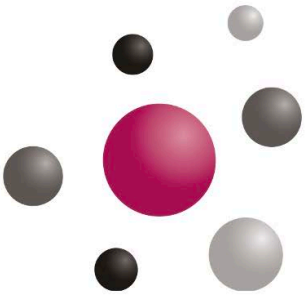

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Education, Indoctrination, and Mass Mobilization in Autocracies

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Education, Indoctrination, and Mass Mobilization in Autocracies*

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Abstract

In this article, we assess whether regime efforts at formal educational indoctrination affect mass mobilization in autocracies. While the literature often emphasizes the democratizing potential of education, mass schooling also offers a conduit for delivering pro-government propaganda aimed at indoctrinating the population. This strategy could directly affect mass mobilization by persuading citizens to support the regime or indirectly if citizens think others are persuaded. Propaganda through educational curriculum may also signal the regime's strength, thereby reducing anti-government mobilization through dominance. Thus, formal education may undermine the democratic character of mass mobilization in authoritarian settings, particularly when education has higher indoctrination potential. We test whether this is the case, drawing on a sample of autocratic spells from 1950 to 2019. We find that education indoctrination potential is associated with less mass mobilization. In particular, the evidence shows that autocracies tend to experience less intense pro-democracy mobilization and a lower probability of an anti-system movement when they invest more in educational indoctrination. By contrast, educational indoctrination policies are associated with higher mobilization for autocracy, all else equal. This suggests that formal indoctrination helps insulate autocrats from bottom-up pressures for democratization and rally support through pro-government demonstrations.

> *"...education, if it does not make men good citizens, makes it at least easier for them to become so."*
>
> —James Bryce, *South America: Observations and Impressions*

> *"If we cannot say that a 'high' level of education is a* sufficient *condition for democracy, the available evidence suggests that it comes close to being a* necessary *one"*
>
> —Seymour Martin Lipset, *Political Man: The Social Bases of Politics*

Introduction

Formal education is often linked to democratization. Early scholarship in this area emphasized the importance of mass education for inculcating values and beliefs that encourage good citizenship (Bryce 1912, 546). Building upon this, modernization theorists argue that education "increases support for democratic practices", making it a key, perhaps even *necessary*, factor linking economic development to democracy (Lipset 1960, 56–57). Often implied in these arguments is that education will encourage a mass pro-democratic revolt (Dahlum and Wig 2019). Recent studies provide some support for this, showing that countries with higher levels of education are more likely to experience peaceful anti-government mobilization (Sawyer and Korotayev 2022; Ustyuzhanin, Sawyer, and Korotayev 2023; Shaykhutdinov 2011), which is more likely to succeed and result in democratization (Stephan and Chenoweth 2008; Kadivar 2018). Combined, this suggests that as education increases, autocracies will face growing bottom-up pressures for democratic reform from peaceful protests.

Yet, education is not apolitical, and what makes a "good citizen" varies depending on the political context. Despite educational advances often being linked to modernization and democracy, the historical record suggests that the advent of mass education often preceded democracy and was driven primarily by interests in state-building and pacification (Paglayan 2021). Early efforts at mass education intentionally aimed to create the nation through a curriculum designed to stave off threats and build up a capable workforce (Paglayan 2022; Darden and Mylonas 2016). Today, autocracies continue to use formal education as a vehicle for regime indoctrination, which could undermine the formation of pro-democratic attitudes and even encourage anti-democratic mobilization.

In this article, we assess how regime efforts at indoctrination affect mass mobilization in autocracies. To preview our main argument, we draw on theories from the recent literature on propaganda to identify three causal mechanisms linking indoctrination potential in education to mass mobilization behavior (Rosenfeld and Wallace 2024; Carter

and Carter 2023, 2021; Huang 2018; Huang and Cruz 2022; Huang 2015). First, efforts at indoctrination may effectively *persuade*, producing citizens who are more subservient to the regime because they have learned the bounds of appropriate behavior and have come to accept the regime as the only legitimate form of rule. In other words, there may be cases where indoctrination is successful at norm internalization and regime legitimation. Second, even if citizens are not persuaded, their exposure to attempts at indoctrination may indirectly affect their behavior through *third person effects*. In such cases, citizens do not believe in the propaganda themselves but adjust their behaviors because they think others have been successfully persuaded. Finally, the literature also leads us to expect that the use of propaganda in schooling acts as a signal of the regime's strength. As a result, citizens will adjust their behavior out of fear or *dominance*.

To test our argument, we move beyond coarse measures of mass mobilization or protest events to evaluate whether indoctrination potential in education affects the pro- or anti-democratic tenor of mass mobilization in autocracies. To do so, we draw on several recent datasets tracking protests, mass mobilization, and educational indoctrination. Our analysis is limited to authoritarian spells from 1950 to 2019. We find that formal indoctrination policies are associated with overall less mass mobilization and in particular, less mass mobilization for democracy. Furthermore, we find that indoctrination efforts are negatively associated with maximalist anti-system campaigns aimed at changing the regime. By contrast, we find some evidence that indoctrination potential in education is associated with more mass mobilization for autocracy. While a direct assessment of the causal mechanisms falls outside our scope, we evaluate their plausibility using variables that capture the short-run and long-run effects of indoctrination potential.

The findings contribute to the literature on autocratic survival and contentious politics by drawing attention to the importance of regime indoctrination strategies. Our results provide further nuance to the literature by differentiating pro-democratic and pro-autocratic mass mobilization and identifying the mechanisms linking indoctrination efforts to mass mobilization potential. In doing so, we also contribute to the resurgence of literature on propaganda. The policy implications of our findings are complicated. Interventions designed to provide alternative information may be effective in some contexts; however, confirming whether such interventions work requires targeted micro-level research. Future studies might employ randomized-controlled trials or survey experiments to assess whether interventions designed to counteract indoctrination can be effective at shaping mass mobilization potential in autocracies.

In the sections that follow, we introduce the literature linking education to mass mobilization and explain our argument about how indoctrination complicates this relationship in autocracies. Afterward, we provide an overview of the data and methods before presenting our empirical results. The conclusion summarizes our main findings and provides additional take-aways for future research.

The Democratizing Potential of Mass Education

There is a broad consensus in the literature that education is good for democracy. Much of this literature draws on modernization theory, linking the economic and social transformations of industrialization to democratization (Lipset 1960). These works argue that development drives investments in mass education to improve the skills and quality of the workforce. Socialization as a byproduct of education leads to increased tolerance and a greater value placed on political engagement (Glaeser, Ponzetto, and Shleifer 2007; Sawyer and Korotayev 2022). In addition, education enhances citizens' critical thinking skills (Sanborn and Thyne 2014; Sawyer and Korotayev 2022), and literacy enhances their ability to monitor the regime's behavior (Murtin and Wacziarg 2014). Education also leads to upward mobility into economic sectors that require fewer working hours, providing citizens with more opportunities to participate in the political process and organize collectively (Sawyer and Korotayev 2022; Ustyuzhanin, Sawyer, and Korotayev 2023; Murtin and Wacziarg 2014; Sanborn and Thyne 2014; Dahlum and Wig 2019).

Embedded within these arguments is the notion that authoritarian regimes will experience increased bottom-up pressures for democratic reforms as their populations become more educated. Several studies support this argument, showing that education is correlated with mass mobilization (Glaeser, Ponzetto, and Shleifer 2007; Korotayev, Sawyer, and Romanov 2021; Dahlum and Wig 2019), particularly *non-violent resistance* (Sawyer and Korotayev 2022; Ustyuzhanin, Sawyer, and Korotayev 2023; Shaykhutdinov 2011). More educated individuals may be more likely to pursue non-violent action because they understand the destructive nature of violent movements, which poses greater costs due to the upward mobility they have experienced as a result of their education. Furthermore, education provides skills that could help citizens think of more creative and diverse ways to engage in non-violent action, which has been shown to promote success for non-violent movements (Chenoweth and Stephan 2011).

The link between education and non-violent resistance is all the more important given the growing body of evidence showing that peaceful mobilization is more effective and more likely to bring about democratic outcomes. In their pathbreaking study, Chenoweth and Stephan (2011) find that maximalist anti-system movements are twice as likely to succeed when they employ non-violent tactics and are significantly more likely to produce democratic regime change. Subsequent work demonstrates several pathways to democracy through non-violent resistance, including direct overthrows, coerced democratic concessions, and elite splits leading to negotiated reforms with or without leadership change (Kim and Kroeger 2019). Furthermore, non-violent resistance is associated with higher quality and more resilient democracies when compared to other modes of transition (Kadivar 2018; Bethke and Pinckney 2021; Bayer, Bethke, and Lambach 2016; Fetrati 2023).

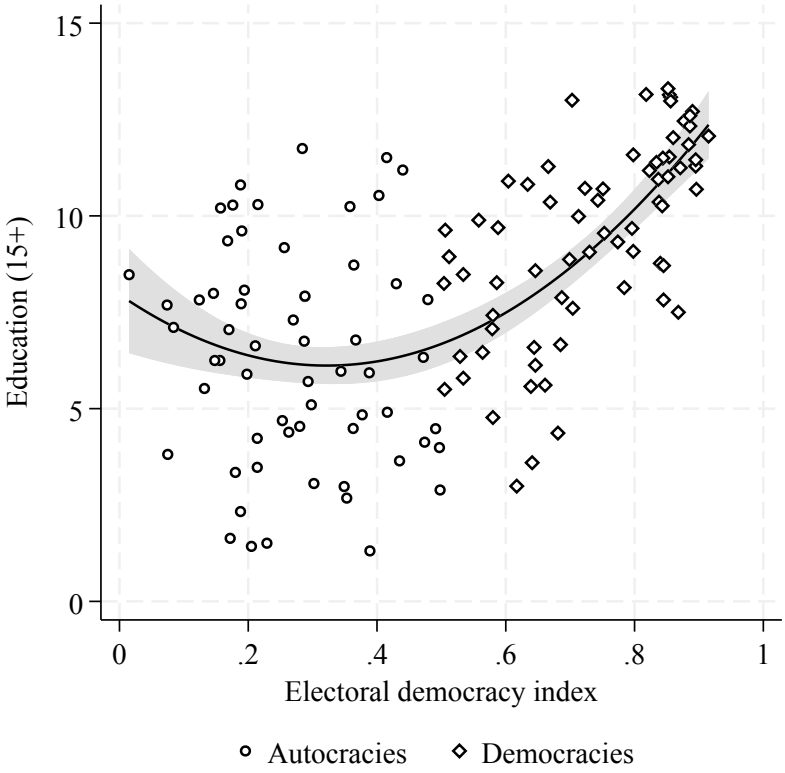

Figure 1: Education and Regime Type in 2023. (Data Source: Coppedge et al. 2024b)

One logical conclusion from this literature is that authoritarian regimes should avoid mass education to minimize bottom-up pressures for democratization. Data from 2023 tentatively support this expectation, with individuals over fifteen years old averaging about 9.5 years of schooling in democracies versus 6.3 years for autocracies.[1] Yet, as shown in Figure 1, the distribution of education is not uniform across regimes. Instead, we see evidence of a U-shaped relationship, with highly authoritarian regimes investing more in education than hybrid regimes, albeit still less than high-scoring democracies. Many stable (or at least long-standing) autocracies, such as Kazakhstan (11.7 years), Singapore (10.5 years), Cuba (10.3 years), and Belarus (10.2 years), provide extensive mass education. There is also a great deal of variation in off-the-line cases, as indicated by the spread of observations around the fitted regression line and 90 percent confidence interval. Simply put, many autocracies invest a great deal in education, despite the literature's emphasis on its risks for these regimes' longevity.

If having an educated population poses such a risk, why do authoritarian regimes invest in mass education? The literature emphasizes several economic, security, and legitimacy benefits authoritarian regimes may gain from educating their population (Paglayan

1. These numbers are based on the classification of regimes from V-Dem's Regimes of the World and data on mean years of schooling compiled by V-Dem from various sources. The difference between these two means is significant at $p<0.0001$, with a t-statistic of 6.6.

2021; Testa 2018; Harding and Stasavage 2014; Stasavage 2005b, 2005a). Mass education provides vital skills for industrialization, which helps the regime sustain itself through economic growth and taxation. Education also helps produce citizens who are better prepared for military service, thereby strengthening the security of the state. Others contend that providing free education helps give the regime a claim to legitimacy, particularly in electoral autocracies. For example, several African countries implemented universal primary education after adopting multiparty politics in the 1990s because it provided the leader or ruling party with an electoral advantage (Harding and Stasavage 2014). In other words, authoritarian regimes must balance competing trade-offs of educating their populations. If they fail to provide this essential public good, they will face economic and legitimacy challenges; however, education may also provide incentives and opportunities for mass protests demanding political reforms. One key way authoritarian regimes can balance these trade-offs is by controlling the content of education (Testa 2018).

The Stabilizing Potential of Educational Propaganda

We argue that the indoctrination potential of education is an overlooked variable in the literature on mass mobilization in autocracies. By indoctrination, we mean "the production by the education system of individuals that tend to hold beliefs and manifest behaviors that serve the purpose of the political regime" (Diwan and Vartanova 2020, 2). More specifically, "a deliberate regime-led process of socializing 'ideal-type' citizens who support the values, principles, and norms of a given regime" (Neundorf et al. 2024, 4).[2] Thus, indoctrination potential refers to the regime's efforts to disseminate coherent political education through centralized curriculum and texts that emphasize civics and the dominant ideology (Neundorf et al. 2024). Indoctrination potential in education also relies upon effective state control over teachers and teacher unions, including employment decisions. In short, indoctrination potential is the degree to which the regime effectively delivers propaganda through the education system.

Although autocracies face mobilization risks of having an educated population, they can relax these trade-offs vis-à-vis other benefits by including propaganda in the education curriculum (Testa 2018). Furthermore, indoctrination often serves as a primary goal when expanding access to education. For example, Paglayan (2022, 1242) shows that after the 1859 Chilean civil war, "the central government responded by expanding primary schooling in rebel provinces not as a concession but to teach obedience and respect for authority." Meanwhile, fascist ruling parties were more likely to centralize

2. The word indoctrination originated as a synonym for instruction or teaching borrowing from the Latin word *doctrīna* (Oxford English Dictionary 2024), but after World War II, it took on a new meaning associated with attempts at political brainwashing (Neundorf et al. 2024). As such, a large literature in educational philosophy and pedagogy focuses on the ethics of instruction and avoidance of indoctrination.

primary education systems with the aim to "reshape society in their own image, and to promote a new national consciousness" (Ansell and Lindvall 2013, 506). Research elsewhere suggests that authoritarian regimes respond to international threats by expanding mass education to promote loyalty and nation-building, such as through shared language (Darden and Mylonas 2016). Therefore, where indoctrination potential in education is higher, we expect to find less mass resistance to the regime and more pro-authoritarian mobilization. In particular, we emphasize three core mechanisms from the literature on authoritarian propaganda: persuasion, third-person effects, and domination.

Persuasion

Persuasion occurs when the regime is successful at indoctrination. Through mass education, individuals learn the appropriate bounds of behavior, internalize norms about political participation, and come to accept the status quo. To be effective at persuasion, propaganda must be subtle enough to avoid detection (Carter and Carter 2023; Rosenfeld and Wallace 2024). If propaganda is too obvious and frequent, audiences will become aware of the attempt to manipulate their beliefs and persuasion will fail (Yu 2021). As such, autocracies deliver propaganda alongside fact-based information, sometimes including reports of regime failures (Carter and Carter 2023).

We argue that mass education provides an ideal venue for disseminating propaganda designed to persuade. Educational curriculum can easily combine neutral information with pro-regime propaganda, especially in contexts where the regime has more centralized control over textbooks and the selection of teachers. For example, in communist Poland, "Spreading propaganda messages all over books instead of concentrating them in separate sections was praised and demanded by policy- makers" (Wojdon 2017, 3). The USSR required that all nonfiction books include references to Stalin's genius under the premise that "History, politics, economics, geography, linguistics and even chemistry, physics and genetics were said to be inadequately studied unless they incorporated his guiding ideas" (Service 2006, 545). In North Korea, primary and secondary school textbooks on morals (*Todŏk*) combine messages about etiquette, such as speaking on the phone, and social ethics, like obeying traffic signals, with heavy handed propaganda designed to build a cult of personality around the Kims and promote socialist nationalism (Lee 2024). In addition, even obvious propaganda may be effective at persuading when delivered through mass education. In school, children receive information from a figure with power to affect their futures if they do not assent to the pro-regime narrative. For example, evidence shows that children are more vulnerable to accepting information as true when it comes from an authority figure, even if they would otherwise detect the falsehood (Shtulman 2023).

The literature generally supports the argument that mass education in autocracies has a persuasive effect on the population's attitudes and behavior. Individuals educated

in authoritarian regimes "are less prone to civic action, less willing to vote, more willing to obey authority, and less trustful of the benefits of democratic systems, compared to individuals educated in democratic countries" (Diwan and Vartanova 2020, 2). Education under communist regimes in Europe is associated with weaker support for democracy and capitalism (Pop-Eleches and Tucker 2014; Alesina and Fuchs-Schündeln 2007), and communist parties were more likely to retain power after the transition in countries where mass education was first introduced under communism (Darden and Grzymala-Busse 2006). In Nazi Germany, evidence suggests that schooling was more effective at indoctrinating antisemitic attitudes than radio or film (Voigtländer and Voth 2015). More recently, scholars provide evidence that Chinese educational curriculum produces more regime-compliant attitudes and behavior, including higher participation in communist political organizations, which could translate into pro-regime mobilization (Cantoni et al. 2017).[3] In Taiwan, individuals with longer exposure to indoctrination curriculum are less likely to vote, more likely to support the former ruling party (Kuomintang), and more likely to identify as Chinese rather than Taiwanese (Bai and Li 2020).

Based on this literature, we expect that when educational indoctrination succeeds at persuading the population of the regime's legitimacy, individuals will be less prone to engage in collective action. In particular, persuasion should reduce the rates of pro-democracy and anti-system mobilization. By contrast, however, persuasion should result in more frequent and intense mobilization for autocracy because the population has bought into the regime's narrative.

Third-Person Effects

When propaganda fails to persuade, individuals may still adjust their behavior in regime-compatible ways if they believe others have been effectively persuaded. The literature on mass communication and public opinion refers to this as the *third-person effect*. According to Davison (1983, 3), who first identified the third-person effect,

> individuals who are members of an audience that is exposed to a persuasive communication (whether or not this communication is intended to be persuasive) will expect the communication to have a greater effect on others than on themselves. And whether or not these individuals are among the ostensible audience for the message, the impact that they expect this communication to have on others may lead them to take some action. Any effect that the communication achieves may thus be due not to the reaction of the ostensible audience but rather to the behavior of those who anticipate, or think they perceive, some reaction on the part of others.

3. In general, more educated Chinese citizens are also less likely to engage in protests, but this may be linked to upward mobility rather than indoctrination (Ong and Han 2019).

Over the past forty years, scholars have established robust support for the third-person effect, particularly when it comes to perceptions; however, less is known about the direct causal effects on behavior (Perloff and Shen 2023).

In authoritarian regimes with higher indoctrination potential in education, the third-person effect could influence protest behavior by altering perceptions about the opportunities for protest success (Kurzman 1996). Individuals will expect fewer people to participate in protests that challenge the status-quo if they think others have been persuaded by the regime's indoctrination. The success of anti-system mobilization is often a function of the number of participants (Chenoweth and Stephan 2011), thus third-person effects of indoctrination could make individuals more pessimistic about the risks and opportunities for success of anti-regime protests. As a result, fewer people will participate in anti-regime and pro-democracy protests, creating a self-fulfilling prophecy. For example, Huang and Cruz (2022) find that Chinese respondents report a lower willingness to engage in anti-government protests if they think exposure to regime propaganda makes others less unwilling to protest.

By contrast, third-person effects may have the opposite result for pro-government mobilization. Individuals who believe others are convinced by the educational indoctrination will expect higher turnout at pro-regime events and this may convince them to also participate if doing so helps them avoid being repressed, thus, avoid the cost of non-participation. Participation in pro-regime rallies may also provide certain material benefits. Evidence suggests that ruling elites often act as brokers orchestrating pro-regime rallies through their clientelistic networks (Szwarcberg 2014; Kang and Petrova 2024). In doing so, elites demonstrate their loyalty and capacity to mobilize for the regime while the masses who participate in these rallies receive benefits through clientelistic exchange. Thus, individuals may feel that their access to jobs and other opportunities is conditional upon continued demonstrations of loyalty through participation in pro-regime rallies. The "fear of missing out" on these benefits is likely stronger when third-person effects are present because the individual believes others are persuaded by the regime's propaganda and will turn out for the rally.

Finally, research shows that involvement in social movements is largely driven by network relations and direct recruitment: "being asked by people one knows is a strong predictor of movement participation" (Walgrave and Wouters 2014, 1672; also see Schussman and Soule 2005). For anti-system movements, third-person effects disrupt the recruitment cycle by introducing uncertainty within networks about whether individuals have been indoctrinated, thereby raising the risks of direct recruitment. As such, third-person effects exacerbate the already severe collective action problems for pro-democracy mobilization in autocracies.

Domination

A third and final causal mechanism comes from recent studies emphasizing the role of propaganda as a signal of state strength used for *domination* rather than persuasion (Carter and Carter 2023). This work draws on the fact that authoritarian regimes often produce propaganda that is intentionally obvious to demonstrate the regime's capacity and deter resistance. Rather than working to change minds through subtle messages, propaganda often borders on absurdity. For example, Idi Amin of Uganda, who went by the inflated job title – "His Excellency President for Life, Field Marshal Al Hadji Doctor Idi Amin, VC, DSO, MC, CBE, Lord of all the Beasts of the Earth and Fishes of the Sea, and Conqueror of the British Empire in Africa in General and Uganda in Particular" – often staged photo-ops to project "the appearance of strength and moral clarity" that "deliberately obscured how most ordinary Ugandans experienced military rule" (Taylor et al. 2021, 416). Yahya Jammeh of the Gambia made radical claims that he would rule for "a billion years" and had discovered the cure for infertility (BBC News 2011). In North Korea, the state spread stories of Kim Jong-il's ability to control the weather and teleport (Crabtree, Kern, and Siegel 2020). Turkmenistan's President Gurbanguly Berdimuhamedov and Uganda's President Yoweri Museveni have used social media to share comedic videos of themselves working out and performing rap songs.

For this reason, scholars sometimes make the distinction between "soft" and "hard" propaganda. Whereas "soft" propaganda is subtle and designed to persuade by blending pro-regime narratives with facts and entertainment, "hard" propaganda is more obvious in its attempt to spread a mythology of the regime's strength and accomplishments. While obvious and often absurd, hard propaganda communicates the state's strength, and by "[forcing] people to repeat nonsense", it is effective at (de)mobilizing citizens through compliance rather than persuasion (Guriev and Treisman 2022, 71–73).[4] For example, in the case of Syria, Wedeen (1999) shows that individuals participate in pro-regime rallies out of compliance rather than true belief in the cult of Assad. Through participation in public rituals, individuals act "as if" the myth were real, and these rituals serve to reinforce guidelines of appropriate behavior by signaling the regime's strength. Furthermore, Wedeen's (1999) interviews revealed that even those who disseminate this propaganda sometimes acknowledge that they hold different views or convictions but nevertheless engage in the activity to avoid sanction and reap rewards from the regime. More recently, survey experiments in China and Venezuela, show that individuals exposed to "hard" propaganda are less willing to participate in protests, even as this form of propaganda erodes confidence and legitimacy of the regime (Huang 2018; Lutscher and Donnay 2024). Furthermore, Carter and Carter (2023, 442) find that where propaganda

4. We are not oblivious to the question of the difficulty of distinguishing between those who have been successfully indoctrinated from those who alter their behaviors out of compliance. However, because the observable implications are identical, this distinction goes beyond the scope of the present study.

is "most effusive and most threatening", the negative effects on popular protest are strongest.

Mass education allows authoritarian regimes to manipulate individuals into parroting the official narrative, even when it is obviously exaggerated or fabricated, because educational performance is linked to life prospects and upward mobility through exam scores and grades. The ideological content of education also signals to students appropriate bounds of behavior for success in the given society, such that they are discouraged from actions that directly oppose the regime, and the coherency of this ideological message reinforces the state's ability to repress anyone who disagrees. As such, authoritarian regimes often infuse educational curricula with obvious or "hard" propaganda to establish compliance. For example, Turkmenistan's leader Saparmurat Niyazov made his first book required reading in all schools and universities, claiming that "any student who read his book at least three times would automatically go to heaven" (Crabtree, Kern, and Siegel 2020). Under Narendra Modi's premiership, education in India has become more right-wing and Hindu-nationalist, with textbooks in Rajasthan discussing the benefits of the BJP's various schemes and one twelfth-grade history text in Gujarat openly praising Mussolini and Hitler (Traub 2018). These are obvious attempts at propaganda that may persuade some, but ultimately signal the regime's capacity to alter historical narratives even with a decentralized education system.

Thus, when educational indoctrination attempts are obvious and fail to persuade, this can still have discernable effects on mass mobilization that benefit the regime. In particular, those exposed to "hard" propaganda through education will be less likely to engage in protests, particularly those that challenge the regime, because they anticipate a strong repressive response. Meanwhile, individuals may be more inclined to participate in pro-regime rallies out of fear that they will experience repression for staying home.

Empirical Expectations

In general, we expect that all three mechanisms outlined above – persuasion, third-person effects, and domination – could be at play. Within any given society, there may be a combination of individuals who are persuaded to support the regime and those who are not persuaded but nonetheless adjust their behavior in regime-compatible ways because of third-person effects or fear of repression. Thus, our goal in this article is not to assess the relative weight of these mechanisms, but rather to test for the general relationships between mass mobilization and educational indoctrination potential within autocracies.

Indeed, all three mechanisms result in the same observable implications for mass mobilization. In particular, generalized mass mobilization should be lower where the state has higher indoctrination potential through education (H1). More specifically, anti-system mobilization should be lower because individuals who are persuaded will not participate

and those who are not persuaded will stay home because of the higher anticipated risks involved due to third person effects or fear of repression (H2). Conversely, we expect to see higher rates of regime-aligned mobilization when indoctrination potential in education is higher, because persuasion has been successful, third-person effects create peer pressures to participate, or dominance signaling increases the anticipated costs of repression for staying home (H3).

Data and Methods

We employ cross-national time series data covering ninety-seven countries from 1950 to 2019. We limit our analysis to country-years classified as autocratic using the binary regime classification from the Regimes of the World (RoW) in the Varieties of Democracy (V-Dem) dataset (Lührmann, Tannenberg, and Lindberg 2018; Coppedge et al. 2024b). Autocratic country-years fail to meet minimum standards on a core set of democratic institutions and practices first outlined by Dahl (1971). In the appendix, we also report results excluding ambiguous cases from the RoW measure and incorporating alternative measures from Boix, Miller, and Rosato (2013). Because of the cross-national time-series nature of our data, we estimate linear regression models with country-fixed effects and country-clustered robust standard errors. In the appendix, we also report models with year-fixed effects. Table 1 provides summary statistics for the variables used in our main models.

Table 1: Summary Statistics for Variables in Main Models

	Mean	SD	Min	Max
Mass mobilization	0.45	0.17	0.00	1.00
Mobilization for democracy	0.38	0.18	0.03	1.00
Mobilization for autocracy	0.40	0.18	0.05	1.00
Indoctrination potential (t_{-1})	0.61	0.22	0.01	0.93
Indoctrination potential (stock)	0.54	0.22	0.01	0.93
Education 15+	4.53	2.81	0.06	11.75
Freedom of Association (t_{-1})	0.34	0.25	0.01	0.90
Personalism	0.62	0.17	0.12	1.00
Corruption (t_{-1})	0.61	0.24	0.01	0.97
Repression (t_{-1})	0.37	0.24	0.01	0.96
Election year	0.24	0.43	0.00	1.00
GDP per capita (t_{-1})	4.79	5.55	0.29	71.39
GDP growth (t_{-1})	0.02	0.05	-0.49	0.39
Population density	0.02	0.08	0.00	1.11
Urbanization	0.40	0.22	0.02	1.00

N=4,062. Countries=97. Years= 1950-2019.

Dependent Variables: Mass Mobilization

We operationalize our main dependent variables for mass mobilization using data from the V-Dem expert survey on Civic and Academic Space, fielded as part of the V-Dem annual data collection cycle (Hellmeier and Bernhard 2023). These data provide comparatively greater longitudinal leverage than other protest or mass mobilization datasets.[5] As part of this survey, experts provided their subjective ratings of the intensity of mass mobilization, defined as the frequency and size of mass citizen action through demonstrations, strikes, and sit-ins. The data includes measures of general mass mobilization, mobilization for democracy, and mobilization for autocracy. Thus, they allow us to estimate the potentially divergent effects of indoctrination on the intensity and nature of mass mobilization. The scores provide an expert-based interpretation of events on the ground, which avoids some of the reporting biases found in more events-based datasets on protests that primarily rely upon journalistic accounts through online web-scraping (Mueller 2018). In particular, we are concerned that media-based accounts of protests in authoritarian regimes will be skewed in the regime's favor or under-reported due to a lack of sufficient independent media penetration, particularly for events-based datasets relying heavily upon Western media sources.

Each indicator is scored on a range from zero (virtually no events) to four (many large-scale and small-scale events). V-Dem uses a measurement model to aggregate individual expert responses into a point estimate of the true value for each indicator and also reports an uncertainty interval of possible high and low values (Pemstein et al. 2024). We use the point estimates from this model as our main dependent variables and have rescaled them to a 0-1 interval so that they map onto the scales for our independent variables of interest.[6] As reported in Table 1, the average for general mass mobilization is 0.45, mobilization for democracy is 0.38, and mobilization for autocracy is 0.40 for our estimation sample. All three variables have a fairly normal distribution, with standard deviations of 0.17 for general mass mobilization and 0.18 for both mobilization for democracy and mobilization for autocracy.[7]

It is important to note that each of these indicators is scored separately by the same group of experts. As a result, the general mass mobilization variable likely picks up

5. The entire coverage is from 1900 to 2019; however, we start our analysis in 1950 due to other covariates of interest.

6. The point estimates from the measurement model take on an approximate z-score distribution. The general mass mobilization variable ranges from -3.56 to 4.00, with a mean of -0.18. Meanwhile, mobilization for democracy averages -0.34, with a range of -3.11 to 4.71. Finally, the mobilization for autocracy indicator ranges from -2.19 to 4.67, with an average of 0.35. By rescaling into a 0-1 interval based on the min/max, we are also able to place variables on similar scales for comparisons.

7. See Figures A1, A2, and A3 in the appendix.

on mobilization events unrelated to democracy and autocracy.[8] In addition, the structure of the data makes it difficult to assess sequencing in mobilization actions, such as pro-democracy protests being followed up with pro-autocracy rallies or vice versa. These variables do not tell us whether the mass mobilization was successful at achieving its goals, nor whether the mobilization was violent or peaceful. The data also do not specifically indicate whether the mobilization was pro- or anti-government. Because we are working with a sample of autocratic country-years, we interpret mobilization for democracy as explicitly anti-regime. We also sometimes imply that the results of mass mobilization for autocracy represent pro-regime movements, but we acknowledge that experts could include rallies that are anti-democratic and anti-regime in this variable. Overall, the longitudinal coverage and emphasis on pro-democratic or pro-autocratic mobilization means that these data have a relative advantage over more noisy events-based datasets. In short, these main outcome variables allow us to assess the association between indoctrination and the intensity and nature of mass mobilization in a given country-year.

Independent Variables: Indoctrination

Our main independent variables of interest come from the Varieties of Indoctrination (V-Indoc) dataset produced by the DEMED project based on an expert survey in 160 countries from 1945 to 2021 (Neundorf et al. 2024). We use a composite index capturing the potential for indoctrination in primary and secondary education, comprised of two main sub-indices capturing political effort and indoctrination coherence in education based on nine indicators directly scored by expert coders. The indicators capture a range of indoctrination tactics, including political education in primary and secondary school, ideology in the history curriculum, centralization of curriculum and textbooks, teacher autonomy in the classroom, independent teacher unions, and political hiring and firing of teachers. More details about the aggregation methods and coding procedures are available through the V-Indoc Codebook (Neundorf et al. 2023). Within our estimation sample, this variable ranges from 0.01 to 0.93, with an average of 0.61. We lag this index by one year to account for endogeneity.

We assess whether there is a longer lag between the adoption of indoctrination policies and changes in mobilization behavior. Over time, as generations achieve education, the effects of indoctrination potential on mass mobilization should accumulate within society, particularly when it comes to the persuasion and third-person mechanisms. Our modeling strategy accounts for this longer-run process by using a stock measure of the indoctrina-

8. Figures A4, A5, and A6 in the appendix illustrate the correlation between our dependent variables. We also regressed general mass mobilization on mobilization for democracy and mobilization for autocracy using a country-fixed effects model with robust country-clustered standard errors. This model achieved a within-country R^2 of 0.56, suggesting that there is still considerable variation in the general mass mobilization measure unaccounted for by democratic and autocratic mobilization.

tion index. This measure is essentially a weighted cumulative sum of all past values since 1945 (or the first available observation).[9] We assume that educational indoctrination has generational effects and weight the stock accordingly based on a 10 percent annual depreciation (see Bernhard and Edgell 2022). For interpretation purposes, we rescale this measure to a 0-1 interval using the maximum possible value for the observed series. The indoctrination stock variable ranges from 0.01 to 0.93, with an average of 0.54. The level and stock variables are highly correlated at 0.87, making it difficult to estimate comprehensive models including both variables without concerns for multicollinearity; therefore, we present separate models for each variable.[10]

Biases in Expert Data?

Functionally, our dependent and independent variables capture expert assessments of mass mobilization and indoctrination potential, respectively. This raises concerns about potential biases among expert coders. Both V-Dem and V-Indoc use extensive vetting procedures to ensure that expert coders are reliable, qualified, and free from government influence. Nevertheless, some experts may be more biased than others, something that both projects address through extensive methodological procedures that account for expert uncertainty and variation in the interpretation of response scales (Coppedge et al. 2024c; Neundorf et al. 2024).

Another concern may be that the V-Indoc data uses the V-Dem infrastructure to implement their survey and the V-Dem measurement model procedures to aggregate expert responses. However, we are less concerned about this because the experts used for V-Indoc are not the same as those participating in the annual V-Dem surveys (see Neundorf et al. 2024). Instead, V-Indoc recruited experts through a separate process that focused specifically on expertise in education policy. Therefore, while there may be some incidental overlap in the experts who coded the V-Indoc and V-Dem variables, this overlap should not be considerable enough to warrant concerns about tautology due to the same experts making judgments on both sides of the equation.

We attempt to mitigate concerns about biases among expert coders by running additional models using observational data for both the outcome and predictors. As alternative outcome measures, we run robustness tests using data from the Nonviolent and Violent Campaigns and Outcomes (NAVCO) project tracking maximalist resistance

9. This builds upon methods introduced by Gerring et al. (2005) measuring democratic stock, more recently adapted to the V-Dem data by Edgell et al. (2020).

10. In part, the high levels of correlation are driven by nature of indoctrination, which lends itself to a slow-moving, rarely-changing variable. Countries adopt policies, which then tend to remain in place for a period without much change until the next political opening. When we estimate a model including both the lagged level and the stock (Table A1, both indoctrination measures are non-significant for the mobilization for democracy model. However, in the mobilization for autocracy model, indoctrination levels remains significant while stock is not significant.

campaigns aimed at overthrowing the existing government, achieving independence from a foreign occupier, or seceding from an independent state (Chenoweth and Shay 2020; Stephan and Chenoweth 2008). NAVCO uses a consensus model among coders to classify these data from 1900 to 2019. The NAVCO data allow us to narrow our analysis to movements that are explicitly anti-system and maximalist in nature, thus providing more insights into mobilization that is likely to threaten the stability of the regime. Using these data, we are also able to address the relationship between education indoctrination potential and violent vs. nonviolent mobilization strategies. In addition, we use an alternative measure of indoctrination produced by the Education Policies and Systems Across History (EPSM) project (Del Río, Knutsen, and Lutscher 2024). EPSM uses official government documents and secondary literature to evaluate education policies, which are then hard-coded by the research team. In particular, we use a binary measure coding whether national laws require regime ideology or leader-specific ideology training.

These alternative measures provide an additional check on the expert-coded results by introducing human-coded data using a more traditional approach. The convergence of results across multiple measures with different data collection processes provides additional robustness to the findings. However, we acknowledge that our alternative measures are not free from their own potential biases due to judgments by the respective research teams, such as decisions about what constitutes a campaign or indoctrination policy.

Control Variables

We control for several other factors that may affect mass mobilization. First, we include average years of schooling for the population that is fifteen years or older from the V-Dem dataset, originally coded from various sources (Coppedge et al. 2024b; Coppedge et al. 2024a). This allows us to account for the independent effects of education on mass mobilization, as discussed in the literature. Education levels range from 0.06 to 11.75, with a mean of 4.53 years.

Second, we account for variation in autocratic regimes using several measures from the V-Dem dataset. The extent to which the regime allows civil society and political parties to operate may affect mass mobilization because such organizations provide venues for collective action and planning. Therefore, we include the V-Dem freedom of association index, which ranges from 0.01 to 0.90, with an average score of 0.34 for our sample. We also control for whether the regime relies on personalist appeals for legitimacy using a variable from V-Dem. Similar to our outcome measures, this variable is based on point estimates from the measurement model, which we rescaled to range from zero to one, with a mean of 0.62 (Tannenberg et al. 2021).[11] Higher levels of regime corruption may lead to greater mass mobilization as citizens express their dissatisfaction. To account for this,

11. The original variable ranges from -2.60 to 3.58, with an average score of 0.94 for our sample.

we include the V-Dem corruption index (McMann et al. 2016), ranging from 0.01 to 0.97 with an average of 0.61 in our sample. We also include the V-Dem physical violence index as a proxy for political repression, which likely leads to lower mass mobilization out of fear for reprisals. This variable ranges from 0.01 to 0.96, with an average of 0.37. Finally, we include a control variable for whether it was an election year, as mass mobilization is likely to increase around elections. About 24 percent of the country-years in our sample are election years.

Third, we control for several other socio-economic features that may affect mass mobilization. We account for overall levels of wealth using GDP per capita and annual GDP growth rates (in millions) using estimates from Fariss et al. (2022) as reported in the V-Dem dataset (Coppedge et al. 2024a; Coppedge et al. 2024b). GDP per capita ranges from 0.29 to 71.39, with an average of 4.79. GDP growth rates average +2 percent, with a range of -49 percent to +39 percent. We expect that higher levels of wealth will be associated with more mass mobilization and mobilization for democracy. By contrast, when the economy is doing well as proxied by GDP growth, we might see fewer mass mobilization events. Finally, we account for population dynamics by including controls for population density and urbanization. We calculated population density using population estimates from Fariss et al. (2022) and land area estimates from Schvitz et al. (2022), as reported in the V-Dem dataset. Population density ranges from near 0 to 1.11, with an average of 0.02. Urbanization data comes from HYDE 3.3 estimates, which we accessed via Our World in Data (Klein Goldewijk et al. 2017; Ritchie, Samborska, and Roser 2024). This variable ranges from 0.02 to 1.00, with an average of 0.40.

Results

Table 2 reports results when estimating general mass mobilization intensity from V-Dem as the dependent variable. While the coefficients for education indoctrination potential suggest an overall negative relationship with mass mobilization, they fail to achieve statistical significance at conventional levels ($p<0.10$). This suggests that contrary to H1, indoctrination is not significantly correlated with general mass mobilization on average. However, in line with the literature, we find a positive association between education levels and mass mobilization. For each additional year of average schooling for ages 15+, the mass mobilization variable increases by about 0.024.

Several other covariates perform as expected in Table 2, indicating that the expert-based mass mobilization measure is valid. In particular, freedom of association and election years are positively correlated with mass mobilization, while personalism and GDP growth show a negative association. These models suggest that the relationship between overall levels of wealth as measured with GDP per capita is not robust. However, population density appears to have a negative association with mass mobilization.

Table 2: Estimation Results: General Mass Mobilization

	(1)	(2)
Indoctrination potential (t_{-1})	−0.063	
	(0.062)	
Indoctrination potential (stock)		−0.035
		(0.049)
Education 15+	0.024***	0.024***
	(0.007)	(0.006)
Freedom of association (t_{-1})	0.208***	0.204***
	(0.034)	(0.034)
Personalism	−0.124**	−0.117**
	(0.055)	(0.054)
Corruption (t_{-1})	−0.034	−0.040
	(0.045)	(0.044)
Repression (t_{-1})	−0.043	−0.046
	(0.045)	(0.045)
Election year	0.020***	0.020***
	(0.004)	(0.004)
GDP per capita (t_{-1})	0.004*	0.004
	(0.002)	(0.002)
GDP growth (t_{-1})	−0.268***	−0.276***
	(0.067)	(0.069)
Population density	−0.711***	−0.657***
	(0.188)	(0.193)
Urbanization	−0.036	−0.034
	(0.085)	(0.085)
Constant	0.409***	0.430***
	(0.052)	(0.058)
R^2 overall	0.10	0.10
R^2 within	0.26	0.27
R^2 between	0.01	0.00
AIC	−7178.73	−7188.44
BIC	−7109.32	−7119.03
N	4062	4062
Countries	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table 3: Estimation Results: Mobilization for Democracy and Mobilization for Autocracy

	Mobilization for Democracy		Mobilization for Autocracy	
	(1)	(2)	(3)	(4)
Indoctrination potential (t_{-1})	-0.103^{**}		0.245^{***}	
	(0.052)		(0.062)	
Indoctrination potential (stock)		-0.087^{*}		0.117^{**}
		(0.047)		(0.049)
Education 15+	0.017^{***}	0.019^{***}	0.003	0.004
	(0.006)	(0.006)	(0.006)	(0.006)
Freedom of association (t_{-1})	0.187^{***}	0.188^{***}	-0.038	-0.058
	(0.031)	(0.031)	(0.041)	(0.045)
Personalism	-0.174^{***}	-0.188^{***}	0.251^{***}	0.279^{***}
	(0.054)	(0.054)	(0.050)	(0.056)
Corruption (t_{-1})	0.039	0.048	0.020	-0.004
	(0.038)	(0.040)	(0.046)	(0.058)
Repression (t_{-1})	-0.049	-0.043	-0.064^{*}	-0.079^{**}
	(0.035)	(0.034)	(0.037)	(0.039)
Election year	0.020^{***}	0.020^{***}	0.005	0.004
	(0.004)	(0.004)	(0.004)	(0.004)
GDP per capita (t_{-1})	0.005^{*}	0.005^{**}	-0.001	-0.002
	(0.002)	(0.003)	(0.002)	(0.002)
GDP growth (t_{-1})	-0.199^{***}	-0.179^{***}	-0.148^{***}	-0.176^{***}
	(0.055)	(0.056)	(0.054)	(0.051)
Population density	-0.437^{**}	-0.516^{**}	-0.147	0.069
	(0.192)	(0.206)	(0.167)	(0.163)
Urbanization	0.089	0.095	0.014	0.029
	(0.081)	(0.081)	(0.062)	(0.066)
Constant	0.350^{***}	0.323^{***}	0.107^{***}	0.197^{***}
	(0.056)	(0.053)	(0.037)	(0.039)
R^2 overall	0.17	0.15	0.27	0.24
R^2 within	0.34	0.34	0.28	0.23
R^2 between	0.03	0.02	0.26	0.26
AIC	-7843.56	-7828.04	-9193.32	-8933.90
BIC	-7774.15	-7758.63	-9123.92	-8864.49
N	4062	4062	4062	4062
Countries	97	97	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table 3 reports results with mobilization for democracy and mobilization for autocracy as the dependent variables. These models sharpen our perspective on the relationship between indoctrination and social mobilization. As shown in Models 1 and 2, indoctrination potential has a significant negative association with mobilization for democracy when using a one-year lag and stock measure, respectively. This provides support for H2, namely that indoctrination potential will be associated with less intense mobilization for democracy. Likewise, Models 3 and 4 show a positive correlation between mobilization for autocracy and indoctrination potential, supporting H3 both with one-year lagged levels and the stock measure.

Moving beyond statistical significance, Figure 2 reports marginal effects. Before interpreting these figures, we want to reiterate that the tests we perform do not establish causality, only the extent to which the variables are associated with one another based on the model. However, the marginal effects help us better understand the magnitude of the relationship and predicted effect sizes if the relationship was indeed causal. The left panel of Figure 2 displays the predicted margins for one-year lagged levels of indoctrination potential. Mobilization for democracy is expected to decrease by about 23 percent from 0.438 to 0.336 as last year's indoctrination potential increases from its minimum to maximum levels. Meanwhile, mobilization for autocracy increases by 97 percent from 0.251 to 0.496. The right panel of Figure 2 shows similar predicted margins when indoctrination potential is measured as a stock. Specifically, as the stock of indoctrination potential increases from its minimum to maximum, mobilization for democracy is estimated to decrease by 21 percent, from 0.423 to 0.335. By contrast, mobilization for autocracy is estimated to increase by 35 percent, from 0.337 to 0.454. Thus, the predicted margins show a substantive benefit for autocrats who engage in educational indoctrination.

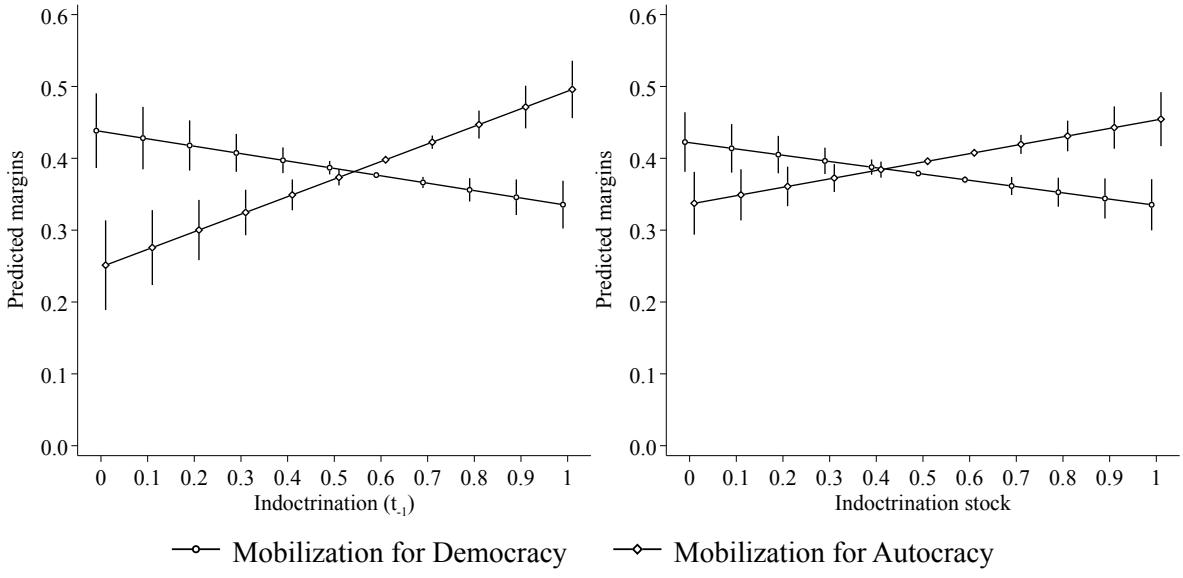

Figure 2: Predicted margins and 90 percent confidence intervals.

To help better understand these benefits, we estimated models predicting the difference in mobilization for democracy and autocracy. We report the predicted margins and 90 percent confidence intervals from this model in Figure 3. Positive values suggest that mobilization for democracy is more intense than mobilization for autocracy, while negative values suggest the opposite. The full estimation results are available in the appendix (see Table A2). At the minimum values for indoctrination potential, mobilization for democracy is significantly higher than mobilization for autocracy, with predicted differences being 0.187 and 0.085 for the one-year lag and stock measures, respectively. As indoctrination potential increases, however, the intensity of mobilization for autocracy outpaces mobilization for democracy. Specifically, we find that the difference is significant (at the 90 percent level) and negative once indoctrination potential surpasses about 0.6 for the one-year lag and 0.5 for the stock measure.

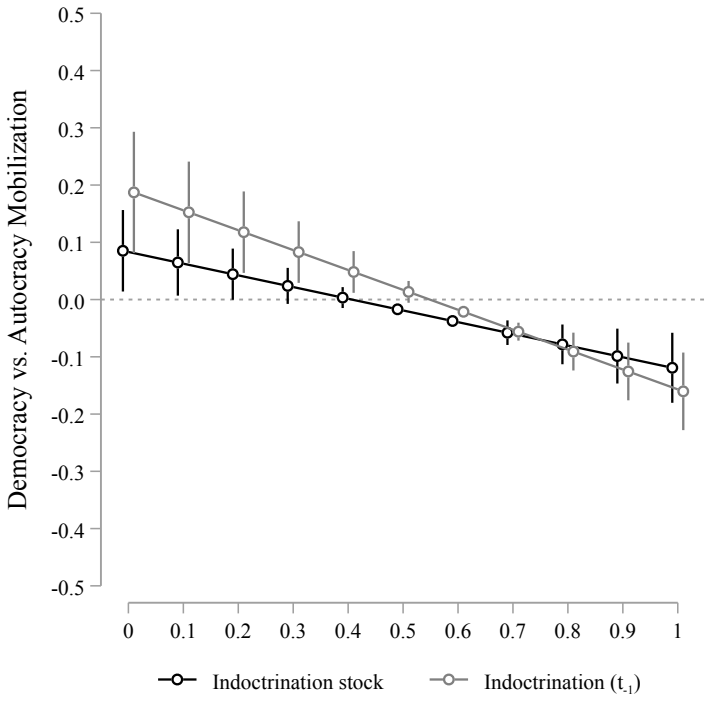

Figure 3: Predicted margins and 90 percent confidence intervals when predicting the difference in democracy and autocracy mobilization. Full results in Table A2.

The control variables in Table 3 also show potentially important patterns. In particular, average levels of education are positively associated with mobilization for democracy, but are not significantly associated with mobilization for autocracy. This suggests that education may still have a pro-democratic effect, even when accounting for indoctrination efforts. As expected, election years and higher levels of wealth are associated with more intense democratic mass mobilization, and higher levels of GDP growth are associated with overall declines in mobilization, regardless of their pro- or anti-democratic char-

acter. Meanwhile, personalist regimes are associated with less intense mobilization for democracy and more intense mobilization for autocracy. This is in line with expectations about how personalist leaders cultivate their support through rallies and mass appeals. By contrast, repression appears to have no significant correlation with mobilization for democracy but has a negative association with mobilization for autocracy. This suggests a trade-off in autocratic regimes between pro-regime mobilization and repression. Finally, population density exhibits a negative relationship to mobilization for democracy, a result we do not have a good theoretical explanation for.

When taken together, these results suggest that while *general* mass mobilization has no significant association with indoctrination potential, *political* mobilization appears to respond in expected ways. Citizens are less likely to mobilize for democracy and more likely to mobilize for autocracy when the regime invests in indoctrination through education, both in the short and long term.

Robustness Checks

In the appendix, we report several robustness checks. First, we check for temporal effects and find evidence that year fixed-effects may improve the overall model fit. When we re-estimate our main models using year fixed-effects (see Table A3 and A4), the results are substantively the same. Second, we estimate the models using annual changes in indoctrination potential, which helps to deal with the stair-step distribution of indoctrination variables within countries, with spells of no change punctuated by annual changes when new policies are introduced. The results reported in Table A5 suggest that increases in indoctrination potential are associated with significantly more intense mobilization for autocracy. While the coefficients for general mobilization and mobilization for democracy are negative, they do not achieve conventional significance levels. This suggests that if changes to indoctrination policies serve as a signal of regime strength, this signal encourages greater pro-autocratic mobilization but may not discourage democratic or general mobilization.

Next, we incorporate two alternative binary measures of regime type to delineate our sample of autocratic country-years. The RoW measure from V-Dem includes information about whether the uncertainty boundaries overlapped with another regime category (Lührmann, Tannenberg, and Lindberg 2018). Using this variable, we refine the sample to only include unambiguous autocracies (i.e., excluding electoral autocracies where the confidence interval overlaps with electoral democracy). Our results are similar in Tables A6 and A7, although stock of indoctrination potential is no longer significant when estimating mobilization for democracy. We also adjust the sample using the binary regime classification from Boix, Miller, and Rosato (2013) in Tables A8 and A9 and find that the results are similar to our main estimation samples.

To check whether our results are the product of expert coding, we incorporate alternative measures for our dependent and independent variables. First, we replace the dependent variable with NAVCO resistance campaigns (Chenoweth and Shay 2020; Stephan and Chenoweth 2008). The outcome variable is a binary measure capturing whether the country-year saw any resistance campaign. We also differentiate whether the regime faced serious anti-system opposition from violent insurgents or non-violent mobilization. For comparability to the main results, we estimate linear probability models using pooled OLS with country-level fixed effects. In general, we find that indoctrination potential is associated with a decreased probability of experiencing a maximalist resistance campaign in Table A10. In addition, in Table A11, we find that this holds regardless of whether the campaign engages primarily in violent or non-violent tactics; although, the significance of the stock measure of indoctrination potential reduces to $p<0.14$ for violent insurgencies.

Next, we test whether a de-jure measure of indoctrination from EPSM performs similarly to the indoctrination potential measures from V-Indoc (Del Río, Knutsen, and Lutscher 2024). Here, we limit the results to lagged levels because the EPSM measure is binary, capturing whether the regime had laws requiring regime- or leader-ideology training. Table A12 reports results with the V-Dem mass mobilization variables as the outcome and the EPSM data on indoctrination as the main predictor of interest. The results are substantively the same, with no association between indoctrination and general mobilization, a negative association with mobilization for democracy, and a positive association with mobilization for autocracy.

To round out these alternative tests, we estimate models with the NAVCO data as the outcome variable and the EPSM data as the predictor of interest in Table A13. Here the findings are less supportive, although all the coefficients are negatively signed. In general, we find no significant association between the EPSM data capturing formal indoctrination laws and the presence of NAVCO anti-system campaigns. We also find no significant relationship with violent insurgencies. However, the results indicate a significant and negative association between formal indoctrination laws as coded in EPSM and non-violent resistance campaigns in NAVCO. Given the extant literature pointing to the positive relationship between non-violent action and democratization, these findings further support the argument that indoctrination policies help autocrats stay in power and undermine democratic mobilization.

Lastly, we test for the effects of influential outliers by iteratively dropping countries from the models in Table 2 and 3. We summarize these results in the appendix.In general, the findings remain similar across these models, indicating that one country does not drive the overall findings. For general mobilization, the coefficient for one-year lagged indoctrination potential (Model 2 of Table 2) becomes significant and is negative signed when we remove the Central African Republic from the model (see Figure A8). In addition, we find some evidence that Russia may be influencing the results for

mobilization for democracy (Figures A9 and A10). The coefficients for indoctrination potential (both lagged and stock) become insignificant when Russia is removed (Models 3 and 4 of Table 3). Somalia, Laos, and Syria may also have influential effects on the estimation results for mobilization for democracy when estimated using the stock measure of indoctrination potential. We see no evidence of any influential cases when it comes to estimating mobilization for autocracy, with indoctrination showing a consistent positive correlation as both one-year lag and stock (Figures A11 and A12).

Conclusion

Whereas the literature often emphasizes the democratic potential of an educated populace, in this article we reflect on the importance of regime indoctrination through mass education in autocracies and how that undermines the pro-democratic nature of education. Drawing on recent literature about authoritarian propaganda (Carter and Carter 2023), we propose three core mechanisms that may limit the democratizing effects of education in autocracies. First, authoritarian regimes may effectively persuade their populations to support them through mass education because the classroom offers a unique opportunity for inculcating shared norms about the legitimacy of the regime. Second, even if efforts to indoctrinate through education are unsuccessful, individuals may alter their behavior in regime-compatible ways because they think others have been indoctrinated through the oft-cited "third-person effect". Finally, indoctrination efforts via mass education may signal the regime's strength, thereby limiting mobilization activity of individuals out of fear of repression or dominance.

We expect that these three mechanisms – persuasion, third-person effects, and dominance – are likely to play out simultaneously within authoritarian regimes because of heterogeneity among the population in terms of their malleability, perceptions of others, and risk-aversion. While we do not test whether this is the case directly, previous studies provide firm support for all three mechanisms (Carter and Carter 2021; Huang 2015; Huang and Cruz 2022). In the future, research could evaluate under what conditions these mechanisms emerge and which types of individuals are affected by them.

Using cross-national times series data covering ninety-seven countries from 1950 to 2019, our regression analyses provide correlational support for the main arguments concerning the stabilizing role of educational indoctrination. We find that while general mobilization has no significant association with indoctrination potential, mobilization for democracy and autocracy exhibit expected patterns. In particular, indoctrination potential in education is associated with less intense mobilization for democracy and more intense mobilization for autocracy. This suggests that authoritarian regimes effectively balance the risks of an educated population when they infuse the educational curriculum with pro-regime propaganda. These results hold to various robustness tests, including

alternative measures for the outcome and predictors and checks for influential outliers.

The findings have important implications for scholars and donors. The emphasis on the expansion of education as a driver of economic development and democratization overlooks how authoritarian regimes strategically adapt curriculum to insulate themselves from bottom-up pro-democratic pressures. Future research could expand upon this study by analyzing the curriculum of contemporary authoritarian regimes, building upon previous work on Soviet regimes and Nazi Germany. Additional research is also needed to evaluate which types of authoritarian regimes invest in educational indoctrination, which could help donors create programs for educational assistance with oversight that diminishes opportunities for education to serve as a vehicle for regime propaganda. Finally, future micro-level research could help uncover who is more likely to be affected by educational indoctrination and which mechanisms are at play. Extensions could also assess which types of interventions are effective at nudging attitudes and countering educational indoctrination.

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Appendix

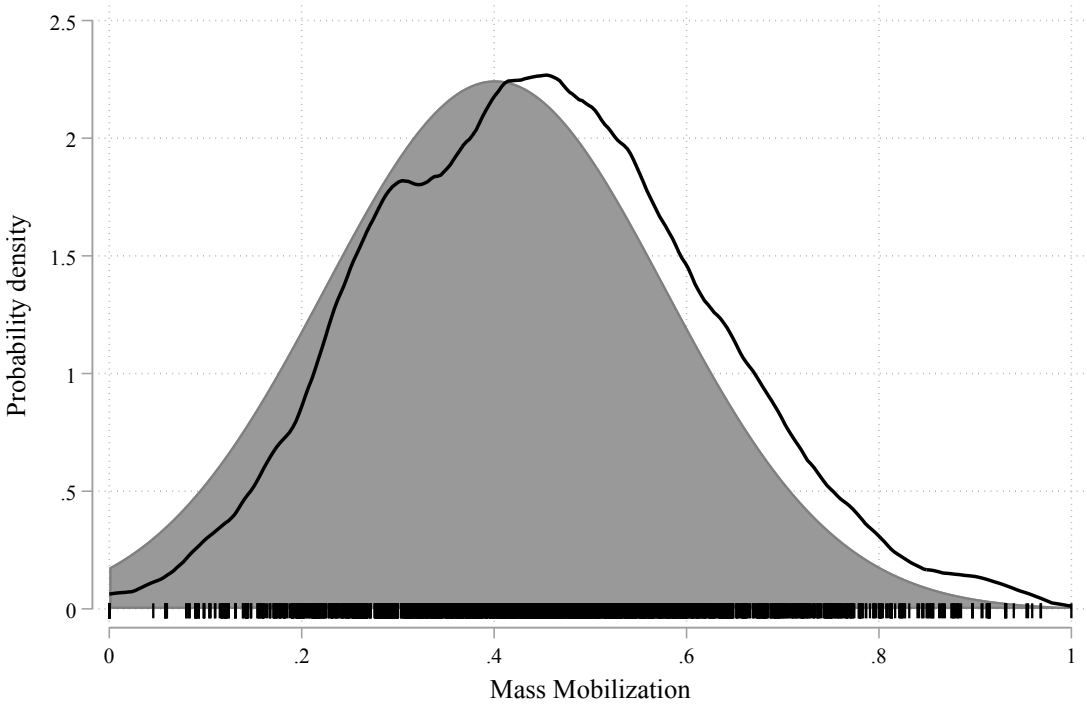

Figure A1: Density plot for general mass mobilization with normal density plot for reference.

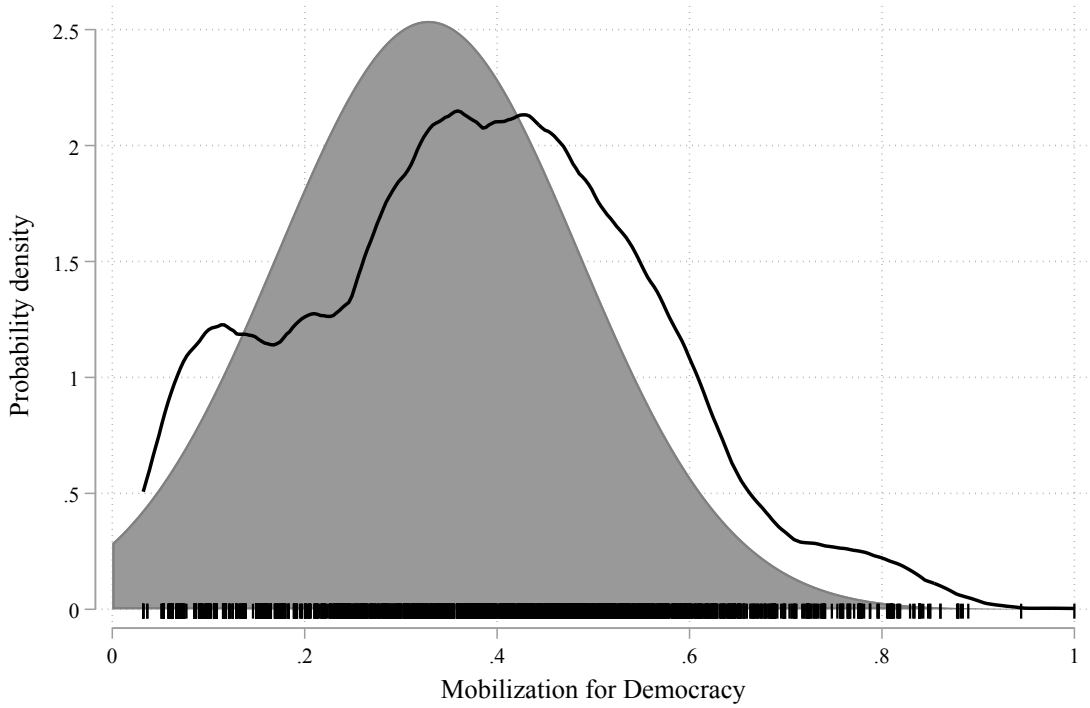

Figure A2: Density plot for mobilization for democracy with normal density plot for reference.

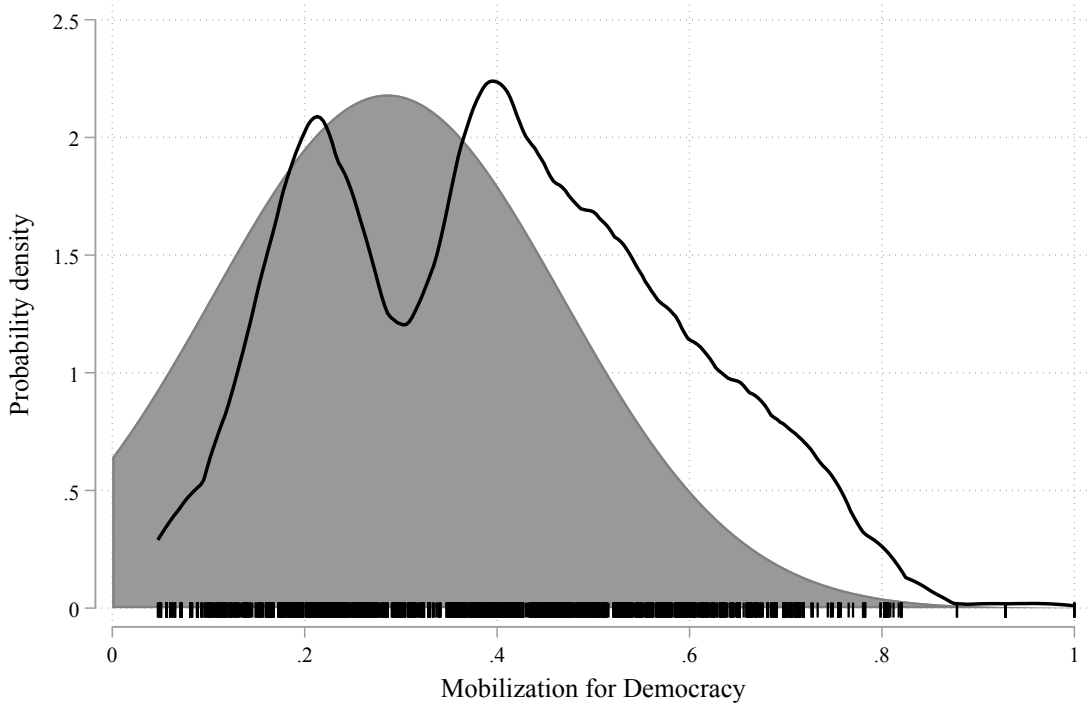

Figure A3: Density plot for mobilization for autocracy with normal density plot for reference.

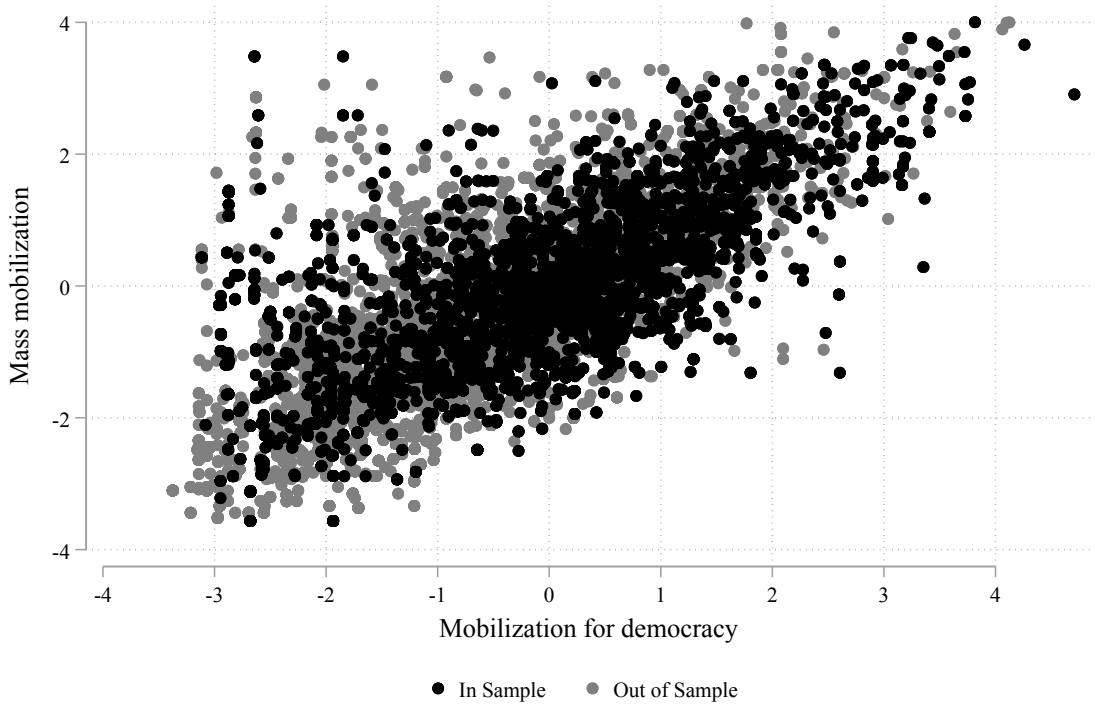

Figure A4: Correlation between mass mobilization and mobilization for democracy. A bivariate linear regression with country-fixed effects and country-clustered robust standard errors produces a coefficient of 0.71 (t=17.35, p<0.001) and a within-country R^2 of 0.548.

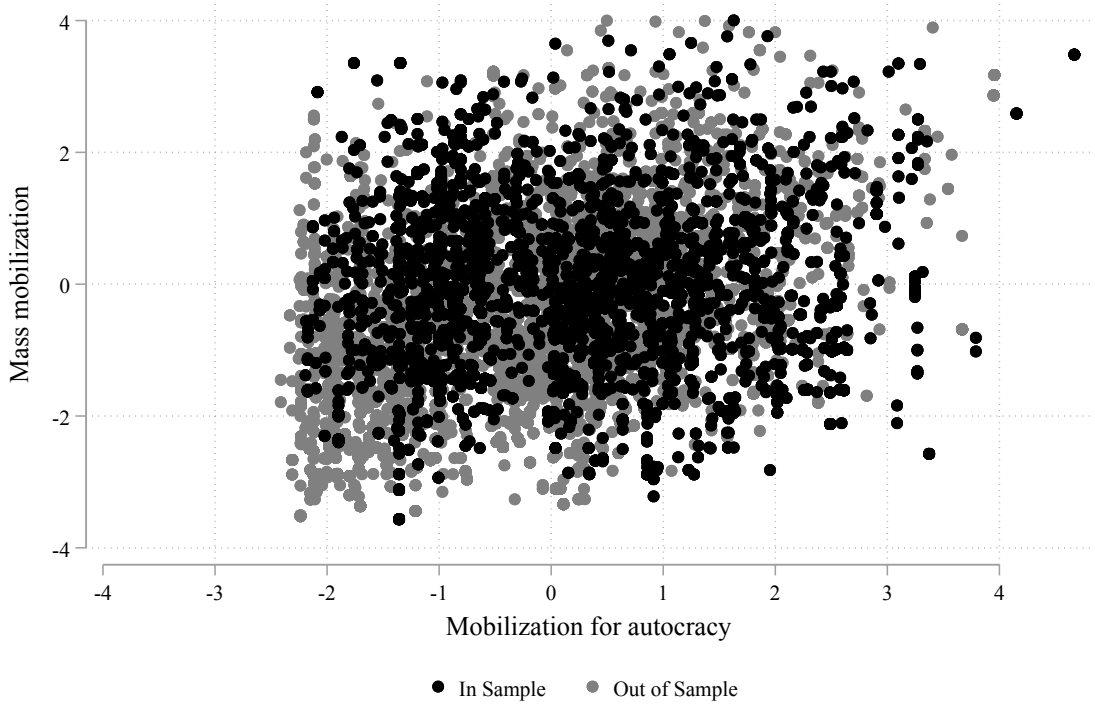

Figure A5: Correlation between mass mobilization and mobilization for autocracy. A bivariate linear regression with country-fixed effects and country-clustered robust standard errors produces a coefficient of 0.018 (t=0.19, p<0.849) and a within-country R^2 of 0.0002.

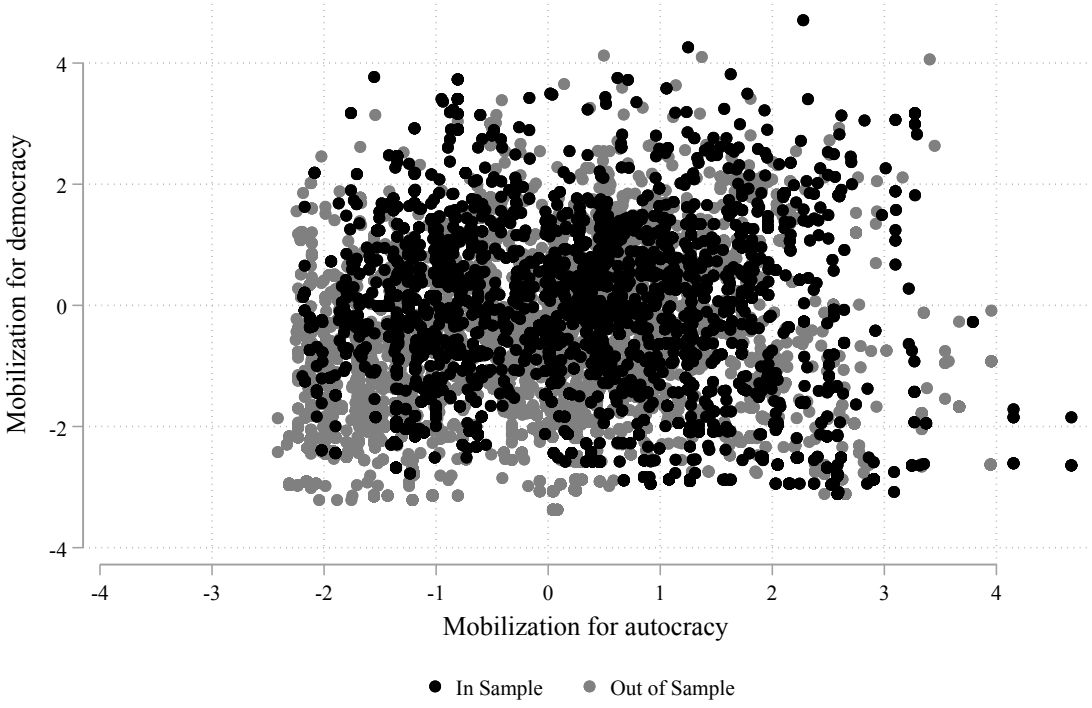

Figure A6: Correlation between mobilization for democracy and mobilization for autocracy.
A bivariate linear regression with country-fixed effects and country-clustered robust standard errors produces a coefficient of -0.146 (t=-1.31, p<0.194) and a within-country R^2 of 0.011.

Table A1: Combined Models for One-Year Lag and Stock of Indoctrination Potential

	General (1)	Democracy (2)	(Autocracy (3)
Indoctrination potential (t_{-1})	−0.067	−0.084	0.280***
	(0.078)	(0.059)	(0.073)
Indoctrination potential (stock)	0.008	−0.033	−0.063
	(0.061)	(0.051)	(0.049)
Education 15+	0.024***	0.018***	0.005
	(0.007)	(0.006)	(0.006)
Freedom of association (t_{-1})	0.205***	0.184***	−0.044
	(0.035)	(0.031)	(0.043)
Personalism	−0.116**	−0.177***	0.245***
	(0.056)	(0.055)	(0.053)
Corruption (t_{-1})	−0.041	0.040	0.023
	(0.044)	(0.038)	(0.046)
Repression (t_{-1})	−0.047	−0.048	−0.062
	(0.046)	(0.035)	(0.038)
Election year	0.020***	0.020***	0.005
	(0.004)	(0.004)	(0.004)
GDP per capita (t_{-1})	0.004	0.005*	−0.000
	(0.002)	(0.002)	(0.002)
GDP growth (t_{-1})	−0.278***	−0.192***	−0.135**
	(0.068)	(0.056)	(0.054)
Population density	−0.655***	−0.446**	−0.164
	(0.195)	(0.198)	(0.170)
Urbanization	−0.035	0.096	0.027
	(0.084)	(0.082)	(0.062)
Constant	0.430***	0.350***	0.106***
	(0.058)	(0.055)	(0.038)
R^2 overall	0.10	0.16	0.26
R^2 within	0.27	0.34	0.28
R^2 between	0.00	0.02	0.25
AIC	−7186.57	−7844.08	−9203.76
BIC	−7110.86	−7768.37	−9128.04
N	4062	4062	4062
Countries	97	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A2: Modeling the Difference in Democracy and Autocracy Mobilization

	(1)	(2)
Indoctrination potential (t_{-1})	-0.348^{***}	
	(0.106)	
Indoctrination potential (stock)		-0.204^{**}
		(0.080)
Education 15+	0.015	0.014
	(0.010)	(0.009)
Freedom of association (t_{-1})	0.246^{***}	0.225^{***}
	(0.058)	(0.057)
Personalism	-0.467^{***}	-0.425^{***}
	(0.079)	(0.073)
Corruption (t_{-1})	0.053	0.019
	(0.082)	(0.067)
Repression (t_{-1})	0.036	0.015
	(0.055)	(0.055)
Election year	0.016^{**}	0.015^{**}
	(0.007)	(0.006)
GDP per capita (t_{-1})	0.007^{**}	0.005^{*}
	(0.004)	(0.003)
GDP growth (t_{-1})	-0.003	-0.051
	(0.073)	(0.077)
Population density	-0.585^{**}	-0.290
	(0.281)	(0.238)
Urbanization	0.066	0.075
	(0.117)	(0.117)
Constant	0.126^{**}	0.243^{***}
	(0.061)	(0.059)
R^2 overall	0.28	0.32
R^2 within	0.36	0.39
R^2 between	0.21	0.23
AIC	-5539.65	-5735.86
BIC	-5470.25	-5666.46
N	4062	4062
Countries	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-fixed effects regression models. The outcome variable is mobilization for democracy minus mobilization for autocracy.
$*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A3: General Mass Mobilization with Year Fixed Effects

	(1)	(2)
Indoctrination potential (t_{-1})	−0.075	
	(0.059)	
Indoctrination potential (stock)		−0.074
		(0.066)
Education 15+	0.013	0.013
	(0.009)	(0.008)
Freedom of association (t_{-1})	0.199***	0.197***
	(0.035)	(0.036)
Personalism	−0.111**	−0.101*
	(0.054)	(0.054)
Corruption (t_{-1})	−0.058	−0.067
	(0.045)	(0.044)
Repression (t_{-1})	−0.048	−0.053
	(0.043)	(0.043)
Election year	0.020***	0.019***
	(0.004)	(0.004)
GDP per capita (t_{-1})	0.003	0.002
	(0.002)	(0.002)
GDP growth (t_{-1})	−0.310***	−0.323***
	(0.073)	(0.076)
Population density	−0.650***	−0.601***
	(0.192)	(0.198)
Urbanization	−0.154*	−0.146
	(0.089)	(0.088)
Constant	0.443***	0.472***
	(0.054)	(0.059)
R^2 overall	0.11	0.11
R^2 within	0.30	0.30
R^2 between	0.01	0.01
AIC	−7244.51	−7250.80
BIC	−6739.75	−6746.04
N	4062	4062
Countries	97	97

Estimated coefficients and country-clustered robust standard errors reported from country- and year-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A4: Mobilization for Democracy and Mobilization for Autocracy with Year Fixed Effects

	Mobilization for Democracy		Mobilization for Autocracy	
	(1)	(2)	(3)	(4)
Indoctrination potential (t_{-1})	-0.116^{**}		0.243^{***}	
	(0.047)		(0.061)	
Indoctrination potential (stock)		-0.135^{***}		0.168^{***}
		(0.048)		(0.062)
Education 15+	0.006	0.004	0.008	0.008
	(0.008)	(0.008)	(0.008)	(0.008)
Freedom of association (t_{-1})	0.174^{***}	0.174^{***}	-0.061	-0.043
	(0.034)	(0.034)	(0.043)	(0.041)
Personalism	-0.175^{***}	-0.160^{***}	0.276^{***}	0.246^{***}
	(0.052)	(0.053)	(0.055)	(0.050)
Corruption (t_{-1})	0.021	0.008	-0.003	0.026
	(0.038)	(0.038)	(0.055)	(0.046)
Repression (t_{-1})	-0.047	-0.056	-0.075^{*}	-0.059
	(0.034)	(0.035)	(0.038)	(0.036)
Election year	0.020^{***}	0.019^{***}	0.005	0.006
	(0.004)	(0.004)	(0.004)	(0.004)
GDP per capita (t_{-1})	0.004^{*}	0.004	-0.004^{*}	-0.002
	(0.002)	(0.002)	(0.002)	(0.002)
GDP growth (t_{-1})	-0.228^{***}	-0.252^{***}	-0.206^{***}	-0.175^{***}
	(0.065)	(0.066)	(0.057)	(0.059)
Population density	-0.475^{**}	-0.408^{**}	0.136	-0.050
	(0.185)	(0.182)	(0.169)	(0.170)
Urbanization	-0.021	-0.009	0.053	0.022
	(0.101)	(0.100)	(0.084)	(0.078)
Constant	0.353^{***}	0.395^{***}	0.208^{***}	0.102^{**}
	(0.057)	(0.064)	(0.042)	(0.044)
R^2 overall	0.24	0.25	0.24	0.25
R^2 within	0.37	0.37	0.26	0.30
R^2 between	0.08	0.08	0.25	0.24
AIC	-7887.73	-7890.07	-8944.80	-9159.48
BIC	-7382.97	-7385.31	-8440.04	-8654.73
N	4062	4062	4062	4062
Countries	97	97	97	97

Estimated coefficients and country-clustered robust standard errors reported from country- and year-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A5: Using Annual Changes in Indoctrination

	General	Democracy	Autocracy
	(1)	(2)	(3)
Indoctrination (annual change)	−0.129	−0.099	0.191***
	(0.092)	(0.066)	(0.071)
Education 15+	0.022***	0.014**	0.010*
	(0.006)	(0.006)	(0.006)
Freedom of association (t_{-1})	0.218***	0.209***	−0.087*
	(0.032)	(0.031)	(0.045)
Personalism	−0.119**	−0.182***	0.270***
	(0.055)	(0.056)	(0.059)
Corruption (t_{-1})	−0.035	0.049	−0.005
	(0.044)	(0.042)	(0.064)
Repression (t_{-1})	−0.044	−0.045	−0.076*
	(0.045)	(0.034)	(0.040)
Election year	0.020***	0.020***	0.005
	(0.004)	(0.004)	(0.004)
GDP per capita (t_{-1})	0.004*	0.005**	−0.002
	(0.002)	(0.003)	(0.002)
GDP growth (t_{-1})	−0.273***	−0.195***	−0.156***
	(0.070)	(0.055)	(0.056)
Population density	−0.718***	−0.540**	0.100
	(0.186)	(0.214)	(0.171)
Urbanization	−0.048	0.066	0.068
	(0.084)	(0.080)	(0.065)
Constant	0.399***	0.298***	0.230***
	(0.049)	(0.054)	(0.044)
R^2 overall	0.11	0.18	0.17
R^2 within	0.26	0.34	0.23
R^2 between	0.01	0.03	0.19
AIC	−7182.47	−7806.24	−8895.30
BIC	−7113.07	−7736.83	−8825.90
N	4062	4062	4062
Countries	97	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A6: General Mass Mobilization using Unambiguous RoW Score estimation sample

	(1)	(2)
Indoctrination potential (t_{-1})	−0.051	
	(0.062)	
Indoctrination potential (stock)		−0.028
		(0.050)
Education 15+	0.025***	0.025***
	(0.007)	(0.007)
Freedom of association (t_{-1})	0.222***	0.218***
	(0.036)	(0.036)
Personalism	−0.140**	−0.134**
	(0.055)	(0.055)
Corruption (t_{-1})	−0.034	−0.038
	(0.047)	(0.046)
Repression (t_{-1})	−0.036	−0.039
	(0.045)	(0.045)
Election year	0.018***	0.018***
	(0.004)	(0.004)
GDP per capita (t_{-1})	0.004	0.003
	(0.002)	(0.002)
GDP growth (t_{-1})	−0.273***	−0.281***
	(0.069)	(0.070)
Population density	−0.711***	−0.663***
	(0.201)	(0.207)
Urbanization	−0.063	−0.060
	(0.087)	(0.087)
Constant	0.417***	0.436***
	(0.051)	(0.056)
R^2 overall	0.10	0.10
R^2 within	0.27	0.27
R^2 between	0.01	0.01
AIC	−6816.71	−6823.13
BIC	−6748.02	−6754.44
N	3807	3807
Countries	96	96

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. Sample is constrained to country-years where the upper bound of the uncertainty interval does not overlap with electoral democracy. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A7: Mobilization for Democracy and Mobilization for Autocracy using Unambiguous RoW Score estimation sample

	Mobilization for Democracy		Mobilization for Autocracy	
	(1)	(2)	(3)	(4)
Indoctrination potential (t_{-1})	-0.095^{*}		0.225^{***}	
	(0.052)		(0.049)	
Indoctrination potential (stock)		-0.082		0.127^{**}
		(0.051)		(0.053)
Education 15+	0.019^{***}	0.018^{***}	0.002	0.002
	(0.006)	(0.006)	(0.007)	(0.006)
Freedom of association (t_{-1})	0.201^{***}	0.201^{***}	-0.048	-0.032
	(0.031)	(0.032)	(0.045)	(0.041)
Personalism	-0.199^{***}	-0.187^{***}	0.270^{***}	0.243^{***}
	(0.054)	(0.054)	(0.058)	(0.052)
Corruption (t_{-1})	0.039	0.032	0.009	0.029
	(0.042)	(0.040)	(0.050)	(0.043)
Repression (t_{-1})	-0.043	-0.049	-0.087^{**}	-0.072^{*}
	(0.033)	(0.034)	(0.039)	(0.038)
Election year	0.019^{***}	0.019^{***}	0.005	0.006
	(0.004)	(0.004)	(0.004)	(0.004)
GDP per capita (t_{-1})	0.005^{**}	0.005^{*}	-0.003	-0.001
	(0.003)	(0.002)	(0.002)	(0.002)
GDP growth (t_{-1})	-0.175^{***}	-0.196^{***}	-0.202^{***}	-0.166^{***}
	(0.058)	(0.056)	(0.047)	(0.047)
Population density	-0.539^{**}	-0.460^{**}	0.110	-0.097
	(0.216)	(0.203)	(0.180)	(0.170)
Urbanization	0.079	0.074	0.041	0.029
	(0.084)	(0.084)	(0.066)	(0.062)
Constant	0.333^{***}	0.358^{***}	0.200^{***}	0.122^{***}
	(0.051)	(0.054)	(0.038)	(0.035)
R^2 overall	0.15	0.17	0.22	0.25
R^2 within	0.34	0.34	0.23	0.27
R^2 between	0.03	0.03	0.25	0.25
AIC	-7402.65	-7414.49	-8580.46	-8773.59
BIC	-7333.96	-7345.80	-8511.77	-8704.90
N	3807	3807	3807	3807
Countries	96	96	96	96

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. Sample is constrained to country-years where the upper bound of the uncertainty interval does not overlap with electoral democracy. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A8: General Mass Mobilization using Boix, Miller, and Rosato (2013) estimation sample

	(1)	(2)
Indoctrination potential (t_{-1})	−0.045	
	(0.066)	
Indoctrination potential (stock)		−0.031
		(0.053)
Education 15+	0.030***	0.029***
	(0.008)	(0.007)
Freedom of association (t_{-1})	0.238***	0.236***
	(0.036)	(0.035)
Personalism	−0.127**	−0.121**
	(0.053)	(0.053)
Corruption (t_{-1})	−0.041	−0.045
	(0.049)	(0.049)
Repression (t_{-1})	−0.009	−0.012
	(0.040)	(0.040)
Election year	0.018***	0.018***
	(0.004)	(0.004)
GDP per capita (t_{-1})	0.002	0.002
	(0.002)	(0.002)
GDP growth (t_{-1})	−0.256***	−0.264***
	(0.065)	(0.067)
Population density	−0.446***	−0.406**
	(0.169)	(0.179)
Urbanization	−0.135	−0.135
	(0.091)	(0.090)
Constant	0.411***	0.424***
	(0.052)	(0.058)
R^2 overall	0.06	0.06
R^2 within	0.31	0.31
R^2 between	0.00	0.00
AIC	−6805.57	−6809.02
BIC	−6737.33	−6740.77
N	3656	3656
Countries	92	92

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. Sample is constrained to country-years classified as autocracies using Boix, Miller, and Rosato (2013). $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A9: Mobilization for Democracy and Mobilization for Autocracy using Boix, Miller, and Rosato (2013) estimation sample

	Mobilization for Democracy		Mobilization for Autocracy	
Indoctrination potential (t_{-1})	-0.100^{*}		0.215^{***}	
	(0.054)		(0.056)	
Indoctrination potential (stock)		-0.092^{*}		0.115^{**}
		(0.054)		(0.054)
Education 15+	0.021^{***}	0.019^{***}	0.005	0.005
	(0.007)	(0.006)	(0.007)	(0.006)
Freedom of association (t_{-1})	0.206^{***}	0.208^{***}	-0.053	-0.039
	(0.034)	(0.034)	(0.048)	(0.044)
Personalism	-0.176^{***}	-0.161^{***}	0.265^{***}	0.234^{***}
	(0.056)	(0.055)	(0.061)	(0.056)
Corruption (t_{-1})	0.054	0.045	-0.015	0.006
	(0.046)	(0.044)	(0.055)	(0.047)
Repression (t_{-1})	-0.025	-0.031	-0.079^{*}	-0.066
	(0.036)	(0.037)	(0.041)	(0.040)
Election year	0.020^{***}	0.020^{***}	0.006	0.007
	(0.004)	(0.004)	(0.005)	(0.005)
GDP per capita (t_{-1})	0.005^{*}	0.004	-0.003	-0.002
	(0.003)	(0.002)	(0.002)	(0.002)
GDP growth (t_{-1})	-0.173^{***}	-0.195^{***}	-0.196^{***}	-0.165^{***}
	(0.057)	(0.055)	(0.045)	(0.048)
Population density	-0.423^{*}	-0.339	0.213	0.010
	(0.232)	(0.215)	(0.176)	(0.167)
Urbanization	0.032	0.025	0.026	0.013
	(0.089)	(0.089)	(0.072)	(0.070)
Constant	0.318^{***}	0.341^{***}	0.221^{***}	0.148^{***}
	(0.056)	(0.058)	(0.043)	(0.041)
R^2 overall	0.15	0.17	0.16	0.20
R^2 within	0.34	0.35	0.22	0.26
R^2 between	0.03	0.03	0.15	0.18
AIC	-7112.53	-7120.63	-8331.57	-8499.49
BIC	-7044.28	-7052.39	-8263.32	-8431.25
N	3656	3656	3656	3656
Countries	92	92	92	92

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. Sample is constrained to country-years classified as autocracies using Boix, Miller, and Rosato (2013). $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A10: Using NAVCO Maximalist Resistance Campaigns (Chenoweth and Shay 2020)

	(1)	(2)
Indoctrination potential (t_{-1})	-0.597^{**}	
	(0.232)	
Indoctrination potential (stock)		-0.391^{*}
		(0.232)
Education 15+	0.073^{***}	0.070^{***}
	(0.027)	(0.025)
Freedom of association (t_{-1})	0.254^{**}	0.226^{**}
	(0.110)	(0.110)
Personalism	-0.492^{***}	-0.419^{**}
	(0.183)	(0.195)
Corruption (t_{-1})	-0.148	-0.205
	(0.155)	(0.140)
Repression (t_{-1})	-0.538^{***}	-0.574^{***}
	(0.135)	(0.133)
Election year	0.019	0.017
	(0.013)	(0.013)
GDP per capita (t_{-1})	0.008	0.004
	(0.009)	(0.008)
GDP growth (t_{-1})	-0.999^{***}	-1.089^{***}
	(0.238)	(0.237)
Population density	-1.025	-0.531
	(0.708)	(0.715)
Urbanization	0.232	0.234
	(0.323)	(0.329)
Constant	0.558^{***}	0.749^{***}
	(0.158)	(0.181)
R^2 overall	0.03	0.05
R^2 within	0.13	0.14
R^2 between	0.00	0.00
AIC	3058.05	2996.84
BIC	3127.46	3066.25
N	4062	4062
Countries	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A11: Violent and Non-violent Campaigns using NAVCO (Chenoweth and Shay 2020)

	Violent Campaigns		Non-violent Campaigns	
	(1)	(2)	(3)	(4)
Indoctrination potential (t_{-1})	−0.498**		−0.210***	
	(0.228)		(0.064)	
Indoctrination potential (stock)		−0.326		−0.231**
		(0.218)		(0.092)
Education 15+	0.032	0.030	0.067***	0.062***
	(0.022)	(0.021)	(0.014)	(0.014)
Freedom of association (t_{-1})	0.333***	0.310***	−0.009	0.001
	(0.113)	(0.114)	(0.062)	(0.063)
Personalism	−0.386**	−0.325	−0.026	0.003
	(0.187)	(0.197)	(0.083)	(0.086)
Corruption (t_{-1})	−0.031	−0.078	−0.108	−0.126
	(0.155)	(0.138)	(0.081)	(0.081)
Repression (t_{-1})	−0.615***	−0.645***	−0.008	−0.022
	(0.131)	(0.131)	(0.068)	(0.068)
Election year	−0.000	−0.003	0.024**	0.023**
	(0.012)	(0.012)	(0.009)	(0.009)
GDP per capita (t_{-1})	0.007	0.004	0.015**	0.014*
	(0.008)	(0.007)	(0.007)	(0.007)
GDP growth (t_{-1})	−0.850***	−0.926***	−0.212	−0.261
	(0.199)	(0.209)	(0.201)	(0.193)
Population density	−0.687	−0.275	−1.647***	−1.500**
	(0.624)	(0.619)	(0.582)	(0.591)
Urbanization	0.125	0.126	−0.104	−0.134
	(0.252)	(0.254)	(0.204)	(0.204)
Constant	0.543***	0.702***	−0.008	0.033
	(0.165)	(0.179)	(0.070)	(0.080)
R^2 overall	0.05	0.06	0.03	0.03
R^2 within	0.10	0.12	0.10	0.10
R^2 between	0.00	0.01	0.01	0.01
AIC	1754.49	1695.85	431.50	433.00
BIC	1823.90	1765.25	500.91	502.40
N	4062	4062	4062	4062
Countries	97	97	97	97

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A12: Mobilization using EPSM Data on Indoctrination (Del Río, Knutsen, and Lutscher 2024)

	General	Democracy	Autocracy
	(1)	(2)	(3)
Indoctrination laws (t_{-1})	−0.025	−0.067***	0.061**
	(0.022)	(0.021)	(0.025)
Education 15+	0.021***	0.013**	0.011*
	(0.007)	(0.007)	(0.006)
Freedom of association (t_{-1})	0.198***	0.174***	−0.054
	(0.038)	(0.032)	(0.044)
Personalism	−0.122**	−0.174***	0.244***
	(0.058)	(0.056)	(0.070)
Corruption (t_{-1})	−0.030	0.044	0.002
	(0.049)	(0.038)	(0.064)
Repression (t_{-1})	−0.047	−0.037	−0.095**
	(0.050)	(0.037)	(0.045)
Election year	0.019***	0.021***	0.005
	(0.004)	(0.004)	(0.004)
GDP per capita (t_{-1})	0.004*	0.005**	−0.001
	(0.002)	(0.002)	(0.002)
GDP growth (t_{-1})	−0.346***	−0.281***	−0.119
	(0.087)	(0.071)	(0.077)
Population density	−0.704***	−0.512**	0.011
	(0.191)	(0.195)	(0.164)
Urbanization	−0.029	0.100	0.011
	(0.101)	(0.097)	(0.079)
Constant	0.409***	0.312***	0.236***
	(0.053)	(0.050)	(0.046)
R_2 overall	0.14	0.26	0.23
R_2 within	0.25	0.34	0.24
R_2 between	0.04	0.13	0.21
AIC	−6100.73	−6606.39	−7626.99
BIC	−6032.93	−6538.59	−7559.19
N	3511	3511	3511
Countries	90	90	90

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

Table A13: Results with NAVCO and EPSM (Chenoweth and Shay 2020; Del Río, Knutsen, and Lutscher 2024)

	General (1)	Violent (2)	Non-violent (3)
Indoctrination laws (t_{-1})	−0.074	−0.042	−0.084***
	(0.080)	(0.087)	(0.031)
Education 15+	0.063**	0.029	0.055***
	(0.026)	(0.021)	(0.015)
Freedom of association (t_{-1})	0.259*	0.326**	0.035
	(0.140)	(0.128)	(0.068)
Personalism	−0.347	−0.242	0.027
	(0.224)	(0.235)	(0.092)
Corruption(t_{-1})	−0.116	0.017	−0.136
	(0.170)	(0.170)	(0.085)
Repression (t_{-1})	−0.460***	−0.495***	−0.069
	(0.146)	(0.135)	(0.074)
Election year	0.021	0.003	0.020*
	(0.014)	(0.013)	(0.010)
GDP per capita (t_{-1})	0.013	0.014*	0.017**
	(0.008)	(0.008)	(0.008)
GDP growth (t_{-1})	−1.367***	−1.072***	−0.467*
	(0.261)	(0.238)	(0.246)
Population density	−1.642**	−1.347**	−1.792***
	(0.673)	(0.552)	(0.645)
Urbanization	−0.058	−0.299	−0.073
	(0.384)	(0.268)	(0.246)
Constant	0.369**	0.380**	−0.074
	(0.180)	(0.185)	(0.083)
R^2 overall	0.04	0.05	0.04
R^2 within	0.12	0.09	0.12
R^2 between	0.00	0.01	0.01
AIC	2530.03	1254.17	551.05
BIC	2597.83	1321.97	618.85
N	3511	3511	3511
Countries	90	90	90

Estimated coefficients and country-clustered robust standard errors reported from country-level fixed effects regression models. $*$ p<0.10 $**$ p<0.05 $***$ p<0.001

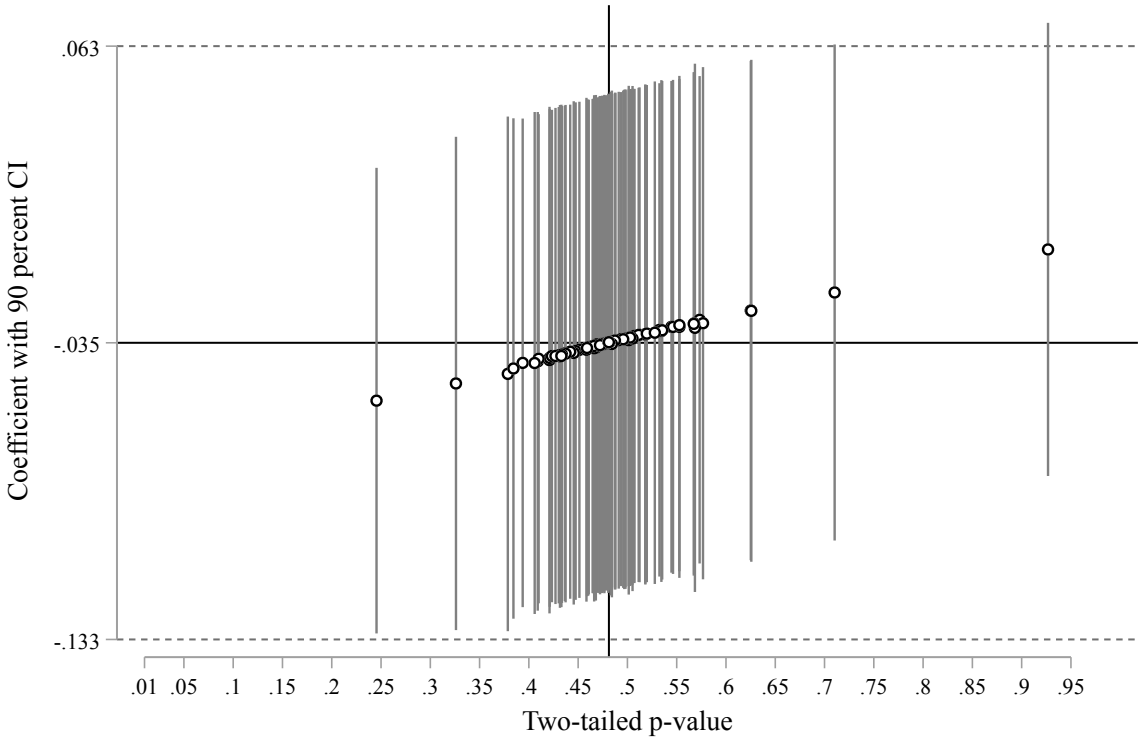

Figure A7: Estimation Results for Indoctrination Stock and General Mass Mobilization when Iteratively Dropping Countries from the Model

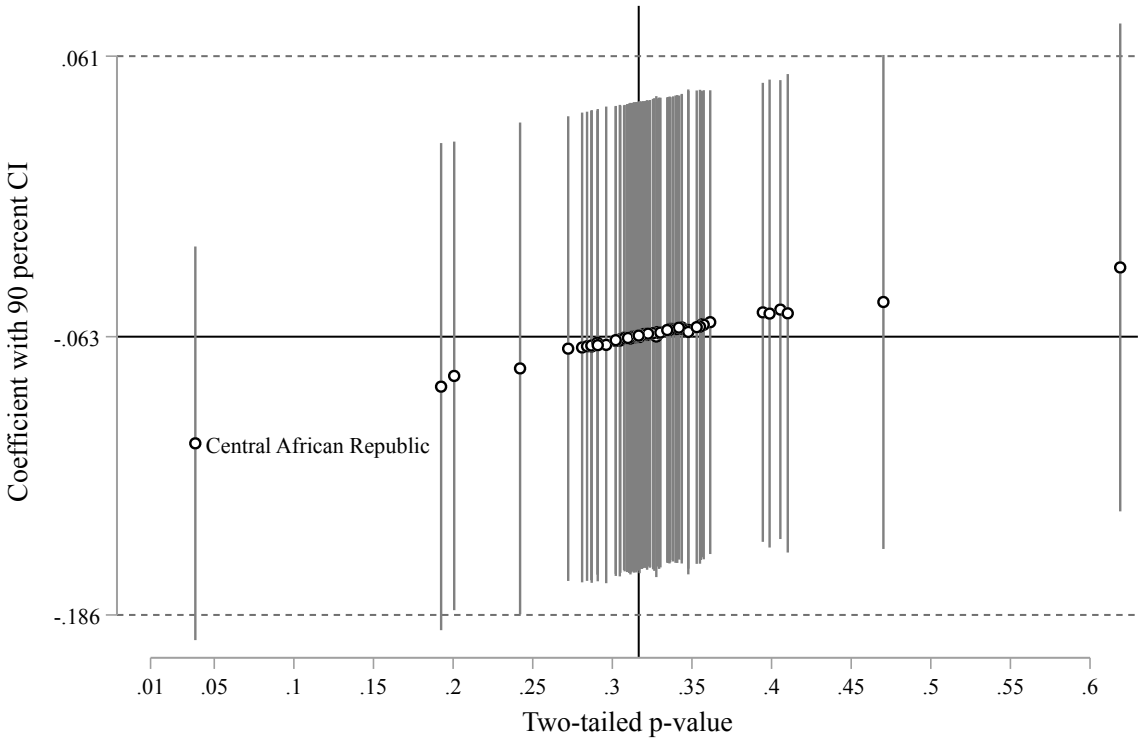

Figure A8: Estimation Results for Indoctrination Levels (t_{-1}) and General Mass Mobilization when Iteratively Dropping Countries from the Model

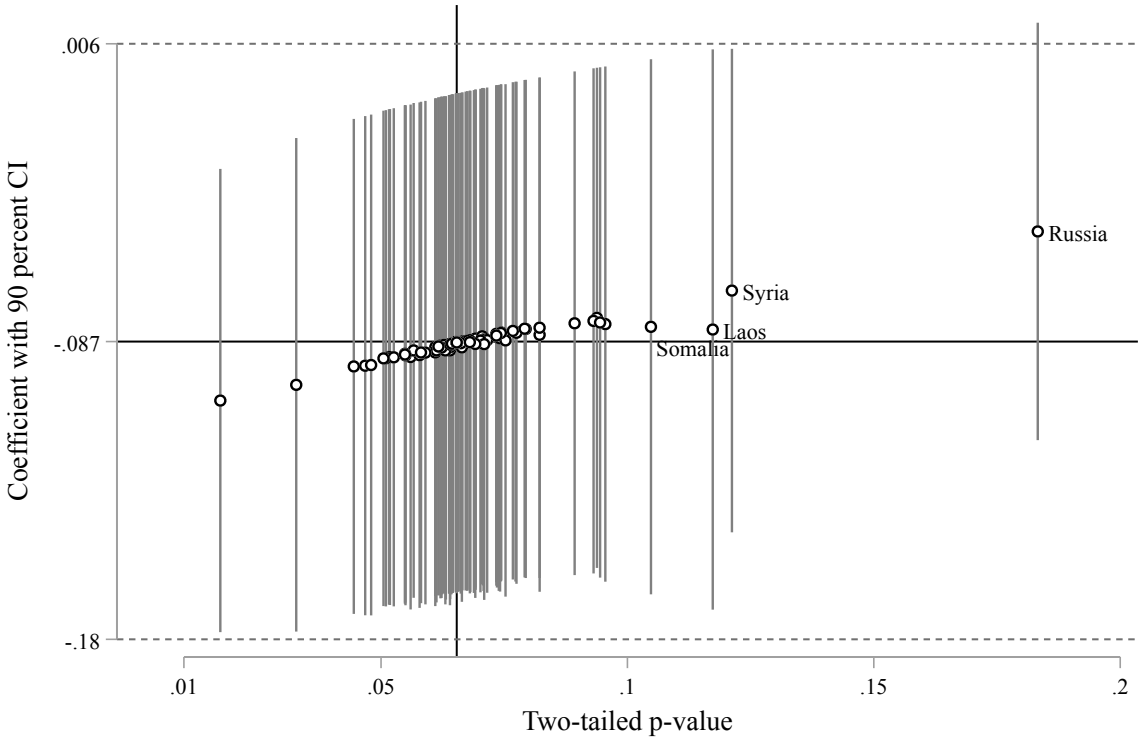

Figure A9: Estimation Results for Indoctrination Stock and Mobilization for Democracy when Iteratively Dropping Countries from the Model

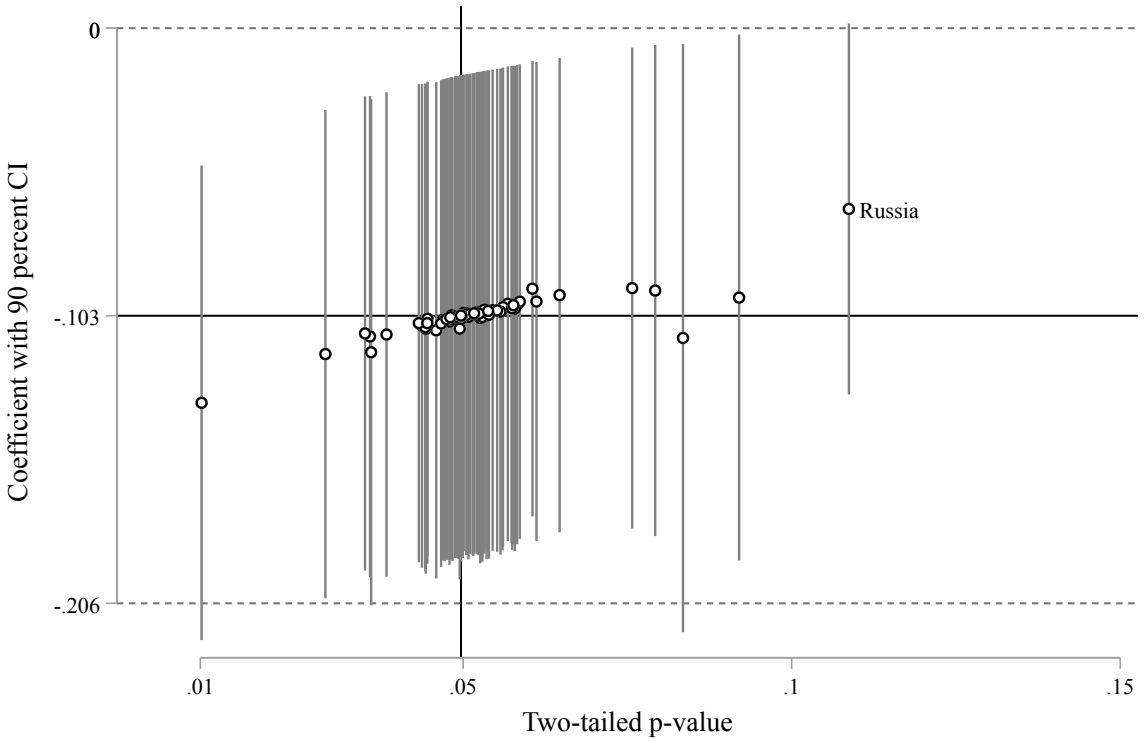

Figure A10: Estimation Results for Indoctrination Levels (t_{-1}) and Mobilization for Democracy when Iteratively Dropping Countries from the Model

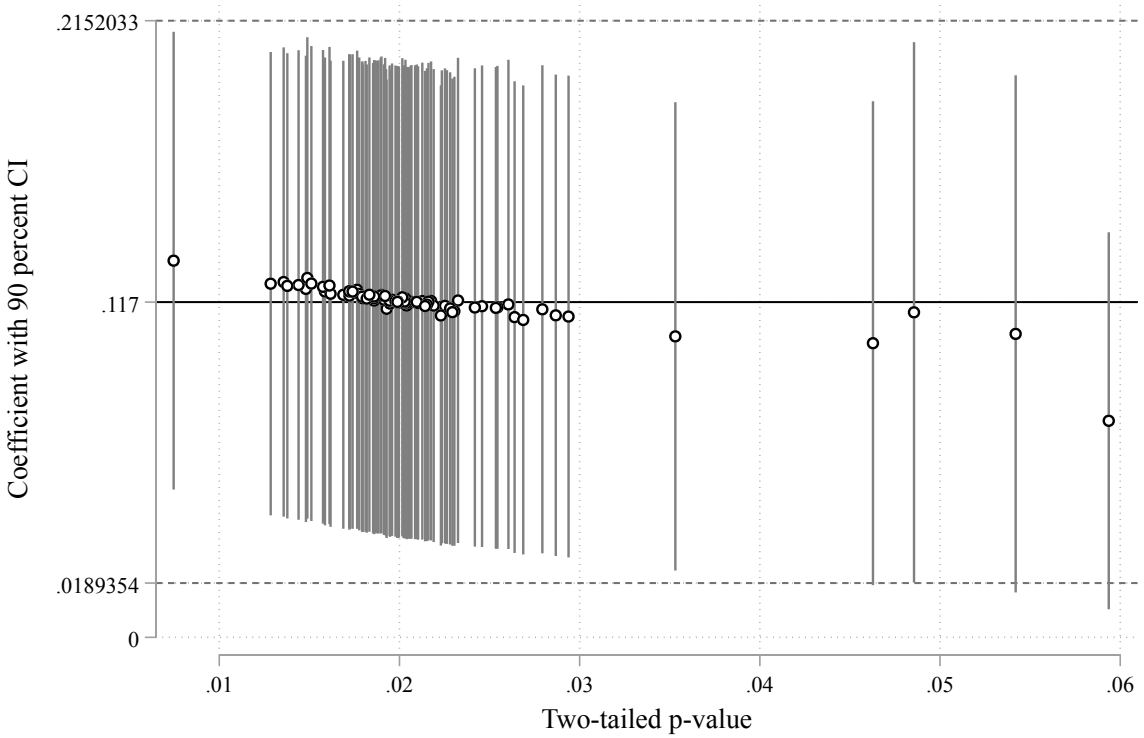

Figure A11: Estimation Results for Indoctrination Stock and Mobilization for Autocracy when Iteratively Dropping Countries from the Model

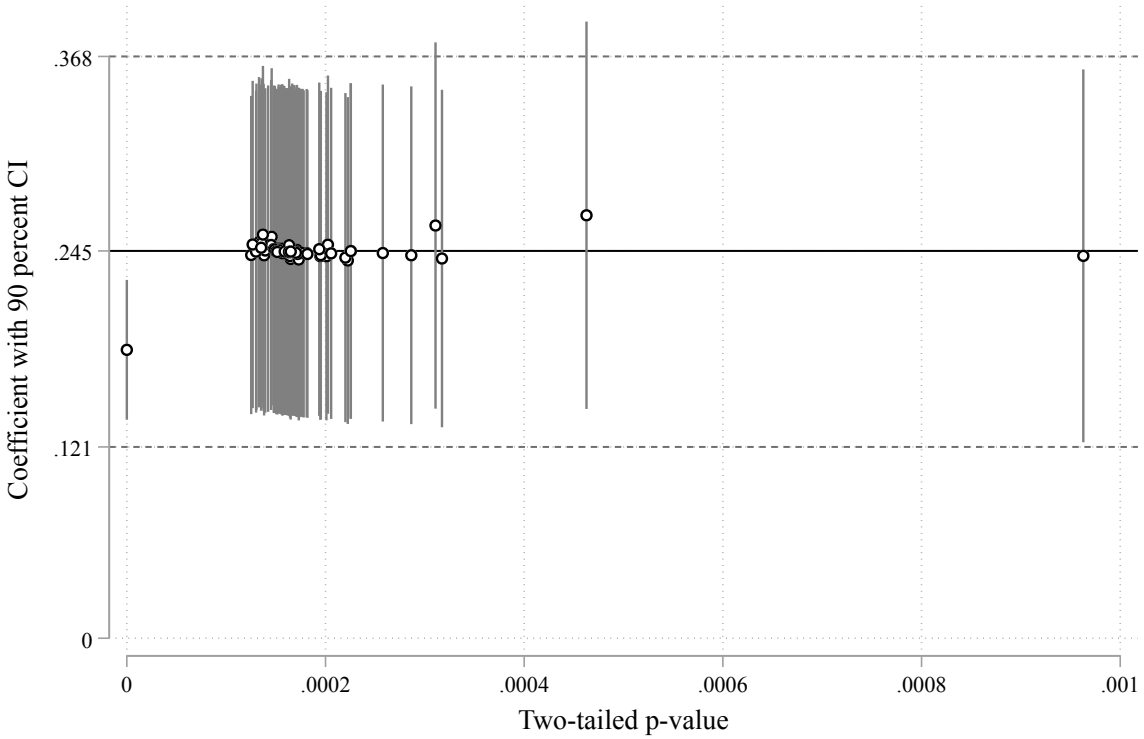

Figure A12: Estimation Results for Indoctrination Levels (t_{-1}) and Mobilization for Autocracy when Iteratively Dropping Countries from the Model