

Government Digital Repression and Political Engagement: A Cross-National Multilevel Analysis

Examining the Roles of Online Surveillance and Censorship

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Abstract

Much research has shown that online news engenders greater political participation, but less attention has been paid to how the relationship can be suppressed by government online surveillance and censorship, especially as Internet freedoms continue to decline in many parts of the world. Drawing from 2017–20 World Value Survey and Varieties of Democracy project data, we conducted multilevel analyses across forty-four countries from seven continents that have different political and media systems. Results showed that online news and online surveillance were positively related to political engagement while online censorship was negatively related. Cross-level interactions also showed some support for the informational theory of repression, whereby the relationships among online news, surveillance, and engagement were conditioned at different levels of online censorship. The results suggest that while country-level online surveillance and censorship is highly correlated, varying levels can engender or suppress political engagement in different ways, which have implications for future studies on the dynamics of government digital repression and citizen participation in politics from a global comparative perspective.

Keywords

online news, social media, political participation, censorship, surveillance, repression

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While the proliferation of information and communication technologies around the world has resulted in greater citizen access to information that engenders engagement in politics (Boulianne 2019; Skoric et al. 2016), the same technologies have also been increasingly used by governments to monitor citizens' browsing behaviors and online communications as well as censor information that challenges government rule (Freedom House 2021). These trends counteract the assertion that the Internet is a "liberation technology" that empowers citizens politically, socially, and economically at the individual level; and engenders democratization at the country level (Diamond 2010). Rather, the technologies have increasingly been co-opted, adapted, and implemented to various degrees and effectiveness by governments around the world to stifle dissenting political voices (Liu and Wang 2021) and deter political expression and engagement (Büchi et al. 2022). Notably, these repressive acts are not confined to authoritarian states such as China, Russia, and Iran, but also democracies like India and Mexico (Pan and Siegel 2019).

Research has separately examined how political engagement is suppressed by online surveillance (Krueger 2005; Stoycheff, et al. 2019) and censorship (e.g., Pop-Eleches and Way 2021; Ververis et al. 2019). A notable gap in the literature is the lack of studies that have theorized and examined the *joint* dynamics of online surveillance and censorship that can shape online news use and political engagement. This is important because online surveillance and censorship serve intertwined roles in government digital repression on its citizens (Earl et al. 2022). Using a cross-continent multilevel analysis of forty-four countries with diverse political and media systems, we elucidate the conditions in which the relationship between online news and political engagement varies according to country-level online surveillance and censorship. In doing so, this study contributes to the literature by providing a more nuanced picture from a global perspective on how government digital repression deters but under some conditions engenders citizen political engagement.

Online News and Political Engagement

Rational choice explanations for citizen political engagement have emphasized the relative *costs* of accruing the necessary resources for engagement (e.g., time, money, and cognitive skills) such that lower costs are conducive for individual participation (Brady et al. 1995). A similar logic was subsequently adopted by scholars to explain why Internet use increases both offline and online political participation: it reduces the time, money, and effort required to access information and news that shape subsequent political attitudes and participation (i.e., online news sites) (Vissers and Stolle 2014); it provides alternative forms of online-based participation that are more convenient and requires little physical effort (e.g., online petitions) (Boulianne 2009); and it offers networking opportunities with like-minded others that can help develop necessary cognitive skills for political engagement (Schlozman et al. 2010). The robust relationship between informational uses of the Internet and political participation was further

demonstrated in several meta-analyses of the literature (e.g., Boulianne 2009, 2019; Skoric et al. 2016), but the literature is less clear on what cross-national factors would strengthen or weaken the relationship. Boulianne compared free press and other press system countries (2019) and correlated effect sizes with different Freedom House indicators such as press freedom and Internet freedom (2020) but found no significant patterns.

Beyond traditional forms of political participation such as voting and contacting government officials, online news can also engender targeted participation such as protests and strikes.¹ The social movement literature has long emphasized the importance of alternative media, first as a channel of information that represents citizen voices and views that are ignored or represented in the mainstream media, and second as a way to disseminate action-orientated political agendas that challenge the status quo (Atton 2007). The spread of the Internet means that alternative media has become more readily accessible and can reach exponentially larger audiences than before. In hybrid and authoritarian regimes where the traditional media usually conforms to ruling government narratives, alternative online news become important outlets to spread dissenting information and mobilize targeted participation (Gainous et al. 2015). Country-level analyses further showed that higher levels of Internet use increased protests in authoritarian regimes compared to democratic countries (Ruijgrok 2016).

In all, online news engenders different types of political activities partly because the Internet reduces the costs required to obtain information that directly or indirectly mobilizes action. Next, we explicate how digital repression can affect these cost dynamics and the online news and political engagement relationship.

Digital Repression and Costs of Political Engagement

Different fields have defined and studied repression in different ways. In political science it has been defined as the “actual or threatened use of physical sanctions against an individual or organization ... for the purpose of imposing a cost on the target” and “detering specific activities and/or beliefs perceived to be challenging to government personnel, practices or institutions” (Davenport 2007: 2). More recently in the social movement literature *digital* repression was defined as “actions directed at a target to raise the target’s costs for digital social movement activity and/or the use of digital or social media to raise the costs for social movement activity, wherever that contestation takes place” (Earl et al. 2022: 1). Despite their different emphases and wordings, both definitions specify the purpose of repressive actions to raise the “cost” of political engagement to such a degree that citizens would not consider or be aware enough to participate in political actions deemed undesirable by those in power. The most notable cost is threat to personal safety that can be applied and enforced through state surveillance, legal action, imprisonment, and physical violence (Freedom House 2021). Actions can also be carried out through state-supported intermediaries, such as online harassment by fellow citizens on Iranian diaspora that used Instagram to criticize the government, resulting in them being “more reserved about the

topics they chose to publicly speak or write about” (Kargar and Rauchfleisch 2019: 1507). Online surveillance and online censorship thus represent two key components of government digital repression (Stoycheff, et al. 2020) and each one can exert costs on political engagement in distinct ways: the former primarily through “physical control” that deters participatory behavior and the latter through “information control” that constrains and filters citizens’ information environments (Earl et al. 2022).

Online Surveillance: Deterrence or Backlash?

Online surveillance involves “the automated, continuous, and unspecific collection, retention, and analysis of digital traces by state and corporate actors” (Büchi et al. 2022: 1) and the targets could range from individuals to the whole of society. In recent years authoritarian and democratic governments alike have been purchasing and deploying increasingly powerful commercial spyware and data extraction technologies to monitor their citizens, particularly activists, protesters, journalists, and dissidents (Freedom House 2021). Online surveillance represents a sophisticated form of coercion and social control because of overt and covert threats to citizen safety that “chills the exercise of vital civil liberties” (Richards 2013: 1945). The threats could be especially high for targeted participation and online participation as the former can involve disruptive actions that challenge the status quo, and the latter could leave behind digital footprints that could be traced back to the user. In a high surveillance society like Thailand, for example, individuals have been sentenced to prison for sharing posts on Facebook (Haberkorn 2018). All things being equal, the perennial threat on citizens in high surveillance societies should deter political engagement and to some extent reduce the mobilizing potential of online news. However, evidence from decades of repression research has been remarkably mixed with substantive findings also demonstrating a “backlash” effect of greater political engagement after government repression (Davenport and Sullivan 2017). To explain this phenomenon some studies have highlighted the role of anger among citizens knowing that they were being surveilled, which motivated political engagement by overriding fear and cost concerns (Best and Krueger 2010; Hager and Krakowski 2021). Other studies of repressive regimes offered an information-based explanation showing that imprisonment of influential anti-government activists could backfire and lead to indirect backlash effects as previously disinterested citizenry proactively sought more information online about those who were arrested. Subsequent awareness of the treatment of activists and government repression disseminated across the Internet could then attract new followers toward anti-government causes and increase collective action potential (Pan and Siegel 2019). In this case, higher country-level surveillance could accentuate the positive role of online news on political engagement. Moreover, in repressive countries citizens and activists can adapt to government surveillance by using different strategies to alleviate the personal costs of engagement, such as adopting pseudonyms instead of real names in online communications, increasing self-censorship, and switching to more private messaging apps such as WhatsApp rather than public social network

sites like Facebook for mobilizing collective actions (Moore-Gilbert and Abdul-Nabi 2021). More concrete evidence that country-level surveillance increases targeted participation at the individual-level (i.e., protests, riots, and acts of civil disobedience) was provided by Stoycheff et al. (2020) in their 21-country multilevel study, which supported the backlash narrative. If increased surveillance can engender these relatively high-risk actions, it is also reasonable to expect the same for offline and online forms of political participation. Nevertheless, given that there is still no consensus in the government repression literature on whether country-level surveillance increases or decreases political engagement, we raise the following research question:

RQ1: Is online surveillance positively or negatively related to political engagement?

Online Censorship: Controlling the Information Environment

Censorship involves government suppression of the free flow of information and ideas that threatens the status quo, and demarcation what is acceptable and unacceptable communications in society (Liu and Wang 2021). The most direct form entails “information coercion” that includes various degrees of access controls and content filtering (Earl et al. 2022). The former is more overt and can range from the blocking of certain websites like YouTube in Turkey for “national security” reasons (Yalkin et al. 2013) or shutting down the Internet during the Arab Spring (Aouragh and Alexander 2011). Content filtering is more covert, such as returning null results when specific names and phrases are searched online in the case of China’s largest microblogging site Weibo because they were politically sensitive (Vuori and Paltemaa 2015). Another form of censorship is achieved through “information channeling” that includes flooding the online space with coordinated pro-government messaging to overwhelm and distract from dissenting opinion and oppositional views, and disseminating misinformation to influence the opinion climate to such an extent that citizens perceive dissenting information as dangerous and increase support for government online censorship (Nisbet et al. 2017). These methods of information control are complementary and can be used concurrently to increase their effectiveness. The result is that they individually or collectively suppress political engagement by imposing a substantive cost for the average citizen to find and consume alternative sources of news that present alternative views and opinions as well as mobilizing information. Therefore, we expect that:

H1: Online censorship is negatively related to political engagement.

Surveillance, Censorship, and an Informational Theory of Repression

As explicated above, online surveillance suppresses political engagement mainly by increasing the costs of political engagement while online censorship suppresses it by increasing the costs to access information that engenders engagement. Both mechanisms can work together and as noted by Earl et al. (2022) “it is likely that some

combinations of digital repression are complementary and generate greater impact when combined” (p. 9). A practical example was the case of China’s MeToo movement where online surveillance of posts and discussions of the issue on social media led to their eventual deletion by the platforms. Moreover, academics and independent feminist media that attracted large number of interactions and followers because of their advocacy were eventually suspended and shut down for “violating the related state’s policy and laws” (Yin and Sun 2020). Removal of these online opinion leaders and key hubs of information also meant it was harder for citizens to access information related to the movement and learn the first-hand accounts of victims, which reduced subsequent potential for collective action seeking political and social change on the issue.

Theoretically, this implies that online surveillance and censorship *jointly* suppress the positive relationship between online news and political engagement. Yet, as noted earlier the role of online surveillance on political engagement has been mixed with support for both deterrence and backlash effects. A useful framework to disentangle and explain the mutual dynamics of digital repression, online news, and political engagement is the recently proposed “informational theory of repression” (Pop–Eleches and Way 2021) and its core argument that whether repression leads to deterrence or backlash is partly determined by levels of censorship. Where censorship is low, citizens have access to alternative media that can portray repression attempts negatively and their results showed that this can reduce confidence in government, generate sympathy and support for the opposition in elections, and increase the likelihood of protest, which was a similar argument put forward by Pan and Siegel (2019) to explain indirect backlash in the Saudi context. Conversely, they found that when the government controls the information environment through censorship citizens were more likely to blame the opposition, regard government repression as appropriate, and vote for the government. The study by Pop–Eleches and Way did not distinguish between information obtained offline or online, but there are strong reasons to assume that online alternative news is more readily accessible and in greater quantities in low-censorship environments. Nor did the authors distinguish between traditional and digital forms of repression, so it would be useful to examine if their informational theory of repression can be applied to the digital repression context of this study.

Several propositions can be stated based on the theory and the reviewed literature. Firstly, with regards to individual-level variables online news should engender while online censorship deters political engagement because both have direct implications on the associated costs related to access to and availability of information that informs and potentially mobilizes action. Second, surveillance can be negatively related (i.e., deterrence) or positively related (i.e., backlash) to political engagement. Third, online censorship serves as the focal variable that shapes the online news and surveillance dynamic on political engagement. When online censorship is low the relationship between online news and political engagement is accentuated by online surveillance because it encourages more information seeking among citizens where alternative sources of online news are readily accessible. Conversely, when censorship is high the relationship between online news and surveillance can be suppressed as

much of the online information and news are likely to be pro-regime. Based on the above reasoning we raise the following research question:

RQ2: Will there be a three-way interaction, such that the relationships among online surveillance, online news use, and political engagement, vary at different levels of online censorship?

Methodology

Sample

To test the proposed hypotheses and research questions, we combined individual-level data from the first release of the World Values Survey 7 (WVS-7) dataset version 1.5 (Haerpfer et al. 2020) with country-level data from the Varieties of Democracy (VDEM) dataset version 11.1 (Coppedge et al. 2021). The WVS seeks to understand citizens' attitudes, values, and beliefs from a longitudinal, global, and comparative perspective and its coverage of 120 countries represents 94.5 percent of the world population. The first data release includes data from fifty-one countries based on the WVS-7 fieldwork schedule (2017–2022). Country samples are representative of the population (i.e., aged eighteen and above and living in private households) based on multi-stage stratified sampling and questionnaires were administered face-to-face to respondents in their native languages from early 2017 to mid-2020.

The VDEM project measures democracy and democratization and the dataset comprises political, civic, and media environment indicators of 202 countries. The measures for each country were coded by at least five “country experts” with diverse academic and professional backgrounds, and they were selected based on their knowledge, expertise, and connection with the country as well as commitment to the project and impartiality (Coppedge et al. 2021). Based on the ratings, a single “best estimate” for each measure is then generated through item response theory modeling techniques (see Coppedge et al. 2021: 22–5). Measures of surveillance and censorship were derived from VDEM. The final study sample consisted of 68,068 respondents from forty-four countries.² The Supplemental Information file summarizes the country list (Table A1) and descriptive statistics of key variables (Tables A2–3).

Country-Level Measures of Digital Repression (VDEM)

Online Censorship. Each country was rated by country experts from 0 to 4 for *government Internet filtering in practice*, which is based on the question “How frequently does the government censor political information (text, audio, images, or video) on the Internet by filtering (blocking access to certain websites)?” The answers ranged from 0 = “The government allows Internet access that is unrestricted” to 4 = “It is a regular practice for the government to remove political content, except to sites that are pro-government.” Moreover, each country was rated from 0 to 4 for *government social media censorship in practice*, which is based on the question: “To what degree does

the government censor political content (i.e., deleting or filtering specific posts for political reasons) on social media in practice?" The answers ranged from 0 = "The government does not censor political social media content" to 4 = "The government simply blocks all social media platforms"). The two scores were combined and averaged to form a scale of online censorship ($r = .86$, $p < .001$). The values ranged from "0" for countries like Germany and South Korea to "3" for China and Tajikistan. No country received a score of 4.

Online Surveillance. Each country was rated by country experts from 0 to 4 for *government social media monitoring*, which is based on the question: "How comprehensive is the surveillance of political content in social media by the government or its agents?" The answers ranged from 0 = "Not at all, or almost not at all" to 4 = "Extremely comprehensive. The government surveils virtually all content on social media." The values ranged from "0" for countries like Japan and New Zealand to "4" for China. As VDEM does not have a general measure of "Internet monitoring" this variable serves as a proxy for online surveillance.³

Individual-Level Measures (WVS)

Political Engagement. Respondents answered whether they had engaged in the following three sets of political actions and the answer choices were "Have done," "Might do," and "Would never do." Affirmative answers were combined to create additive indexes of engagement.

Targeted Participation. Respondents were asked whether they had engaged in the following forms of "political action": (1) joining in boycotts, (2) attending peaceful demonstrations, and (3) joining strikes.

Political Participation. Respondents were asked whether they had engaged in the following forms of "political action and social activism": (1) signing a petition, (2) donating to a group or campaign, (3) contacting a government official, (4) encouraging others to take action about political issues, and (5) encouraging others to vote.

Online Political Participation. Respondents were asked whether they had engaged in "other forms of political action that people can take using Internet and social media tools like Facebook, Twitter etc.": (1) signing an electronic petition, (2) encouraging other people to take any form of political action, and (3) organizing political activities, events, protest.

Media Use and Controls. Online News. Respondents indicated their frequency of using the "Internet" and "social media" to learn about what is going on in their countries and around the world. Answers ranged from 1 ("Never") to 5 ("Daily"). The two were then combined and averaged to form a scale ($r = .73$, $p < .001$).

Controls. An extensive battery of control variables at the country and individual levels were included. Similar to Stoycheff et al. (2020), we obtained country-level measures from various sources; including *population* (Cyprus = 1.2 million to China = 1.4 billion) from the United Nation's 2020 mid-year annual total population data; *gross domestic product* (Kyrgyzstan = US\$7.7 billion to U.S. = US\$20.9 trillion)

from 2020 World Bank data; the *Human Development Index* (Ethiopia = 0.49 to Germany = 0.95) from the United Nations Development Programme 2020 Human Development Reports; *internet access* (Tajikistan = 21.96 to Canada = 96.67), which represented the percentage of individuals using the internet that was obtained from available 2017–20 International Telecommunications Union (ITU) data; *press freedom* (New Zealand = 10.04 to China = 78.72) from Reporters Without Borders' 2020 World Press Freedom Index, which was subsequently reverse-coded so larger values represented greater press freedom; and *regime type* (China = -7 to Greece = 10) from 2018 Polity V data, which classified each country's regime type from a scale of -10 ("complete autocracy") to 10 ("complete democracy"); and *civil society engagement* from VDEM (Iran = 0.25 to various others = 1).

At the individual-level we included several variables based on the resource model of participation (Brady et al. 1995): *political interest* (1 = "not at all interested" and 4 = "very interested") and *political discussion* (1 = "never" and 3 = "frequently"). Moreover, we took into account the motivating role of political discontent (van der Bles et al. 2018) with the measure *satisfaction with the government* (i.e., "how satisfied are you with how the political system is functioning in your country these days?" where 1 = "not satisfied at all" and 10 = "completely satisfied"). A measure of *traditional news* was also included, which was analogous to online news but was derived from measures of newspaper, TV, and radio use. Demographic variables included *age*, *gender*, and *education* (0 = "No education" and 8 = "Doctoral"), and *household income* (1 = "Lowest group" and 10 = "Highest group").

Results

We first conducted a series of Pearson correlations (Table 1) to examine how online censorship and surveillance were related to the other country level variables. In line with expectations, online censorship was related to surveillance ($r = .80$), which was similar to Stoycheff et al. (2020) ($r = .76$), and it was negatively related with all political engagement measures (from $r = -.41$ to $r = -.55$). Surveillance was negatively related to targeted participation ($r = -.44$) and marginally related to political and online participation (both $r = -.26$). Moreover, both online censorship and surveillance exhibited strong negative relationships with the higher-order measures of press freedom ($r = -.76$ and $r = -.79$), civic society engagement ($r = -.75$ and $r = -.68$), and democratic regime ($r = -.82$ and $r = -.75$), and a moderate negative relationship with HDI ($r = -.44$ and $r = -.33$) and internet access ($r = -.42$ and $r = -.30$).

Analytic Approach to Predict Political Engagement

All three dependent variables in this study were count data as they represented occurrences of a behavior (Coxe et al. 2009). Diagnostic tests of linear models with the dependent variables also confirmed that they violated the assumptions required for linear regression (e.g., linearity of relationships, normal distribution, homoscedasticity). Therefore, we used a type of Poisson regression (i.e., negative binomial

Table 1. Country-Level Correlations.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1 Censorship	—											
2 Surveillance	.80***	—										
3 Online news	-.21	-.14	—									
4 Population	.29#	.33*	-.10	—								
5 GDP	-.02	.05	.14	.67***	—							
6 HDI	-.44**	-.33*	.49***	-.09	.26#	—						
7 Internet access	-.42**	-.30*	.62***	-.06	.21	.92***	—					
8 Press freedom	-.76***	-.79***	.16	-.48***	-.08	.40**	.34*	—				
9 Civil society engagement	-.75***	-.68***	-.03	-.22	.03	.27#	.23	.77***	—			
10 Regime type (democracy)	-.82***	-.75***	.09	-.37*	-.11	.24	.19	.79***	.66***	—		
11 Targeted participation	-.55***	-.44**	.22	-.17	.08	.36*	.34*	.59***	.55***	.49***	—	
12 Political participation	-.43**	-.26#	.32*	-.00	.30*	.51***	.44**	.44**	.38***	.31**	.76***	—
13 Online participation	-.41**	-.26#	.38*	-.05	.38*	.46**	.42**	.42**	.38***	.24	.78***	.85***

N = 44; *** p < .001, ** p < .01, * p < .05, # p < .10.

regression) to model the relationships as it is appropriate for analyzing count outcomes when the variance of the dependent variable is higher than its mean (Coxe et al. 2009). Moreover, given that individual respondent data is nested within countries the assumption of independent observations required for regression analysis is violated, which can result in smaller standard errors that lead to lower-than-expected p -values and Type I error. Past research has adopted different approaches to address the issue, such as using “robust standard errors” to cross-check results derived from default standard errors (King and Roberts, 2015) and multilevel modelling (Huang 2016). We adopted the latter approach as examining country-level digital repression is central to this study. Taking into consideration the count data in our models, we used generalized linear mixed model (GLMM) analysis via the *glmmTMB* R package (Brooks et al. 2017). Like individual-level data, country-level data should also assume between-cluster independence as violations could result in smaller standard errors. This is typically addressed by using “cluster-robust standard errors” (CRSEs) to calculate p -values (see Jackson 2019). However, we are not aware of the procedures to obtain CRSEs for GLMMs. For instance, in the political science literature, Esarey and Menger (2018) and Jackson (2019) explicated the relevant statistical procedures for linear, logistic, and multinomial models only. Thus, our multilevel models statistically address independence at the individual-level but not at the country-level, and subsequent analyses should be read with this potential limitation in mind.

Main Models Predicting Political Engagement

Intercept-only models were first tested to ascertain the variance of the dependent variables that were explained by country only, which were 17 percent, 25 percent, and 21 percent, respectively, for targeted participation, political participation, and online political participation. This indicated that political engagement varied across countries and mixed-model analyses were appropriate. All individual and country-level variables were then entered as fixed effects. As summarized in Table 2, Models 1, 3, and 5 represented the base models while Models 2, 4, and 6 represented the main models with cross-level interactions added (see Supplemental Information file, Figures A1–3 for additional visual summaries of marginal effects). Standardized coefficients were reported to facilitate comparison of effect sizes among the variables. Examining the base models and addressing RQ1 first, online surveillance was positively related to political participation ($\beta = .32, p < .01$) and online political participation ($\beta = .37, p < .01$), but exhibited no significant relationship with targeted participation ($\beta = .14, p = .29$). Online censorship was negatively related to online political participation ($\beta = -.55, p < .01$), marginally negatively related to political participation ($\beta = -.25, p < .10$), and not related to targeted participation ($\beta = -.18, p < .30$). Hypothesis 1 was partially supported.

For the individual-level variables online news was positively related to targeted participation ($\beta = .19, p < .001$), political participation ($\beta = .15, p < .001$), and online political participation ($\beta = .51, p < .001$). For other individual-level variables political interest and political discussion were positively related to all political

Table 2. Negative Binomial Regression Models Predicting Political Engagement.

	Targeted participation		Political participation			Online political participation	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
<i>Fixed effects (country)</i>							
Intercept	-1.65***	-1.79***	-.20**	-.30*	-2.09***	-2.12***	
Population	.14	.01	.17	.08	.03	-.01	
GDP	-.11	-.07	-.00	.03	-.01	.00	
HDI	-.27	-.40	.14	.04	.08	.06	
Internet access	.12	.21	-.09	-.02	-.05	-.05	
Press freedom	.29	.30#	.24	.25	.50*	.49*	
Civic society engagement	.19	.23#	.05	.08	.05	.08	
Regime type (democracy)	.02	.10	-.02	.03	-.40*	-.37#	
Online censorship	-.18	-.21	-.25#	-.27#	-.55**	-.63**	
Online surveillance	.14	.23	.32**	.39**	.37*	.43*	
<i>Fixed effects (individual)</i>							
Age	.04***	.04***	.07***	.07***	-.12***	-.13***	
Education	.20***	.20***	.13***	.13***	.19***	.19***	
Income	-.02*	-.02*	.01*	.01*	.01	.01	
Gender (female)	-.05***	-.05***	.02***	.02***	.02	.02	
Political interest	.26***	.26***	.20***	.20***	.35***	.35***	
Political satisfaction	-.10***	-.10***	-.05***	-.05***	-.08***	-.07***	
Political discussion	.24***	.24***	.17***	.17***	.23***	.23***	
Traditional news	.08***	.08***	.04***	.04***	-.03*	-.03**	
Online news	.19***	.23***	.15***	.18***	.51***	.50***	
<i>Interactions</i>							
Censorship × Surveillance		.17		.12		-.01	

(continued)

Table 2. (continued)

	Targeted participation		Political participation			Online political participation		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6		
Online news × Surveillance		-.02		-.03**		-.08**		
Online news × Censorship		.06**		.04***		.16***		
Online news × Surveillance × Censorship		-.04*		-.03***		.05*		
Random effects								
Intercept	.19	.19	.15	.15	.27	.26		
AIC	73022.99	73015.03	148339.32	148322.97	59516.74	59466.08		
Log likelihood	-36490.50	-36482.52	-74148.66	-74136.49	-29737.37	-29708.04		
N	59344	59344	58739	58739	55597	55597		
N (country)	44	44	44	44	44	44		
R ² (Fixed)	.22	.23	.24	.25	.32	.34		
R ² (Total)	.29	.29	.35	.35	.39	.42		

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$. Standardized beta coefficients are shown.

engagement measures while political satisfaction was negatively related to engagement.

Cross-Level Interactions Predicting Political Engagement

To examine the three-way interaction among online surveillance, censorship, and online news use on political engagement (RQ2), we added cross-level interaction terms that crossed the country-level variables with individual-level online news to the base models. The interactions were significant for targeted participation ($\beta = -.04, p < .05$), political participation ($\beta = -.03, p < .001$), and online political participation ($\beta = .05, p < .05$). Figures 1 to 3 provided a clearer picture by visualizing the predicted values of the outcomes based on the interactions between online news use and online surveillance at different levels of online censorship at one standard deviation above and below the Mean. Three patterns in the figures were noticeable. First, the overall valence of the online news and political engagement relationships was positive at all levels of online surveillance and censorship. Second, higher levels of online censorship suppressed political engagement, especially online participation. Third, the interaction of online news use and online surveillance varied at different levels of online censorship. In particular, Figures 1 and 2 showed evidence of increased “divergent positive” moderation based on the moderation typology of Holbert and Park (2020). This means that under lower levels of online censorship, the positive relationship between online news use and targeted/political participation diverges as online surveillance increases, which is consistent with expectations based on the informational theory of repression (Pop–Eleches and Way 2021). Figure 3 however showed

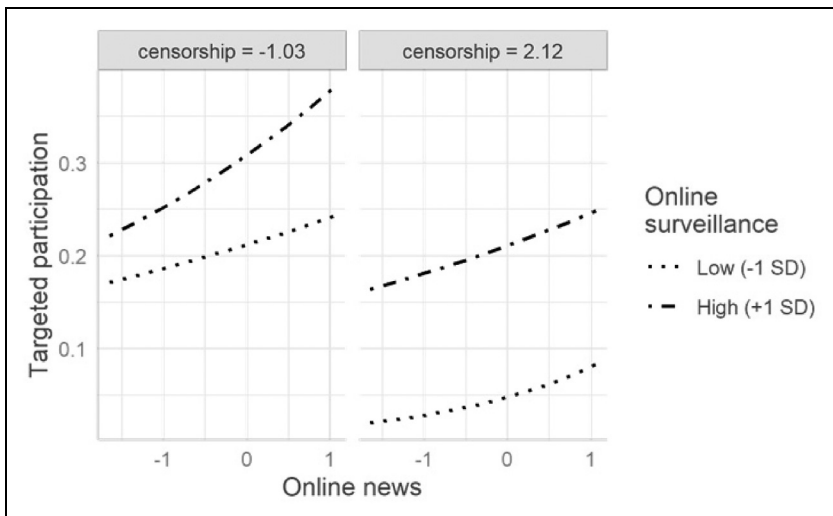


Figure 1. Estimated marginal means of three-way interactions from model 2.

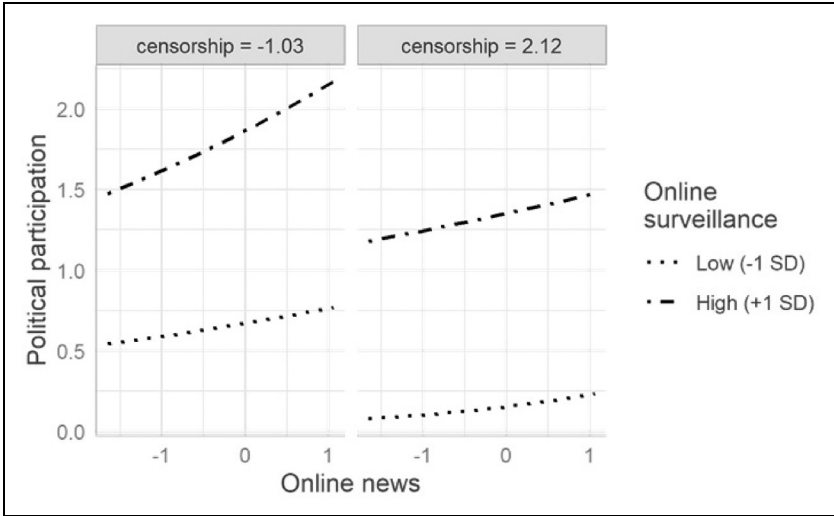


Figure 2. Estimated marginal means of three-way interactions from model 4.

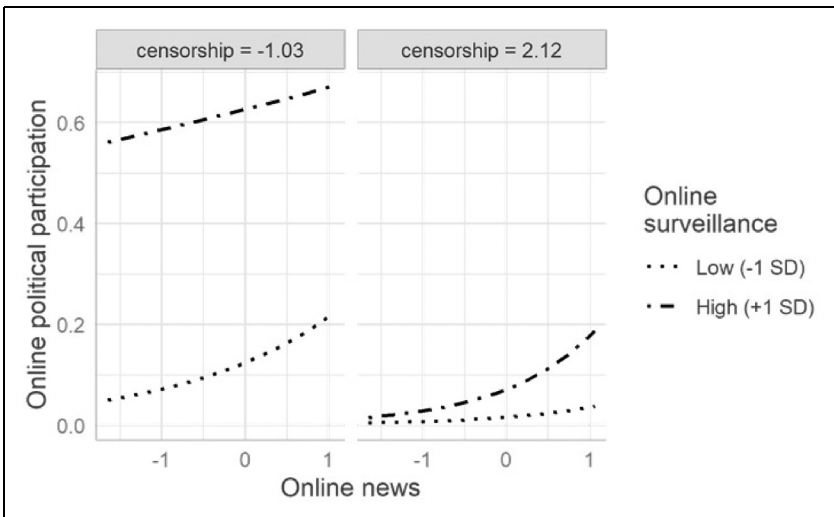


Figure 3. Estimated marginal means of three-way interactions from model 6.

that the positive divergent moderation was more noticeable at higher levels of censorship compared to lower levels, such that online news increased online political participation at a greater rate under higher surveillance. Implications of the findings are discussed next.

Discussion

While acknowledging that the Internet can be a “liberation technology” that empowers citizens to mobilize for political and social change, Diamond (2010) also warned that “the use of Internet filtering and surveillance by undemocratic regimes is becoming both more widespread and more sophisticated” (p. 80). This means the body of accumulated evidence that optimistically asserted a positive role of the Internet to engender different forms of political engagement (Boulianne 2019, 2020; Chae et al. 2018; Skoric et al. 2016; Stein 2017) need to be examined against the backdrop of global declines in Internet freedoms that increase the personal costs of information access and political engagement. This study examined these cost dynamics by focusing on how digital repression shapes the online news and political engagement relationship. The overall findings based on the cross-national analysis of forty-four countries elucidated areas of normative concern, but also some optimism.

As expected, online censorship was negatively related to all forms of engagement. Using political, legal, and technological means, governments can determine what kinds of speech and discourse are acceptable and what kinds are not using a repertoire of tools and strategies that increase the costs for citizens to access and find mobilizing information online. Perhaps even more effective is the “psychological” dimension of censorship where governments in countries like Russia can shape an opinion climate where citizens consent to be censored and believe that it is for their benefit, thus sharing the workload with the government to stifle dissent (Nisbet et al. 2017). Online censorship can be an effective tool that not only suppresses regime-challenging political actions such as strikes and protests, but also conventional forms of engagement that support the process of democratization because the informational environment can be biased towards those in power and against any oppositional voices (Büchi et al. 2022).

Although online surveillance was correlated with online censorship ($r = .80$), it was positively related to offline and online political participation in the multilevel models. This result is more in line with the backlash explanations of surveillance on political engagement (Pan and Siegel 2019) rather than suppression (Penney 2017) and suggested that surveillance and censorship together might not be as “complementary” as previously thought to repress citizen political engagement (Earl et al. 2022). To further understand their mutual dynamics, we tested the informational theory of repression proposed by Pop–Eleches and Way (2021) and their core assertion that “the extent to which repression triggers popular acquiescence versus resistance depends on the nature of the information environment in which the repression unfolds” (p. 14). Our findings provided some support for the theory. As shown in Figure 1 (targeted participation) and Figure 2 (political participation), online surveillance accentuated the relationship between online news and behavior under lower censorship (i.e., divergent positive moderation). When the information environment is relatively free of government control, citizens have access to information from different political camps and ideologies. For protests and social movements, punishment of political actors and social activists could backfire in at least two ways: by generating increased interest

among previously disinterested citizens to proactively search for information on government repression; and generating sympathy and/or anger that motivates citizens to support the political or social cause (Pan and Siegel 2019). For more conventional forms of political participation, revelations about government surveillance on its citizens could also elicit anger among individuals towards the government, which can override the cost concerns related to information access and participation (Best and Krueger 2010). To further demonstrate the importance of including online news in the interaction terms, we ran post-hoc models (1, 3, and 5) and added only a single two-way interaction for country-level surveillance and censorship similar to Pop-Eleches and Way (2021). None of the interactions were significant. This suggests that future tests of the theory should consider individual-level variations in information consumption as the country-level measures of digital repression alone may not be adequate to explain citizens' political engagement from an informational perspective.

The result for online political participation (Figure 3) was somewhat different compared to the other two political outcomes as the online news/surveillance relationship was stronger under higher censorship, which suggested that the backfire of high surveillance on participation could also occur in high censorship environments. This would seem to go against the predictions of the informational theory of repression. A possible explanation is that online political participation is firstly a relatively low-cost behavior and secondly in authoritarian societies it is perhaps the *only* possible means of political participation. For example, in the highly censored information environment of Saudi Arabia, Twitter is one of few online channels to express dissent and organize collective action whereas any attempt at physical forms of political participation could be subject to physical violence by the government and its supporters. Therefore, backlash *online* could be possible even under heavily censored environments (Pan and Siegel 2019). Future studies can test this possible scope condition of the theory by further exploring whether it is confined to explaining more physical forms of participation (e.g., strikes) that have comparatively higher personal costs compared to online behaviors as well as more in-depth analyses of more specific forms of online participation in different countries under different degrees of repression.

Another aspect where the results did not align with the theory is the lack of evidence from the findings showing that digital repression led to "cleaved moderation" (Holbert and Park 2020). None of the figures showed that the relationship between online news and political engagement became *negative* at higher levels of censorship. Rather, the positive valence of the online news and political engagement relationship is sustained at all levels of surveillance and censorship even though it could be substantially suppressed in the cases of political participation and online political participation under conditions of low surveillance and high censorship. Unless governments shut down the Internet completely, which is not a viable long-term strategy because of the economic losses that comes with detaching from the digital economy, citizens would be able to find ways to bypass or alleviate the costs of accessing and sharing mobilizing information that can engender different forms of political engagement (Chibuwe et al. 2021).

Limitations and Further Research

Several limitations of the study should be noted. First, as with any kind of study that utilizes secondary data, we were restricted to available questions that constituted the data for analysis. The forty-four country data were collected over a period of two-plus years so different world events may have affected responses among the respondents in different countries. Moreover, while our measure of online censorship encapsulated both general Internet and social media specific filtering and censorship, our measure of online surveillance was limited to only social media surveillance due to the availability of questions. Second, the study focused only on the role of “digital” repression whereas in some societies there is also the overt threat of physical coercion such as arrests and physical violence that can affect individuals’ cost calculus when deciding to participate in protests, elections, and other political actions (Earl et al. 2022). This means future studies should also include country-level measures of physical coercion, especially when examining authoritarian societies. Third, we focused on online news and did not consider other uses of the Internet that can also be shaped by online surveillance and censorship, such as use for expression and use for developing relationships with like-minded others, which also engenders political engagement (Chan 2016). Fourth, the nature of the measures meant that the political slant or valence of the online news accessed by respondents were not known, such as whether the news is pro- or anti-government. Future studies could include more refined informational measures that consider the partisan slant of the content as well as the political ideology of the individual. Finally, while our use of multilevel modeling addressed dependence between observations, we were not able statistically to fully address dependence between countries. To further validate our findings, future research can use normally distributed dependent variables so that CRSEs can be obtained using current recommended procedures (e.g., Esarey and Menger 2018).

Despite these limitations, this study makes an important contribution to the literature by explicating how online surveillance and censorship at the country level can shape individual-level online news use and political engagement from a cross-national perspective. We showed that while the two variables were highly correlated, they were conceptually distinct and engendered political outcomes in different ways. Future cross-national comparative studies examining the Internet and political engagement relationship can provide more nuanced findings by including these variables beyond the more generic factors such as the continent of sample origin (Chae et al. 2018) and higher-order freedom indicators (e.g., political rights, civil liberties, etc.) (Boulianne 2020).

Even though this study found a generally robust relationship between online news and political engagement relationship, one must be cognizant that incremental developments in big data and artificial intelligence means that the technologies supporting censorship and surveillance can be even more omnipresent, pervasive, intrusive, and effective in the future to control information flows, monitor citizens, and debilitate democratic engagement. This applies not only for authoritarian regimes like China that already have in place sophisticated offline and online government apparatuses

for censorship and surveillance (Roberts 2018), but also liberal democracies as many have followed the example of the United States post-9/11 and put in place more subtle forms of surveillance to monitor citizens' online activities (Valentino et al. 2020). Theoretically, this means that cleaved moderation remains a distinct possibility in the future where increased online news use may be related to *decreased* political engagement. This necessitates continued research into the factors that explain individual and country level resistance to surveillance and censorship as Internet freedoms continue to be threatened in many parts of the world.

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Supplemental Material

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Notes

1. We follow the minimalist definition of *political participation* based on the typology proposed by van Deth (2014) where it is defined as “a voluntary activity by citizens in the area of government, politics or the state” (p. 354). We further distinguish activities that are performed offline and online. Within the typology, protests and strikes fall under *targeted participation* because the activities are usually targeted at the government or state.
2. Forty-seven of the fifty-one countries in the WVS-7 were represented in the VDEM dataset. However, the samples for Egypt, and Vietnam were not included as they did not include some core question items required for this study. Moreover, certain country-level indicators were not available for Hong Kong. Therefore, the final country sample for this study was forty-four, which represented around 56 percent of the population.
3. We used measures of online censorship and surveillance from VDEM rather than Freedom House measures adopted by Stoycheff et al. (2020). See the Supplemental Information file (“Comparing VDEM and Freedom House measures of online surveillance and censorship”) for more discussion.

References

- Aouragh, Miriyam, and Anne Alexander. 2011. "The Egyptian Experience: Sense and Nonsense of the Internet Revolution." *International Journal of Communication* 5:1344–58.
- Atton, Chris. 2007. "Current Issues in Alternative Media Research." *Sociology Compass* 1 (1): 17–27. doi:10.1111/j.1751-9020.2007.00005.x.
- Best, Samuel J., and Brian S. Krueger. 2010. "Government Monitoring and Political Participation in the United States: The Distinct Roles of Anger and Anxiety." *American Politics Research* 39 (1): 85–117. doi:10.1177/1532673x10380848.
- Boulianne, Shelley. 2009. "Does Internet Use Affect Engagement? A Meta-Analysis of Research." *Political Communication* 26: 193–211. doi:10.1080/10584600902854363.
- Boulianne, Shelley. 2019. "Revolution in the Making? Social Media Effects Across the Globe." *Information, Communication & Society* 22 (1): 39–54. doi:10.1080/1369118x.2017.1353641.
- Boulianne, Shelley. 2020. "Twenty Years of Digital Media Effects on Civic and Political Participation." *Communication Research* 47 (7): 947–66. doi:10.1177/0093650218808186.
- Brady, Henry E., Sidney Verba, and Kay Lehman Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." *American Political Science Review* 89 (2): 271–94. doi: 10.2307/2082425.
- Brooks, Mollie E., Kasper Kristensen, Koen J. van Benthem, Arni Magnusson, Casper W. Berg, Anders Nielsen, Hans J. Skaug, Martin Maechler, and Benjamin M. Bolker. 2017. "glmmTMB Balances Speed and Flexibility Among Packages for Zero-Inflated Generalized Linear Mixed Modeling." *The R Journal* 9 (2): 378–400.
- Büchi, Moritz, Noemi Festic, and Michael Latzer. 2022. "The Chilling Effects of Digital Dataveillance: A Theoretical Model and an Empirical Research Agenda." *Big Data & Society* 9 (1): 1–14. doi:10.1177/205395172111065368.
- Chae, Younggil, Sookjung Lee, and Yeolib Kim. 2018. "Meta-analysis of the Relationship Between Internet Use and Political Participation: Examining Main and Moderating Effects." *Asian Journal of Communication* 29 (1): 35–54. doi:10.1080/01292986.2018.1499121.
- Chan, Michael. 2016. "Social Network Sites and Political Engagement: Exploring the Impact of Facebook Connections and Uses on Political Protest and Participation." *Mass Communication and Society* 19 (4): 430–51. doi:10.1080/15205436.2016.1161803.
- Chibwe, Albert, Phillip Mpofu, and Kudakwashe Bhowa. 2021. "Naming the Ghost: Self-Naming, Pseudonyms, and Identities of Phantoms on Zimbabwean Twitter." *Social Media + Society* 7 (3): 1–12. doi:10.1177/20563051211035694.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Kyle L. Marquardt, and Juraj Medzihorsky, Daniel Pemstein, Nazifa Alizada, Lisa Gastaldi, Garry Hindle, Josefine Pernes, Johannes von Römer, Eitan Tzelgov, Yi-ting Wang, and Steven Wilson. 2021. *V-Dem Methodology v11.1: Varieties of Democracy (V-Dem) Project*.
- Coxe, Stefany, Stephen G. West, and Leona S. Aiken. 2009. "The Analysis of Count Data: A Gentle introduction to Poisson Regression and its Alternatives." *Journal of Personality Assessment* 91 (2): 121–36. doi:10.1080/00223890802634175.
- Davenport, Christian. 2007. "State Repression and Political Order." *Annual Review of Political Science* 10 (1): 1–23. doi:10.1146/annurev.polisci.10.101405.143216.
- Davenport, Christian, and Christopher Michael Sullivan. 2017. "The Rebel Alliance Strikes Back: Understanding the Politics of Backlash Mobilization*." *Mobilization: An International Quarterly* 22 (1): 39–56. doi:10.17813/1086-671x-22-1-39.
- Diamond, Larry. 2010. "Liberation Technology." *Journal of Democracy* 21 (3): 69–83. doi:10.1353/jod.0.0190.

- Earl, Jennifer, Thomas V. Maher, and Jennifer Pan. 2022. "The Digital Repression of Social Movements, Protest, and Activism: A Synthetic Review." *Science Advances* 8 (10): eabl8198. doi:10.1126/sciadv.abl8198.
- Esarey, Justin, and Andrew Menger. 2018. "Practical and Effective Approaches to Dealing With Clustered Data." *Political Science Research and Methods* 7 (3): 541–59. doi:10.1017/psrm.2017.42.
- Freedom House. 2021. "The Global Drive to Control Big Tech." <https://freedomhouse.org/report/freedom-net/2021/global-drive-control-big-tech>.
- Gainous, Jason, Kevin M. Wagner, and Jason P. Abbott. 2015. "Civic Disobedience: Does Internet Use Stimulate Political Unrest in East Asia?" *Journal of Information Technology & Politics* 12 (2): 219–36. doi:10.1080/19331681.2015.1034909.
- Haberkorn, Tyrell. 2018. "Dictatorship, Monarchy, and Freedom of Expression in Thailand." *The Journal of Asian Studies* 77 (4): 935–43. doi:10.1017/s0021911818002528.
- Haerpfer, C., R. Inglehart, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin, and B. Puranen. 2020. *World Values Survey: Round Seven – Country-Pooled Datafile*. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat.
- Hager, Anselm, and Krzysztof Krakowski. 2021. "Does State Repression Spark Protests? Evidence from Secret Police Surveillance in Communist Poland." *American Political Science Review* 116 (2): 564–79. doi:10.1017/s0003055421000770.
- Holbert, R. Lance, and Esul Park. 2020. "Conceptualizing, Organizing, and Positing Moderation in Communication Research." *Communication Theory* 30 (3): 227–46. doi:10.1093/ct/qtz006.
- Huang, Francis L. 2016. "Alternatives to Multilevel Modeling for the Analysis of Clustered Data." *The Journal of Experimental Education* 84 (1): 175–96. doi:10.1080/00220973.2014.952397.
- Jackson, John E. 2019. "Corrected Standard Errors with Clustered Data." *Political Analysis* 28 (3): 318–39. doi:10.1017/pan.2019.38.
- Kargar, Simin, and Adrian Rauchfleisch. 2019. "State-aligned Trolling in Iran and the Double-Edged Affordances of Instagram." *New Media & Society* 21 (7): 1506–27. doi:10.1177/1461444818825133.
- King, Gary, and Margaret E. Roberts. 2015. "How Robust Standard Errors Expose Methodological Problems They Do Not Fix, and What to Do About It." *Political Analysis* 23 (2): 159–79. doi:10.1093/pan/mpu015.
- Krueger, Brian S. 2005. "Government Surveillance and Political Participation on the Internet." *Social Science Computer Review* 23 (4): 439–52. doi:10.1177/0894439305278871.
- Liu, Sida, and Di Wang. 2021. "Censorship: State Control of Expression." In *Routledge Handbook of Law and Society*, ed. M. Valverde, K. Clarke, E. Darian-Smith, and P. Kotiswaran, 86–9. New York, NY: Routledge.
- Moore-Gilbert, Kylie, and Zainab Abdul-Nabi. 2021. "Authoritarian Downgrading, (Self) Censorship and New Media Activism After the Arab Spring." *New Media & Society* 23 (5): 875–93. doi:10.1177/1461444818821367.
- Nisbet, Erik C., Olga Kamenchuk, and Aysenur Dal. 2017. "A Psychological Firewall? Risk Perceptions and Public Support for Online Censorship in Russia*." *Social Science Quarterly* 98 (3): 958–75. doi:10.1111/ssqu.12435.
- Pan, Jennifer, and Alexandra A. Siegel. 2019. "How Saudi Crackdowns Fail to Silence Online Dissent." *American Political Science Review* 114 (1): 109–25. doi:10.1017/s0003055419000650.
- Penney, Jonathon W. 2017. "Internet Surveillance, Regulation, and Chilling Effects Online: A Comparative Case Study." *Internet Policy Review* 6 (2): 1–39. doi:10.14763/2017.2.692.
- Pop-Eleches, Grigore, and Lucan A. Way. 2021. "Censorship and the Impact of Repression on Dissent." *American Journal of Political Science*, 1–16. doi:10.1111/ajps.12633.

- Richards, Neil M. 2013. "The Dangers of Surveillance." *Harvard Law Review* 126 (7): 1934–65.
- Roberts, Margaret. 2018. *Censored*. Princeton, NJ: Princeton University Press.
- Ruijgrok, Kris. 2016. "From the Web to the Streets: Internet and Protests Under Authoritarian Regimes." *Democratization*, 1–23. doi:10.1080/13510347.2016.1223630.
- Schlozman, Kay Lehman, Sidney Verba, and Henry E. Brady. 2010. "Weapon of the Strong? Participatory Inequality and the Internet." *Perspectives on Politics* 8 (2): 487–509. doi:10.1017/s1537592710001210.
- Skoric, Marko M, Qinfeng Zhu, Debbie Goh, and Natalie Pang. 2016. "Social Media and Citizen Engagement: A Meta-Analytic Review." *New Media & Society* 18 (9): 1817–39. doi:10.1177/1461444815616221.
- Stein, Elizabeth A. 2017. "Are ICTs Democratizing Dictatorships? New Media and Mass Mobilization*." *Social Science Quarterly* 98 (3): 914–41. doi:10.1111/ssqu.12439.
- Stoycheff, Elizabeth, G. Scott Burgess, and Maria Clara Martucci. 2020. "Online Censorship and Digital Surveillance: The Relationship Between Suppression Technologies and Democratization Across Countries." *Information, Communication & Society* 23 (4): 474–90. doi:10.1080/1369118x.2018.1518472.
- Stoycheff, Elizabeth, Juan Liu, Kai Xu, and Kunto Wibowo. 2019. "Privacy and the Panopticon: Online Mass Surveillance's Deterrence and Chilling Effects." *New Media & Society* 21 (3): 602–19. doi:10.1177/1461444818801317.
- Valentino, Nicholas A., Fabian G. Neuner, Julia Kamin, and Michael Bailey. 2020. "Testing Snowden's Hypothesis Does Mere Awareness Drive Opposition to Government Surveillance?" *Public Opinion Quarterly* 84 (4): 958–85. doi:10.1093/poq/nfaa050.
- van der Bles, Anne Marthe, Tom Postmes, Babet LeKander-Kanis, and Simon Otjes. 2018. "The Consequences of Collective Discontent: A New Measure of Zeitgeist Predicts Voting for Extreme Parties." *Political Psychology* 39 (2): 381–98. doi:10.1111/pops.12424.
- van Deth, Jan W. 2014. "A Conceptual Map of Political Participation." *Acta Politica* 49 (3): 349–67. doi:10.1057/ap.2014.6.
- Ververis, Vasilis, Sophia Marguel, and Benjamin Fabian. 2019. "Cross-Country Comparison of Internet Censorship: A Literature Review." *Policy & Internet* 12 (4): 450–73. doi:10.1002/poi3.2228.
- Visser, Sara, and Dietlind Stolle. 2014. "The Internet and New Modes of Political Participation: Online Versus Offline Participation." *Information, Communication & Society* 17 (8): 937–55. doi:10.1080/1369118x.2013.867356.
- Vuori, Juha Antero, and Lauri Paltemaa. 2015. "The Lexicon of Fear: Chinese Internet Control Practice in Sina Weibo Microblog Censorship." *Surveillance & Society* 13: 400–21.
- Yalkin, Çağrı, Finola Kerrigan, and Dirk vom Lehn. 2013. "(Il)Legitimation of the Role of the Nation State: Understanding of and Reactions to Internet Censorship in Turkey." *New Media & Society* 16 (2): 271–89. doi:10.1177/1461444813479762.
- Yin, Siyuan, and Yu Sun. 2020. "Intersectional Digital Feminism: Assessing the Participation Politics and Impact of the MeToo Movement in China." *Feminist Media Studies* 21 (7): 1176–92. doi:10.1080/14680777.2020.1837908.

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