

**Affective Polarization and Support for Democratic Institutions:
Evidence from Survey Experiments in Brazil, Chile, and Colombia**

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Abstract

We examine the relationship between partisan social media messages and voters' support for undemocratic transgressions on the institutions of the President and Congress. We describe survey experiments in Brazil, Chile, and Colombia that randomly expose respondents to partisan messages about contentious and consensus issues like inflation, abortion, crime, and protests. We then assess whether these messages increase support for undemocratic transgressions. Our findings reveal distinct inter-party differences: opposition voters were more inclined toward presidential impeachment, while incumbent supporters were more disposed to dissolving Congress. However, contrary to our initial pre-registered hypotheses, exposure to partisan social media messages did not consistently augment these tendencies. This implies that while voters often endorse undemocratic measures in line with their partisan leanings, such preferences are not heightened by exposure to partisan discourse on social media.

1 Introduction

On December 7, 2022, while facing his second impeachment proceeding in less than two years, President Pedro Castillo declared the dissolution of the Peruvian Congress. Within hours of his decision, he was ousted from office and Vice-President Dina Boluarte took his place. This event marked Castillo as the second Peruvian President to dissolve Congress in two years and the third to be impeached in Peru since 2018. Just five months later, on May 17, 2023, less than 1,200 miles north of Lima, President Guillermo Lasso of Ecuador used his constitutional prerogative to invoke the country's "mutual death" rule. By doing so, he dissolved Congress and called for new general elections. Like Pedro Castillo, Guillermo Lasso was in the middle of impeachment proceedings for the second time in less than two years. The cases of Castillo in Peru and Lasso in Ecuador are not uncommon. Indeed, they exemplify the broader trend of attacks on democratic institutions controlled by out-group partisans taking place across Latin America.

In contrast to past autocratic reversals witnessed in the 20th century in Latin America, the current cycle of democratic recession has been driven by partisan attacks on the institutions of the Presidency and Congress (Pérez-Liñán, 2007, 2018). Affective polarization among elites and voters, fuelled by the drive to secure in-group benefits, heightened undemocratic aggressions against out-group adversaries. This trend is not unique to Latin America; public assaults on the executive and legislative branches of democracies have been reported worldwide (Svolik, 2019; Graham and Svolik, 2020; Kingzette et al., 2021). This paper outlines three experiments conducted in Brazil, Chile, and Colombia to under-

stand undemocratic attitudes. We explore the interaction between affective polarization, partisan social media messages, and support for undemocratic transgressions against the Presidency and Congress.

Svolik (2019) and Graham and Svolik (2020) assert that polarization can impair the public’s ability to check the illiberal or undemocratic inclinations of politicians within their own in-group. These tendencies often surface as reduced support for political tolerance and constitutional safeguards (Mason, 2018; Iyengar and Westwood, 2015a; Levitsky and Ziblatt, 2018; Kingzette et al., 2021). For instance, Kingzette et al. (2021) found that affectively polarized Republicans opposed the expansion of constitutional protections while affectively polarized Democrats supported them. However, we do not know if short term increases in affective polarization induced by partisan messages increase support for important markers of democratic recession such as uncivil discourse, political intolerance, and violations of democratic institutions (Bowler et al., 2022; Broockman and Kalla, 2022; Broockman et al., 2023).

We examine the impact of partisan messages on citizens’ support for democratic institutions of the President and Congress. Specifically, we investigate whether those in opposition are more inclined to resist undemocratic intrusions on Congress, while endorsing undemocratic transgressions against the Executive. Conversely, we delve into whether supporters of the government reject the concept of impeaching the president but accept the dissolution of Congress. Understanding the degree to which citizens respond to partisan content and are willing to encroach upon democratic institutions forms an essential research direction that has thus far been under-explored in the field (Kurlantzick, 2011).

As part of our study, we assess partisan disparities supporting dissolving Congress and impeaching the president. To achieve this, we expose a specific group of respondents to partisan social media messages to ascertain if these partisan effects can be further amplified.

The experiments were conducted through three nationally representative surveys in Brazil, Chile, and Colombia between November 2022 and March 2023. The treated groups, comprising two-thirds of the respondents, answered questions about Congress and the Presidency after being exposed to Facebook posts from government officials discussing salient issues such as voting, inflation, abortion, crime, unemployment, and protests. After exposure, they answered questions concerning democratic recession. The control group, which consisted of one-third of the respondents, addressed questions on democratic recession before exposure to Facebook posts. These survey experiments enable us to assess the effects of exposure to partisan social media messages, social media engagement, and attitudes toward democratic recession. We aimed to discern whether respondents would be more inclined to infringe on institutions that did not align with their in-group objectives. The hypotheses tested in this article were pre-registered in separate plans and approved before each survey. The presentation of the results adheres to these pre-approved plans, which are deposited at <https://osf.io/>.

The findings confirm the expected inter-party differences in baseline attitudes, with opposition voters favoring impeachment of the president and government supporters demonstrating a preference for dissolving Congress. However, we observed no consistent effect of social media. While incumbent and opposition voters typically endorsed undemocratic

policies aligned with their in-group objectives, this effect did not amplify with exposure to partisan social media messages related to general or divisive issues.

2 Affective Polarization and Democratic Recession Attitudes

After over three decades of a widespread global trend towards democratization, signs of democratic erosion are becoming increasingly evident, sparking concerns about possible autocratic reversals (Diamond, 2021; Levitsky and Ziblatt, 2019). The concept of a democratic recession refers to the gradual deterioration in the quality of democratic institutions, deterioration typically driven by strategies used by electorally successful autocrats seeking to maintain a competitive advantage. These tactics often involve media censorship and harassment, curtailing civil liberties and party competition, and undermining the independence and autonomy of election management bodies (Lührmann and Lindberg, 2019).

Populist tactics frequently portray out-group candidates and voters as corrupt and disloyal, while media organizations are vilified as propagators of "fake news" (Waisbord, 2018), positioned as part of a corrupt elite neglecting the common people (Diamond, 2021). Populist appeals to voters, affective polarization, and a consistent rise in uncivil discourse constitute the backbone of democratic recession. As a result, understanding the extent to which citizens are responsive to partisan content and ready to transgress democratic institutions becomes an essential research pursuit (Kurlantzick, 2011).

In highly polarized political environments, voters may internalize and propagate mes-

sages that portray out-party members as extreme, prejudiced, and undemocratic. Such a scenario fosters in-group behaviors and policies that defy the principle of treating all viewpoints equitably, a fundamental tenet of democratic governance (Kingzette et al., 2021). This inclination to view opposition partisans negatively and co-partisans positively is called affective polarization (Iyengar and Westwood, 2015b).

Scholars have long recognized that deep social divisions, or polarization, pose significant risks to democracy. For instance, Dahl (1971) warned of the dangers arising from a society polarized into antagonistic groups. Linz (1978) argued that deep social cleavages could lead to the collapse of democratic regimes. The tendency to view opposing partisans negatively and co-partisans positively, defined as affective polarization (Iyengar and Westwood, 2015b), is thought to undermine citizens' support for democracy. Specifically, affectively polarized citizens are often willing to compromise their democratic principles for partisan interests (Svolik, 2019; Graham and Svolik, 2020). In polarized contexts, partisans may need to demonstrate their party allegiance to peers and distinguish themselves from members of the other party (Kingzette et al., 2021). As a result, they are less likely to challenge the illiberal tendencies of in-group politicians and demonstrate less support for democratic principles, norms, and institutions.

While there is consensus on the direction of the effect, there is less agreement on how to measure citizens' support for democracy. Three approaches are most prominent. The first relies on questions regarding citizens' perceptions of living in a democracy, with support for democracy measured as citizens' satisfaction with the political system. Norris (2011) explains the 'democratic deficit' as a result of increased skepticism toward the political

system in liberal democracies. However, she argues that this critical stance does not translate into a lack of political trust in democracy. Using survey data from the fifth wave of the World Values Survey (2005-2007), [Norris \(2011\)](#) found support for the existence of a democratic deficit. That is, a gap between expectations and satisfaction with liberal democracies worldwide. While expectations about democratic systems continue to grow, satisfaction has, at best, remained stable ([Norris, 2011](#)).

The second approach measures support for democracy as citizens' adherence to and commitment toward democratic norms and principles ([Graham and Svolik, 2020](#); [Svolik, 2019](#)). In this framework, scholars infer respondents' commitment to democratic principles based on their choices in hypothetical election scenarios. 'Support for democracy' is not measured through a direct question about their support, but rather based on their preference for democratic principles over other conflicting factors, such as ideology, partisanship, and policy preferences. [Svolik \(2019\)](#) analyzed the effects of polarization on citizens' support for democracy in Turkey, Venezuela, and the U.S. The author found that amid polarization, ordinary people prioritize partisan interests over democratic principles. They are partisans first and democrats second. The results suggest that centrists serve as a vital democratic force, as they punish undemocratic candidates more severely than partisans ([Svolik, 2019](#)). Using the same framework, [Graham and Svolik \(2020\)](#) examined whether U.S. citizens would trade off their democratic principles for political ideology, partisanship, or policy preferences. They found that only a tiny fraction of U.S. citizens prioritize democratic principles, and even this small support decreases as levels of polarization, policy extremism, and divergence with candidates' platforms increase

(Graham and Svolik, 2020).

The third and final approach focuses on citizens' support for constitutional protections and political tolerance. Following this framework, scholars ask respondents to indicate their level of agreement - typically on a five-point scale - with statements regarding constitutional protections and political tolerance. Kingzette et al. (2021) examined how affective polarization undermines support for democratic norms in the U.S. within the context of the 2019 and 2012 elections. They posited that affectively polarized voters might compromise their support for democracy through two mechanisms: (i) they are likely to receive cues from elites in power about which norms to oppose, thereby becoming less inclined to support constitutional protections, and (ii) they are likely to perceive out-party politicians as adversaries, thus becoming less inclined to support political tolerance (Kingzette et al., 2021). The results suggest that partisan cue-taking mechanisms shape voters' beliefs about constitutional protections. Specifically, they found that affectively polarized Republicans opposed constitutional protections, while affectively polarized Democrats supported them during the recent Republican administration in the U.S. (Kingzette et al., 2021).

3 Hypotheses: Partisan messages and support for democratic institutions

Our survey is similar to the third approach. We design our experiments to measure political (in)tolerance on a five-point scale. However, our interest lies in understanding to what extent voters who agree or disagree with the incumbent government's policy

messages are willing to transgress against the institutions of the Presidency or Congress. Building on the partisan-cue taking theory by [Kingzette et al. \(2021\)](#), we examine citizens' support for dissolving Congress or impeaching the chief executive in response to explicit policy differences instead of 'crimes or misdemeanors'.

We hypothesize that supporters of the incumbent President will be more willing to act against Congress, whereas supporters of the opposition will exhibit a greater inclination to impeach the president. The phrasing of the impeachment question reads, 'If the president's policy does not align with the preferences of [Chileans, Brazilians, Colombians], Congress should remove the president from office.' The wording indicates that impeachment is being considered based solely on the expected congruity between the preferences of the electorate and those of the President, without any insinuation that the call for impeachment is due to an actual crime or impropriety.

The question reads, "When the country faces serious difficulties it is justifiable for the President to dissolve Congress". As before, the question is vague on the rationale for dissolving Congress and indicates that it is an outcome decided solely by the President. We consider impeachment and dissolution as separate dependent variables and consider that the mean level of support will be similar. Therefore, all hypotheses describe results for each question separately.

The first set of hypotheses evaluates the baseline attitudes of the respondents who support the government or the opposition. We expect voters to transgress against democratic institutions controlled by out-group politicians and to oppose transgressions against democratic institutions they control. It is worth noticing that in all three countries, Brazil,

Chile, and Colombia, the party that controls the Presidency holds a minority of the legislative seats. Accordingly, the first set of hypotheses reads:

HT_{1a}: Opposition voters will be more likely to report a preference to impeach the incumbent President than supporters.

HT_{1a}: Voters of the incumbent President will be more likely to report a preference to dissolve Congress than opposition voters.

The second set of hypotheses considers the effect of partisan social media posts on the preferences to dissolve Congress or impeach the President. Respondents were treated to statements by public officials or agencies before answering questions about their willingness to transgress on Congress or the Presidency. The treatments are factually accurate public statements with minor edits for clarity. The Facebook posts were approved by the appropriate IRB agency and are discussed in the next section.

These treatments include policies generally viewed positively by most voters, such as the support for compulsory voting, unemployment, and violence; as well as wedge issues that divide government and opposition supporters, such as suppressing political protests, tax reforms, and inflation.

The second set of hypotheses of our study measures if partisan treatments of different intensity, from non-partisan to highly partisan, increase the likelihood that respondents will be more likely to agree with the statements that justify dissolving Congress or impeaching the president:

HT_{2a} : Opposition voters will report a higher willingness to impeach the President after being treated to partisan messages.

HT_2b : Supporters of the government will report higher support for dissolving Congress after being treated to partisan messages.

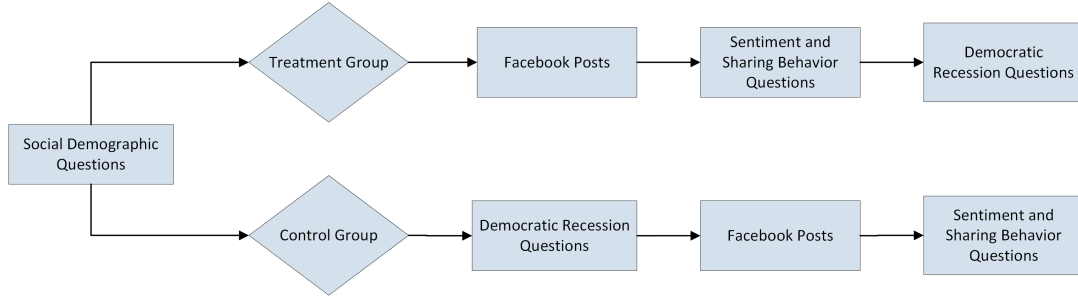
4 Survey implementation, treatments, and estimation

To test our theory, we collected data from three nationally representative surveys conducted by [omitted for review purposes] in Brazil, Chile, and Colombia. The surveys implement a two-branch, two-stage design (see Figure 1). Respondents first answered socio-demographic questions, such as their gender, partisan affiliation, and age. Then, we randomly assigned 1/3 of the respondents to the control group, about 800 respondents, and 2/3 to the treatment group, about 1,600. Both groups answer the same questions but in a different order. The control group answers questions about democratic institutions and, only afterward, is presented with social media posts describing public officials' statements. The treated group, on the other hand, is presented with the public statements first and, only afterward, answers questions on democratic institutions.

In each country, we consider five different treatments that include issues that are not partisan, issues that are partisan, and wedge issues. Attention and validation checks measure the behavioral response to the treatment (i.e., the willingness to 'like,' 'share,' and 'comment' on the social media post) and the self-reported affective response using Ekman's six basic emotion categories (Ekman and Friesen, 1971) of fear, anger, joy, sadness, disgust, and surprise, with multiple responses allowed except for the alternative 'indifferent,' which was exclusive if selected. Finally, they answer questions about transgressions against

democratic institutions and support for democracy.

Figure 1 Survey Flow



Therefore, the only difference between the treatment and control groups is that the treated respondents observe the government messages and then answer the democratic recession questions, while the control group observes the government messages only after they answer the democratic recession questions. As a result, we expect to distinguish whether voters' willingness to transgress democratic institutions and support democracy results from the mechanisms proposed in our treatment.

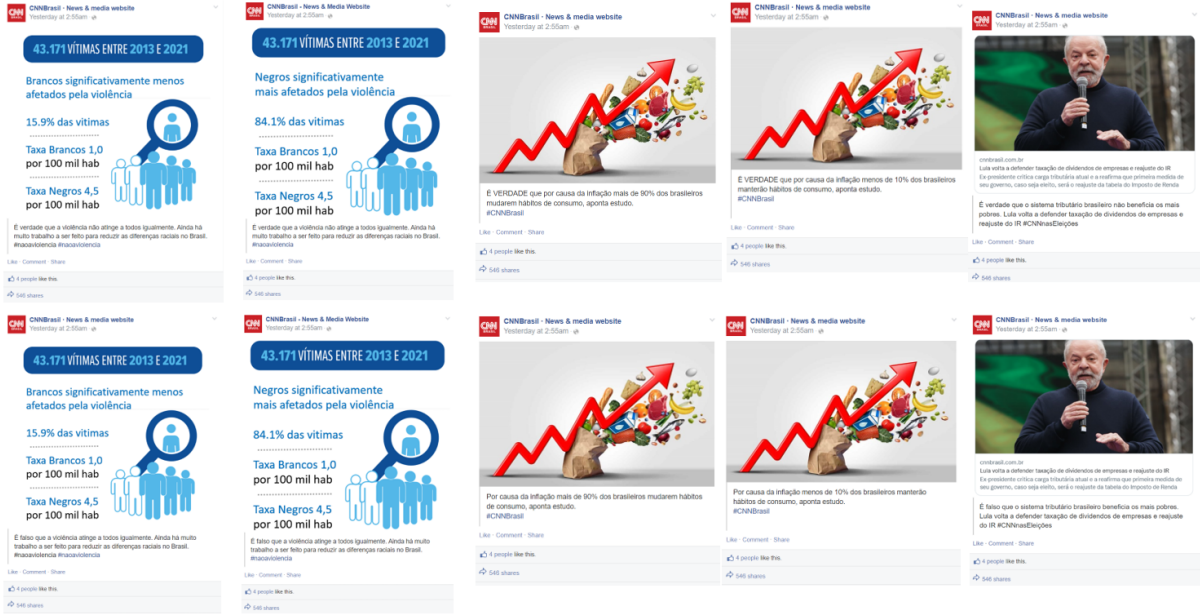
The treatments were all framed as Facebook posts. We include two alternative but semantically equivalent frames for each treatment, one as a confirmation ("It is TRUE that p") and the second one as a refutation ("It is FALSE that not p"). Each survey had a different set of five treatments corresponding to relevant issues in each country.

The three cases were selected because they had competitive and polarized elections won by leftist presidents (Lula da Silva, Gabriel Boric, and Gustavo Petro) against very conservative candidates (Jair Bolsonaro, José Antonio Kast, and Rodolfo Hernandez) in run-off elections. Further, in all three cases, the opposition candidates received more legislative votes and a larger share of seats in Congress. Therefore, all three countries

have divided governments controlled by intense partisans.

The Brazilian survey was fielded between December 5 and 15, 2022, among 2,426 respondents. A third of the respondents (801) were randomly assigned to the control group, and the remaining two-thirds (1625) to the treatment group. The five pairs of treatments are shown in Figure 2. The first treatment states that white people are significantly less affected by violence and represent only 16% of the victims (Crime16). The second treatment reports that black people are more affected by violence and represent 84.1 percent of all victims (Crime 84). The third treatment reports that over 90 percent of Brazilians have reduced their consuming habits due to inflation (Inflacion90). The fourth treatment reports that less than 10 percent of Brazilians have maintained their consumption habits due to inflation (Inflacion10). The fifth treatment states that the current Brazilian tax system favors the wealthy and that Lula seeks to introduce a new tax on dividends (LulaTax).

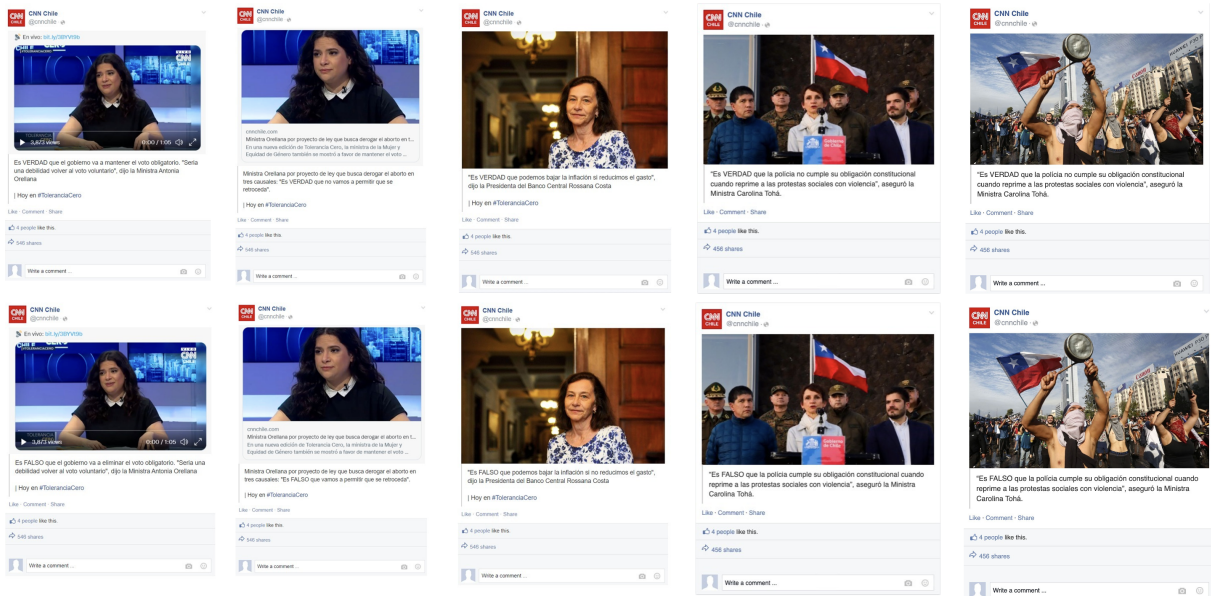
Figure 2 Brazilian Treatments



The Chilean survey was fielded between October 19 and November 7, 2022, among 2,772 people respondents. A total of 961 respondents were assigned to the control group and the remaining 1,811 to the treatment group. Figure 3 displays the five pairs of treatments. The first treatment reports the commitment by the current administration of Boric to maintaining compulsory voting, a policy favored by a majority of voters in Chile (voto Obligatorio). The second treatment reports on the Chilean government's commitment to reducing expenditures and inflation (Inflation). The third treatment states that the administration supports existing pro-abortion reforms (Aborto). The fourth treatment reports that the administration will not violently suppress social protests, primed with an image of the Ministry of Interior giving a speech (ProtestaMinistra). Finally, the fifth treatment is identical to number 4, committed not to suppress protests, but is primed

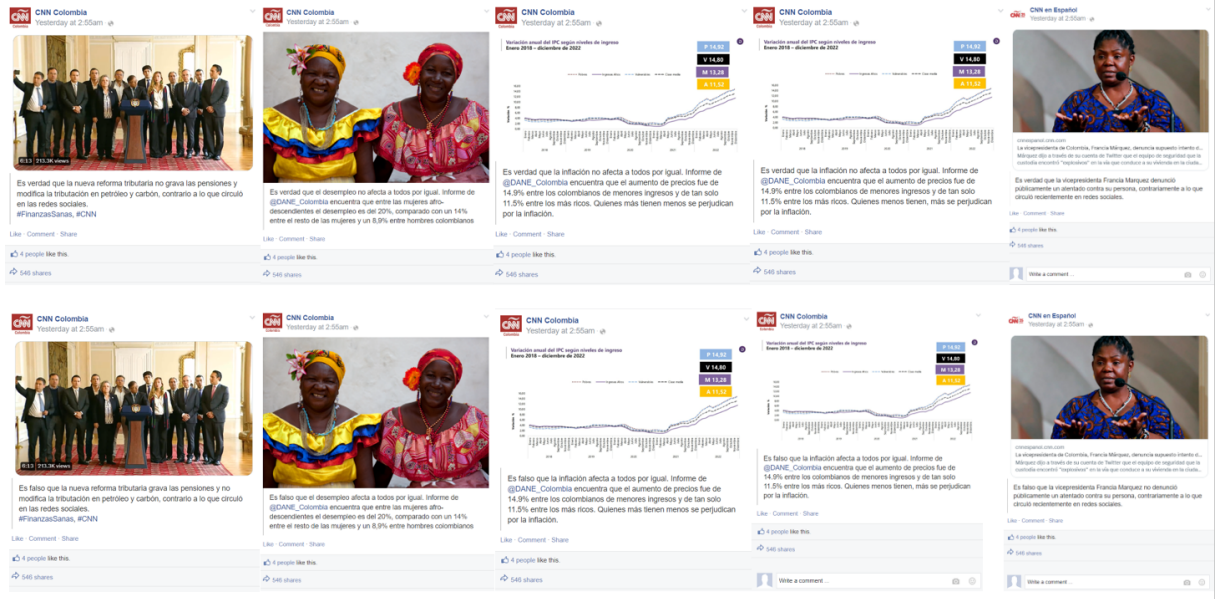
with a picture of protesters banging pots and pans (ProtestaMarcha).

Figure 3 Chilean Treatments



The Colombian survey was fielded between February 2 and 27, 2023, among 2,449 respondents. A total of 859 respondents were assigned to the control group and the remaining 1,590 to the treatment group. Figure 4 displays the five pairs of treatments applied in Colombia. The first pair of posts states that the proposed tax reform will not levy pension taxes or modify duties on oil and carbon (Impuesto). The second treatment reports that unemployment is largest among afro-descendent women, 20 percent, compared to other Colombian women, 14 percent, and Colombian men, 8.9 percent (Desempleo). The third treatment reports that inflation affects higher-income individuals less (InflacionMas). The fourth treatment reports that inflation affects lower-income individuals more (Inflacion-Menos). Lastly, the fifth treatment reports that vice-president Fracia Marquez publically denounced that she was the target of a terrorist attack (AtentadoMarquez).

Figure 4 Colombian Treatments



4.1 Variables

We estimate models for two main dependent variables. The first measures respondents' willingness to transgress democratic institutions to favor Congress over the president. The variable is measured based on respondents' 5-point agreement with the question: "If the president's policy does not match the preferences of [Chileans, Brazilians, Colombians], Congress should remove the president from office". The 5-point scale ranges from strongly agree to strongly disagree.

Our second dependent variable measures respondents' willingness to dissolve Congress using the same 5-point agreement scale: "When the country faces serious difficulties, it is justifiable for the President to dissolve Congress".

We measure respondents' undemocratic attitudes as a function of vote choice and ex-

posure to social media treatments. Vote choice measures preferred presidential candidate "if the presidential election runoff was set to take place next week". The three alternatives were to vote for the incumbent president, to vote for the leading opposition candidate of the last runoff election, or to cast a blank vote. We used the same ballot as that used in the previous election. In all models, we set the base category to the incumbent president and create dummy variables for the opposition and blank vote choice. **The treatment variable** takes the value of 0 if the respondent was assigned to the control group and the value of 1 if the respondent was assigned to the treated group. The unrestricted models include the two main independent variables, the interaction between vote choice and treatment, and other socio-demographic controls. Lastly, we created dummies for the five different political messages to measure the effectiveness of widely accepted and more partisan messages.

5 Results

We estimate both OLS and ordered logit specification of our models, given the 5-point scale of our dependent variables. Figure 5 and Table 1 present the OLS and Ordered Logit results, respectively. Model specifications, with controls, held the left-leaning incumbent president in each country as the baseline. Models include a variable for the treated group and separate dummies for each treatment category. To facilitate the interpretation of our results, Figure 5 presents the OLS predicted probabilities organized by country (Brazil, Chile, and Colombia) and, from left to right, by Candidate (Left-leaning, blank voters,

and right-leaning).

Let us begin by describing the overall model results shown in Figure 5. The first set of hypotheses expects opposition voters to express higher support for impeaching the President and government voters to express higher support for dissolving Congress. As expected, opposition voters reported support for impeachment between half a point (Brazil) and two points higher (Chile). Differences were statistically significant at the $p < .01$ level in all three countries.

There are also significant differences in the support for impeachment across countries. In Brazil, the mean support for impeachment is very high across the board, including among supporters of the Workers' Party President Lula da Silva. This is not surprising given the high frequency of impeachment proceedings and the removal of Collor de Mello and, more recently, Dilma Rousseff. While the decision to remove Collor de Mello took place amid a corruption scandal, the impeachment of Dilma Rousseff is widely considered as partisan and politically motivated (Nunes and Melo, 2017; Van Dijk, 2017). Interestingly, while progressive and leftist Members of Congress (MCs) proposed bills (2019) and initiated impeachment procedures (2022) against Sebastian Pinera, support for impeachment among supporters of Gabriel Boric in Chile is well below the support for impeachment among Lula da Silva voters.

Finally, Colombia, a country that has not sought an impeachment against the President since the proceedings against Ernesto Samper in 1996 and has never successfully impeached a President (Buitrago Rojas et al., 2020), displays remarkably high levels of support for impeaching the president. Our results also show that Colombia has the widest

differences in support for impeachment between supporters of the government and the opposition.

Opposition voters reported lower support for dissolving Congress in Colombia and Chile, as expected. However, and to some extent surprisingly, voters of Bolsonaro were supportive of dissolving Congress, reporting a 3.27/5 score that is on the "agree" side of the scale. Differences between the left and the right were large and statistically significant at the $p < .01$ level in all three countries, but, as indicated, of the opposite sign in Brazil. The fact that Lula da Silva was President-elect and that Bolsonaristas expressed significant anger regarding the result of the 2022 election may partly explain these results. However, it is clearly a surprising result if we consider that the Liberal Party of Jair Bolsonaro has the largest delegation to the Brazilian Congress (99 seats) and that the conservatives hold 233 seats compared to 223 of the governing coalition. Therefore, on purely instrumental grounds, it is unexpected that Bolsonaro voters displayed the highest support for dissolving Congress.

In all three countries, the overall level of support for dissolving Congress was lower than the support for impeachment. In fact, it is only among the supporters of Gabriel Boric in Chile that support for impeachment was clearly below the support expressed for dissolving Congress. Notwithstanding the high level of support among Bolsonaristas for dissolving Congress, evidence is generally supportive of hypotheses 1a and 1b.

Social Media Treatments

Results are not supportive of hypotheses 2a and 2b, as they were described in the previous sections and our pre-approved plans. First, results in Figure 5 show minimal differences between the mean support for impeachment among those respondents treated to social media posts by the government and those in the control group. Out of the 9 comparisons between the treated and control groups of Figure 5, there is only one of the estimates that behave as expected in our experimental design (i.e. the decline in the preference for impeachment among Gabriel Boric supporters). By contrast, results are not statistically significant for all other groups of voters in Brazil, Chile, and Colombia.

The effect of the treatments is also insignificant when we consider the preference for dissolving Congress. The results are null, and the relatively tight confidence intervals for the treated and control groups clearly indicate that this is not a measurement problem. Further tests of the mechanisms in the last section of this paper indicate that the treatments were properly understood by the respondents. Validation and attention checks provide little doubt that the lack of effect is not due to a failure to elicit the correct treatment response.

A more detailed look at the treatment-specific effects is shown in Figure 6, 7, and 8, which plot the predicted probabilities by treatment type against the control group for all three countries. Albeit we reported null effects of the treatments, some of the political messages seem to have an effect on support for undemocratic practices. In Brazil, blank voters exposed to the treatment Crime16 were less likely to back the dissolution

of congress, as reported in the bottom middle graph in Figure 6. In Chile, blank voters exposed to the abortion treatment were more likely to report a preference for impeachment, as we can see from the top middle graph in Figure 7. In Colombia, exposure to the treatment of inflation decreased incumbent voters' willingness to constrain the authority of congress, as shown in the bottom left graph in Figure 8. Additionally, opposition voters exposed to the tax reform treatment were more likely to favor the dissolution of congress, as shown in the bottom right graph in Figure

While some results are suggestive that priming on wedge and partisan issues may increase support for impeachment, as it is when Kast supported reading the protest post in Chile, it is difficult to extract any conclusion other than a rejection of the second set of hypotheses. While it is possible that negative and highly toxic messages will produce the desired effect, that would only be possible if we sacrifice external validity. We consider our choice of treatments as carefully curated to describe typical messages observed in all three countries and, within those parameters, the results should be considered globally as null and a rejection of the stated hypotheses.

Figure 5 Impeachment and Dissolution of Congress by Party and Country, Treatment and Control, OLS models reported in the SIF to this article.

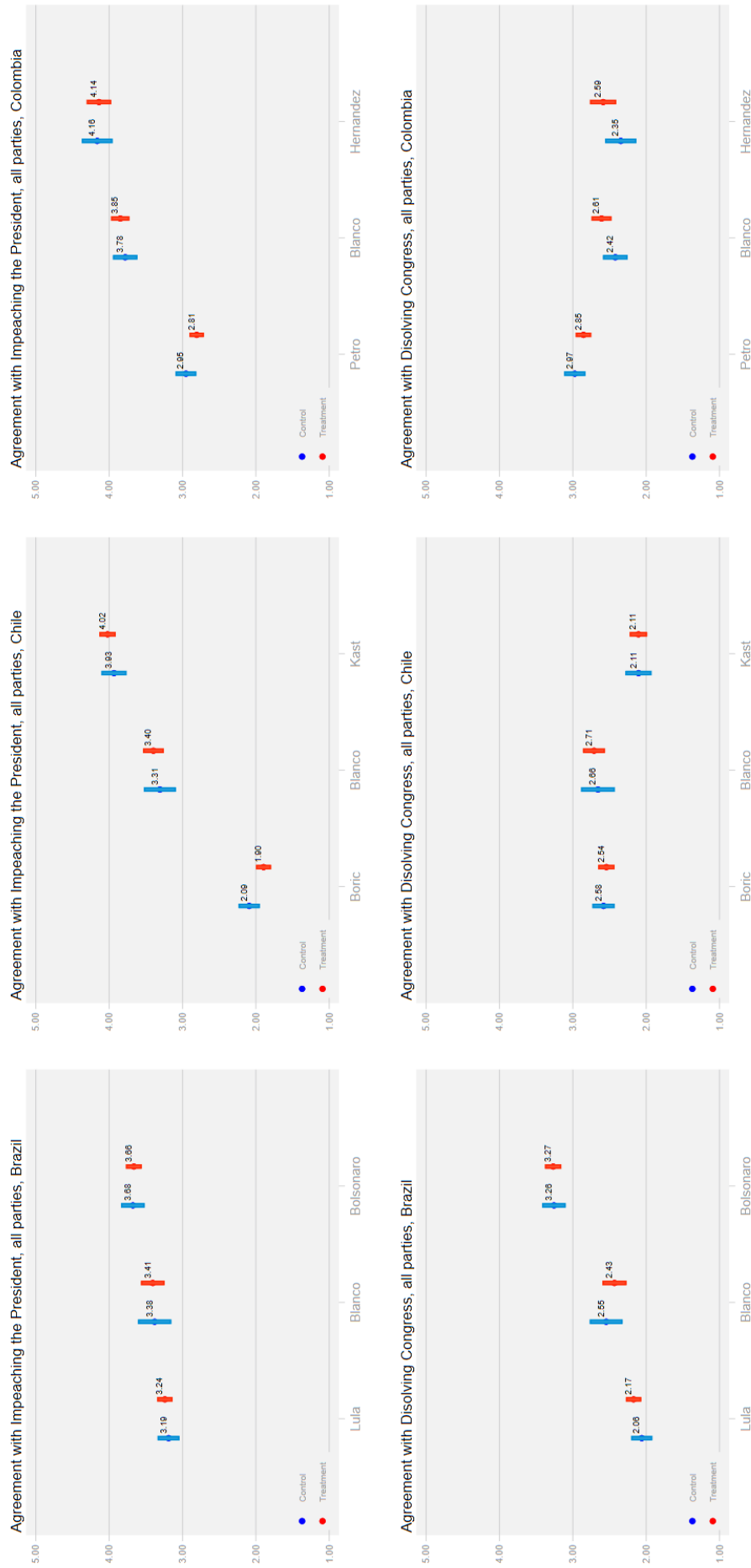


Table 1 Support for Impeachment and Dissolution of Congress in Brazil, Chile and Colombia

	Brazil Impeach	Brazil Dissolve	Chile Impeach	Chile Dissolve	Colombia Impeach	Colombia Dissolve
Opposition Voters	0.661*** (0.151)	1.634*** (0.156)	1.621*** (0.180)	-0.778*** (0.173)	2.137*** (0.146)	-0.655*** (0.143)
Blank Voters	0.156 (0.182)	0.765*** (0.187)	1.149*** (0.155)	-0.707*** (0.153)	1.451*** (0.164)	-0.068 (0.161)
Treated Group	0.038 (0.123)	0.202 (0.130)	-0.179 (0.113)	-0.117 (0.114)	-0.157 (0.114)	-0.049 (0.112)
Treatment 1	-0.195 (0.123)	0.035 (0.127)	-0.159 (0.124)	-0.087 (0.125)	0.025 (0.117)	0.066 (0.116)
Treatment 2	-0.034 (0.122)	0.016 (0.126)	-0.301** (0.125)	0.081 (0.125)	0.084 (0.115)	0.067 (0.114)
Treatment 3	-0.057 (0.120)	0.080 (0.123)	-0.056 (0.123)	0.153 (0.123)	0.189 (0.117)	0.107 (0.116)
Treatment 4	-0.010 (0.123)	0.204 (0.126)	-0.024 (0.124)	0.214* (0.121)	0.134 (0.113)	-0.015 (0.112)
Treated Opposition	-0.049 (0.182)	-0.183 (0.186)	0.189 (0.226)	0.413* (0.219)	0.320* (0.176)	0.016 (0.176)
Treated Blank	0.064 (0.224)	-0.349 (0.232)	0.179 (0.191)	0.332* (0.190)	0.250 (0.199)	0.227 (0.196)
1 2	-1.729*** (0.137)	0.118 (0.136)	-1.368*** (0.128)	-1.163*** (0.125)	-0.152 (0.117)	-0.762*** (0.116)
2 3	-0.865*** (0.131)	0.738*** (0.137)	-0.530*** (0.123)	-0.382*** (0.122)	0.721*** (0.118)	-0.032 (0.115)
3 4	0.132 (0.130)	1.843*** (0.141)	0.302** (0.122)	0.561*** (0.123)	1.485*** (0.121)	0.914*** (0.117)
4 5	1.211*** (0.132)	2.871*** (0.149)	1.292*** (0.126)	1.559*** (0.129)	2.337*** (0.126)	1.871*** (0.124)
N	2159	2127	2137	2068	2513	2455
Controls	yes	yes	yes	yes	yes	yes

***p < .01; **p < .05; *p < .1

Notes: The model baseline is set to voters of the incumbent Presidents in each country, Lula Da Silva (President elect) in Brazil, Gustavo Petro in Colombia, and Gabriel Boric in Chile. The baseline treatments are *Crime16* in Brazil, *votoObligatorio* in Chile, and *Impuesto* in Colombia. The baseline treatment is *Inflacion10* in Brazil, *Aborto* in Chile, and *AtentadoMarquez* in Colombia. Treatment 2 is *Inflacion90* in Brazil, *Inflacion* in Chile, and *Inflacion-* in Colombia. Treatment 3 is *Crime84* in Brazil, *ProtestaMinistra* in Chile, and *Inflacion+* in Colombia. Treatment 4 is *LulaTax* in Brazil, *ProtestaMarcha* in Chile, and *Desempleo* in Colombia.

Figure 6 Impeachment and Dissolution of Congress by party and treatment in Brazil, OLS models reported in the SIF to this article.

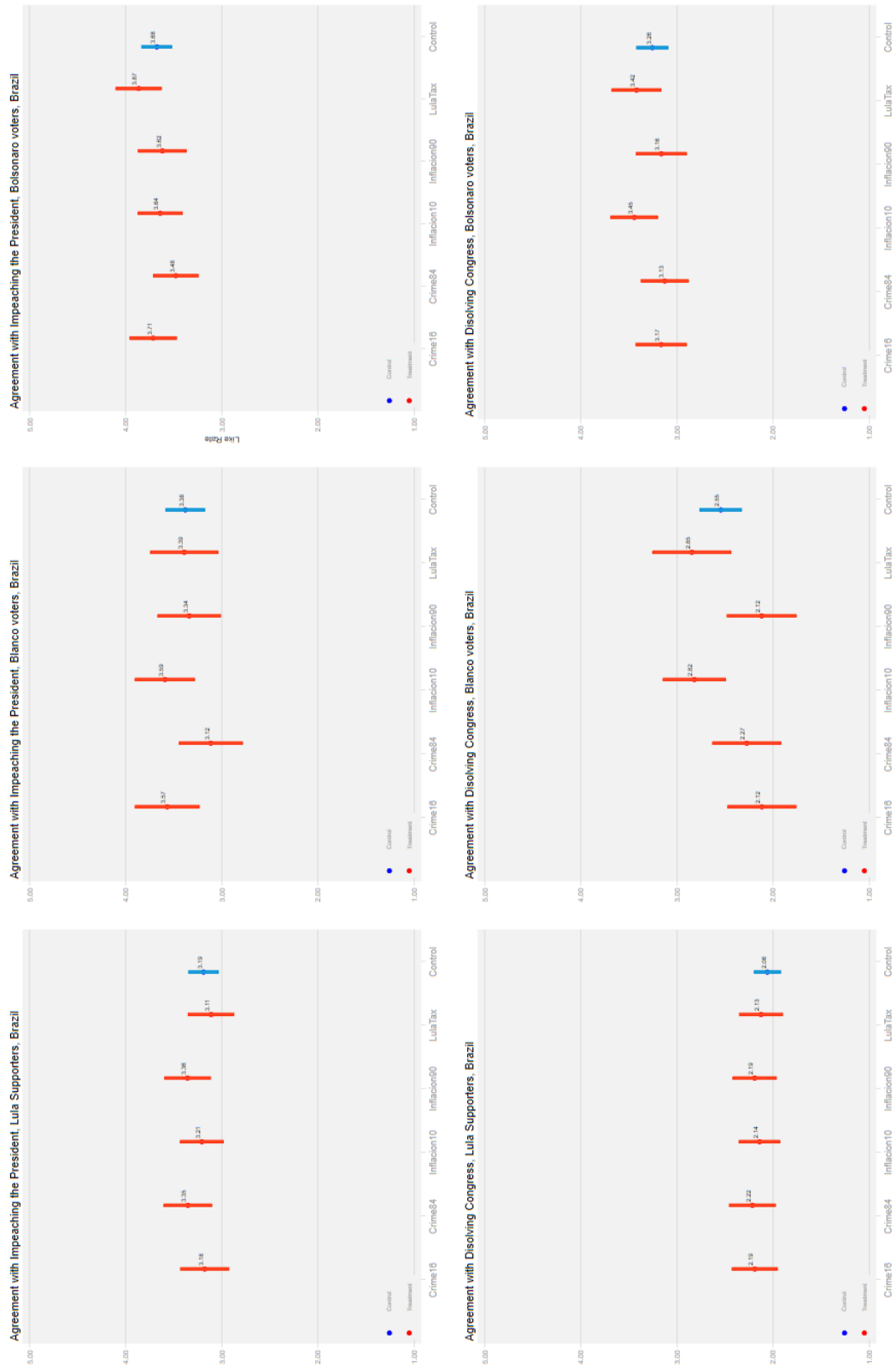


Figure 7 Impeachment and Dissolution of Congress by party and treatment in Chile, OLS models reported in the SIF to this article.

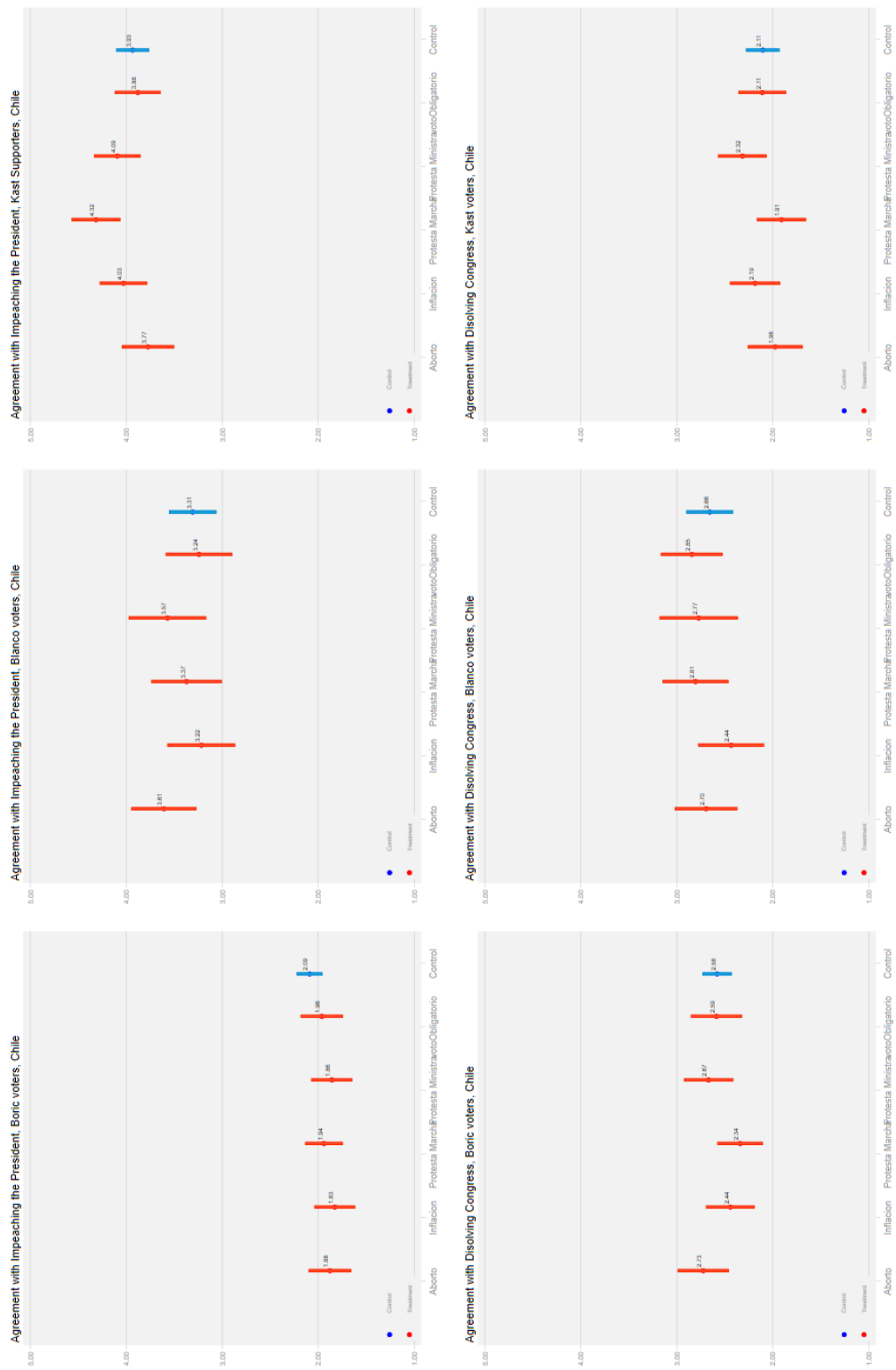
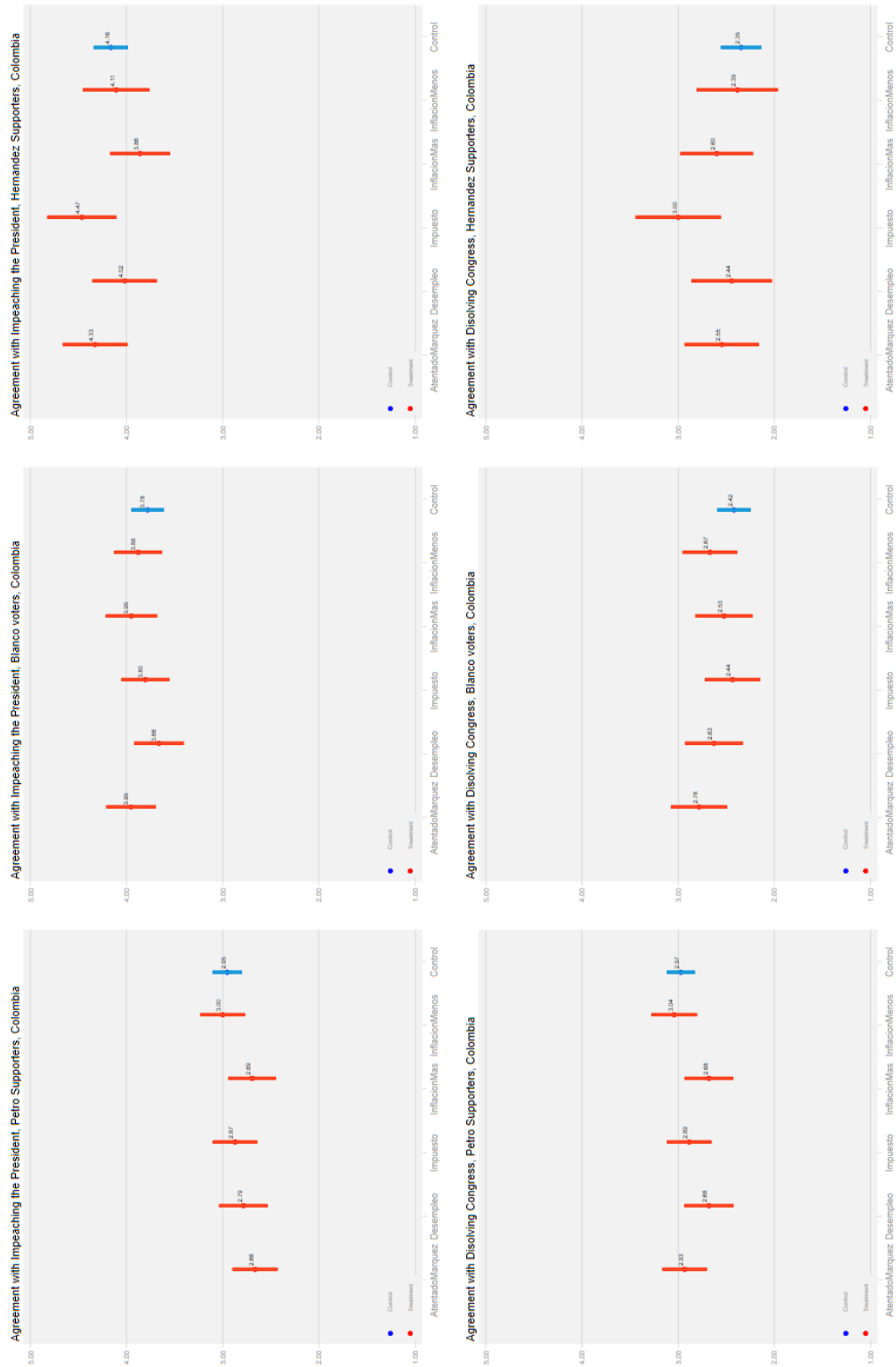


Figure 8 Impeachment and Dissolution of Congress by party and treatment in Colombia, OLS models reported in the SIF to this article.



6 Why "null findings"? An Autopsy of our Experiment

Results in this article describe affectively polarized voters that support undemocratic policies if it serves the purpose of advancing in-group goals. Yet, our experimental design could not provide a convincing mechanism where partisan messages increase support for undemocratic practices. We report null results for most treatments, even if some highly partisan social media messages on wedge issues produce suggestive results. Overall, the evidence is that respondents treated to social media messages are statistically indistinguishable from those in the control group. In this section, we conduct an autopsy of our experimental results to assess if the null findings are credible and reflective of the respondents' attitudes or the result of problems in our experimental design.

The experiment's sample size is large and comfortably exceeds power requirements, even for the subsamples of blank and partisan voters.¹ In preparation for the possibility that results could be null, we included in the survey validation checks that allow us to explore if the treatments were understood correctly by the respondents, if the treatments elicited the expected affective response, and controlling for such affective responses, test for the causal mechanisms that connect social media exposure and (un)democratic attitudes.

What could have failed...or not?

Null findings are always important if they disprove theories but are less interesting if they reflect poor design choices (Calvo and Ventura, 2021). Therefore, let us describe

¹Finding the minimum sample size that would prevent Type I errors is difficult before collecting survey results. We expected a survey of 2,400 respondents to exceed power requirements.

three different problems that could affect our experiment: First, (1) respondents could have failed to interpret the social media treatments. In that case, the null findings would not disprove the hypotheses, given that partisanship was not properly primed. To ensure that treatments were understood correctly, we asked respondents whether they would "like", "share", "comment", or ignore the Facebook posts. Therefore, we can assess if partisans' interpretation of the treatment aligns with our experimental design.

Second, findings may be weak because frames did not elicit the expected emotional response, with negative or positive partisan messages failing to elicit in-group or out-group affective reactions. Following [Banks et al. \(2021\)](#), we expect self-reported affective responses such as "anger", "joy", or "disgust" to activate partisan identities and increase the perceptions of threat to the in-group. However, if the affective responses do not correspond with the expectations, then the (un)democratic response would not materialize.

Finally, it is possible that the treatment frames are appropriately interpreted by the respondents and that they elicit the expected affective responses. In this case, we assume that the null results are an appropriate description that the mechanism is not producing the expected results. The hypotheses would then be rejected.

To summarize, a failure to elicit the appropriate partisan response to the treatments would indicate an experimental design problem. In contrast, eliciting the proper behavioral and affective response would suggest that the hypotheses are not supported.

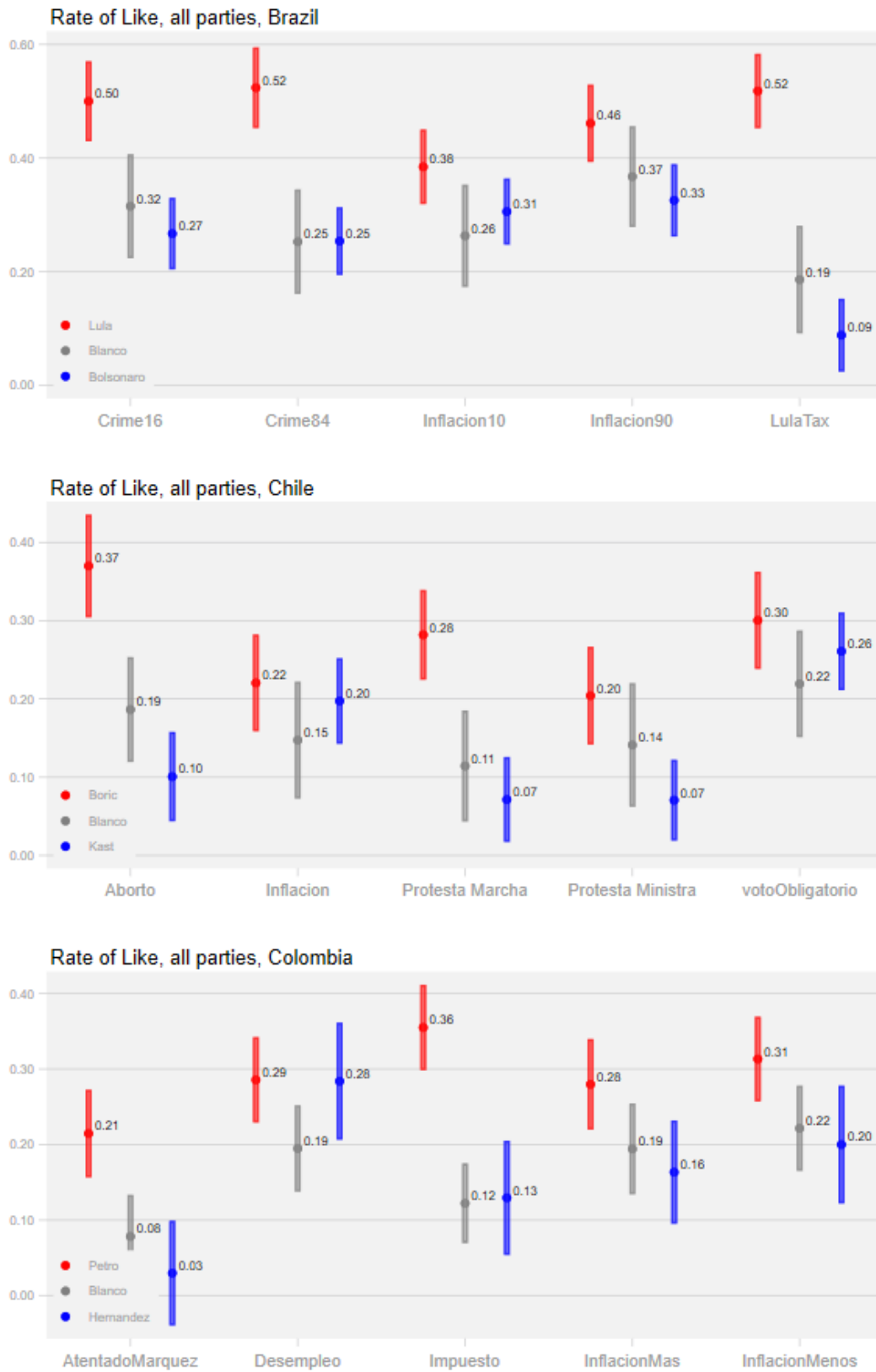
Autopsy of Problem 1: Did the respondents properly interpret the treatments?

To evaluate if there is a failure to communicate the partisan content of the frames, we can take advantage of one of the survey questions that asked respondents whether they would “like”, “share”, “comment”, or “ignore” the treatments. Descriptive information in Figure 9 shows that, as expected, decisions to “like” follow clear partisan lines, with voters supporting the government considerably more likely to “share” the treatments than supporters of the opposition.

Interestingly, some of the results we previously described as *suggestive* also elicit a wider inter-party difference in “likes”, such as the treatments “marcha protesta” and “Aborto” in Chile. However, while supporters of the government “liked” and “shared” the different treatments, it did not translate into more (un)democratic attitudes.

Overall, the “like” and “share” behavior indicates that respondents correctly interpreted the treatments. Results rule out that the source of the null findings is an improper design or a failure to understand the treatments.

Figure 9 Respondent's “like” rate by country, party, and treatment.



Autopsy of Problems 2: Did treatments elicit the expected affective response

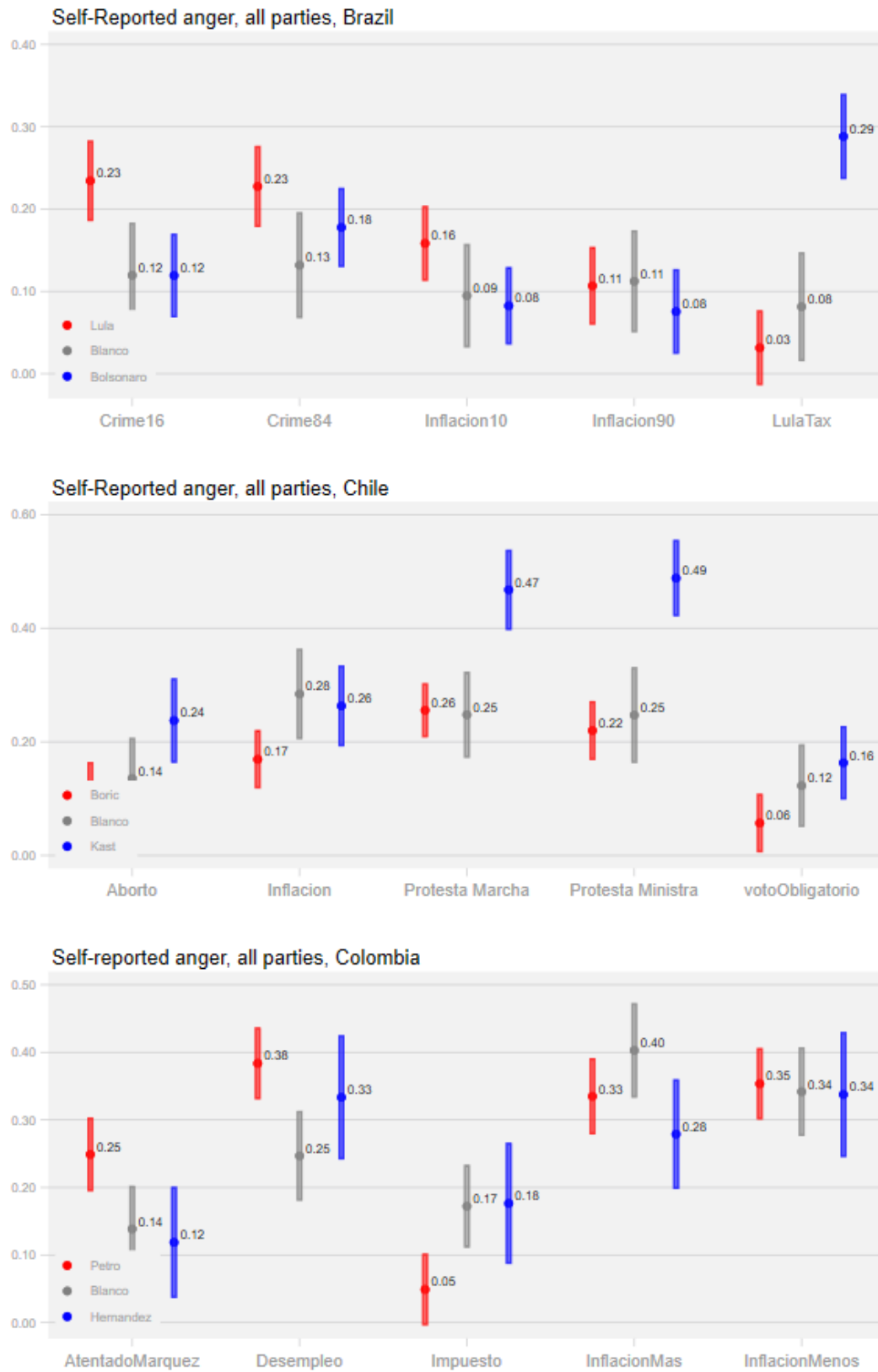
Results in Figure 10 show that self-reported anger is higher among partisans and for partisan treatments. In Brazil, 23% of Lula voters reported “anger” after being treated to the Crime16 and Crime84 posts; and 29% of Bolsonaro supporters reported “anger” after reading LulaTax. However, neither Lula voters nor Bolsonaro voters increased their support for dissolving Congress or impeachment respectively. There is no increase in (un)democratic attitudes when considering those treatments that elicit the strongest negative responses. The effect of the treatments is null when we add the emotional responses as controls for the models.

In the case of Chile, Abortion and the two Protest treatments elicit angry responses of 24%, 47%, and 49% among Kast voters. Although ProtestaMarcha and ProtestaMinistra have almost identical “angry” rates, only ProtestaMarcha is associated with an increase in agreement with impeachment at a statistically significant $p < .05$ while the effect of the treatment Abortion is insignificant and the sign has the wrong direction.

In Colombia, the three treatments that elicited the largest “angry” rates were Unemployment and the two inflation treatments. However, although the rate was well above 30% of the sample, there is no statistical difference with the control group.

Overall, there is no evidence that high self-reported rates of “anger” after being treated had any measurable effect on the support for impeachment or for dissolving Congress.

Figure 10 Respondent's self-reported "anger" by country, party, and treatment.



7 Concluding remarks

This multi-country and pre-registered study sought to assess the effect of partisan social media messages on two undemocratic practices, politically motivated impeachment and dissolving Congress. We surveyed over 7,500 respondents in Brazil, Chile, and Colombia and considered 15 treatments, from non-partisan government statements to wedge issues such as protests, taxes, and abortion. The two-branch and two-stage design included validation checks to evaluate the behavioral and affective reaction to the treatments, allowing us to verify that respondents understood the messages and that partisans’ “likes” and affective responses did meet expectations.

The results of this study verify that opposition voters express higher support for impeaching the President and government voters express higher support for dissolving Congress. As expected, opposition voters reported support for impeachment between half a point (Brazil) and two points higher (Chile) on a 5-point scale. Differences were statistically significant at the $p < .01$ level in all three countries.

While partisan differences in attitudes towards impeachment and dissolving Congress align with expectations, results of the different treatments did not consistently increase or decrease undemocratic attitudes. The narrow confidence intervals around the treatment and control groups indicate that attitude differences across partisans are robust and that the treatments had no measurable effects.

Results in Figure 9 and Figure 10 provide consistent evidence that supporters of the different candidates “liked” the treatments as per the design and that these treatments

activated the expected emotional responses. However, *liking* the treatments and *angry* self-reported emotions do not increase support for impeachment or dissolving Congress. The autopsy conducted on key validation checks allows us to discard problems in the interpretation of the treatments or a failure to elicit a proper affective response. Therefore, we interpret our findings as a rejection of the second set of hypotheses.

References

- Banks, A., Calvo, E., Karol, D., and Telhami, S. (2021). # polarizedfeeds: Three experiments on polarization, framing, and social media. *The International Journal of Press/Politics*, 26(3):609–634.
- Bowler, S., Carreras, M., and Merolla, J. L. (2022). Trump tweets and democratic attitudes: Evidence from a survey experiment. *Political Research Quarterly*, page 10659129221137348.
- Broockman, D. E. and Kalla, J. L. (2022). When and why are campaigns’ persuasive effects small? evidence from the 2020 us presidential election. *American Journal of Political Science*.
- Broockman, D. E., Kalla, J. L., and Westwood, S. J. (2023). Does affective polarization undermine democratic norms or accountability? maybe not. *American Journal of Political Science*, 67(3):808–828.
- Buitrago Rojas, A. P., Miranda Corzo, J. G., and López López, J. S. (2020). *Juicio político a presidentes en Colombia (1982-2018)*. Ediciones Usta.
- Calvo, E. and Ventura, T. (2021). Will i get covid-19? partisanship, social media frames, and perceptions of health risk in brazil. *Latin American politics and society*, 63(1):1–26.
- Dahl, R. A. (1971). *Polyarchy: Participation and Opposition*. Yale University Press. Google-Books-ID: LRG7ngEACAAJ.

- Diamond, L. (2021). Democratic regression in comparative perspective: scope, methods, and causes. *Democratization*, 28(1):22–42.
- Ekman, P. and Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of personality and social psychology*, 17(2):124.
- Graham, M. H. and Svobik, M. W. (2020). Democracy in america? partisanship, polarization, and the robustness of support for democracy in the united states. *American Political Science Review*, 114(2):392–409.
- Iyengar, S. and Westwood, S. J. (2015a). Fear and loathing across party lines: New evidence on group polarization. *American Journal of Political Science*, 59(3):690–707.
- Iyengar, S. and Westwood, S. J. (2015b). Fear and loathing across party lines: New evidence on group polarization. *American journal of political science*, 59(3):690–707.
- Kingzette, J., Druckman, J. N., Klar, S., Krupnikov, Y., Levendusky, M., and Ryan, J. B. (2021). How Affective Polarization Undermines Support for Democratic Norms. *Public Opinion Quarterly*, 85(2):663–677.
- Kurlantzick, J. (2011). The great democracy meltdown. *New Republic*, 242(8):12–15.
- Levitsky, S. and Ziblatt, D. (2018). *How democracies die*. Crown Publishing Group Viking an imprint of Penguin Books.
- Levitsky, S. and Ziblatt, D. (2019). *How democracies die*. Crown.
- Linz, J. J. (1978). *The Breakdown of Democratic Regimes: Crisis, Breakdown and*

Reequilibration. An Introduction. Johns Hopkins University Press. Google-Books-ID: *vfkp3sWAgIC*.

Lührmann, A. and Lindberg, S. I. (2019). A third wave of autocratization is here: what is new about it? *Democratization*, 26(7):1095–1113.

Mason, L. (2018). *Uncivil agreement: How politics became our identity.* University of Chicago Press.

Norris, P. (2011). *Democratic Deficit: Critical Citizens Revisited.* Cambridge University Press,.

Nunes, F. and Melo, C. R. (2017). Impeachment, political crisis and democracy in brazil. *Revista de Ciencia Política*, 37(2):281–304.

Pérez-Liñán, A. (2007). *Presidential impeachment and the new political instability in Latin America.* Cambridge University Press.

Pérez-Liñán, A. (2018). Impeachment or backsliding? threats to democracy in the twenty-first century. *Revista Brasileira de Ciências Sociais*, 33.

Svolik, M. W. (2019). Polarization versus democracy. *Journal of Democracy*, 30(3):20–32.

Van Dijk, T. A. (2017). How globo media manipulated the impeachment of brazilian president dilma rousseff. *Discourse & Communication*, 11(2):199–229.

Waisbord, S. (2018). Truth is what happens to news: On journalism, fake news, and post-truth. *Journalism studies*, 19(13):1866–1878.