governance, which in turn influence varied responses, such as using alternative platforms, reducing Twitter use, and supporting government intervention.

Social media are not explicitly designed to appeal to identity groups, but their affordances – accessibility, connectivity, and visibility – have made them important venues for identity expression and community building. Social media are widely accessible to diverse populations (Freelon et al., 2018; Newman et al., 2023), spanning the political spectrum and including underrepresented groups. Accessibility, coupled with connectivity, enables users to engage with unfamiliar others sharing the same identity. Such connections foster online communities that provide mutual support and facilitate collective action (Brock, 2012; Karpf, 2017). Regarding the visibility affordance, one important pathway to amplifying political and identity expressions and reaching broader audiences is through hashtags (e.g., #MeToo), which influence mainstream news and online discourse (Freelon et al., 2018; Jackson et al., 2020).

Given the importance of social media for identity expression and community building across partisan, gender, and racial lines, we argue that structural changes disrupting these functions prompt identity-protective responses. According to the IBM model, contextually cued identities motivate identity-congruent reactions. Thus, when platform changes threaten group interests, users are likely to interpret platform governance through the lens of these identities. Even before Musk's takeover, individuals evaluated social media through partisan lenses, with Republicans perceiving greater algorithmic bias than Democrats due to content moderation and the flagging of Trump's posts (Otala et al., 2021; Smith, 2018). Moreover, users may respond in identity-congruent ways, such as migrating to alternative platforms or supporting external interventions favorable to their group interests.

Understanding how structural changes to major platforms shape user reactions is essential for assessing both user agency and broader societal impact. Examining user reactions pinpoints their agency in adapting to these changes rather than viewing them as passive subjects (Hesselberth, 2018; Light, 2014). More importantly, user responses have key societal consequences. If users migrate from broader platforms to more niche and even extreme social media spaces, inhabiting separate echo chambers, opportunities for cross-cutting interactions will decline, and political polarization will intensify.

This study also advances understanding of user reactions to Musk's takeover. Initial studies revealed divergent opinions on the acquisition (Wang et al., 2024) and evidence that some users migrated to Mastodon (He et al., 2023). While these studies used mostly online discourse and behavioral data, which might not reflect reactions and patterns in

the general population of Twitter users, we analyze nationally representative online panel survey data to investigate the role of social identities in perceptual and behavioral responses.

Structural changes on platforms, social identities, and disconnection

When social media undergo *structural changes* – defined as major shifts in policies, content moderation, features, or ownership – they often disrupt functions critical to certain social groups, prompting users to reduce usage or quit the platforms. For instance, the increased content moderation on Twitter and Facebook during the 2020 U.S. election, including flagging posts about voter fraud by Donald Trump, led to dissatisfaction among some conservatives and their migration to Parler (Otala et al., 2021). Similarly, WhatsApp's privacy policy update in 2021 raised concerns over data sharing with Facebook, prompting privacy-conscious users and activists to switch to encrypted alternatives like Signal (Duffy, 2021).

These structural changes, including Musk's takeover of Twitter, have drawn immense public attention. Prior studies offer valuable insights into outcomes like platform migration (Otala et al., 2021; Sabo & Gesthuizen, 2024), but have not proposed a general framework for understanding user reactions to structural changes or outcomes.

A related line of research, *disconnection scholarship*, examines the diverse motivations and practices of technology non-use (Hesselberth, 2018). Among various motivations, the maintenance and performance of social identities have been found to influence decisions to disconnect from social media (Lomborg & Ytre-Arne, 2021). For example, past studies show that users disconnect from platforms to perform or affirm political or subcultural identities (e.g., as hipsters) (Neves et al., 2015; Portwood-Stacer, 2013).

Building on these insights, we incorporate the IBM model to argue that social identities shape how users perceive and navigate structural changes on social media. The IBM model posits that individuals are motivated to interpret the world and act in identity-congruent ways, but identities exert such influence only when activated or made salient by situational cues (Oyserman, 2009). In contrast, classic social identity theory emphasizes group categorization and comparison as drivers of behaviors and intergroup dynamics. While both frameworks focus on social identities, the IBM model stresses contextual activation and its influence on individual-level perceptions and behaviors rather than intergroup relations (Oyserman, 2009).

Specifically, the IBM model extends disconnection scholarship in two ways. First, most disconnection studies focus on how users initiate social media detoxing, without considering external shocks – particularly structural platform changes. The IBM model provides a theoretical foundation for conceptualizing such changes as contextual cues that activate social identities and motivate identity-congruent actions. Only disruptions to functions central to social groups (e.g., identity expression, community building) would trigger identity activation; minor tweaks like interface redesigns usually do not.

Second, while disconnection scholarship has treated identities as only one of several focuses (Lomborg & Ytre-Arne, 2021), often through qualitative accounts of the interplay between identity performance and disconnection, the IBM model centers on identities and specifies how they shape behavioral responses. Beyond identity performance, the IBM model suggests that contextually cued identities foster identity-protective

perceptions and reactions, and that identity-based motivation can even override original goals (Oyserman, 2009). Applied to our case, the model implies that when social groups perceive platform changes as threats and experience identity activation, this activation triggers defensive interpretations of changes and behavioral responses such as supporting external intervention or reducing use.

Through this theoretical integration, we propose a framework for understanding user perceptions and reactions to structural platform changes (see Figure 1(a)). At the user level, our framework comprises three arguments. First, social identities, particularly

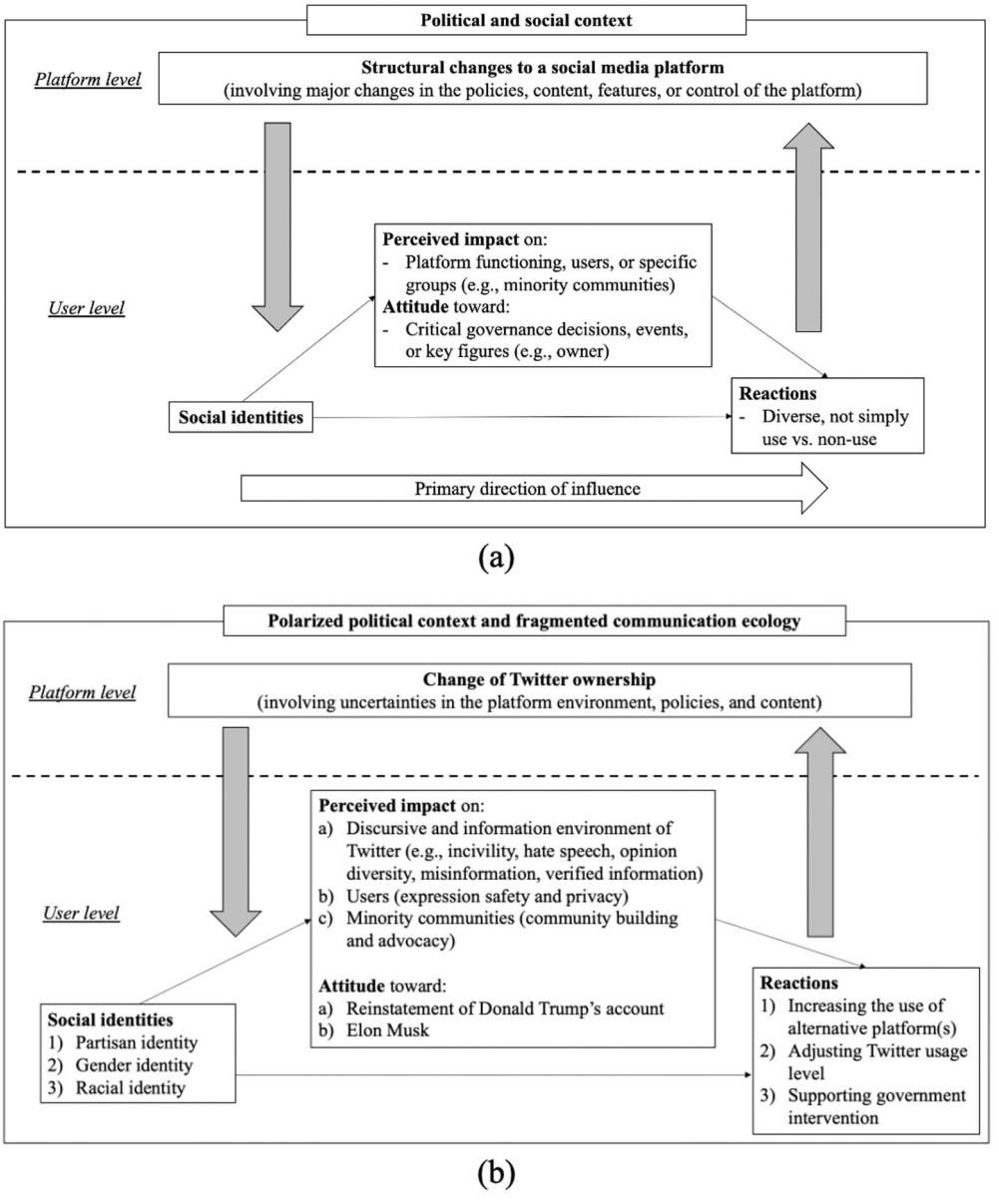

Figure 1. (a) Conceptual framework. (b) Model for our case study.

those cued by the platform changes, influence users' reactions. Second, diverse reactions should be considered instead of a single type of response. Third, the relationships between social identities and reactions are mediated by platform-related perceptions and attitudes. The sections below explain these arguments and the relationships tested for our case (see Figure 1(b)).

Notably, our framework assumes reciprocal influences between platform and user levels. Platform changes make certain identities salient, prompting identity-congruent reactions to these changes. User reactions in turn affect the functioning role of platforms in the communication ecology; for example, if social groups perceive the platform negatively and quit, the platform may lose its functions in community building. These reciprocal influences should also be understood within the societal context. Specifically, the political environment and social structures influence the motivations of social groups for using social media (e.g., strong partisans expressing opinions, minorities building their online communities), shaping the associations between social identities and perceptions of platform changes.

Social identities and user reactions to Twitter's ownership change

Our case study – Musk's acquisition of Twitter – involves structural platform changes, on a larger scale than most prior scholarship. The mass layoffs after Musk's takeover raised concerns about whether Twitter's capacity for privacy protection and content moderation. Moreover, Musk claimed himself to be a 'free speech absolutist,' reinstating controversial accounts from users like Donald Trump and introducing Twitter Blue verification, which requires users to pay for verification. Some verified accounts disseminated misinformation (Kasinathan, 2023).

Focusing on the United States, we hypothesize that three social identities – *partisanship*, *gender*, and *race* – are cued in response to Twitter's ownership change.

Twitter has long been a platform for political expression across the partisan spectrum, and changes affecting these functions may be perceived as either threats or opportunities to competing partisans. Twitter previously flagged and suspended Trump's tweets, a move welcomed by many Democrats but criticized by Republicans (Otala et al., 2021). After Musk's acquisition, Twitter reversed these policies and reinstated Trump's account. These decisions may prompt negative perceptions among Democrats and favorable evaluations among Republicans. Notably, reinstating Trump – a symbolic figure of Republicans – likely heightened the salience of partisan identity in interpreting and reacting to the ownership change.

Women, gender minorities, and racial minorities are also expected to react more negatively than male and white users, as Twitter has played a central role in their community building and advocacy. Its hashtag functionality has been essential to movements such as #MeToo, which advanced women's rights, and #BlackTwitter and #BLM, which mobilized racial solidarity and collective action (Brock, 2012; Jackson et al., 2020). After Musk's takeover, studies reported a surge in racist, misogynistic, and homophobic slurs on Twitter (Frenkel & Conger, 2022). Women, gender minorities, and racial minorities likely perceive the increased visibility of such content as threats to their groups and to their use of Twitter for community building and advocacy, which prompts more negative reactions to Musk's takeover.

Diverse reactions to structural platform changes

Our second argument highlights diverse user reactions to structural platform changes, as disconnection scholarship, particularly the *theory of disconnective practices*, suggests that disconnection gestures are more nuanced than staying or quitting, and vary across individuals (Light, 2014). For Twitter's ownership change, we examine three types of reactions: *increasing use of alternative platforms*, *adjusting usage levels*, and *supporting government intervention*.

Using alternative platforms has been addressed in past disconnection studies (Baumer et al., 2013; Karppi, 2018). After Musk's takeover, Mastodon gained significant attention owing to its decentralized structure and community-based moderation; recent studies on this topic predominantly focused on migration to Mastodon (Sabo & Gesthuizen, 2024). Instead, we address the general outcome of increasing the use of alternative platforms, as some users may increase their usage of other popular platforms like Facebook and Instagram, where they connect to more readily available networks.

He et al. (2023) found that many users who 'migrated' to Mastodon continued using Twitter, which pinpoints the need to observe the second outcome – adjusting usage levels. Claesson (2023) found that French journalists strategically reduced Twitter usage after Musk's takeover and explored alternative platforms instead of quitting completely to avoid losing their audiences. Similarly, reducing usage is more plausible than complete non-use or migration for most users, as Twitter was deeply intertwined with their social relationships.

We consider both current and intended long-term usage, suggesting that current practices do not necessarily reflect users' planned disconnection. This refers to the phenomenon of *lagging resistance* – a desire to reduce the use of, or quit, a platform or system but delaying doing so (Baumer et al., 2013; Zhang et al., 2022). Baumer et al. (2013) first proposed this concept, observing that users perceiving privacy violations, data misuse, or banality often intended to quit but postponed to maintain social or professional ties. Subsequent human–computer interaction studies applied the concept to disconnection from platforms, including Twitter, and from smartphones (Hiniker et al., 2016; Zhang et al., 2022).

Lagging resistance emphasizes resistant attitudes over delayed action, with negative platform perceptions serving as motivation. Barriers such as habitual use and social obligations often prevent people from acting on their disconnection intentions, causing the attitudinal-behavioral gap (Hiniker et al., 2016). While previous studies focused on 'ordinary times' of social media detoxing, we extend the concept to structural platform change, examining whether identity and perception variables show different associations with current versus intended long-term usage after Musk's takeover.

The third outcome is support for government intervention. Unlike migration and reduced usage, supporting government intervention involves seeking external solutions to counteract platform changes. This is particularly relevant to users who depend on Twitter yet struggle to quit. Before Musk's takeover, about half of Americans (51%) supported more government regulation of technology companies (Smith, 2018).

Platform-related perceptions and attitudes

Our final argument suggests that the relationships between social identities and behavioral reactions are mediated by platform-related perceptions and attitudes. According to the IBM model, cued social identities shape how users perceive external changes, eventually prompting identity-congruent behaviors (Oyserman, 2009). We define *platform-related perceptions* as users' understanding of platform operation and its impact. These perceptions are shaped by users' social identities, experiences, and their available knowledge, which may not necessarily align with the actual operation or social impact of platforms (DeVito, 2021; Schwarzenegger, 2020) but may nevertheless influence platform use (DeVito, 2021).

We consider *perceived effects on the platform environment*, *users themselves*, and *minority communities*. For the platform environment, we examine users' perceptions of how the information and discursive environment on Twitter changed after Musk's takeover. We also consider users' perceptions about how these changes affect themselves, given concerns about Twitter's reduced staff safeguarding users' privacy and protecting them from trolling (Kasinathan, 2023). Perceived impact on minority communities is also relevant, as these groups used Twitter to build communities and launch advocacy campaigns.

Regarding the association between social identities and these perception variables, users may perceive Musk's takeover through a partisan lens. Democrats were more likely than Republicans to view harassment and misinformation as major issues on Twitter after the takeover (Anderson, 2023). Similarly, Wang et al. (2024) observed a surge in conservatives' tweets endorsing Musk's leadership and liberals' tweets expressing concern. We hypothesize that Democratic users perceive more deterioration of the information and discursive environment, greater impact on their own safety, and greater impact on minority communities on Twitter, compared with Republican users.

We also expect gender and racial identities to shape perceptions. Women, gender minorities, and racial minorities are likely to perceive greater deterioration of the platform environment and safety risks, given relaxed content moderation. Racial minorities, particularly Black users, may also perceive greater harm to minority communities, given Twitter's key role in #BlackTwitter and #BLM.

Furthermore, we consider two attitudinal variables: *agreement over Trump's reinstatement* and *trust in Elon Musk*. Both capture attitudes toward specific governance decisions and individuals who have come into the spotlight. While the exact changes to content moderation were not publicly revealed, major modifications such as the reinstatement of Trump's account were noticeable. Trump's reinstatement is politically symbolic, as Twitter was central to his strategy – using streams of tweets to influence mainstream media – and restoring his account offered him and his supporters renewed influence (Wells et al., 2016). Motivated by partisan identities, Democratic users are expected to express more disagreement over Trump's reinstatement than Republican users. Moreover, much of the advocacy by women and Black users on Twitter has been tied to Trump's policies and rhetoric (Freelon et al., 2018; Jackson et al., 2020), and his account was also engaged by segments of his fan base that deployed racist and sexist tropes (Karpf, 2017); his reinstatement therefore directly affects Feminist and Black Twitter and may be viewed by these groups as revitalizing the influence of abusive communities.

Furthermore, as Musk became the central figure associated with Twitter, users' trust in him may serve as a direct heuristic influencing their Twitter use. We expect that Democratic users have a lower trust in Musk than Republican users.

We hypothesize that these perceptions and attitudes are associated with behavioral outcomes. Users perceiving a deterioration of Twitter's information and discursive environment may find it less suitable for networking. Even before Musk's takeover, fake news and harassment were already fueling disconnection (Ng, 2023). Past studies showed that perceived negative effects of social media content are related to more support for platform regulation (Riedl et al., 2022) and that greater privacy and safety concerns reduce usage or lead to platform disconnection (Baumer et al., 2013). Thus, users who perceive greater deterioration of Twitter's environment and impact on personal safety are more likely to use alternative platforms, reduce Twitter usage, and support government intervention. Furthermore, controversial reinstatement of Trump's account may prompt Democratic users to reduce use or even to quit Twitter.

Despite limited empirical evidence about the effect of the remaining perceptual and attitudinal variables, it is logical to hypothesize that users perceiving a greater impact on minority communities or lower trust in Musk will support external intervention or reduce Twitter usage and turn to alternative platforms.

Research questions

Given the number of variables involved, we ask the following research questions:

RQ1: How are partisan, gender, and racial identities associated with various platform-related perceptions and attitudes (perceived effects on the platform environment, users themselves, and minority communities; agreement over Donald Trump's account reinstatement; and trust in Elon Musk)?

RQ2: How are platform-related perceptions and attitudes associated with different behavioral reactions (increasing use of alternative platforms, reducing current and intended long-term use, and supporting government intervention)?

RQ3: Given RQ1-2, how are the relationships between social identities and behavioral reactions mediated by platform-related perceptions and attitudes?

Method

Our two-wave probability panel survey was administered online via Social Science Research Solutions, which recruited respondents based on the nationally representative Address Based Sample design. The first wave (W1) was collected from 31 October to 14 November 2022, involving 2,874 respondents. The second wave (W2) took place from 23 March to 6 April 2023, around five months after Musk's acquisition. 2,069 respondents from W1 completed the second survey, a retention rate of 71.99%. The focal variables of the present study were collected only in W2, as the W1 survey had been programmed before the takeover became official.

Respondents who never used Twitter in the six months before the W2 survey were excluded from our analysis. Thus, our sample includes users who quit Twitter after Musk's takeover and excludes non-users and those who had already left one month

before the takeover. This left 543 respondents, i.e., 26.24% of the W2 sample, which is similar to Twitter's (25%) U.S. penetration (Newman et al., 2023).

Measurement

The measurements of social identities are from W1, while the perceptual and behavioral variables are from W2. Appendix I presents the correlations among key variables.

Social identities

Partisanship. Based on a partisan identification question and a follow-up question about political leaning, we created a seven-point scale measuring partisanship: 1 = *strong Republican*, 2 = *Republican*, 3 = *Republican leaner*, 4 = *Independent*, 5 = *Democrat leaner*, 6 = *Democrat*, and 7 = *strong Democrat* (W1 $M = 4.17$, W1 $SD = 2.02$).

Gender. Respondents reported their gender identity: 1 = *Male*, 2 = *Female*, 3 = *Trans male/Trans man*, 4 = *Trans female/Trans woman*, 5 = *Gender queer, non-conforming*, and 6 = *Different identity (open-ended)*. We created two categories, *male* (54.1%) and *non-male* (42.9%), and treated male as the baseline in our analysis.[1]

Race. Respondents indicated their racial identity with options, including 1 = *Black or African American (non-Hispanic)*, 2 = *Hispanic*, 3 = *White (non-Hispanic)*, 4 = *Asian, South Asian or Pacific Islander*, 5 = *Native American or American Indian*, and 6 = *Other*. We created three categories: *White* (61.1%), *Black or African American* (12.0%), and *other racial identities*, which cover the other four options (26.9%). White is the baseline in our analysis.

Platform-related perceptions and attitudes

For perceived impact on Twitter's environment, users, and minority communities, respondents indicated their agreement with 16 statements about Twitter tapping into hate speech, harassment, incivility (Van Duyn & Muddiman, 2022), deliberative quality, information quality, expression safety, privacy (Chen, 2018), and minority community building and advocacy after Musk's takeover (1 = *strongly disagree* to 5 = *strongly agree*). Conducting a principal component analysis with varimax rotation, we obtained a solution of four components addressing the perceived deterioration of Twitter's discursive environment and perceived enhancement of Twitter's discursive environment, along with perceived negative impact on personal safety and minority communities (Table 1).

Agreement over Trump's reinstatement. Respondents expressed whether they agreed with the reinstatement of former President Donald Trump's Twitter account from 1 = *strongly disagree* to 5 = *strongly agree* (W2 $M = 2.94$, W2 $SD = 1.41$).

Trust in Elon Musk. Respondents expressed their trust of 'Elon Musk, the owner of Twitter,' from 1 = *distrust completely* to 5 = *trust completely* (W2 $M = 2.55$, W2 $SD = 1.26$). For brevity, we refer to this measure as 'trust in Elon Musk.'

Table 1. Principal component analysis.

Component variables	W2 *M*	W2 *SD*	Factor loading
Perceived negative impact on minority communities (*α* = .95)			
Minority communities will be less likely to use Twitter to engage in advocacy campaigns.	2.95	1.05	.87
Minority groups will be less likely to use the power of their Twitter communities to organize protests.	2.92	1.03	.86
Minority groups will be less likely to use Twitter to build their communities.	2.93	1.04	.85
Members of minority communities will be less likely to use Twitter to connect with each other.	2.91	1.02	.84
Perceived deterioration of the discursive environment (*α* = .92)			
Comments on politics have become more uncivil on Twitter.	3.28	1.17	.79
Online harassment on Twitter has increased.	3.23	1.13	.79
Political discussions have become more uncivil on Twitter.	3.27	1.08	.78
Hate speech on Twitter has increased.	3.25	1.11	.77
Misinformation on Twitter has increased.	3.23	1.20	.67
Perceived negative impact on users themselves (*α* = .85)			
I feel unsafe to post or share photos, videos, or audio files about politics.	2.87	.99	.83
I feel unsafe to post or share personal experiences or thoughts about politics.	2.95	.98	.82
The information I submit on Twitter will be more likely to be used in a way I did not foresee.	2.96	1.11	.66
The information I submit on Twitter will be more likely to be misused.	2.97	1.13	.66
Perceived enhancement of the discursive environment (*α* = .72)			
Freedom of expression on Twitter has increased.	3.27	1.09	.81
Diversity of viewpoints on Twitter has increased.	3.16	1.05	.78
The amount of verified information on Twitter has increased.	2.86	1.01	.70

Behavioral outcomes

Support for government intervention. Respondents expressed whether the government should take the following actions after Musk's takeover (1 = *strongly disagree* to 5 = *strongly agree*): intervening in the change of Twitter ownership and monitoring the content moderation policy of Twitter (Spearman-Brown coefficient = .80; W2 $M = 2.45$, W2 $SD = 1.06$)

Usage adjustment. Current use of Twitter was measured from 1 = *never* to 5 = *very often* (W2 $M = 2.87$, W2 $SD = 1.23$). For intended long-term use, we asked respondents to report their intended future use, given the change of ownership, on a four-point scale (1 = *will stop using/have already stopped using Twitter* to 4 = *will increase overall usage*; W2 $M = 2.53$, W2 $SD = 0.88$).

Use of alternative platforms. Respondents answered whether they would increase their use of other social media platforms, given Twitter's ownership change. Almost three-quarters (73.5%) indicated *No*, 26.5% chose *Yes*. Those choosing *Yes* reported which platform(s) they would use; Appendix II summarizes these responses.

Controls

We controlled for demographics, including age (W1 $M = 45.84$, W1 $SD = 16.21$), education (W1 $M = 3.04$, W1 $SD = 1.49$, *Mdn* = '3 = *Associate's degree*'), household income (W1 $M = 3.60$, W1 $SD = 1.82$, *Mdn* = *3 = $50,000 to $74,999*'). Other controls included political interest, news use, political discussion, Twitter usage at W1 (same scale as W2 usage), political expression on Twitter, fear of missing out (FOMO), and the use of other social networking sites. All these variables were measured on a five-point scale, except for political interest, which was on a four-point scale. They were all from

W1, except for political expression on Twitter and FOMO, which were available only in W2. Appendix III provides descriptive statistics and measurements.

Analytical strategies

Using the *lavaan* package in R (Rosseel, 2012), we applied path analysis, a form of structural equation modeling, with robust maximum likelihood estimation. Control variables were residualized for the mediators and dependent variables (perception, attitude, and behavioral variables) to ensure that all analyses accounted for their influence. In the tested model, all six perception and attitude variables were regressed on each social identity variable, and all four behavioral reactions were regressed on every identity, perception, and attitude variable. Appendix IV provides analytical details (estimation approach, covariances, model fit criteria).

Table 2 presents the results for path coefficients (see Figure 2 for all significant paths). The model fit was good, χ^2 (3) = 8.55, p = .036; comparative fit index = .995; root mean square error of approximation = .060; standardized root mean square residual = .016. Collinearity diagnostics indicated minimal risk of multicollinearity, with variance inflation factors ranging from 1.02 to 2.00 (Appendix V).

Results

RQ1 addresses how social identities are associated with platform-related perceptions and attitudes. Partisanship was significantly associated with all the perceptual and attitudinal variables; specifically, more Democratic-leaning users perceived greater deterioration (β = .22, p < .001) and less enhancement (β = −.22, p < .001) of Twitter's discursive environment, larger impact on their own safety of using Twitter (β = .10, p = .028), and larger negative impact on minority communities (β = .16, p < .001). More Democratic-leaning users also expressed less agreement over Trump's reinstatement (β = −.37, p < .001) and had less trust in Elon Musk (β = −.25, p < .001).

Non-male users had less trust in Musk (β = −.09, p = .040) than male users. Black users perceived greater deterioration of Twitter's discursive environment (β = .10, p = .030) than White users, while users of other racial identities perceived greater enhancement of Twitter's discursive environment (β = .11, p = .013) than White users.

RQ2 addresses the role of perceptions and attitudes in behavioral outcomes. Regarding the use of alternative platform(s), users perceiving larger negative impact on minority communities were more likely to increase their use of alternative platform(s) (β = .11, p = .033).

To examine possible lagging resistance, we consider both current use at W2 and intended long-term use (with W1 use controlled). Only perceptions of enhancement of Twitter's discursive environment were associated with more use at W2 (β = .12, p = .005). By contrast, all the perceptual and attitudinal variables had significant associations with intended long-term use. Users who perceived greater deterioration (β = −.15, p = .008) and less enhancement (β = .12, p = .009) of Twitter's discursive environment, larger impact on personal safety of using Twitter (β = −.11, p = .026), and larger negative impact on minority communities (β = −.10, p = .027), show less agreement with Trump's reinstatement (β = .12, p = .014), and have less trust in Musk (β = .12, p = .009) reported a lower level of intended long-term use.

Table 2. Path analysis results.

	Outcomes: Perceptions and attitudes (W2)					
	Perceived deterioration of Twitter's discursive environment	Perceived enhancement of Twitter's discursive environment	Perceived impact on personal safety	Perceived negative impact on minority communities	Agreement over Trump's reinstatement	Trust in Elon Musk
Social identities (W1)						
Partisanship (higher: Democrat)	.22***	−.22***	.10*	.16***	−.37***	−.25***
Gender identity (non-male = 1)	.07	.03	.07	.07	−.06	−.09*
Racial identity (ref.: white)						
Black	.10*	−.04	.08	.00	.02	.01
Other	.01	.11*	.03	−.03	.03	.04

	Outcomes: Behavioral reactions (W2)			
	Increased use of alternative platform(s) (Yes = 1)	Twitter use at W2	Intended long-term Twitter use	Support for government intervention
Social identity (W1)				
Partisanship (higher: Democrat)	−.02	.00	.02	.02
Gender identity (non-male = 1)	.06	−.07	−.11**	.04
Racial identity (ref.: white)				
Black	.04	−.05	.01	.12***
Other	.02	−.06	−.04	.08
Perceptions and attitudes (W2)				
Perceived deterioration of Twitter's discursive environment	.09	.02	−.15**	.06
Perceived enhancement of Twitter's discursive environment	.08	.12**	.12**	.05
Perceived impact on personal safety	.04	.01	−.11*	.15**
Perceived negative impact on minority communities	.11*	−.04	−.10*	.18***
Agreement over Trump's reinstatement	−.10	.02	.12*	−.10
Trust in Elon Musk	.03	−.01	.12**	−.09

Note. Control variables (including Twitter use at W1) were residualized for all outcomes. Entries are standardized path coefficients. *$p < .05$, **$p < .01$, ***$p < .001$.

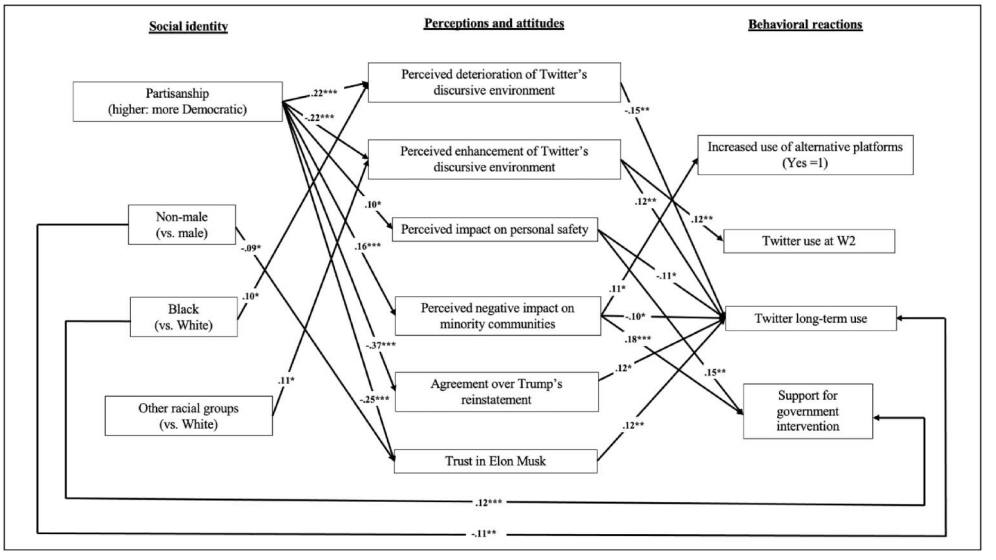

Figure 2. Path model results. Note. For clarity, only significant paths are shown.

Furthermore, perceptions of a larger impact on personal safety ($\beta = .15$, $p = .007$) and minority communities ($\beta = .18$, $p < .001$) are related to greater support for government intervention.

RQ3 examines how perceptions and attitudes mediate the relationships between social identities and behavioral reactions. To answer RQ3, we tested the mediation paths involving significant constituent paths indicated in Table 2. Table 3 summarizes the results.

More Republican-leaning users perceived more enhancement of Twitter's discursive environment, which relates to higher usage at W2 ($\beta = -.027$, $p = .015$). By contrast, we observed more significant mediators between partisanship and intended long-term

Table 3. Mediation results.

	B
Increased use of alternative platforms	
Partisanship → PM → use of alternative platforms	.017
Twitter use at W2	
Partisanship → PE → W2 use	−.027*
Other racial identities (vs. white) → PE → W2 use	.014
Intended long-term use	
Partisanship → PD → Long-term use	−.033*
Partisanship → PE → Long-term use	−.027*
Partisanship → PS → Long-term use	−.011
Partisanship → PM → Long-term use	−.016
Partisanship → ATR → Long-term use	−.044*
Partisanship → TEM → Long-term use	−.029*
Non-male (vs. male) → TEM → Long-term use	−.010
Black (vs. white) → PD → Long-term use	−.015
Other racial identities (vs. white) → PE → Long-term use	.014
Support for government intervention	
Partisanship → PS → support for government intervention	.015
Partisanship → PM → support for government intervention	.029*

Note: PD: perceived deterioration of Twitter's discursive environment; PE: perceived enhancement of Twitter's discursive environment; PS: perceived impact on personal safety; PM: perceived negative impact on minority communities; ATR: agreement over Trump's reinstatement; TEM: trust in Elon Musk. Entries are standardized coefficients. *$p < .05$.

usage. More Democratic-leaning users perceived greater deterioration ($\beta = -.033$, $p = .016$) and less enhancement ($\beta = -.027$, $p = .021$) of Twitter's discursive environment, expressed less agreement over Trump's reinstatement ($\beta = -.044$, $p = .022$), and trusted Musk less ($\beta = -.029$, $p = .019$), which ultimately relates to lower intended long-term use.

Regarding support for government intervention, more Democratic-leaning users perceived larger impact on minority communities, which eventually relates to stronger support ($\beta = .029$, $p = .013$). Notably, no indirect paths from social identities to increased use of alternative platform(s) were significant. No significant indirect paths were observed for gender and racial identities.

Discussion

To examine user reactions to structural platform changes, we propose a framework about the interplay of social identities, platform-related perceptions/attitudes, and behavioral responses. Regarding Elon Musk's Twitter purchase, partisanship was consistently associated with perceptions and attitudes that related to intended long-term use or support for government intervention. We also observed lagging resistance, as negative perceptions and attitudes were associated with only reduced long-term usage, not current usage.

Contributions of theoretical framework

Our findings support the three key arguments of our proposed framework. First, social identities, particularly those cued by platform changes, were associated with user reactions. Our analysis shows that partisan, gender, and racial identities are associated with perceptual and behavioral responses to Musk's takeover. Second, we show that identities and perceptions relate not only to increased use of alternative platforms, but also to long-term use intentions and support for government intervention. Third, the hypothesized mediating role of perceptions and attitudes was supported, as partisanship was associated with different behavioral outcomes through perceived impact and related attitudes.

The framework can be further developed in two ways. First, although Figure 1(a) highlights the role of political and social contexts, we did not empirically test it. The polarized U.S. context informed our hypotheses, particularly why partisan, gender, and racial identities were readily cued by Twitter's ownership change. However, comparative studies could examine contextual influences and assess the generalizability of our framework. In less polarized contexts, partisan identity may be less salient, whereas in more tightly regulated environments such as Europe, support for government intervention may be stronger.

Second, the reciprocal influences between platforms and users suggested in our framework have not yet been tested. Future research should examine how user responses feed back into platform policies and how such changes, in turn, reshape user behavior. Our findings show that negative perceptions were associated with intentions to reduce long-term use. If many users act on their intentions to use X less, this may pressure X to revise its policies, which might again alter user perceptions and decisions. Tracking studies are therefore recommended to capture these iterative dynamics.

Furthermore, we extend the IBM model underpinning our framework in two ways. First, we expand its application from consumption and health behaviors to user responses to platform governance. Second, whereas past research has emphasized episodic situational cues (e.g., advertisements) that activate social identities (Oyserman, 2009), our study highlights broader contextual cues, such as large-scale platform changes. This aligns with the original but untested formulation of the theory, which was not confined to micro-level situations.

Role of social identities

A notable finding is that partisanship had significant relationships with all perceptual and attitudinal outcomes. More Democratic-leaning users were more likely to perceive a negative impact, oppose Trump's account reinstatement, and report lower trust in Musk.

This significant role of partisanship in conditioning platform perceptions has implications for the social media ecology and platform governance as partisan divides in platform attitudes are likely to spread across the multiplatform ecology. Republicans have long perceived major platforms like Facebook as biased against them (Smith, 2018), while Democrats may fear losing other platforms for expression and community building owing to sudden ownership changes. Partisanship is likely to remain a salient identity conditioning perception of future structural changes across platforms, which turns them into major sites of partisan conflict.

If partisan attitudes toward platforms continue to diverge, the social media ecology may evolve into a bifurcated structure. Future research should examine whether Democrats, before quitting X, make their accounts private and engage mostly in like-minded interactions. Such withdrawals reduce cross-cutting exposure and weaken dialogue across partisan lines. If migration to alternatives such as Bluesky eventually reaches a critical mass, Democrats may abandon X entirely. This may lead to echo chambers forming on separate platforms, undermining social media's potential as a shared arena for political discursive participation.

Regarding platform governance, partisan conflict has also intensified. The U.S. Congress has repeatedly debated platform regulation and summoned platform owners to testify, highlighting that platform governance is no longer merely technical or commercial but deeply politicized. When user-level partisan polarization in platform attitudes and elite-level polarization mutually reinforce each other, regulatory proposals may increasingly reflect political considerations rather than democratic or user-protection principles. Such developments limit the capacity of social media to support deliberative democracy.

In addition to partisan identity, racial and gender identities were also associated with user responses. Black users were found to be more likely to support government intervention. Their demand for government intervention has been overlooked, despite the attention given to the rise in racist slurs (Frenkel & Conger, 2022) and platform migration (Sabo & Gesthuizen, 2024).

Surprisingly, users from other racial identities perceived greater enhancement in Twitter's discursive environment compared to White users. Our post hoc analysis (see Appendix VI) revealed that Hispanic users, in particular, perceived greater enhancement than White users. While these findings should be interpreted with caution given the small number of Hispanic respondents ($n = 97$), they offer important exploratory leads. Future

research could oversample Hispanic users to test the robustness of this relationship over time. Focus groups could explore how Hispanic users interpret Musk's takeover and how these interpretations compare to those of Black users, specifically whether they perceive distinct forms of 'enhancement' not recognized by other racial groups. Computational analyses of Hispanic users' tweets before and after the takeover could offer supplementary evidence by tracing shifts in discursive practices.

We also found that non-male users were more likely than males to have lower trust in Musk and reduce long-term X use. This lower trust is potentially driven by news coverage about Musk's sexist remarks and a lawsuit over his sex discrimination against female Twitter employees (Vlamis & Tan, 2023). Such gendered distrust in Musk should be understood within the broader literature showing that women are more susceptible than men to online harassment on social media (Jane, 2017), which has heightened their attention to platform governance, particularly privacy and safety (Tifferet, 2019). Ng (2023) noted that Twitter was especially 'toxic' for harassment and misogynistic abuse even before Musk's takeover, and its lack of improvement has pushed many women toward disconnection. Future research could examine whether lower trust in Musk among non-male users identified in our study, combined with harassment experiences and longstanding skepticism toward X's governance, might become a tipping point for actual disconnection if harassment intensifies.

Lagging resistance to structural platform changes

Our analysis showed evidence of lagging resistance: specifically, perceptions of negative impact, disagreement with Trump's reinstatement, and distrust in Musk were associated with intention to reduce long-term usage, not actual usage in W2.

While earlier research examined lagging resistance mainly under ordinary circumstances of social media detoxing, our study shows that it also occurs when users confront structural platform changes they perceive negatively. Past research points to explanations such as fear of losing networking opportunities or difficulty of breaking entrenched habits (Zhang et al., 2022). These factors remain highly relevant for our case study: some users may view the costs of quitting as more unbearable than a deteriorating platform environment. Moreover, 'abrupt' ownership changes can make it difficult for users to change their routines quickly and may require longer-term adjustments, especially when Twitter was deeply embedded in their social and information practices. Lagging resistance emphasizes both negative perceptions that motivate disconnection and the barriers that prevent it (Hiniker et al., 2016); our study reveals diverse perceptions underlying planned disconnection. Future research should examine the barrier aspect more directly – for example, through interviews exploring whether the barriers users encounter amid structural platform changes differ from those in ordinary circumstances.

Meanwhile, some users with negative perceptions may adopt a 'wait-and-see mentality' and may reduce usage only if further unacceptable changes are implemented. Alternatively, if Musk reverts some changes, these users may change their perceptions and abandon their intention to reduce long-term use. While our dataset captured only the first few months after Musk's takeover, future studies could examine whether lagging resistance turns into actual resistance as X continues to change.

Furthermore, our findings about using alternative platforms supplement the understanding of lagging resistance. No identity variables had significant direct or indirect

relationships with this outcome, which suggests no clear migration preferences among social groups. Our findings highlight the overemphasis on platform migration in existing research (He et al., 2023; Sabo & Gesthuizen, 2024). Appendix II shows that respondents were more likely to increase their use of Facebook (11.05%) and Instagram (7.73%) than Mastodon (2.03%), which indicates that the key consequence is more likely an incremental adjustment toward mainstream incumbents than 'massive' migration to new alternatives. The narrow focus on platform migration in the literature poses two theoretical limitations. First, it overlooks research on technology adoption, which suggests that most users hesitate to adopt new platforms unless they perceive them as easy to use, useful, and popular (Vishwanath, 2015). Second, it sidelines the larger group who adapt their use of mainstream platforms and risks overlooking whether and how users transfer their Twitter practices onto these incumbents.

Limitations and conclusion

Our study has certain limitations. First, we could not conduct autoregressive analysis to strengthen causal inference because the W1 survey was programmed before Musk's takeover. Some key variables are therefore only available in W2. Second, we relied on self-reported rather than observed online data for behavioral outcomes. Third, we focused on attitudes toward Trump's reinstatement, while other major events such as Twitter Blue and mass layoffs were only indirectly captured by perceived impact on Twitter's discursive environment and user safety. Future research could examine a broader range of governance decisions when studying platform changes.

In conclusion, our framework to understand user reactions to major changes in platform ownership and functioning by addressing the interplay of social identities, platform-related perceptions, and attitudes in shaping behavioral outcomes sheds light on future controversies involving platform changes and identity-based polarization in user responses.

Note

1. We combined female and other gender identities, as the latter constitute only 3.0% of the sample ($n = 16$).

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Data availability statement

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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Appendices

Appendix I

Correlations among key variables.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Partisanship (Higher: more Democratic)													
2. Non-male (vs. male)	.11*												
3. Black (vs. White)	.16***	.08											
4. Other racial groups (vs. White)	.20***	.03	−.22***										
5. Perceived deterioration of Twitter's discursive environment	.57***	.12**	.15**	.13**									
6. Perceived enhancement of Twitter's discursive environment	−.47***	.01	−.10*	−.06	−.42***								
7. Perceived impact on personal safety	.33***	.13**	.12**	.11**	.67***	−.29***							
8. Perceived negative impact on minority communities	.42***	.13**	.09*	.07	.64***	−.35***	.55***						
9. Agreement over Trump's reinstatement	−.68***	−.12**	−.08	−.16***	−.56***	.57***	−.31***	−.42***					
10. Trust in Elon Musk	−.58***	−.16***	−.10*	−.13**	−.54***	.49***	−.36***	−.41***	.61***				
11. Support for government intervention	.42***	.19***	.20***	.21***	.48***	−.24***	.44***	.46***	−.38***	−.39***			
12. Twitter use at W2	.00	−.12**	−.00	−.08	−.01	.08	−.06	.00	.03	.03	−.02		
13. Twitter long-term use	−.42***	−.20***	−.10*	−.16***	−.53***	.41***	−.43***	−.45***	.48***	.49***	−.41***	.17***	
14. Increased use of alternative platforms (Yes = 1)	.22***	.17***	.14***	.10*	.26***	−.12**	.22***	.27***	−.23***	−.23***	.36***	.09*	−.28***

Note: *$p < .05$, **$p < .01$, ***$p < .001$.

Appendix II

Platforms that users indicated to increase their use after the change of Twitter ownership

Platform	Frequency
Facebook	60
Instagram	42
TikTok	36
Mastodon	11
Reddit	4
WhatsApp, Snapchat, YouTube, Pinterest, LinkedIn, Ugly Hedgehog, Yahoo! News, Discord, Tribel, Substack, Dreamwidth, Tumblr, Gap, Truth Social, Rumble, Post	1 for each

Note. 144 respondents (26.5%) indicated increased use of alternative platform(s); respondents could name more than one platform.

Appendix III

Operationalization and descriptive statistics of control variables
Political interest (W1 $M = 3.20$, W1 $SD = .90$)

- Question: Some people seem to follow what's going on in politics most of the time, whether there's an election going on or not. Others aren't that interested. Would you say you follow what's going on in politics most of the time (4), some of the time (3), only now and then (2), or hardly at all (1)?

Left-leaning news use (averaging three items; $\alpha = .68$; W1 $M = 1.69$, W1 $SD = .73$)

- Question: How often in the last week have you used the following types of media content? MSNBC cable news / HuffPost / Vox (1 = *never* to 5 = *very often*)

Center-left news use (averaging eight items; $\alpha = .84$; W1 $M = 1.72$, W1 $SD = .76$)

- Question: How often in the last week have you used the following types of media content? National nightly news on CBS, ABC, or NBC / CNN cable news / NPR news / The New York Times / The Washington Post / The Wall Street Journal / The Hill / Politico (1 = *never* to 5 = *very often*)

Right-leaning news use (averaging five items; $\alpha = .83$; W1 $M = 1.55$, W1 $SD = .70$)

- Question: How often in the last week have you used the following types of media content? Fox cable news / national conservative talk radio / Breitbart / One America News Network / Daily Caller (1 = *never* to 5 = *very often*)

Political discussion (averaging four items; $\alpha = .67$; W1 $M = 2.79$, W1 $SD = .78$)

- Question: How often do you discuss politics and current events in person with each of the following groups? Family members and friends / co-workers / Republicans / Democrats (1 = *never* to 5 = *very often*)

Twitter usage in W1 (same scale used for W2 usage; W1 $M = 2.82$, W1 $SD = 1.34$)

- Question: How often in the last week have you used the following types of media content? Twitter (1 = *never* to 5 = *very often*)

Twitter political expression (averaging two items; Spearman-brown coefficient = .90; W2 $M = 1.84$, W2 $SD = 1.08$)

- Question: How often would you say you participate in the following activities on Twitter in the last six months? posting or sharing personal experiences or thoughts about politics / posting or sharing photos, videos, or audio files about politics (1 = *never* to 5 = *very often*)

Fear of missing out (a scale from Przybylski et al. (2013); $\alpha = .67$; W2 $M = 3.40$, W2 $SD = .86$)

- Question: To what extent do you agree with the following statements? (1 = *strongly disagree* to 5 = *strongly agree*)
  - I get anxious when I don't know what my friends are up to.
  - Sometimes, I wonder if I spend too much time keeping up with what is going on.
  - When I go on vacation, I continue to keep tabs on what my friends are doing.

Use of other social networking sites (a scale averaging usage levels of Facebook, Instagram, and TikTok; $\alpha = .67$; W1 $M = 2.50$, W1 $SD = .95$).

- Question: How often in the last week have you used the following types of media content? Facebook / Instagram / TikTok (1 = *never* to 5 = *very often*)

Appendix IV

Further details about the path analysis
This appendix explains the choice of estimation method and the consideration of covariances.

Choice of estimation method
As mentioned in the main text, we selected robust maximum likelihood (MLR) estimation for path analysis. Kaplan (2009) argues that MLR estimation assumes continuous data but works well with categorical outcomes, and it is considered the best approach among the different estimation approaches. In our model, nine mediators and dependent variables are continuous, and one of them (i.e., increased use of alternative platforms) is binary.

Consideration of covariances
In the analysis, we also estimated the covariances among the six perception and attitude variables (perceived deterioration of Twitter's discursive environment, perceived enhancement of Twitter's discursive environment, perceived impact on personal safety, perceived negative impact on minority communities, agreement over Trump's reinstatement, and trust in Elon Musk), as these perception and attitude variables can possibly affect one another; for example, individuals perceiving greater deterioration of Twitter's discursive environment may perceive the platform to be less suitable or even detrimental for minority community building and advocacy (i.e., perceptions of more negative impact on minority communities). Given their potential interrelations, it is theoretically unjustifiable to constrain the covariances among these variables as zero.

Furthermore, we chose to estimate their covariances rather than proposing and testing concrete hypotheses about the directions of these relationships, because our focus is on how social identities and these perceptions and attitudes were associated with different behavioral reactions to Musk's takeover of Twitter, but not on making solid causality claims about the relationships among the six perception and attitude variables. Moreover, our perception and attitude variables are only measured in W2 (as explained in the method section in our main text), which limits the potentiality of the dataset to sort out the causal relationships among these six perception and attitude variables.

Given the above rationales, we decided to estimate the covariances among the six perception and attitude variables rather than constraining their relationships as zero or proposing and testing directional hypotheses about their relationships. Results about their covariances estimated in path analysis are provided below:

Variables	1	2	3	4	5
1. Perceived deterioration of Twitter's discursive environment					
2. Perceived enhancement of Twitter's discursive environment	−.23***				
3. Perceived impact on personal safety	.60***	−.20***			
4. Perceived negative impact on minority communities	.51***	−.25***	.45***		
5. Agreement over Trump's reinstatement	−.29***	.36***	−.13***	−.22***	
6. Trust in Elon Musk	−.28***	.30***	−.20**	−.21***	.37***

Note: Entries are standardized path coefficients. **$p < .01$, ***$p < .001$.

Evaluation of model fit

Our tested model showed a good fit, χ^2 (3) = 8.55, $p = .036$; comparative fit index (CFI) = .995; root mean square error of approximation (RMSEA) = .060; standardized root mean square residual (SRMR) = .016. A model is considered to have a good fit when the chi-square test is non-significant, CFI is .95 or higher, RMSEA is .06 or lower, and SRMR is .08 or lower (Hu & Bentler, 1999; Kline, 2015). However, the chi-square statistic is sensitive to a large sample size and almost always significant, as observed in our tested model; thus, the chi-square statistic is not considered an adequate test of model fit (Kline, 2015).

Appendix V

Values of variance inflation factor (VIF) of key variables in path analysis

	VIF values	
	For regression predicting each of the perception and attitude variable	For regression predicting each behavioral reaction
Social identity		
Partisanship (higher: Democrat)	1.09	1.28
Gender identity (non-male = 1)	1.02	1.04
Racial identity (ref.: white)		
Black	1.10	1.12
Other	1.11	1.13
Perceptions/attitudes		
Perceived deterioration of Twitter's discursive environment		2.00
Perceived enhancement of Twitter's discursive environment		1.30
Perceived impact on personal safety		1.69
Perceived negative impact on minority communities		1.51
Agreement over Trump's reinstatement		1.52
Trust in Elon Musk		1.34

Appendix VI

Post hoc analysis based on the positive relationship between 'other racial identities' and perceived enhancement of Twitter's discursive environment

To further examine the positive relationship between other racial identities (vs. White) and perceived enhancement of Twitter's discursive environment, we conducted two extra sets of analysis. First, we tried to leave out other key identity variables to see if the coefficient concerned remains

significant. As explained in the main text, we found out that, this relationship became non-significant when partisanship was excluded from the model (see column (B) below). This implies a suppression effect of partisanship on the relationship between other racial identities (vs. White) and perceived enhancement of Twitter's discursive environment. In other words, the positive relationship between other racial identities (vs. White) and perceived enhancement of Twitter's discursive environment can only be observed, when the confounding influence of partisanship is controlled. Specifically, it indicates that users of other racial identities perceived greater enhancement of Twitter's discursive environment across partisan groups.

Second, we reran the analysis by treating different racial identities as separate variables. We did not adopt this approach in our main analysis, given our focus on Black users (in response to the Black Twitter community) and the relatively small sizes of some racial groups in our sample (e.g., 44 for *Asian, South Asian or Pacific Islander* and 1 for *Native American or American Indian*). To conduct the post hoc analysis, we constructed five categories: (1) *White*, (2) *Black or African American*, (3) *Hispanic*, (4) *Asian, South Asian or Pacific Islander*, and (5) other racial identities (including those picking *Native American or American Indian* or *Other*) this time and treated White as the baseline for the analysis. The post hoc analysis, as shown in column (C) below, reveals that Hispanic users, but not other racial groups, perceived greater improvement than White users. The results remain largely similar to the main analysis for other outcomes; being Hispanic was not significantly associated with other perceptions, attitudes, and behavioral reactions.

	Outcome: Perceived enhancement of Twitter's discursive environment (W2)		
	(A)	(B)	(C)
Social identities (W1)			
Partisanship (higher: Democrat)	−.22***		−.22***
Gender identity (non-male = 1)	.03	.02	.03
Racial identity – three categories (ref.: white)			
Black	−.04	−.08	
Other	.11*	.06	
Racial identity – five categories (ref.: white)			
Black			−.04
Hispanic			.13**
Asian			.01
Other			.04

Note: Control variables were residualized for all the outcome variables before path analysis. Entries are standardized path coefficients. *$p < .05$, **$p < .01$, ***$p < .001$. Column (A) presents the results of the main analysis and is provided here for reference.