

E-expression in a comparative perspective: contextual drivers and constraints of online political expression

Drews, Wiebke

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Drews, W. (2022). E-expression in a comparative perspective: contextual drivers and constraints of online political expression. *Political Research Exchange*, 4(1), 1-23. <https://doi.org/10.1080/2474736X.2022.2083520>

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:
<https://creativecommons.org/licenses/by/4.0/deed.de>

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more Information see:
<https://creativecommons.org/licenses/by/4.0>

E-expression in a comparative perspective: contextual drivers and constraints of online political expression

Wiebke Drews

To cite this article: Wiebke Drews (2022) E-expression in a comparative perspective: contextual drivers and constraints of online political expression, Political Research Exchange, 4:1, 2083520, DOI: [10.1080/2474736X.2022.2083520](https://doi.org/10.1080/2474736X.2022.2083520)

To link to this article: <https://doi.org/10.1080/2474736X.2022.2083520>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 08 Jun 2022.



Submit your article to this journal [↗](#)



Article views: 396



View related articles [↗](#)



View Crossmark data [↗](#)

RESEARCH ARTICLE



E-expression in a comparative perspective: contextual drivers and constraints of online political expression

Wiebke Drews

Institut für Politikwissenschaft, Universität der Bundeswehr München, Munich, Germany

ABSTRACT

As the opportunities for online political expression grow exponentially, aggregate levels of e-expression vary strongly across countries worldwide. The paper explores contextual factors enabling or restraining e-expression, particularly media dependence, democratic experience and civil society robustness and combines them with micro-level demographics, capacities, and motivations. Based on multilevel logistic modelling of 2014 ISSP 'Citizenship II' data [ISSP Research Group. 2016. "International Social Survey Programme: Citizenship II – ISSP 2014 (Version 2.0.0) [Data file]." GESIS Data Archive.], it shows that e-expression is not dependent on a robust civil society, but on the years spent under democratic rule and the level of media dependence. The latter mediates the predictive effect of political trust, which is negative but ceases in countries with dependent and unfree media. The findings challenge assumptions on the mobilizing potential of digital tools in less free countries, particularly for critical citizens who wish to express grievances outside the circuit of official but closed or monitored channels. In contrast, a reinforcement effect is not only found on the individual-level but also in terms of a democratic digital divide between free and consolidated as well as dependent and young/no democratic regimes. Thereby, the paper contributes to our theoretical understanding of the institutional factors shaping e-expression.

ARTICLE HISTORY

Received 22 December 2020
Accepted 25 May 2022

KEYWORDS

Political expression; media dependence; political trust; digital divide; multilevel analysis

Introduction

Due to the ever-rising number of digital tools, opportunities for citizens to express themselves politically have increased exponentially (Gibson and Cantijoch 2013; Theocharis and van Deth 2018). Yet, aggregate levels of e-expression¹ vary significantly across countries worldwide. According to an ISSP survey conducted between 2013 and 2016, 11.9% of citizens in 34 countries have expressed themselves politically online. Evidently, countries do not cluster according to geographic regions as the numbers are ranging from 24.7% in India, 22.2% in the U.S., and 20.1% in Denmark to as low as 1.6% in Japan, 5.2% in Poland and 5.5% in South Korea (ISSP Research Group 2016). This empirical

CONTACT Wiebke Drews wiebke.drews@unibw.de Institut für Politikwissenschaft, Universität der Bundeswehr München, Werner-Heisenberg-Weg 39, Neubiberg, Munich 85579, Germany

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

observation suggests that the context matters and that political structures, historical as well as cultural dispositions should be taken into account in studies of e-expression (Cantijoch Cunill and Gibson 2019; Lane, Do, and Molina-Rogers 2021). Yet, macro-level analyses of e-expression are scarce. Strikingly, e-expression is often conceptualized as a bottom-up process and seldom as a pattern of governing, facilitation and capabilities provided by executive institutional actors that are embedded in different political contexts and cultures. Existing research mainly consists of single-case studies in developed democracies with limited comparative value, often focusing on political expression as a means of political participation (Boulianne 2009; Gil de Zúñiga, Molyneux, and Zheng 2014; Vaccari et al. 2015). However, if e-expression performs central functions for democracy and democratization by itself (Gil de Zúñiga, Molyneux, and Zheng 2014; Margetts et al. 2016; Shah 2016), it is essential to take a step back and explore unique, contextual factors enabling or constraining it as the main dependent variable.

The present study contributes to the literature by testing multilevel logistic models of e-expression that explore macro-level explanatory factors of *media dependence*, *democratic experience*, and *the robustness of civil society* across 34 countries. Thereby, it gives unprecedented insights in and fosters our theoretical understanding of the contextual catalysers and hurdles for citizens to express themselves politically online. The paper also provides descriptions of individual-level attributes of those engaging in e-expression, which sheds light on potentially mobilizing or reinforcing effects of digital tools (Oser and Boulianne 2020). According to the findings, aggregate levels of e-expression are not dependent on civil society robustness but on the years spent under democratic rule and the level of media dependence. The latter mediates the predictive effect of political trust, which is negative but ceases in countries with dependent and unfree media. The results cast doubts on the mobilizing potential of digital tools in less free countries, particularly for citizens with high political distrust who wish to express grievances in the online sphere outside the circuit of official but closed or monitored channels. In contrast, it appears that a democratic digital divide is reinforced by macro-level factors: control, surveillance, and restrictions and low or no democratic experience prevent citizens – even the most critical ones – from using digital tools for political expression. In free and established democracies, however, it serves to illustrate an additional channel used by already politically active and interested citizens.

E-expression and individual-level predictors

In their recent review of the burgeoning literature on online political expression, Lane, Do, and Molina-Rogers (2021) conclude that political expression is a distinct category of political communication, setting it apart from other communicative activities, such as rhetoric and deliberation. The authors argue that political expression is an intrapersonal communication process, which ‘does not inherently depend on interaction between social actors’ (Lane, Do, and Molina-Rogers 2021, 2) and can take a variety of normative forms. This renders political expression more conceptually flexible than other forms of political communication and allows for more diverse operationalizations. In this paper, expressing one’s political views online is conceptualized as a communicative activity, a process involving the creation and interpretation of online messages containing political information (Hoffman 2012). This is an inclusive definition that accommodates the rising

and changing opportunities for political expression as ever new digital tools and social media emerge and the affordances of existing platforms are constantly updated. Among others, existing research on e-expression has focused on content-expressive behaviour, e.g. creating original political and news media content (Barnidge, Ardèvol-Abreu, and Gil de Zúñiga 2018), embedding or sharing content about politics with others, for example on social media profiles (Gibson and Cantijoch 2013), commenting on and discussing existing media content (Vaccari et al. 2015) or modifying profile pictures to raise awareness for political and social causes (Weeks, Ardèvol-Abreu, and Gil de Zúñiga 2015).

Arguably, there are offline counterparts to some of these forms of e-expression. While these activities may not appear revolutionary at first, their underlying digital technology is indeed of disruptive character (van Dijk and Hacker 2018). Due to the logic of social media – programmability, popularity, connectivity and datafication (van Dijk and Poell 2013) – information monopolies vanish and communication structures become increasingly horizontal, which deprives traditional authorities and gatekeepers of their powers. Users turn into content producers and consumers alike, which may be shared with a geographically dispersed audience at significantly lower costs in terms of time, money and even cognitive resources (Castells 2007).

Studies that have looked at what motivates or restrains e-expression at the individual-level underline its mobilizing potential in terms of age, not least because young cohorts are more tech-savvy and familiar with digital tools (Bennett 2008; Literat and Kligler-Vilenchik 2019). Among young adults, political interest and conflict avoidance are the most important predictors in a study of e-expression on Facebook (Vraga et al. 2015). Vraga et al. (2015) argue that the degree of network heterogeneity and, thus, the amount but also the tone of political disagreement may hamper or encourage e-expression. Politically interested individuals who are less conflict-averse are more likely to express themselves despite political disagreement, while disagreement may encourage ‘provocateurs’ to post about politics even though they are less politically interested. Barnidge, Ardèvol-Abreu, and Gil de Zúñiga (2018), who do not distinguish between age cohorts, find a positive association between social media news use and content-expressive behaviour, which grows stronger in more heterogeneous social networks. The authors also address the potential of the Internet to perpetuate ideological extremism, i.e. due to filter bubbles and echo chambers (Bail et al. 2018; Ferrucci, Hopp, and Vargo 2020; Sunstein 2017). Strikingly, they find that content-expressive behaviour is not significantly related to ideological extremity without accounting for the moderating role of emotional intelligence. Hence, respondents with high emotional understandings result in more moderate ideologies and vice versa.

The literature also underlines the link between e-expression and political participation. Analogues to offline political talk, e-expression may put citizens ‘on a pathway to political participation’ (Gil de Zúñiga, Molyneux, and Zheng 2014, 613). Shah (2016) argues that all kinds of formal and informal political conversations online offer expressive and informational opportunities that foster political participation. Hence, research found a consistent connection between e-expression and online political participation (Ferrucci, Hopp, and Vargo 2020), political actions during electoral campaigns (Vaccari et al. 2015), boycotting (Becker and Copeland 2016), protest events (Macafee and De Simone 2012), and party-related engagement (Vaccari and Valeriani 2016).

Regardless of the substantive amount of literature addressing e-expression, the majority consists of single-case studies focusing on individual-level variables. Hence, there is a striking scarcity of research engaging in comparative analyses of the contextual drivers and constraints, especially beyond Western democracies. Among the few exceptions are meta-analyses by Boulianne (2019) and Skoric, Zhu, and Pang (2016) who find that press freedom and regime type play an important role in the relationship between online political expression and political participation. Barnidge, Huber, Gil de Zúñiga and Liu (2018) show that a positive relationship between network heterogeneity and political expression in 20 countries is stronger if freedom of expression is low. Vaccari and Valeriani (2018) spot that the association between political talk on social media and on – and offline political participation is stronger in four established than three third-wave democracies. Except for Barnidge, Huber, Gil de Zúñiga, and Liu (2018), however, these studies mainly focus on e-expression as means to political participation. Thereby, they do not provide enough information on the specific contextual factors that are associated with, and presumably stimulate online political expression as the main dependent variable and across a large variety of countries. In the following, I will elaborate on potential macro-level explanatory factors for e-expression to be tested in this paper.

Explaining e-expression through its context

The paper argues that the dependence and, thus, closure of the media (system) restrains e-expression and mediates the predictive effect of individual-level political distrust on online political expression. Furthermore, it hypothesizes that democratic experience and the robustness of civil society offer theoretical explanations for cross-country differences in the propensity of citizens to express their views about political issues online. Each of the mechanisms will be explained in more detail below.

Media dependence and political distrust

As e-expression is taking place with (online social) media as its stage, I argue that the independence and freedom of the media should encourage citizens to express their views openly while dependence and state control would constrain citizens' action repertoires. A tight control over the media is usually undertaken to manipulate rational citizens' behaviour and avoid electoral punishment (Larreguy and Marshall 2020), for example, by dictating media content that distorts actual government performance (Geddes and Zaller 1989) or concealing cases of corruption (Besley and Prat 2005). A state may also want to demonstrate strength (Simpser 2013) and censor and suppress relevant information that could mobilize individuals to take political actions against it.

Under such circumstances, a rational individual – weighing the costs and benefits of her actions (Olson 2003) – would engage in so-called 'preference falsification' (Kuran 1997). Even in mildly authoritarian countries, individuals will weigh the external costs of revealing any preferences running counter to the regime – in the worst case being prosecuted and risking one's life – as well as the internal costs of passively acquiescing to a system that does not conform to their privately held beliefs. According to the collective action literature, external costs are reduced as soon as there is a critical mass of individuals who go first and motivate others to follow (Lohmann 2020). In the absence of a free and

independent media, however, individuals will find it difficult to learn about the true preferences and actions of fellow citizens and, thus, be discouraged to make a first move. Moreover, leaving traces of one's opinion may be particularly risky in the public and open environment abounding online (Cantijoch Cunill and Gibson 2019). Hence, citizens remain silent. In contrast, if information is freely available in systems with independent media, citizens can access this information which may incentivize them to speak out as well.

However, state intervention in the media – even in a strong manner – is not only limited to autocracies. In contrast, as shown by Hallin and Mancini (2004) it takes place in Western democracies, too. Take the case of Hungary where the constitutional court in May 2014 ruled that Internet providers can be held liable for user-generated content. This was criticized for encouraging websites to disable comment features. Meanwhile, employees of private and public Hungarian media outlets admitted to growing self-censorship due to possible fines or dismissals (Freedom House 2015). Beyond Hungary, it is argued that law enforcement agencies in various democratic states are increasingly monitoring online and social media activities (Shaked 2017). Hence, the widespread belief that one's communication is under surveillance could put individuals to silence. It is for this reasoning that I expect countries with a relatively high dependency of the media on the state – which is interfering and dictating the rules of communication and expression – to discourage citizens from freely expressing themselves politically online (Farrell 2012).

However, a qualification must be made here: e-expression does also take place on different platforms. Hence, beyond popular social media, such as Facebook and Twitter, which are pushing for persistent identities, there are also fully and quasi-anonymous fora, such as 4Chan (Knuttila 2011), which invite respondents to express their views in an incognito fashion. Thereby, the Internet is also characterized by a certain degree of autonomy and anonymity, which makes universal control impossible (Röllgen and Bug 2012). This may be particularly attractive for citizens living in countries with high media dependence and displaying low levels of political trust, who are found to be more drawn to participate in non-institutionalized channels anyways (Hooghe and Marien 2013; Kaase 1999). Hence, detractors of the political system – such as those distrusting governmental actors and political institutions – will be pushed to withdraw to safe spaces outside the government's control if official participatory channels are limited and monitored. Boulianne (2019), for example, postulates a relationship between press freedom and social media use arguing that the latter take on an especially important role for political activities in countries without a free and independent press as 'policing and influencing social media communications is more challenging because intervention must occur at many different nodes' (Larreguy and Marshall 2020, 601). Hence, I do not merely assume contextual factors, such as media dependence, to enable or constrain individual-level behaviour, but also to change the meaning and mediate the strength of micro-level variables, such as political trust (Goertz 1994).

Based on this line of thinking, the predictive effect of political trust on e-expression should be conditioned through media dependence. I expect that it is generally negative but stronger in countries with higher media dependence as politically vocal opponents who are distrusting government officials are more likely to switch to online platforms to express their grievances in a less controlled and monitored environment:

H1: The higher the media dependence, the stronger the negative effect of political trust on e-expression.

Democratic experience

The second argument concerns the level of democratization (Norris 2002) and the recent democratic history of a country more specifically. As shown by Teorell, Torcal, and Ramon Montero (2007), the democratic legacy, i.e. years spent under democratic rule, does well in predicting institutionalized forms of political participation. Thus, Western, mature democracies usually display higher levels of participation than their counterparts in other regions of the world. In contrast, the suppression of autonomous and independent associations in non-democratic regimes deprives citizens of important 'schools of democracy' that are teaching the civic skills fundamental for political engagement (Hyden 1997; Tocqueville, Mansfield, and Winthrop 2002). In Central and Eastern Europe, for example, the Soviet legacy has impacted negatively upon the latter. Due to the extraordinary penetration of the party system into all kinds of public and private spheres, mistrust in post-communist institutions was fostered leading to deeply ingrained political apathy (M. M. Howard 2003; Pop-Eleches and Tucker 2013). I assume that this mechanism holds for all kinds of political activities with citizens living in countries with comparatively shorter or no democratic history displaying lower levels of e-expression:

H2: The shorter a country's democratic history, the lower aggregate levels of e-expression.

Civil society robustness

My last argument concerns the relationships between e-expression and civil society robustness. As shown by Putnam, Leonardi, and Nanetti (1994), social capital is key to the maintenance of democracy. In particular, the authors reveal that a vibrant associational life and civil society encourage democratic practices. Beyond formal associations, civil society also consists of a variety of less institutionalized (new) social movements, groups and even individuals creating solidarities to advance their interest (Linz and Stepan 1996). For the organization and political communication of civil society, digital tools have become indispensable (Castells 2015). According to Obar, Zube, and Lampe (2012), social media in particular do help all kinds of civil society organizations (CSOs) in extending their public outreach, raising awareness about their activities, facilitating mobilization and creating efficient feedback loops. The online sphere is not only a place where a multitude of locally dispersed individuals can interact, pool resources and form new groups to advance their interests, but also a means through which already existing advocacy groups can get their message across more effectively and reach a potentially unlimited number of people. Not least because of this, Castells argues that '[F]or new social movements, the Internet provides the essential debate, their means of acting on people's mind, and ultimately serves as their most potent political weapon.' (Castells 2007, 250). One can thus expect CSOs to take advantage of digital tools to express political grievances.

In this paper, a robust civil society is defined as being relatively autonomous from the state and in which citizens pursue their collective interests actively, i.e., there are many diverse CSOs with a high degree of citizen involvement (Bernhard et al. 2015). To this

end, I assume that a country hosting such a robust civil society taking advantage of the technological advancements online to display higher aggregate levels of e-expression:

H3: The more robust the civil society of a country, the higher aggregate levels of e-expression.

Data and models

To test my hypotheses on the relation between contextual factors and e-expression, I combine data from the 2014 ISSP 'Citizenship II' round with several macro-level indicators and analyse them with multilevel logistic regressions (ISSP Research Group 2016). In total, my sample consists of 34 countries and 28,397 respondents. My dependent variable e-expression is operationalized using a survey item from a battery of 'some different forms of political and social action that people can take' (ISSP Research Group 2014). Respondents were asked to indicate whether they have 'expressed political views on the internet' ranging from 1 ('have done it in the past year') to 4 ('have not done and would never do it'). I recoded it into a dummy whereas 1 indicates participation, i.e. 'have done it in the past year' and 'have done it in the more distant past', and 0 its absence, i.e. 'have not done it but might do' and 'have not done it and would never do it'. Data is mean \pm standard error. On average, 11.9% (\pm 11.8%) of respondents across all nations have expressed their political views online. Appendix 1 plots the mean and confidence interval for each country.

The macro-level independent variables are taken from a variety of sources and as of 2013–2016, depending on the time of the survey's fieldwork in each country. Media dependence is measured using Freedom House's Freedom of the Press Index ranking from 0 indicating free to 100 not free with a mean of 28.6 (\pm 17.3) (Freedom House 2021). Moreover, I am looking at democratic experience with a self-generated variable indicating the number of years since the last transition to democracy with a mean of 61.8 years (\pm 50.5 years). The robustness of civil society is indicated by V-Dem's core civil society index, which measures both the organizational environment of and level of citizen activism in civil society based on responses by country experts. It ranges from 0 least to 100 most robust with a mean of 83.4 (\pm 16.6) (V-Dem 2021). Appendix 2 plots the mean for each variable per country. The means of the macro-level indicators across countries are summarized in Table 1.

To investigate the relationship of media dependence and political trust with e-expression, I include a cross-level interaction in the analysis. In the ISSP, political trust is measured on a 1–5 scale, whereas 1 indicates no trust and 5 much trust in 'the people in government to do what is right'.

On the macro-level, I include several covariates. First, I control for national elections coded as a dummy, whereas 1 indicates that a national election has taken place in the

Table 1. Descriptive statistics of dependent and macro-level variables.

Variable	Mean	Standard deviation	Minimum	Maximum
E-expression	.118	.323	0	1
Media	28.555	17.324	10	83
Democratic age	61.845	50.5	0	216
Civil society	83.368	16.622	32	97

year(s) of fieldwork of the survey and two months after to account for e-expressive activities during an electoral campaign (ElectionGuide 2021). Electoral campaigns serve to illustrate a highly politicized period in the electoral cycle and the heyday of political expression, which could incentivize a broad mass all over a country to engage in e-expression (Cantijoch Cunill and Gibson 2019). As illustrated in Appendix 3, national elections happened in 14 countries, including Austria, Denmark, Switzerland, Estonia, Georgia, Croatia, Hungary, Japan, Poland, Sweden, Slovakia, Turkey, United States and Venezuela. The variable does not account for national elections that have taken place in the more distant past. For robustness purposes, I re-ran the analysis for e-expressive activities done in the past year only and included the results in Appendix 4. I also control for regime type to account for differences of liberal principles, particularly freedom of expression, that are traditionally (more) restricted in autocracies. Thereby, the number of channels and possibilities to engage in e-expression – without facing sanctions or being controlled – are significantly lower than in less restrictive regimes (N. Howard 2010; Skoric, Zhu, and Pang 2016). I use V-Dem's Regimes of the World (RoW), which classifies countries as closed or electoral autocracies and electoral or liberal democracies ranging from 0 to 3 (Lührmann, Tannenbergh, and Lindberg 2018). Moreover, e-expression is also fundamentally dependent on resources and technical accessibility. The ability to engage in self-actualization activities, such as e-expression, depends on the satisfaction of basic physical needs (Maslow 1943) as well as digital opportunities, such as access to and usage of the Internet (Norris 2001). Hence, I also control for GDP per capita and per cent of the population using the Internet as reported by The World Bank (2021).

Following the reasoning of previous research, I also include a battery of micro-level indicators measuring resources and motivations to engage in e-expression. First, I include age measured in years, gender, and socio-economic status (SES) in the form of education and income. Education is a categorical variable ranging from 0 (no formal education) to 6 (university education). As it was not inquired about in Hungary, I re-ran the analysis also without education and included the results (N = 35) in Appendix 5. Income is not directly comparable in the ISSP, which is why I look at the relative position of income earners in a country and assign observations to the country-specific income deciles. In addition, I include political interest, which is measured on a 4-point-scale with 1 indicating not at all and 4 very interested. I also add a variable on ideological extremism measured on a L-R ideological scale that was folded so that moderate ideology equals 0 and extreme ideology 5. Finally, I also consider the relationship between e-expression and political participation as posited by the literature. First, I control whether a respondent has voted in the last election as a more institutionalized form of political participation. Second, I include a dummy measuring participation in at least one of the following informal activities included in the ISSP: petitions, boycotts, demonstrations, rallies, and donations.

Before running the analyses, I checked for multicollinearity. The VIFs of all variables are below 10 and acceptable (Hail et al. 1995).² To test my hypotheses, I run several multilevel specifications with random intercepts, adding all the macro-level arguments as well as the interaction one after the other and combining them together into a final model. All individual-level variables are unstandardized and unweighted.³

Table 2. Multilevel logistic regression on E-expression.

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Media dependence		Media dependence × political trust		Democratic experience		Civil society		Combined	
	B (SE)	OR	B (SE)	OR	B (SE)	OR	B (SE)	OR	B (SE)	OR
<i>Macro-level effects</i>										
Media	-.02* (.01)	.98	-.03** (.01)	.97					-.02* (.01)	.98
Media × trust			.003** (.00)	1.003					.00** (.00)	1.003
Demo. Age					.01* (.00)	1.01			.00* (.00)	1.004
Civil Society							.01 (.01)	1.01	.00 (.01)	1.003
Election	-.18 (.16)	.83	-.17 (.16)	.84	-.19 (.16)	.83	-.18 (.17)	.83	-.21 (.16)	.81
Regime (Lib democracy)	-.27 (.28)	.76	-.28 (.28)	.78	.09 (.16)	1.10	-.06 (.26)	.94	-.27 (.29)	.77
GDP	.00 (.00)	1.00	.00 (.00)	1.00	-.00 (.00)	.99	.00 (.00)	1.00	-.00 (.00)	.99
Internet	-.01* (.01)	.99	-.01* (.01)	.99	-.00 (.01)	.99	-.01 (.01)	.99	-.01 (.01)	.99
<i>Micro-level effects</i>										
Gender (male)	.22*** (.04)	1.25	.22*** (.04)	1.25	.22*** (.04)	1.25	.22*** (.04)	1.25	.22*** (.04)	1.25
Age	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96
Education	.04*** (.00)	1.04	.04*** (.00)	1.04	.04*** (.00)	1.04	.04*** (.00)	1.04	.04*** (.00)	1.04
Income	.00 (.01)	1.00	.00 (.01)	1.00	.00 (.01)	1.00	.00 (.01)	1.00	.00 (.01)	1.00
Vote	-.11** (.05)	.89	-.11** (.05)	.89	-.11** (.05)	.90	-.11** (.05)	.90	-.11** (.05)	.90
Pol. Activities	1.75*** (.07)	5.74	1.75*** (.07)	5.76	1.75*** (.07)	5.75	1.75*** (.07)	5.75	1.75*** (.07)	5.76
Pol. Interest	.70*** (.03)	2.02	.70*** (.03)	2.02	.70*** (.03)	2.02	.70*** (.03)	2.02	.70*** (.03)	2.02
Pol. Trust	-.16*** (.02)	.85	-.24*** (.03)	.78	-.16*** (.02)	.85	-.16*** (.02)	.85	-.24*** (.03)	.78
Extremism	.11*** (.01)	1.11	.11*** (.01)	1.12	.11*** (.01)	1.12	.11*** (.01)	1.12	.11*** (.01)	1.12
Countries	34		34		34		34		34	
N	28,397		28,397		28,397		28,397		28,397	
AIC	18,345.94		18,338.57		18,345.77		18,348.18		18,340.26	
ICC	.05		.05		.05		.05		.05	

* $p < .10$, ** $p < .05$, *** $p < .001$.

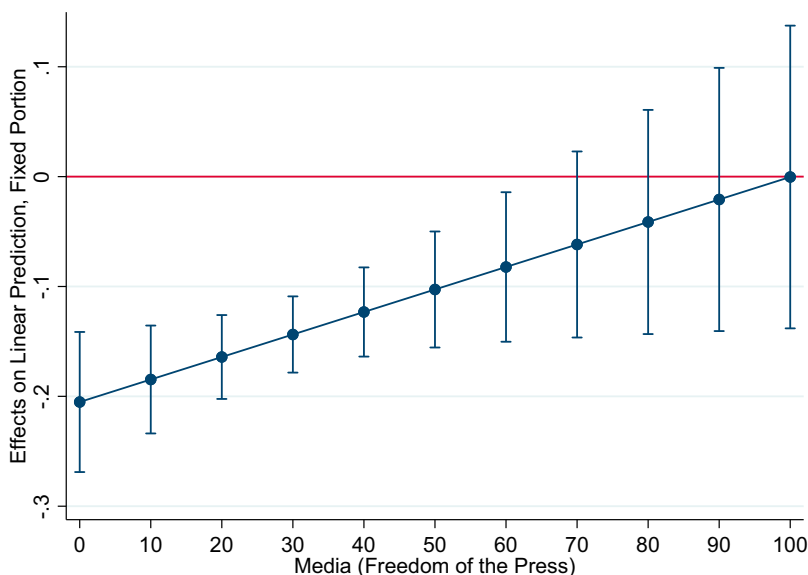


Figure 1. Marginal impact of political trust with 95% CIs across media scores.

Results

Table 2 presents the results of the multilevel analyses. Models 1, 2, 3, 4 and 5 depict the impact of country-level variables and the interaction while controlling for national elections, regime type, GDP, and Internet usage. According to Model 1 – and *irrespective* of the level of political trust – respondents from countries with more dependent media which are subject to state intervention are less likely to express their views on political issues online ($b = -.02$, $p < .10$). In fact, the odds to engage in e-expression decrease by 2% with a one-unit increase on the 0–100 scale of press freedom. As illustrated in Model 2 and **Figure 1**, the interaction between media dependence and political trust is statistically significant ($b = .003$, $p < .05$). However, while the statistically significant effect of political trust is generally negative, its predictive power decreases in countries with higher media dependence. In other words, political trust has a stronger negative effect on e-expression in countries with relatively free and independent media and it becomes insignificant beyond a Freedom of the Press score of 60. As illustrated in Appendix 3, however, this may be explained by the fact that only three countries fall into that range, namely Turkey (65), Venezuela (81) and Russia (83). Nonetheless, I can reject H1: citizens from closed media systems who are displaying high levels of political distrust are not relatively more likely to retreat to potentially safe harbours online. On the contrary, e-expression as an outlet to voice grievances is relatively more frequented by politically distrustful individuals who are living in countries with relatively independent and free media. According to Model 3, I find evidence that supports H2: democratic experience is statistically significant ($b = .01$, $p < .10$) and the relationship is positive. Substantially, with each additional year spent under democratic rule, the odds for e-expression increase by 1%. The findings correspond to broader developments observed in consolidated democracies, where publics are becoming increasingly critical of authority and

political authority in particular, which is why they are more engaged in elite-challenging activities outside conventional action repertoires and via alternative (online) channels (Dalton 2006; Dalton, Van Sickle, and Weldon 2010; Inglehart 1999; Marien, Hooghe, and Quintelier 2010; Norris 1999). In more restrictive and less free countries, the results also point to limitations to the extent that digital tools may enable 'risky' political expressions (Barnidge, Huber, et al. 2018) and accelerate democratization processes, if the risk is defined as being prosecuted for expressing preferences running counter to the regime. Collective action against the status quo is mobilized by a critical mass that dares to speak up and, thereby, reduces the external costs for others to follow (Lohmann 2020; Olson 2003). The results suggest, however, that even opponents are more likely to engage in preference falsification and passive acquisition instead of e-expression, which facilitates a continuation of current affairs (Kuran 1997). Hence, it appears that a democratic digital divide (Norris 2001) is reinforced by macro-level factors: control, surveillance and restrictions and low or no democratic experience prevent citizens – even the most critical ones – from using digital tools for political expression. In contrast, e-expression serves to illustrate an additional, well frequented channel for citizens in consolidated democracies that already have large action repertoires at hands.

According to Model 4, I can reject H3 on civil society robustness. Considering that e-expression is not related to the diversity of CSOs and the degree of citizen involvement, one could conclude that e-expression is more of an individual activity that is not stimulated due to its relevance for and usage by associations, movements, or collective interests. Model 5 combines all macro-level variables and the controls at both levels. The results for both, the interaction term of media dependence and political trust as well as democratic age remain robust.

Even though the focus of this paper is on the contextual drivers and constraints of e-expression, discussing the individual-level controls is substantially interesting and an important contribution to the ongoing scholarly debate on mobilization and reinforcement effects of digital tools. This section, therefore, briefly reflects on micro-level capacities and motivations of e-expressive citizens. As revealed in Model 5, male respondents are 25% more likely than females to express their political views on the Internet ($b = .22, p < .001$). In line with the literature, age has a negative effect with each additional year decreasing the odds by 4% ($b = -.04, p < .001$). Regarding capacities, any additional educational degree increases the likelihood that respondents engage in e-expression by 4% ($b = .04, p < .001$). Strikingly, it appears that education is also absorbing the effect of income, which is statistically insignificant in all models featuring education but becomes significant in Appendix 4 when education is excluded. Considering that the control of GDP on the macro-level, too, renders insignificant, one could argue that material resources do not enable e-expression.

In substantive terms, non-institutionalized political activities and e-expression have by far the strongest relationship: engaging in at least one petition, boycott, demonstration, rally or donating increases the chances of e-expression more than five-fold ($b = 1.75, p < .001$). Voting, too, is statistically significant, but the relationship is negative ($b = -.11, p < .05$). This underlines the informal character of e-expression. In terms of motivation, political interest, too, is highly significant: respondents positioning themselves one point higher on the scale are about twice as likely to engage in e-expression

($b = .70$, $p < .001$). In terms of ideological extremism, a one-unit increase on the 5-point-scale from moderate to high extremism increases the odds by 12% ($b = .11$, $p < .001$). This suggests that moderate citizens tend to remain silent online. One can therefore conclude that e-expression is done by predominantly young males with high education that are politically active and interested and tend towards ideological extremism. This supports previous findings on reinforcement effects of digital tools (Oser and Boulianne 2020).

Discussion

This paper proposes to approach e-expression differently than in previous studies: not solely as means to political participation or as a subject of single-case studies in advanced democracies, but as a standalone act with aggregate levels varying across countries that do not cluster according to geographic regions. Hence, the central question explored in this paper is the extent to which contextual drivers of media dependence, democratic age, and civil society robustness shape aggregate levels of engagement in e-expression. This is of particular relevance as the literature acknowledges that e-expression fulfills central functions for democracy and democratization and is highly context-dependent (Cantijoch Cunill and Gibson 2019; Chadwick 2013; Gil de Zúñiga, Molyneux, and Zheng 2014; Lane, Do, and Molina-Rogers 2021; Margetts et al. 2016; Shah 2016).

The results indicate that respondents from countries with higher media dependence – irrespective of their levels of political trust – usually display lower levels of participation, so do those with shorter democratic histories. The media environment also mediates the effect of political trust on e-expression: it is generally negative but ceases the less free and independent media can operate in a state. This runs counter to my assumption that critical, distrusting citizens are more drawn to engage in e-expression in relatively anonymous and autonomous channels online if others are monitored. E-expression is also predominantly done in advanced, old democracies. These findings raise questions on the extent to which digital tools indeed posit an alternative route for citizens to express themselves if formal paths are closed. Instead, it appears to be an additional option for politically active and critical citizens who already have a wide range of possibilities to choose from. A democratic digital divide – between those that use or do not use digital tools for political expression – seems to be reinforced by institutional factors: surveillance and control of the media and short or no democratic experiences serve to illustrate constraining factors for e-expression. The individual-level variables, too, suggest that instead of mobilizing traditionally disadvantaged or disengaged citizens, a reinforcement is taking place with politically active and interested citizens also being more drawn to express themselves online. Thereby, my findings fall into the hands of supporters and opponents of democratic consolidation alike: for political expression online to flourish, the media and Internet should be as open and free as possible, though patience may be needed in countries with late transitions to democracy. By implication, governing a tight regime over the media discourages parts of the population to participate in e-expression, as those with preferences against the status quo are less politically outspoken.

The conclusions articulated above are limited in two ways: first, the data was gathered in the mid-2010ths and the number of digital tools for political expression has increased exponentially in the meantime. Thereby, e-expression as a subject of study is constantly

changing and the analysis at hand merely provides a snapshot in time for the period of fieldwork. Second, there are several outliers – India in terms of e-expression, Venezuela and Russia in terms of media dependence and the US in terms of democratic age. To overcome the (statistical) challenges posited by such outliers and increase the balance of samples, more countries should be included in future surveys featuring e-expression. Despite these limitations, the present study provides an important and unprecedented empirical exploration of the importance of media dependence and democratic age in stimulating e-expression and a starting point for future work to build on.

Notes

1. For the remainder of this paper, I will refer to online political expression as e-expression.
2. The VIFs for all variables in the models are as follows: Media = 8.30, Democracy = 4.53, Civil Society = 3.55, Election = 1.17, Regime Type = 6.20, GDP = 8.17, Internet = 4.47, Pol. Trust = 1.06, Voting = 1.12, Pol. Activities = 1.20, Gender = 1.02, Age = 1.18, Education = 1.35, Income = 1.14, Pol. Interest = 1.19, Extremism = 1.05.
3. For a discussion of standardisation via mean centring, see Hox (2010).

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Wiebke Drews  <http://orcid.org/0000-0002-5711-6114>

References

- Bail, C. A., L. P. Argyle, T. W. Brown, J. P. Bumpus, H. Chen, M. B. F. Hunzaker, J. Lee, M. Mann, F. Merhout, and A. Volfovsky. 2018. "Exposure to Opposing Views on Social Media Can Increase Political Polarization." *Proceedings of the National Academy of Sciences* 115 (37): 9216–9221. doi:10.1073/pnas.1804840115.
- Barnidge, M., A. Ardèvol-Abreu, and H. Gil de Zúñiga. 2018. "Content-expressive Behavior and Ideological Extremity: An Examination of the Roles of Emotional Intelligence and Information Network Heterogeneity." *New Media & Society* 20 (2): 815–834. doi:10.1177/1461444816675183.
- Barnidge, M., B. Huber, H. Gil de Zúñiga, and J. H. Liu. 2018. "Social Media as a Sphere for "Risky" Political Expression: A Twenty-Country Multilevel Comparative Analysis." *The International Journal of Press/Politics* 23 (2): 161–182. doi:10.1177/1940161218773838.
- Becker, A. B., and L. Copeland. 2016. "Networked Publics: How Connective Social Media use Facilitates Political Consumerism among LGBT Americans." *Journal of Information Technology & Politics* 13 (1): 22–36. doi:10.1080/19331681.2015.1131655.
- Bennett, W. L. 2008. *Civic Life Online: Learning how Digital Media Can Engage Youth*. Cambridge, Mass: MIT Press.
- Bernhard, M., E. Tzelgov, D.-J. Jung, M. Coppedge, and S. I. Lindberg. 2015. "The Varieties of Democracy Core Civil Society Index." *V-Dem Working Paper* 13: 1–41. doi:10.2139/ssrn.2667493.
- Besley, T. J., and A. Prat. 2005. *Handcuffs for the Grabbing Hand? Media Capture and Government Accountability (SSRN Scholarly Paper No. ID 1158329)*. Rochester, NY: Social Science Research Network.
- Boulianne, S. 2009. "Does Internet Use Affect Engagement? A Meta-Analysis of Research." *Political Communication* 26 (2): 193–211.

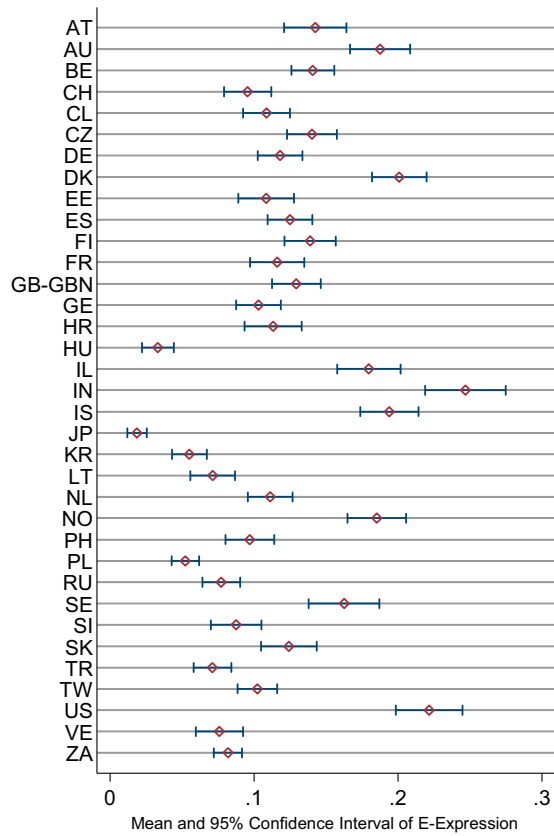
- Boulianne, S. 2019. "Revolution in the Making? Social Media Effects Across the Globe." *Information, Communication & Society* 22 (1): 39–54. doi:10.1080/1369118X.2017.1353641.
- Cantijoch Cunill, M., and R. Gibson. 2019. "E-Participation." In *Oxford Research Encyclopedia: Politics*. Oxford: Oxford University Press. <https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-580>
- Castells, M. 2007. "Communication, Power and Counter-Power in the Network Society." *International Journal of Communication* 1: 238–266. <http://ijoc.org/index.php/ijoc/article/view/46>.
- Castells, M. 2015. *Networks of Outrage and Hope: Social Movements in the Internet age*. 2nd ed. Malden, MA: Polity Press.
- Chadwick, A. 2013. *The Hybrid Media System: Politics and Power*. New York: Oxford University Press.
- Dalton, R. J. 2006. "Citizenship Norms and Political Participation in America." Accessed <http://www.socsci.uci.edu/~rdalton/archive/cid2.pdf>.
- Dalton, R. J., A. Van Sickle, and S. Weldon. 2010. "The Individual–Institutional Nexus of Protest Behaviour." *British Journal of Political Science* 40 (1): 51–73. doi:10.1017/S000712340999038X.
- ElectionGuide. 2021. "Past Elections." Accessed <https://www.electionguide.org/elections/type/past/>.
- Farrell, H. 2012. "The Consequences of the Internet for Politics." *Annual Review of Political Science* 15 (1): 35–52. doi:10.1146/annurev-polisci-030810-110815.
- Ferrucci, P., T. Hopp, and C. J. Vargo. 2020. "Civic Engagement, Social Capital, and Ideological Extremity: Exploring Online Political Engagement and Political Expression on Facebook." *New Media & Society* 22 (6): 1095–1115. doi:10.1177/1461444819873110.
- Freedom House. 2015. *Hungary*. Country Report. Freedom of the Press. Accessed <https://freedom-house.org/report/freedom-press/2015/hungary>.
- Freedom House. 2021. "Media Freedom." Accessed <https://freedomhouse.org/issues/media-freedom>.
- Geddes, B., and J. Zaller. 1989. "Sources of Popular Support for Authoritarian Regimes." *American Journal of Political Science* 33 (2): 319–347. JSTOR. doi:10.2307/2111150.
- Gibson, R., and M. Cantijoch. 2013. "Conceptualizing and Measuring Participation in the Age of the Internet: Is Online Political Engagement Really Different to Offline?" *The Journal of Politics* 75 (3): 701–716. doi:10.1017/S0022381613000431.
- Gil de Zúñiga, H., L. Molyneux, and P. Zheng. 2014. "Social Media, Political Expression, and Political Participation: Panel Analysis of Lagged and Concurrent Relationships." *Journal of Communication* 64 (4): 612–634. doi:10.1111/jcom.12103.
- Goertz, G. 1994. *Contexts of International Politics*. 1st ed. Cambridge: Cambridge University Press.
- Hail, J. F. Jr., R. E. Anderson, R. L. Tatham, and W. C. Black. 1995. *Multivariate Data Analysis*. 3rd ed. New York: Macmillan.
- Hallin, D. C., and P. Mancini. 2004. *Comparing Media Systems: Three Models of Media and Politics*. Cambridge, NY: Cambridge University Press.
- Hoffman, L. H. 2012. "Participation or Communication? An Explication of Political Activity in the Internet Age." *Journal of Information Technology & Politics* 9 (3): 217–233. doi:10.1080/19331681.2011.650929.
- Hooghe, M., and S. Marien. 2013. "A Comparative Analysis of the Relation Between Political Trust and Forms of Political Participation in Europe." *European Societies* 15 (1): 131–152. doi:10.1080/14616696.2012.692807.
- Howard, M. M. 2003. *The Weakness of Civil Society in Post-Communist Europe*. New York, NY: Cambridge University Press.
- Howard, P. N. 2010. *The Digital Origins of Dictatorship and Democracy: Information Technology and Political Islam*. Oxford, NY: Oxford University Press.
- Hox, J. J. 2010. *Multilevel Analysis: Techniques and Applications*. 2nd ed. New York: Routledge, Taylor & Francis.
- Hyden, G. 1997. "Civil Society, Social Capital, and Development: Dissection of a Complex Discourse." *Studies in Comparative International Development* 32 (1): 3–30. doi:10.1007/BF02696304.
- Inglehart, R. 1999. "Postmodernization Erodes Respect for Authority, But Increases Support for Democracy." In *Critical Citizens: Global Support for Democratic Governance*, edited by P. Norris, 236–256. Oxford: Oxford University Press.

- ISSP Research Group. 2014. "ISSP 2014 Source Questionnaire." GESIS Data Archive.
- ISSP Research Group. 2016. "International Social Survey Programme: Citizenship II – ISSP 2014 (Version 2.0.0) [Data file]." GESIS Data Archive.
- Kaase, M. 1999. "Interpersonal Trust, Political Trust and non-Institutionalised Political Participation in Western Europe." *West European Politics* 22 (3): 1–21. doi:[10.1080/01402389908425313](https://doi.org/10.1080/01402389908425313).
- Knuttila, L. 2011. "User Unknown: 4chan, Anonymity and Contingency." *First Monday*, doi:[10.5210/fm.v16i10.3665](https://doi.org/10.5210/fm.v16i10.3665).
- Kuran, T. 1997. *Private Truths, Public Lies: The Social Consequences of Preference Falsification (First Harvard University Press Paperback Edition)*. Cambridge, MA: Harvard University Press.
- Lane, D. S., K. Do, and N. Molina-Rogers. 2021. "What is Political Expression on Social Media Anyway?: A Systematic Review." *Journal of Information Technology & Politics*, 1–15. doi:[10.1080/19331681.2021.1985031](https://doi.org/10.1080/19331681.2021.1985031)
- Larreguy, H., and J. Marshall. 2020. "The Incentives and Effects of Independent and Government-Controlled Media in the Developing World." In *The Oxford Handbook of Electoral Persuasion*, edited by E. Suhay, B. Grofman, and A. H. Trechsel, 590–620. New York, NY: Oxford University Press.
- Linz, J. J., and A. C. Stepan. 1996. *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe*. Baltimore: Johns Hopkins University Press.
- Literat, I., and N. Kligler-Vilenchik. 2019. "Youth Collective Political Expression on Social Media: The Role of Affordances and Memetic Dimensions for Voicing Political Views." *New Media & Society* 21 (9): 1988–2009. doi:[10.1177/1461444819837571](https://doi.org/10.1177/1461444819837571).
- Lohmann, S. 2020. "Bandwagon Effects, Information Cascades, and the Power in Numbers." In *The Oxford Handbook of Electoral Persuasion*, edited by E. Suhay, B. Grofman, and A. H. Trechsel, 730–753. New York, NY: Oxford University Press.
- Lührmann, A., M. Tannenbergh, and S. I. Lindberg. 2018. "Regimes of the World (RoW): Opening New Avenues for the Comparative Study of Political Regimes." *Politics and Governance* 6 (1): 60–77. doi:[10.17645/pag.v6i1.1214](https://doi.org/10.17645/pag.v6i1.1214).
- Macafee, T., and J. J. De Simone. 2012. "Killing the Bill Online? Pathways to Young People's Protest Engagement via Social Media." *Cyberpsychology, Behavior, and Social Networking* 15 (11): 579–584. doi:[10.1089/cyber.2012.0153](https://doi.org/10.1089/cyber.2012.0153).
- Margetts, H., P. John, S. Hale, and T. Yasseri. 2016. *Political Turbulence: How Social Media Shape Collective Action*. Princeton, NJ: Princeton University Press.
- Marien, S., M. Hooghe, and E. Quintelier. 2010. "Inequalities in Non-Institutionalised Forms of Political Participation: A Multi-Level Analysis of 25 Countries." *Political Studies* 58 (1): 187–213. doi:[10.1111/j.1467-9248.2009.00801.x](https://doi.org/10.1111/j.1467-9248.2009.00801.x).
- Maslow, A. H. 1943. "A Theory of Human Motivation." *Psychological Review* 50 (4): 370–396. doi:[10.1037/h0054346](https://doi.org/10.1037/h0054346).
- Norris, P. 1999. *Critical Citizens: Global Support for Democratic Government*. Oxford: Oxford University Press.
- Norris, P. 2001. *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge, NY: Cambridge University Press.
- Norris, P. 2002. *Democratic Phoenix: Reinventing Political Activism*. Cambridge: Cambridge University Press.
- Obar, J. A., P. Zube, and C. Lampe. 2012. "Advocacy 2.0: An Analysis of How Advocacy Groups in the United States Perceive and Use Social Media as Tools for Facilitating Civic Engagement and Collective Action." *Journal of Information Policy* 2: 1–25 [10.5325/jinfopoli.2.2012.1](https://doi.org/10.5325/jinfopoli.2.2012.1).
- Olson, M. 2003. *The Logic of Collective Action: Public Goods and the Theory of Groups* (21. Printing). Cambridge, MA: Harvard Univ. Press.
- Oser, J., and S. Boulianne. 2020. "Reinforcement Effects Between Digital Media Use and Political Participation: A Meta-Analysis of Repeated-Wave Panel Data." *Public Opinion Quarterly* 84 (S1): 355–365. doi:[10.1093/poq/nfaa017](https://doi.org/10.1093/poq/nfaa017).
- Pop-Eleches, G., and J. A. Tucker. 2013. "Associated with the Past? Communist Legacies and Civic Participation in Post-Communist Countries." *East European Politics & Societies* 27 (1): 45–68. doi:[10.1177/0888325412465087](https://doi.org/10.1177/0888325412465087).

- Putnam, R. D., R. Leonardi, and R. Y. Nanetti. 1994. *Making Democracy Work: Civic Traditions in Modern Italy* (5. Print., 1. Princeton Paperback Print). Princeton, NJ: Princeton Univ. Press.
- Röllgen, J., and M. Bug. 2012. "Internal Security Institutions Meeting Internet Governance. A Comparative View on the UK and Germany." *JeDEM - EJournal of EDemocracy and Open Government* 3 (2): 192–206. doi:10.29379/jedem.v3i2.69.
- Shah, D. V. 2016. "Conversation is the Soul of Democracy: Expression Effects, Communication Mediation, and Digital Media." *Communication and the Public* 1 (1): 12–18. doi:10.1177/2057047316628310.
- Shaked, S. 2017. *Collective Action 2.0: The Impact of Social Media on Collective Action*. Cambridge, MA: Chandos Publishing. an imprint of Elsevier.
- Simpser, A. 2013. *Why Governments and Parties Manipulate Elections: Theory, Practice, and Implications*. Cambridge: Cambridge University Press.
- Skoric, M. M., Q. Zhu, and N. Pang. 2016. "Social Media, Political Expression, and Participation in Confucian Asia." *Chinese Journal of Communication* 9 (4): 331–347. doi:10.1080/17544750.2016.1143378.
- Sunstein, C. R. 2017. *#Republic: Divided Democracy in the age of Social Media*. Princeton: Princeton University Press.
- Teorell, J., M. Torcal, and J. Ramon Montero. 2007. "Political Participation: Mapping the Terrain." In *Citizenship and Involvement in European Democracies: A Comparative Analysis*, edited by J. W. van Deth, J. R. Montero, and A. Westholm, 334–357. New York: Routledge, Taylor & Francis Group.
- Theocharis, Y., and J. W. van Deth. 2018. "The Continuous Expansion of Citizen Participation: A new Taxonomy." *European Political Science Review* 10 (1): 139–163. doi:10.1017/S1755773916000230.
- Tocqueville, A. d., H. C. Mansfield, and D. Winthrop. 2002. *Democracy in America (Paperback ed)*. Chicago, IL: Univ. of Chicago Press.
- Vaccari, C., and A. Valeriani. 2016. "Party Campaigners or Citizen Campaigners? How Social Media Deepen and Broaden Party-Related Engagement." *The International Journal of Press/Politics* 21 (3): 294–312. doi:10.1177/1940161216642152.
- Vaccari, C., and A. Valeriani. 2018. "Digital Political Talk and Political Participation: Comparing Established and Third Wave Democracies." *SAGE Open* 8 (2) 10.1177/2158244018784986.
- Vaccari, C., A. Valeriani, P. Barberá, R. Bonneau, J. T. Jost, J. Nagler, and J. A. Tucker. 2015. "Political Expression and Action on Social Media: Exploring the Relationship Between Lower- and Higher-Threshold Political Activities Among Twitter Users in Italy." *Journal of Computer-Mediated Communication* 20 (2): 221–239. doi:10.1111/jcc4.12108.
- van Dijck, J., and T. Poell. 2013. *Understanding Social Media Logic (SSRN Scholarly Paper No. ID 2309065)*. Rochester, NY: Social Science Research Network.
- van Dijk, J., and K. L. Hacker. 2018. *Internet and Democracy in the Network Society*. New York: Routledge, Taylor & Francis Group.
- V-Dem. 2021. "Core Civil Society Index." Accessed <https://www.v-dem.net/en/news/core-civil-society-index/>.
- Vraga, E. K., K. Thorson, N. Kligler-Vilenchik, and E. Gee. 2015. "How Individual Sensitivities to Disagreement Shape Youth Political Expression on Facebook." *Computers in Human Behavior* 45: 281–289. doi:10.1016/j.chb.2014.12.025
- Weeks, B. E., A. Ardèvol-Abreu, and H. Gil de Zúñiga. 2015. "Online Influence? Social Media Use, Opinion Leadership, and Political Persuasion." *International Journal of Public Opinion Research* 29 (2): 214–239.
- The World Bank. 2021. "World Bank Open Data." Accessed <https://data.worldbank.org/>.

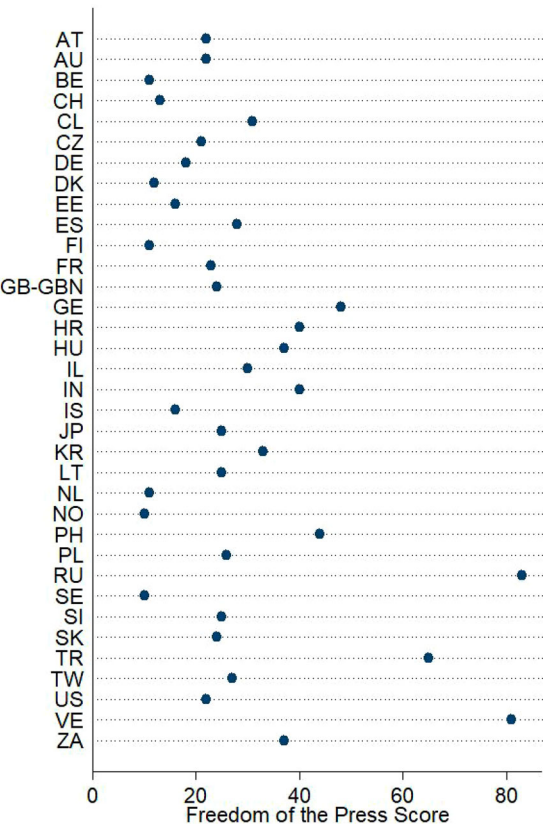
Appendices

Appendix 1. Mean and confidence interval of E-expression across countries (Source: ISSP 2014 'Citizenship II')

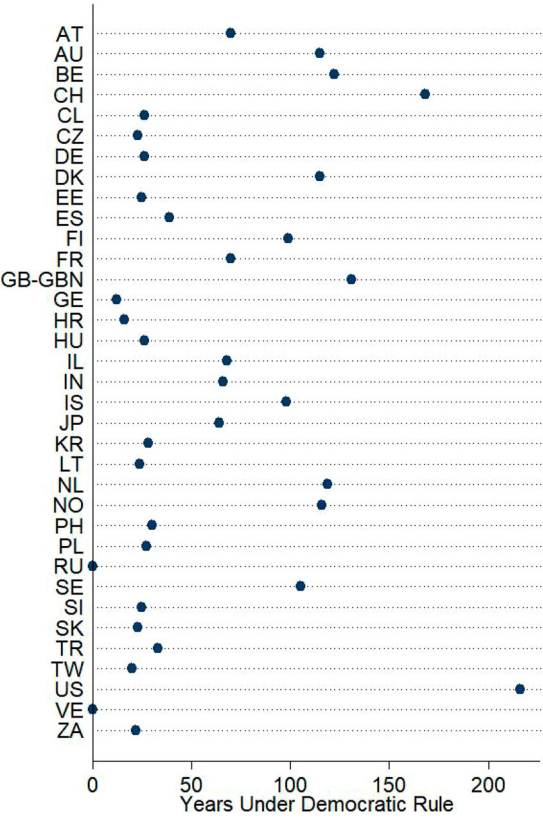


Appendix 2. Mean of macro-level independent variables across countries

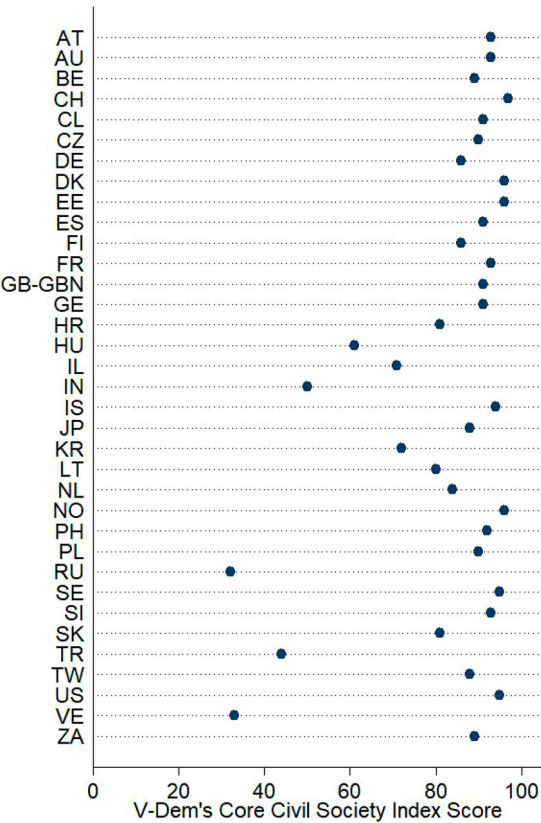
Media dependence



Democratic Age



Civil Society Robustness



Appendix 3

Table A1. ISSP fieldwork and electoral events.

Country	Time of fieldwork	National elections
AT	10.06.2016	Presidential (24.04.2016, 22.05.2016, 04.12.2016)
AU	12.05.2014–16.04.2014	
BE	14.10.2015–22.03.2016	
CL	31.10.2014–27.11.2014	
CZ	11.04.2014–20.06.2014	
DK	22.11.2014–06.02.2015	Referendum (25.05.2014) & Danish Parliament (18.06.2015)
CH	12.02.2014–10.07.2015	Referenda (02.09., 18.05., 28.09., 30.11.2014, 08.03., 14.06.2015) & Swiss Council of States / Swiss National Council (18.10.2015)
DE	24.03.2014–13.09.2014	
EE	09.2015–10.2015	Estonian Parliament (01.03.2015)
ES	14.03.2014–28.05.2014	
FI	17.09.2014–19.12.2014	
FR	28.02.2014–09.2014	
GB-GBN	31.07.2014–06.11.2014	
GE	01.09.2013–24.10.2013	Presidential (27.10.2013)
HR	03.01.2015–23.01.2015	Presidential (11.01.2015) & Croatian Assembly (08.11.2015)
HU	13.06.2014–18.06.2014	Hungarian National Assembly (06.04.2014)
IL (Israel)	03.02.2014–03.06.2014	
IN	12.03.2016–29.03.2016	
IS	03.07.2015–02.09.2015	
JP	14.06.2014–22.06.2014	Japanese House of Representatives (14.12.2014)
KR	23.06.2014–18.10.2014	
LT	03.03.2015–28.04.2015	
NL	01.04.2014–30.09.2014	
NOR	20.10.2014–30.12.2014	
PH	19.02.2014–23.02.2014	
PL	01.03.2014–26.06.2015	Presidential (10.05., 24.05.2015), Referendum (06.09.2015), Polish Sejm (25.10.2015), Polish Senate (25.10.2015)
RU	01.08.2014–05.08.2014	
SE	11.03.2014–30.05.2014	Swedish Parliament (14.09.2014)
SI	02.10.2013–17.12.2013	
SK	17.09.2014–28.10.2014	Presidential (15.03., 29.03.2014)
TR	13.02.2015–06.04.2015	Grand National Assembly of Turkey (07.06.2015)
TW	04.08.2014–16.11.2014	
US	01.04.2014–11.10.2014	US Senate (04.11.2014) & US House of Representatives (04.11.2014)
VE	19.01.2015–08.02.2015	Venezuelan National Assembly (06.12.2015)
ZA	01.01.2015–31.03.2015	

Appendix 4**Table A2.** Multilevel logistic regression on E-expression ('have done it in the past year').

	Model 1		Model 2 Media dependence × political trust		Model 3 Democratic experience		Model 4 Civil society		Model 5 Combined	
	B (SE)	OR	B (SE)	OR	B (SE)	OR	B (SE)	OR	B (SE)	OR
<i>Macro-level effects</i>										
Media	-.01 (.01)	.99	-.02* (.01)	.98					-.01 (.01)	.99
Media × Trust			.004*** (.00)	1.004					.004*** (.00)	1.004
Demo. Age					.00 (.00)	1.00			.004 (.00)	1.004
Civil society							.01 (.01)	1.01	.01 (.00)	1.01
Election	-.12 (.18)	.87	-.10 (.18)	.90	-.14 (.18)	.87	-.14 (.18)	.89	-.25 (.18)	.86
Regime (Lib. Democracy)	-.02 (.31)	.98	-.03 (.33)	.98	.12 (.18)	1.13	-.04 (.28)	.96	-.07 (.32)	.93
GDP	.00 (.00)	1.00	.00 (.00)	1.00	-.00 (.00)	.99	.00 (.00)	1.00	-.00 (.00)	.99
Internet	-.01 (.01)	.99	-.01 (.01)	.99	-.00 (.01)	.997	-.01 (.01)	.99	-.00 (.01)	.997
<i>Micro-level factors</i>										
Gender (male)	.22*** (.04)	1.25	.22*** (.05)	1.25	.22*** (.05)	1.25	.22*** (.05)	1.25	.22*** (.05)	1.25
Age	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96
Education	.05*** (.01)	1.05	.05*** (.01)	1.05	.05*** (.01)	1.05	.05*** (.01)	1.05	.05*** (.01)	1.05
Income	.00 (.01)	1.00	.00 (.01)	1.00	.00 (.01)	1.00	.00 (.01)	1.00	.00 (.01)	1.00
Vote	-.06 (.06)	.94	-.06 (.06)	.94	-.05 (.06)	.95	-.06 (.06)	.94	-.06 (.07)	.95
Pol. Activities	1.59*** (.09)	4.91	1.60*** (.09)	4.93	1.59*** (.09)	4.92	1.59*** (.09)	4.92	1.60*** (.09)	4.94
Pol. Interest	.83*** (.03)	2.29	.83*** (.03)	2.29	.83*** (.03)	2.29	.83*** (.03)	2.29	.83*** (.03)	2.29
Pol. Trust	-.21*** (.02)	.81	-.31*** (.04)	.73	-.20*** (.02)	.81	-.21*** (.02)	.81	-.31*** (.04)	.73
Extremism	.13*** (.02)	1.14	.13*** (.02)	1.14	.13*** (.02)	1.14	.13*** (.02)	1.14	.13*** (.02)	1.14
Countries	35		34		34		34		34	
N	28,397		28,397		28,397		28,397		28,397	
AIC	13,307.84		13,299.09		13,306.7		13,307.42		13,301.36	
ICC	.06		.06		.05		.06		.05	

* $p < .10$, ** $p < .05$, *** $p < .001$.

Appendix 5.

Table A3. Multilevel logistic regression on e-expression (without education).

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Media dependence		Media dependence × political trust		Democratic experience		Civil society		Combined	
	B (SE)	OR	B (SE)	OR	B (SE)	OR	B (SE)	OR	B (SE)	OR
<i>Macro-Level Effects</i>										
Media	-.02* (.01)	.98	-.03** (.01)	.97					-.02* (.01)	.98
Media × Trust			.003** (.00)	1.003					.003** (.00)	1.003
Demo. Age					.01* (.00)	1.01			.005* (.00)	1.005
Civil society							.01 (.01)	1.01	.003 (.01)	1.003
Election	-.20 (.16)	.82	-.19 (.16)	.83	-.20 (.16)	.82	-.19 (.17)	.83	-.22 (.16)	.80
Regime (Lib. Democracy)	-.20 (.28)	.82	-.20 (.28)	.82	.13 (.17)	1.14	-.01 (.26)	.99	-.20 (.29)	.82
GDP	.00 (.00)	1.00	.00 (.00)	1.00	-.00 (.00)	.99	.00 (.00)	1.00	-.00 (.00)	.99
Internet	-.01 (.01)	.99	-.01 (.01)	.99	-.00 (.01)	.99	-.01 (.01)	.99	-.003 (.01)	.996
<i>Micro-level effects</i>										
Gender (male)	.21*** (.04)	1.23	.21*** (.04)	1.23	.21*** (.04)	1.23	.21*** (.04)	1.23	.21*** (.04)	1.23
Age	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96	-.04*** (.00)	.96
Income	.01** (.01)	1.01	.01** (.01)	1.01	.01* (.01)	1.01	.01* (.01)	1.01	.01** (.01)	1.01
Vote	-.09* (.05)	.92	-.09* (.05)	.91	-.08 (.05)	.92	-.09* (.05)	.92	-.09 (.05)	.92
Pol. Activities	1.79*** (.07)	5.88	1.79*** (.07)	5.89	1.79*** (.07)	5.98	1.79*** (.07)	5.97	1.79*** (.07)	5.99
Pol. Interest	.73*** (.03)	2.01	.72*** (.03)	2.06	.73*** (.03)	2.07	.73*** (.03)	2.07	.72*** (.03)	2.06
Pol. Trust	-.16*** (.02)	.85	-.24*** (.03)	.79	-.16*** (.02)	.85	-.16*** (.02)	.85	-.24*** (.03)	.79
Extremism	.11*** (.01)	1.11	.11*** (.01)	1.11	.11*** (.01)	1.11	.11*** (.01)	1.11	.11*** (.01)	1.11
Countries	35		35		35		35		35	
N	29,211		29,211		29,211		29,211		29,211	
AIC	18,784.75		18,778.38		18,784.15		18,786.67		18,780.03	
ICC	.05		.05		.05		.05		.05	

* $p < .10$, ** $p < .05$, *** $p < .001$.