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**DOI**

[10.1215/03616878-10910233](https://doi.org/10.1215/03616878-10910233)

**Publication date**

2024

**Document Version**

Final published version

**Published in**

Journal of Health Politics, Policy and Law

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**Citation for published version (APA):**

Boräng, F., & Carlitz, R. (2024). The Double Democratic Bind: Challenges to Enacting Mandates and Combating Misinformation. *Journal of Health Politics, Policy and Law*, 49(1), 189-215. <https://doi.org/10.1215/03616878-10910233>

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# The Double Democratic Bind: Challenges to Enacting Mandates and Combating Misinformation

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## **Abstract**

**Context:** Wealthy countries vary considerably in terms of how well they have been able to inoculate their populations against COVID-19. In particular, democracies have been constrained in their abilities to implement vaccine mandates, given enshrined protections of civil liberties and individual freedom in such regimes. While scholars have begun addressing the democratic constraint on vaccine mandates, less attention has been paid to the additional challenges democracies face in constraining the spread of vaccine misinformation—particularly misinformation that spreads online.

**Methods:** This study combines large-N cross-country analysis with a case study of Germany to illustrate the “double bind” that democracies face when it comes to containing both the spread of disease and the spread of misinformation through social media.

**Findings:** The cross-national analysis confirms that democracies have been less likely to enact vaccine mandates, and they have also been relatively more hesitant to restrict what people can see and share online. The case study of Germany highlights the normative and the procedural constraints underlying such decisions.

**Conclusions:** These findings show that resources are often not the binding constraint on effective disease control, raising questions regarding the ability of high-income democracies to respond effectively to future public health emergencies.

**Keywords** COVID-19, vaccination, misinformation, social media, democracy

Following widespread availability of multiple effective vaccines against COVID-19, countries have varied considerably in terms of how well they have been able to inoculate their populations. While this reflects resource constraints in some cases, politics have hindered the rollout of vaccination

campaigns in many wealthy countries. In particular, democracies have been constrained in their abilities to implement vaccine mandates, given enshrined protections of civil liberties and individual freedom. Furthermore, democracies face challenges in constraining the spread of vaccine misinformation—especially misinformation spread online. This is critical given that engagement with social media has in turn been shown to increase vaccine hesitancy and may thus erode voluntary compliance with vaccination policies (Wilson and Wisyonge 2020).

We are not the first to study the constraints democracies face in their choice of COVID-19 policies. Focusing on social distancing, Cheibub, Hong, and Przeworski (2020) found that democracies were more hesitant than autocracies to introduce measures that violate rights, such as school closures, bans on public meetings, and lockdowns. They also found that the most established democracies were the slowest to react to increasing numbers of death rates with such measures. Similarly, Frey, Chen, and Presidente (2020) found that autocratic regimes imposed more stringent lockdowns and relied more on contact tracing than democracies did.

Engler and colleagues (2021) focused on variation among democratic countries and found that governments in countries with stronger protections of democratic principles in place before the pandemic were more hesitant to introduce measures that would constrain individual freedoms and lead to more power concentration. This resonates with Lührmann and colleagues' (2020) findings that in the European countries where pandemic emergency responses conflicted with liberal-democratic standards, democracy was already on the decline before the pandemic. Leaders with autocratic ambitions may thus use a crisis as an opportunity to increase power concentration and weaken democratic institutions.

The abovementioned studies do not deal with vaccination policies. Closest to the present study is a recent contribution by Munir and Munir (2022), which asks what drives success in countries' COVID-19 vaccine rollouts. They argue that strong civil liberties constrain governments' vaccine efforts because more intrusive aspects of vaccine policies, such as mandates, face resistance in light of such norms. However, they analyze actual vaccinations, not vaccine policies. This makes it very difficult to conclude that (potential) resistance to mandates matters, because the number of vaccinations is the result of both voluntary and forced compliance.

Vaccine mandates deserve specific attention because they highlight core ethical dilemmas in policy making. Although critical for public health, vaccination policy "reaches into the most private sphere of citizens and unavoidably conflicts with individual-based ethics" (Luyten et al. 2011:

280), and vaccine mandates contradict the doctrine of informed consent for medical treatment (Somerville 2021).<sup>1</sup>

The challenges democracies face in constraining the spread of online vaccine misinformation have received even less scholarly attention.<sup>2</sup> This is surprising, since misinformation has been such a central aspect of the COVID-19 pandemic. While misinformation around health issues is far from a new phenomenon, the COVID-19 pandemic is the first in which online technologies have been used on a massive scale to provide people with information—as well as mis- and disinformation.<sup>3</sup> Indeed, already on September 23, 2020, a coalition of UN agencies issued a joint statement in which they urged governments and other stakeholders to fight the “infodemic” they argued threatened countries’ ability to fight the pandemic, particularly the rollout of effective vaccination campaigns (WHO et al. 2020). This statement is in line with others suggesting that disinformation is a serious threat to COVID-19 vaccination efforts (van der Linden 2022; Winter et al. 2021). Such mis- and disinformation has demonstrable consequences. Using an experimental design, Betsch and colleagues (2010) show that even short exposure (5 to 10 minutes) to vaccine-critical websites increases the perception of the risk of vaccinating and decreases intentions to vaccinate. In the context of COVID-19 vaccination, Loomba and colleagues (2021) find that exposure to misinformation induced significant declines in people’s intention to vaccinate. However, these studies tend to focus at the micro level, rather than illuminating the broader challenges democracies face in combating misinformation.

Indeed, the UN agencies stress that while governments should fight the “infodemic,” this has to be done “while respecting freedom of expression,” highlighting the inherent tension between the fight against misinformation and democratic principles (WHO et al. 2020). Our study combines large-N cross-country analysis with a case study to illustrate this tension—what we

1. Despite this ethical dilemma, childhood immunization mandates have been in place for a long time in several liberal democracies. However, it should be noted that such mandates are often controversial and are contested by vocal groups. In this context it is also important to note that, unlike the vaccines included in child immunization programs, COVID vaccines are based on recently developed mRNA technologies, which may further complicate the ethical dilemma.

2. Political scientists such as Bennett and Livingston (2018) have instead tended to focus on the challenges misinformation poses for democracy rather than turning the causal arrow in this direction.

3. Misinformation is false or misleading information disseminated without an intent to deceive; disinformation is purposefully false or misleading information disseminated with an intent to deceive. Both are important from a health policy perspective, even though they can be difficult to distinguish from each other, as we discuss in further detail below.

call the “double bind” that democracies face in their choice of public health policies as well as in containing the spread of misinformation through social media. A case study of Germany illustrates the implications of misinformation for the effectiveness of voluntary health policy instruments, and it highlights the normative and the procedural constraints underlying vaccine policy decisions. Interestingly, electoral accountability constraints do not seem to have worked against vaccine mandates in this case.

## Theory

### Democratic Constraints on Vaccine Mandates

Many factors likely make it more difficult for democracies to introduce vaccine mandates than for autocracies to do so. First, *legal constraints* on mandatory vaccination are likely to be more extensive in democracies than in autocracies, given that civil liberties are often protected in constitutions for the very reason that they should be difficult for governments to change. Although the scope of explicitly defined civil liberties varies among countries, protections often have direct implications for vaccination policies, such as the right to privacy and the right to bodily integrity. More general formulations about the protection of individual freedom and dignity may also be activated against intrusive vaccine policies. More generally, in democracies policy proposals are routinely assessed for their compatibility with previous legislation, which tends to reflect such protections. Indeed, in the context of COVID-19 policies, there are several examples of measures being delayed or stopped following judicial review (Marzocchi 2021).

The perhaps most obvious constraint on democratic leaders' ability to introduce mandates is *electoral accountability*. Anticipating punishment in future elections if they introduce unpopular public health measures, politicians may refrain from intrusive policies. However, when this argument is used in the context of COVID-19 policies we often miss an explicit discussion about what the public wants. Governments can also be held accountable for *lack* of action, so it is an open question whether the electoral accountability mechanism will work for or against mandates. In situations where a majority of the population is willing to get vaccinated voluntarily, mandates would directly affect only a minority. But the majority may nevertheless be opposed to mandates if they perceive these as threats to individual freedom and bodily integrity, even if they themselves are not targeted. Since it is difficult to make valid assumptions about what the public wants,

an evaluation of the electoral accountability mechanism requires information about public opinion on the matter.

This leads to the third mechanism constraining the enactment of mandates in democracies: *vocal minorities*. Citizens in democracies not only have the right to vote but also have the right to protest. Even where a majority of citizens support stringent public health policies, there may be a minority that opposes them strongly and publicly. Democratic leaders could therefore be hesitant to introduce policies that lead to major protests and civil unrest. (Autocratic leaders may fear protests too, but revolts against vaccine mandates are less likely in settings where protests are deemed illegal and are violently suppressed.)

Furthermore, the *normative constraints* on vaccine mandates should be stronger in democracies. Normative constraints apply when an action is less likely because it goes against shared norms and values. In democracies, these typically include the protection of civil liberties and individual freedoms. Thus, political actors likely perceive that they ought not take actions that violate such principles even when they can do so. This means that even in the absence of legal constraints, political leaders might be hesitant to introduce vaccine mandates because these may violate the norm that individual freedoms ought to be respected. To the extent that the public values these freedoms and lets parties' positions on them inform their electoral choices, this factor also feeds into the electoral accountability mechanism. Moreover, such norms are also reflected in legislation, as noted above. But in democracies we can expect an elite-level commitment to democratic principles regarding civil liberties and individual freedoms and rights that goes beyond legal constraints or calculations about electoral gains or losses.

Democracies are also distinct from autocracies in terms of respect for procedures, even when these take time. In other words, the *procedural constraints* should be stronger in democracies than autocracies. Although the extent to which checks and balances are formally structured differs considerably among democracies, intrinsic to such regimes are mechanisms that prevent too much power concentration and that allow many actors to give input in the policy-making process. These mechanisms are likely to be activated in particular when the issue at hand is controversial, since policy makers may feel especially urged to ensure procedural legitimacy when the legitimacy of the output may be questioned. This can have important implications for crisis policy in particular: crises initially induce swift action, but procedural concerns slow policy making down. Crisis policy proposals may lose momentum as reactions to the

crisis change over time, and if they are not enacted quickly, they may not be enacted at all.

In sum, we expect that democracies will be less likely than autocracies to enact vaccine mandates, all else being equal.

### **Democratic Constraints on Limiting the Spread of Online Mis- and Disinformation**

There are also good reasons to expect that democracies face more constraints than autocracies when it comes to effective regulation of online mis- and disinformation. First and foremost, there are significant *legal constraints*. In liberal democracies free speech and freedom of information have strong legal protection, often in constitutions, for the very reason that they should be difficult for governments to change. This does not mean that democracies protect all forms of expression, as laws against hate speech illustrate. But in the context of online mis- and disinformation the distinction between lawful and unlawful content can be extremely difficult to pin down, given the potential ambiguity of these concepts. Disinformation implies an intent to deceive; however, establishing that someone had such an intent can be very difficult. Furthermore, defining misinformation purely in content-based terms (i.e., information that is contrary to established facts) poses particular challenges in the context of COVID-19, about which expert consensus has evolved rapidly and been subject to uncertainty and change (van der Linden 2022). Since any restriction on free speech would likely have to be very clearly defined and delimited to be consistent with existing protections of freedom of expression, efforts to regulate vaccine mis- and disinformation can be expected to face significant legal obstacles in democracies.

*Electoral accountability* may also serve as a constraint on the regulation of mis- and disinformation, given that the public is strongly opposed to such regulations. Similarly, any attempts to regulate online communication in democracies may spur protests by *vocal minorities* for which the issue of internet freedom is highly salient.

*Normative constraints* may also play a part, if political elites are hesitant to restrict free speech even within the limits of what would be legally or electorally possible.

Moreover, democracies face *procedural constraints* in combating online mis- and disinformation. Indeed, Radu (2020) notes that among the 18 governments that have taken legal action to combat the “infodemic,” democracies tend to enact measures that can be publicly deliberated, such as task forces or media literacy courses.

Taken together, this means that even when democratic governments perceive online misinformation as an important problem, any attempts to effectively regulate online communication are likely to face significant constraints. For autocracies, limiting what people see and share online is more of a practical and technical problem than a legal or normative one, and there are many examples of authoritarian regimes that steer online communication tools, censor them, or use them to their own advantage (Wilson 2017).

In sum, we expect that democracies will be less likely to censor social media or engage in social media monitoring, all else being equal.

Notably, the two democratic binds that we have discussed differ in how they relate to health policy. While democratic constraints on vaccine mandates are obviously and directly related to vaccine policies, the link between online misinformation and vaccine policies is more indirect. By inducing vaccine hesitancy, misinformation can make voluntary vaccine policy instruments less effective, and in that way can hinder governments' ability to implement vaccine policies.

## Methods

We present evidence of the double democratic bind first with cross-country analysis. An illustrative case study of Germany then serves to unpack mechanisms, and in particular to highlight which democratic constraints may be driving the observed cross-national relationships. The case study also illustrates the implications of mis- and disinformation for vaccine hesitancy.

### Cross-Country Analysis

We look across countries to understand the influence of regime type on both the willingness of governments to enact vaccine mandates and on whether and to what extent they restrict the free flow of information on social media. We draw on a variety of data sources, described in further detail below.

*Vaccine Mandates.* We use the Oxford COVID-19 Government Response Tracker for information on vaccine mandates. The tracker codes countries on a daily basis on a number of policy responses. For COVID-19 vaccines, a country is coded as “0” if there is no requirement to be vaccinated and “1” if there is requirement to be vaccinated. This indicator is set to “missing” if there is no available data. Given that a number of countries have enacted



and then revoked COVID-19 vaccine mandates since the pandemic began, we take the average daily value as of September 2022. We also include an indicator of whether a country has ever had a mandate in place. We restrict our analysis to countries that have achieved universal vaccine access.

*Social Media Usage and Restrictions.* We draw on a new source of data describing the intersection between politics and social media in countries around the world, the Digital Society Project (DSP), which is based on a survey of experts engaged by the Varieties of Democracy (V-Dem) initiative. The DSP consists of 35 questions and covers 179 countries from 2000 to 2021.<sup>4,5</sup> We consider four variables:

1. *Average people's use of social media to organize offline action.* Experts code how frequently this occurs, on a scale from 0 (never, or almost never) to 4 (regularly).
2. *Government social media monitoring.* Experts code how comprehensive the surveillance of political content in social media is by the government or its agents, on a scale from 0 (extremely comprehensive) to 4 (not at all, or almost not at all).
3. *Government social media shut down in practice.* Experts code how often the government shuts down access to social media platforms, on a scale from 0 (extremely often) to 4 (never, or almost never).
4. *Government social media censorship in practice.* Experts code the degree to which the government censors political content on social media in practice, on a scale from 0 ("The government simply blocks all social media platforms") to 4 ("The government does not censor political social media content").

For the latter three variables, we take the inverse, such that higher values indicate more monitoring and censorship.

*Democracy.* We investigate the influence of democracy using the 2021 "regimes of the world" variable from the V-Dem dataset (Coppedge et al. 2022), which considers the competitiveness of access to power as well as liberal principles. Experts place countries in one of four categories: closed

4. The V-Dem experts span a network of more than 3,200 scholars from more than 180 countries. V-Dem typically gathers information from five experts to code each indicator. Their responses are then aggregated with a measurement model that allows for uncertainty about estimates and potential biases. For more information see <https://www.v-dem.net/about/v-dem-project/methodology/>.

5. For more information about the Digital Society Project, including a codebook with more details on the variables we examine, see <http://digitalsocietyproject.org/>.

autocracy; electoral autocracy; electoral democracy; and liberal democracy. We code countries as being democratic if they belong to either of the latter two categories.

*Control Variables.* We control for country income by using data from the World Bank's World Development Indicators (WDI) on gross national income (GNI) per capita, in current US dollars, adjusted for purchasing power parity. We also control for country population as well as population density (people per square kilometer of land area) and degree of urbanization, again using WDI data. We use data from 2021, except for population density, which is only available for 2020.<sup>6</sup>

### Illustrative Case Study

We complement our cross-national analysis with a case study of Germany, which, as we describe in further detail below, is a “typical case” that serves to illustrate general trends and unpack the mechanisms (Van Evera 1997) underlying the double democratic bind. Germany's 2021 score on V-Dem's Liberal Democracy Index is 0.822, placing the country in the 95th percentile of all countries scored by the index in that year. Furthermore, Germany is a very good case for unpacking the mechanisms and studying the implications of the democratic constraints on vaccine policies. A proposal for a general vaccine mandate was on the table during the pandemic, as policy makers perceived that a voluntary approach was not sufficient to reach the government's vaccine policy goals. Moreover, for some time during the process, the major political parties supported a general mandate at least in principle. Still, in the end, a proposal for a general mandate for people older than 60 was defeated in parliament. We draw on media accounts, expert reports, and secondary sources to assess which of the mechanisms described above were most consequential for this outcome, and how they operated.

For mis- and disinformation, we cannot systematically evaluate which mechanisms are at play because we do not observe a policy process, as we do for vaccine mandates. The misinformation problem is very general and applies to many policy areas, and it therefore precedes specific policy debates, whereas for mandates it is easier to observe the mechanisms in operation during the policy process. This represents a limitation of our study. We therefore discuss the democratic constraints that hinder

6. Alternate models also consider GNI data from 2020, which is available for a slightly larger set of countries.

effective regulation of online mis- and disinformation at a more general level. Importantly, we also illustrate how mis- and disinformation have implications for the vaccine policy context by inducing vaccine hesitancy.

## Cross-National Analysis

### Democracy Constrains Vaccine Mandates

Among the 154 countries that had achieved universal vaccine access in our sample, 73 enacted some sort of mandate, although the breadth of such mandates has varied considerably. As shown in figure 1, the most commonly implemented type of mandate was for people in “high-contact” professions (e.g., airport staff, educators, and health care workers). The next most common type of mandate was for state employees (government officials and military). Mandates targeting the general population were relatively rare: only 12 countries enacted a mandate targeting some subset of the general population, and just seven enacted a mandate covering all people older than 15.

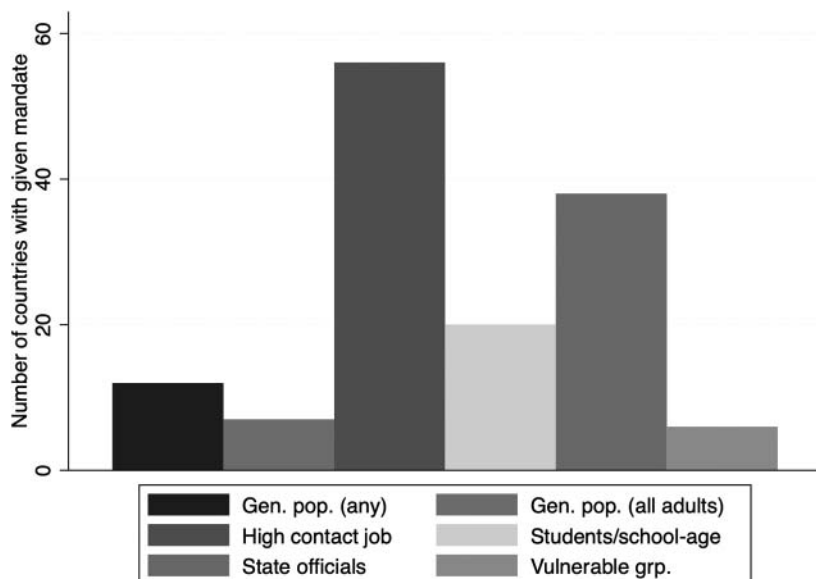
If and when countries enact mandates, there is also considerable variation in how long they are able to keep them in place. Peru had a mandate in place for just 15 days, whereas Iraq had a mandate in place for more than a year (487 days). The average mandate length is 234 days.

Statistical analysis, shown in table 1, indicates that democracies were significantly less likely to enact mandates of any kind, and that if they did enact them, such regimes also did not tend to keep mandates in place for as long. These results are robust to controlling for country income and population density.

### Democracy Facilitates Open Social Media

Table 2 provides evidence suggesting that people living in democratic regimes enjoy more open access to social media. Democracies are consistently less likely to engage in social media monitoring and are moreover less likely to censor social media or shut it down wholesale. These results are robust to controlling for country income, which captures in part the capacity that different governments have to control the online flow of information. Interestingly, richer countries are *less* likely to shut down social media, even when controlling for their democratic status.

The final two columns also show that people living in democracies take advantage of such unfettered access to social media to organize offline as well. This has important implications in our context, since, as noted above,



**Figure 1** Types of vaccine mandates across countries.

**Table 1** Democracy and COVID-19 Vaccine Mandates

	(1) Ever mandate?	(2) Ever mandate?	(3) Average mandate	(4) Average mandate
Democracy	-0.78** (0.35)	-0.90** (0.44)	-0.18** (0.07)	-0.20** (0.09)
GNI per capita (2021, log)		0.12 (0.21)		0.03 (0.04)
Population density		-0.00 (0.00)		-0.00 (0.00)
Constant	0.32 (0.27)	-0.69 (1.88)	0.45*** (0.06)	0.21 (0.38)
Observations	137	124	137	124

*Notes:* Standard errors in parentheses. Models 1 and 2 present the results of logistic regressions; the dependent variable is a dummy variable indicating whether the country has ever had a vaccine mandate. Models 3 and 4 present the results of OLS regressions. The dependent variable indicates the average value of mandate presence. All models consider countries that have achieved universal vaccine access only. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table 2** Democracy and Social Media Restrictions and Usage

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Monitoring	Monitoring	Censorship	Censorship	Shutdown	Shutdown	Organize	Organize
Democracy	-1.28*** (0.11)	-1.02*** (0.13)	-0.97*** (0.09)	-0.74*** (0.10)	-0.90*** (0.11)	-0.63*** (0.11)	0.69*** (0.12)	0.50*** (0.13)
GNI per capita (2021, log)		-0.07 (0.05)		-0.03 (0.04)		-0.09** (0.05)		0.21*** (0.05)
Population (2021, log)		0.07* (0.03)		0.06** (0.03)		0.07** (0.03)		0.12*** (0.03)
Constant	2.32*** (0.08)	1.66** (0.72)	1.28*** (0.06)	0.43 (0.55)	1.08*** (0.07)	0.55 (0.63)	2.14*** (0.09)	-1.62** (0.73)
Observations	179	158	179	158	179	158	179	158

*Notes:* Standard errors in parentheses. The dependent variable in columns 1–2 indicates the frequency of government social media monitoring. The dependent variable in columns 3–4 indicates how often the government shuts down social media in practice. The dependent variable in columns 5–6 indicates how often the government censors social media in practice. The dependent variable in columns 7–8 captures how frequently people use social media to organize offline action. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Wilson and Wisyonge (2020) have shown that the use of social media to organize offline action is highly predictive of the belief that vaccinations are unsafe, with such beliefs increasing as more organization occurs on social media.

## Mandates and Misinformation: The Case of Germany

The preceding statistical analysis lends support to our hypotheses that democracies are less likely than autocracies to enact vaccine mandates, and to censor social media or engage in social media monitoring, and thus potentially to rein in misinformation spread online. To better understand the mechanisms underlying such patterns as well as the implications of the democratic constraints, we consider Germany's experience with COVID-19 vaccination. The country did enact a limited mandate for health workers, although it was only in place for 47 days—well below the average among countries enacting such policies. Moreover, Germany's behavior with respect to social media restrictions and usage is typical for liberal democracies, as reflected by its DSP scores for *social media monitoring* (1.04 on a scale of 0–4, where 4 indicates more monitoring), *social media censorship* (0.4), and *social media shutdown* (0.11). Reflecting the limited nature of government restrictions, German citizens make great use of their free access to social media: recent estimates suggest nearly 80% of German citizens regularly use some form of social media.<sup>7</sup> The country scores a 3.6 (on a scale of 0–4) on the DSP indicator *average people's use of social media to organize offline action*, placing Germany in the 90th percentile on this indicator for liberal democracies.

In what follows, we trace the decisions and processes leading up to the decision not to introduce a general COVID-19 vaccine mandate, to identify which of the suggested mechanisms were at play and how. We also illustrate the legal constraints that the country faced in curtailing the online spread of mis- and disinformation. Finally, we discuss how the widespread vaccine mis- and disinformation in Germany had implications for vaccine policies by describing the connection between exposure to misinformation and vaccine hesitancy.

## Mandates

*Background and Timeline.* Early moves toward a vaccine mandate were made in December 2021, when outgoing chancellor Angela Merkel, in

7. <https://datareportal.com/reports/digital-2021-germany>

agreement with her successor Olaf Scholz, suggested that additional measures to increase vaccination rates were needed. This was a break with the previous position of Merkel's outgoing government, which had ruled out a mandate (Henley 2021). But as Germany was hit hard by the fourth wave of the pandemic in November 2021, politicians started to consider more coercive measures, including a vaccine mandate that was suggested by some state premiers (DW 2021b). Scholz said already in late November that he wanted to launch mandatory vaccinations in February (von der Burchard 2022), and Merkel was reported to have told a meeting of Christian Democratic leaders that "the current rules are not enough" (DW 2021a). At the time, Germany had one of the lowest vaccination rates in Western Europe: 68% of the population had been fully vaccinated, which according to experts was to blame for the fourth wave (Henley 2021). In December, it was decided that a vaccine mandate for certain health and care workers would be implemented from mid-March 2022 (DW 2022a). On January 26, 2022, a general mandate was debated in the Bundestag (Germany's federal parliament) with the purpose not of making a decision but to discuss the issue (DW 2022b). By that time, it was clear that Germany would miss the target of 80% vaccinated by the end of January (Murray 2022). On April 7, the Bundestag voted on a proposal for a mandate that would have required all residents older than 60 to be vaccinated (already a watered-down version, from proposals that would have affected all adults). The proposed mandate was rejected, with 378 votes against and 296 in favor. This was seen as a major blow to the governing coalition consisting of the Social Democrats, the Greens, and the Free Democrats as well as to Scholz himself (DW 2022c).

*Democratic Constraints.* We first consider the legal constraints in the German case. The German Basic Law states in article 2 (on personal freedoms), paragraph 2, that "every person shall have the right to life and physical integrity." At the same time, the Law on Protection against Infection provides for restrictions on the right to physical integrity to prevent communicable diseases, including mandatory vaccinations. Vaccine mandates would thus have to strike a delicate balance and would have been sent to the Federal Constitutional Court for review (Tonti 2020). It seems unlikely, however, that legal constraints were the main reason for a vaccine mandate not being enacted in the German case. Although mandates are a "constitutional grey area" in Germany, it has been argued that they could, in fact, be constitutional (Tonti 2020). The Federal Constitutional Court did uphold the mandate for health workers when it was challenged (DW

2022d). This court also previously upheld the requirement for all children attending kindergarten or childcare facilities to be vaccinated against measles (More 2022).

Next, we look into whether the rejection of vaccine mandates in the Bundestag was a result of public hostility to such mandates. In December 2021, surveys showed that most Germans would actually support vaccine mandates, with 63% being in favor and less than a third of respondents opposed to such measures (DW 2022d). Even by the time of the vote in parliament in April 2022, 60% of Germans supported a vaccine mandate (DW 2022c). This suggests that the electoral accountability mechanism did not play a major part in the decision: if policy makers had followed general public opinion on this issue, the outcome would have been different. Indeed, at the decision debate on April 7, MP Janosh Dahmen (Greens) argued that the Bundestag “had a responsibility to listen to the majority of Germans who have come out in support of the vaccine mandate” (DW 2022c).

Although a majority supported mandates, there were some who strongly opposed them, leading to the question of whether the proposal was blocked by a vocal minority. Indeed, as proposals for mandatory vaccination were presented, protesters mobilized against them (Mailliet and Spicer 2022). There are, however, no obvious indications that it was the vocal-minority mechanism that ultimately led to the rejection of the mandate. First, the antivaccine protests were met with counterprotests (Pfeifer 2022). Although these did not draw as many people as the protests against mandates (which could be partly because counterprotesters were more hesitant to gather in crowds during the pandemic), the counterprotests also drew thousands (Bahgat 2022). Politicians wishing to cater to the interests of antivaccine protesters could therefore expect resistance from another, increasingly vocal, group. It also seems that the character of the antimandate protests would work against the vocal-minority mechanism. Protests were often instigated by, and had heavy involvement of, far-right extremists (Pfeifer 2022). For most mainstream politicians, even those very concerned about protests, catering to the interests of protesters would therefore likely be politically unacceptable. Indeed, mainstream parties such as the Green Party, the Left Party, and the Social Democratic Party have in some cities organized their own counterprotests, clearly indicating an unwillingness to let the goals of protesters steer policy decisions (Pieper 2022).

To what extent was Germany’s unwillingness to enact a mandate a result of normative constraints, that is, elite-level commitment to norms about civil liberties and individual rights? A first indication that such constraints



mattered is that several senior members of the Free Democrats (FDP) argued against the mandate, making reference to enshrined individual liberties, despite the fact that the defeat in parliament was seen as a major blow to the government coalition of which FDP is a part (DW 2022c). During the debate on January 26, FDP member and vice president of the Bundestag Wolfgang Kubicki said it was problematic for the state to force citizens to get vaccinated (DW 2022b). On the day of the decision he argued that it was unconstitutional to force adults to get vaccinated and that “it is not the job of this house to protect adults against their own will” (DW 2022c). He was not alone: a group of 22 FDP lawmakers had previously drafted a proposal to block vaccine mandates (Schumacher 2022).

The above examples concern actors who spoke out against a mandate, which is what we would observe when there is a direct effect of commitment to norms on policy positions among political elites. But there can also be a more indirect effect of such a commitment. Even policy makers who might be inclined to back mandates may, because of their commitment to democratic norms, opt for an especially careful process, with indirect consequences for the final decision. When the legitimacy of the outcome may be questioned, policy makers may try to maximize the legitimacy of the process, and normatively challenging questions may therefore get a more thorough treatment, making the process both longer and more uncertain. This brings us to the procedural constraints, that is, the process leading up to the final decision and the actors involved. We can first note that the question of a general mandate was referred to the German Ethics Council, an independent body that provides expert ethical advice to policy makers and the public. The council approved a vaccine mandate for all eligible adults under certain conditions, but only by a narrow majority (DW 2021c).

The continued process indicates that procedural constraints were critical in the German case. Scholz had originally hoped that the mandate would be in place by early February (von der Burchard 2022). In January 2022, President Frank-Walter Steinmeier called for a thorough debate on mandates before a decision could be made. Highlighting the trade-off between fast, crisis-induced decision making and democratic procedures, he argued that “the exceptional situation of a pandemic increases the pressure for the state to act, but it doesn’t replace the requirement to weigh up arguments and balance interests” (DW 2022a). On January 26, the issue was debated in the Bundestag, the purpose not being to make a decision that day but to discuss the issue (DW 2022b).

Furthermore, Scholz decided to keep the decision-making process unusually open, with little top-down steering. Instead of letting his cabinet

bring a proposal forward, he let the MPs take the lead, and he allowed them to vote their conscience rather than following the party line (von der Burchard 2022). As the choice of procedure was criticized for causing delays by leaders of the Christian Democrats (who then, in January, publicly backed a vaccine mandate), Scholz defended it with reference to civil liberties, saying that vaccination is “about our bodies . . . and that’s why it’s just such a case where you should go this way” (von der Burchard 2022).

While we do not have the counterfactual, it appears that the choice of procedures significantly affected the decision to not introduce a mandate. The choice of time-consuming procedures meant that the COVID situation changed along the way. Already in mid-February 2022, it was argued that vaccine mandates were losing momentum because no decision could be expected before the spring, when infection rates were already projected to be on the decline (Oltermann 2022). Policy makers began to hesitate over mandates, and over a couple of months, the Christian Democrats went from openly backing mandates to rejecting the already watered-down proposal. Furthermore, the procedure of free votes meant that MPs from the government coalition could both argue and vote against the proposal, an opportunity taken by many. Had all 416 MPs from the government coalition parties supported the proposal, it would have won a clear majority. Instead, only 296 voted in favor of the proposal, while 378 voted against it (Alkousaa 2022).

In sum, there are strong indications that normative constraints in combination with procedural constraints explain why no general mandate was enacted in the end. Perhaps surprisingly, there are no indications that electoral accountability constraints worked against a general mandate. If anything, the electoral accountability mechanism would have worked in favor of a mandate in this case. It also seems that neither legal constraints nor protests by vocal minorities were consequential for the outcome.

### Vaccine Mis- and Disinformation

From the perspective of policy makers, the vaccine policy difficulties were all the more pronounced because voluntary approaches were not regarded as sufficient. In the following, we show how voluntary compliance with COVID-19 vaccine policies was hindered by vaccine mis- and disinformation, the online spread of which is difficult for a democracy like Germany to constrain.

*Constraints on Regulation of Online Disinformation.* It should be noted that for mis- and disinformation, we cannot evaluate all types of democratic

constraints because the policy process we trace concerns vaccine mandates. What we can see, however, is that the *legal constraints* on restricting online mis- and disinformation are strong in the German case. The first paragraph of article 5 of the German Basic Law states that “every person shall have the right freely to express and disseminate his opinions in speech, writing and pictures and to inform himself without hindrance from generally accessible sources. . . . There shall be no censorship.” While the Basic Law can be amended by a qualified majority of both the Bundestag and the Bundesrat (the country’s second federal legislative chamber), the fundamental rights specified in articles 1 to 19 cannot be removed; thus, free speech enjoys strong constitutional protection in the German case. There are some legal provisions for speech-restricting laws under some circumstances, and in 2018 a new law came into force, demanding that social media platforms delete “obviously unlawful content” within 24 hours (Heldt 2021). Importantly, however, mis- and disinformation on health issues is not unlawful and is unlikely to be regarded as such, as experts argue that “the state should not interfere by means of statutory law in concerns of truth” (Heldt 2021).

Because of the constraints on democratic governments’ interference with free speech in general and matters of truth in particular, the handling of false information is at the discretion of social media platform companies. In 2021, Meta decided to remove a German network of Facebook and Instagram accounts, pages, and groups coordinated by the Querdenken movement, which spreads online disinformation and organizes real-life protests against vaccines and COVID-19 policies more generally. The company’s head of security policy stated that this decision was motivated by these accounts engaging in “coordinated social harm,” by, for example, “promoting the conspiracy that the German government’s COVID-19 restrictions are part of a larger plan to strip citizens of their freedoms and basic rights” (Gleicher 2021). It is interesting to note how a private company has powers to combat socially harmful mis- and disinformation that the democratic state lacks.

This move by Meta must, however, be regarded as the exception rather than the rule. Frustrated by the continued spread of societally harmful mis- and disinformation as platform companies set their own standards, the European Union recently took steps toward stricter regulation. The new Digital Services Act aims to ensure that companies more forcefully monitor and remove illicit content from their platforms. However, critics question whether the law can be effectively enforced given the massive resources available to the tech giants, dwarfing the enforcement resources at the disposal of the EU (Satariano 2022).

It remains to be seen if the EU will be able to rein in social media companies. At present, however, observers deem the regulations that govern such companies in Germany to be insufficient to combat online mis- and disinformation relating to COVID-19 vaccinations (Winter et al. 2021). In the following, we address the implications of this lack of effective regulation on vaccine mis- and disinformation and vaccination intent.

*Spread of Mis- and Disinformation.* The reach of German-language mis- and disinformation on COVID-19 and COVID vaccines is extensive, and over time, more and more people have been getting information from channels that spread disinformation (Winter et al. 2021). For a study on the digital networks used by vaccine skeptics in Germany, researchers collected data from more than 1,000 relevant antivaccine groups and channels on Facebook, Twitter, Instagram, and Telegram. They showed that the popularity of these channels had grown rapidly, and between April 2020 and April 2021 they increased their follower count substantially: vaccine disinformation Facebook pages and Facebook groups grew by 21.2% and 28.5% respectively. The growth was even more spectacular for Instagram (189%) and various Telegram channels (up to 471%) (Winter et al. 2021). Furthermore, the number of individual followers on vaccine disinformation Facebook pages had, by April 2021, reached 4.5 million (Winter et al. 2021). Other reports show that the German-language branch of RT (formerly Russia Today), RT Deutsch, has managed to reach a large audience by promoting antivaccine content. Indeed, in October 2021 the Facebook page of RT Deutsch had over the past year had more interactions than any other German-language media page (including those of important outlets such as *Der Spiegel* and *Die Welt*) and had more than 600,000 followers (Schafer 2021).

*Exposure to Misinformation and Vaccine Intent.* As mentioned above, there is compelling evidence that online mis- and disinformation have real consequences for intentions to vaccinate. The German case is no exception. In their study of COVID misinformation in Germany, Leuker and colleagues (2022) assess predictors of beliefs in misinformation (measured by asking respondents to rate a range of statements as true or false) in a sample of 3,324 respondents. They find that respondents who got their COVID-19 information from social media were more likely to believe in false statements. Importantly, they find that two of the most believed false claims were that the EU has approved dangerous vaccines, and that the coronavirus infection is no worse than the flu. Such beliefs are in turn important

predictors of vaccine hesitancy (Leuker et al. 2022). Similarly, Jensen and colleagues (2021) show that within their sample of German respondents, there is a negative correlation between belief in vaccine conspiracy theories and willingness to get vaccinated.

*Vaccine Hesitancy.* Germans' willingness to get the COVID-19 vaccine has fluctuated over time, and it dropped from 79% in April 2020 to 62% in January 2021 (Jensen et al. 2021). Still, the majority of Germans were prepared to get vaccinated, and they did so once vaccines became widely available. Survey data from COVID-19 Snapshot Monitoring suggests that by the fall of 2021, however, voluntary compliance with vaccination recommendations had been exhausted, and among those still not vaccinated, resistance to vaccination was strong (COSMO 2022). This represented a problem from the point of view of the government, as voluntariness had been exhausted before the vaccination goal was reached. Willingness to vaccinate among the unvaccinated had already dropped significantly when the proportion of the population that was fully vaccinated was still below 70% (Mathieu et al. 2021).

In an interesting parallel to the fact that online disinformation has been very pronounced in German-language social media—not least with the help of RT Deutsch—*Financial Times* noted that within western Europe, German-speaking countries stood out in terms of the number of people who had yet to receive their first vaccine dose (Jones and Chazan 2021). It is beyond the scope of this study to establish a causal relationship between the two, but the spread of online mis- and disinformation—which democracies like Germany face particular challenges in regulating—poses clear challenges for vaccine policies that rely on voluntary compliance.

## Discussion and Conclusion

Although the COVID-19 pandemic has officially ended, governments face ongoing challenges in containing the spread of disease, and vaccines remain an important tool in their toolkits. Recent research suggests that COVID-19 vaccine acceptance is considerably higher in low- and middle-income countries than in the global North (Solís Arce et al. 2021). Thus, it is important to understand constraints that go beyond the availability of resources. We have demonstrated the particular challenges that democracies face when it comes to enacting coercive policies and restricting the flow of information that can undermine voluntary compliance. An important insight from our study is that we cannot take for granted that all

democratic constraints always pull in the same direction. In the German case, the electoral accountability mechanism does not seem to have prevented a vaccine mandate. If anything, it worked in *favor* of a mandate, while other democratic constraints prevented its ultimate enactment. Of course, this is not necessarily a universal tendency across democracies, and as we note, we cannot take the leaning of public opinion for granted but instead need to investigate it in each case.

Although we have focused on democratic constraints, democracies are not necessarily at a general disadvantage in handling crises. Such polities may have a larger pool of potential voluntary compliance to draw from, as suggested by studies that show that for a given level of policy stringency, people in democracies were more likely to restrict their movement and thus stem the spread of disease (Frey, Chen, and Presidente 2020). Moreover, while autocracies may have an easier time enacting more stringent measures, sustaining a draconian response can pose challenges for government legitimacy, as scholars have suggested for the case of China (Christensen and Ma 2021).

Democracies must also be careful not to take voluntary compliance for granted. It has been shown that enforcement may crowd out voluntary support for COVID-19 policies, particularly policies that intrude on people's private lives, such as vaccination (Schmelz 2021). This points to the risk of a vicious cycle if an erosion of voluntary compliance leads to more coercion, which can further hamper government legitimacy and thus undermine voluntary compliance for future public health measures.

Given the risk that increased coercion entails for the legitimacy of democratic governments, political actors may need to look to more subtle policy instruments and interventions. Recently, scholars have turned their attention to interventions that “inoculate” people against misinformation and help them debunk or even “prebunk” misleading or harmful messages about COVID-19 vaccines (Pennycook et al. 2020; Schuetz, Sykes, and Venkatesh 2021), building on efforts intended to tackle misinformation and “fake news” about a range of other politically sensitive topics (Basol, Roozenbeek, and van der Linden 2020; Chan et al. 2017; Lewandowsky and van der Linden 2021). From a democratic viewpoint, such interventions have the attractive property of empowering citizens rather than exerting power over them, as coercive policy instruments do. However, it remains to be seen if such interventions can be scaled up; and even if they can, society-level results cannot be expected to emerge in the short term.

The insights we glean from studying the democratic double bind as it relates to vaccination against COVID-19 have implications for other global

health problems that require collective action. This may be particularly urgent in situations where voluntary compliance is insufficient to reach stated policy goals, and where mis- and disinformation serve to further erode people's willingness to act voluntarily. This represents a particular challenge for polities that enshrine both civil liberties and the free flow of information.

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### Acknowledgments

This study received generous financial support from the Swedish Research Council (grant number 2018–02151). We also thank Meda Stankeviciute for excellent research assistance.

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