

The impact of using social media to obtain political information on presidential approval: the case of Chile, 2011-2021

El impacto del uso de las redes sociales para adquirir información política en la aprobación presidencial: el caso de Chile, 2011-2021

O impacto do uso das redes sociais para aquisição de informações políticas na aprovação presidencial: O caso do Chile, 2011-2021

Jorge Belmar Soto, Universidad Diego Portales, Santiago, Chile,
(jorge.belmar@mail.udp.cl)

Vicente Faúndez Caicedo, Universidad Diego Portales, Santiago, Chile,
(vicente.faundez@mail.udp.cl)

Patricio Navia, Universidad Diego Portales, Santiago Chile; New York University,
Nueva York, Estados Unidos (pdn200@nyu.edu)

ABSTRACT | In this article, we examine how the use of social media to obtain political information affects presidential approval. Building on the extensive literature linking social media use to the reinforcement of views among people, we hypothesize that the use of social media to obtain political information is associated with more extreme positions on presidential approval. We test the hypothesis using data from nine national surveys conducted between 2011 and 2021 in Chile, a high-to middle-income country with widespread Internet access and burgeoning social media use. We find that obtaining political information on Facebook and Twitter (now X, since 2023) is positively associated with lower presidential approval. This correlation is particularly strong among right-wing extremists when the president is on the right.

KEYWORDS: presidential approval; use of social networks; acquiring political information; television consumption; ideological identification; Chile.

FORMA DE CITAR

Belmar, J., Faúndez, V. & Navia, P. (2024). The impact of using social media to obtain political information on presidential approval: the case of Chile, 2011-2021. *Cuadernos.info*, (59), 71-93.
<https://doi.org/10.7764/cdi.59.73757>

RESUMEN | Este trabajo evalúa el impacto del uso de las redes sociales para adquirir información política sobre la aprobación presidencial. Con base en la abundante literatura que asocia el uso de estas redes con el refuerzo de las opiniones entre las personas, postulamos una hipótesis que asocia el uso de las redes sociales para adquirir información política con posiciones más extremas sobre la aprobación presidencial. Las hipótesis se testaron utilizando datos de nueve encuestas nacionales realizadas en Chile –un país de ingresos mediano alto con acceso generalizado a Internet y un uso incipiente de las redes sociales– entre 2011 y 2021. Encontramos que adquirir información política en Facebook y Twitter (desde 2023, X) se asocia positivamente con una menor aprobación presidencial. Esto es especialmente fuerte en el caso de la derecha cuando hay un presidente de derecha.

PALABRAS CLAVE: aprobación presidencial; uso de redes sociales; adquirir información política; consumo de televisión; identificación ideológica; Chile.

RESUMO | Avaliamos o impacto do uso das redes sociais para adquirir informações políticas na aprovação presidencial. Com base na abundante literatura que associa o uso das redes sociais ao reforço de opiniões entre as pessoas, postulamos uma hipótese que associa o uso das redes sociais para aquisição de informação política a posições mais extremadas sobre a aprovação presidencial. Testamos as hipóteses usando dados de nove pesquisas nacionais realizadas no Chile entre 2011 e 2021, um país de renda média-alta com amplo acesso à Internet e uso emergente de mídias sociais. Descobrimos que a aquisição de informação política no Facebook e no X (antes, Twitter) está positivamente associada a uma menor aprovação presidencial. Isto é especialmente forte no caso da direita, quando há um presidente de direita.

PALAVRAS-CHAVE: aprovação presidencial; uso de redes sociais; adquirir informações políticas; consumo de televisão; identificação ideológica; Chile.

THE IMPACT OF USING SOCIAL MEDIA TO OBTAIN POLITICAL INFORMATION ON PRESIDENTIAL APPROVAL: THE CASE OF CHILE, 2011-2021

In recent years, social media has become one of the most important sources of information for people. It has been shown that the use of social media leads people to reinforce their pre-existing views. We extend the study of the impact of social media use on presidential approval, a dimension that has been somewhat neglected. Previous work has shown that presidential approval is influenced by respondents' ideology, their perceptions of the state of the economy, and in some cases, their sociodemographic characteristics. Since social media use reinforces people's views, we would expect a similar amplification effect of using social media to obtain political information on presidential approval.

Opinion polls that ask about the use of social media to target political information offer us the opportunity to assess its influence on presidential approval. We examine the case of Chile from 2011 to 2021, a high middle-income country with widespread Internet access. In 2011, 14.8% of Chileans reported using social media to obtain political information. In 2021, the figure was 35.4%. In those years, 71.1% of those who used social media to obtain political information disapproved of the president, but among the rest, disapproval was lower at 62.1%.

In what follows, we discuss the effects of social media use on the formation of people's opinions. We then discuss the determinants of presidential approval and include the increasing use of social media as a factor that affects how people evaluate the performance of their government. We hypothesize that the use of social media to obtain political information has an amplifying effect on presidential approval. We then present the methodology and describe the case of the evolution of the use of social media to obtain political information in Chile between 2011 and 2021. In the following section, we present the results. Finally, we discuss the implications of our findings for the general debate on the impact of social media use on presidential approval.

The growth of social media and its effects

Since social media are similar to traditional media in many dimensions, "one should expect their persuasion effects to mirror those of traditional media" (Zhuravskaya et al., 2020, p. 416). But in other dimensions, the impact of social media will be different. Low access barriers to the Internet and social networks favor the access of a variety of visions and perspectives (Benkler, 2006; Zhuravskaya et al., 2020). The use of social networks is expected to increase citizens' knowledge about politics, which promotes civic and political participation (Dimitrova et al., 2014; Boulianne, 2015; Scherman & Rivera, 2021). However, as anyone can produce content, there are many opportunities for misinformation, the spread of fake news and the open use of propaganda (Settle, 2018; Kim et al., 2022).

The information citizens receive through the media influences their political leanings and preferences, enabling users to form networks and facilitate collective action on social issues (Boulianne, 2015). Several studies highlight the impact of social media use as a reinforcement mechanism for the views people already hold (Klein & Robinson, 2020). Social media use leads to higher levels of political polarization (Settle 2018; Levendusky, 2013; Levendusky & Malhotra, 2016) and promotes affective polarization (Druckman et al. 2022; Yarchi et al., 2021) — although other studies question this. We would therefore expect people who engage more with online media to have more radical views than the rest. Furthermore, people who engage online usually interact with others who share their political and social views, and this tends to polarize them more (Settle, 2018).

In the digital age, social media has become an important source of political information for many people and has triggered a wave of social and political change. Social media is changing the way political information is consumed, not complementing traditional journalism and media, but replacing it (Casero-Ripollés, 2018). The information cycle has shifted and, in addition to communication professionals, platform users are now also involved in the production and dissemination of political information, thus influencing information dynamics (Enli, 2017). The characteristics of individual social media platforms significantly influence the dissemination of content (Nahon, 2016). For example, studies show that, for example, Twitter —the social network now known as X— is known for news dissemination, while Facebook focuses on community building and networking (Stier et al., 2018; Boukes, 2019). Consequently, political information consumption varies by platform (Casero-Ripollés, 2018).

The information landscape has evolved from a dynamic of scarcity to an era of abundance and information overload (Keane, 2013). People are more likely to casually stumble upon news via social media than actively seek out information. A 2018 study conducted in over 30 countries found that more than half of respondents, especially young people and those less interested in news, stumble upon news online casually to keep up to date (Newman et al., 2018).

This new information dynamic is strongly influenced by algorithms. Algorithms refer to the way developers prioritize the selection, order or visibility of information displayed on a social network (Bucher, 2012). Algorithms are typically designed to maximize user engagement, prioritize content that is likely to lead to interactions, potentially reinforce existing viewpoints, and create filter bubbles (Pariser, 2011). Algorithms in social media enable closed spaces where like-minded users interact, reinforcing homogeneous views and isolating dissenting ones (Monteiro & Vaca Narvaja, 2022). Sunstein (2018) discusses the age of algorithms and expresses

concern that citizens are losing control over the news they consume. Social media platforms act as intermediaries that determine the visibility of content for users. However, other studies show that people may be exposed to broader and more diverse discourse and views on social networks, but that the opportunity to be exposed to such diversity depends in part on people seeking out more diverse views (Bakshy et al., 2015).

Because of what algorithms typically do, users may be trapped in restricted information environments, contributing to polarization and hinders exposure to diverse ideas. Filter bubbles can increase polarization through various mechanisms that drive users to find support for their social interpretations and to find sources of information that reduce cognitive dissonance and reinforce a coherent collective vision that excludes dissenting perspectives. In addition, users prefer an environment that strengthens their group image. They seek legitimacy and security among like-minded people, which favors the exclusion of dissenting opinions. Finally, users tend to favor arguments that reinforce their existing beliefs and seek validation and acceptance even for extreme arguments (Pérez Zafrilla, 2021).

In this way, social media create echo chambers in which like-minded users gather in virtual public spaces and reinforce shared perspectives and biases (Calvo & Aruguete, 2018). The resulting polarization leads to a fragmentation of public opinion and exacerbates conflicts between different ideological groups. Echo chambers reinforce pre-existing beliefs, reduce the possibility of constructive dialog and increase social division (Iyengar & Westwood, 2015; Sunstein, 2018). This fragmentation and reinforcement of homogeneous views can negatively influence approval of a president. Social media users who are predominantly exposed to information that confirms their biases and perspectives develop more extreme views and polarized attitudes (Hollander, 2008; Tewksbury & Riles, 2015; Van Aelst et al., 2017; Waisbord, 2018; Aruguete & Calvo, 2018).

Because presidents “use the public’s evaluations of their performance as a window into citizens’ evolving views and, thus, as a guide to adjusting their policy program (...) changes in presidents’ approval ratings have serious enough consequences to give presidents strong incentives to pay attention — and they do” (Carlin et al., 2015, p. 111), they pay attention to the way people access news and information because their approval depends on the information people have about the president's and the government's activities.

The sharpening of partisan attitudes, reflected in increasingly extreme assessments of the performance of presidents or other national leaders, is an indicator of political polarization. Since the early years of social media, it has been

shown that the number of followers making extreme evaluations of presidential performance in the United States has increased significantly, exacerbated by the influence of social media on the dissemination of political information (Iyengar & Hahn, 2009).

The media, through its many platforms, shapes perceptions of the president's job (Iyengar & Kinder, 1987; Jacobs & Shapiro, 1994; Druckman & Holmes, 2004). In short, “media attention can prime citizen evaluations of presidential popularity” (Kelleher & Wolak, 2006, p. 195). Through access to information via the media, citizens evaluate government performance, assign responsibility for successes and failures to the authorities and make their voting decisions (Iyengar, 1994; Norris, 2000).

In traditional media, journalists acted as gatekeepers of information, filtering and contextualizing news in a more unified way. In contrast, social media, with its abundance of information and ability to create echo chambers, can increase polarization and significantly influence political evaluation. It is therefore reasonable to assume that people who consume more political information via social media are likely to display greater disapproval of the president.

Guriev and colleagues (2021) conducted a groundbreaking global study in 116 countries on the effects of the Internet on government approval and reported that expanding Internet access increases perceptions of corruption and negatively affects government approval, especially among respondents from lower socioeconomic strata (Guriev et al., 2021). A study from Russian regions also reports that higher use of the internet and social media decreases approval of the president. Others have speculated that the rise of social media may have led to “niche and partisan news consumption” (Small & Eisinger, 2020, p. 857). Drawing on these recent findings and the link between social media consumption and polarization, we offer an initial hypothesis:

H1. Respondents who use social media to obtain political information are less satisfied with the president than other respondents.

Previous studies have already identified other determinants of presidential approval. Economic conditions have been identified as an important determinant of presidential popularity (Mueller, 1970; Lewis-Beck & Steigmaier, 2000). After early research on presidential approval focused on national-level indicators such as inflation and unemployment, later studies focused on economic socio- or egotropic views and with a prospective or retrospective approach (Lewis-Beck & Steigmaier, 2007). Personal traits — or the perceived personality of presidents — also affect approval of the executive (Kinder, 1983), so much so that the personality of leaders

makes some citizens more forgiving of political mistakes (Krosnick & Kinder, 1990). Other studies on presidential approval point to the influence of ideology, gender, religion, education level, and occupation (Jung & Oh, 2019). Generational differences are responsible for presidential approval (Jacobson, 2016). Kriner and Schickler (2014) have shown that age, used as a control variable, has a slightly negative impact on presidential approval. Since we already know about the effects of sociodemographic variables, our study looks at the possible effects of social media use on presidential approval.

Several studies show that political ideology influences presidential approval (Nannestad & Paldam, 1997; Donovan et al., 2019). Citizens who identify with the ruling party are more likely to approve of the president (Fiorina, 1981). Because people acquire political values in their formative years, they are less likely to change their views as they grow older (Bartels & Jackman, 2014). Although critics have also downplayed the importance of political ideology, a growing body of recent evidence suggests that ideology plays a very important role in how people see the world and how it shapes their views, values, and attitudes (Jost et al., 2008; Dalton, 2008).

Given that literature has largely shown that presidential approval is partially influenced by ideological identification —with those who are ideologically close to the administration more likely to approve of the president— and that there may be a negative association between social media consumption and presidential approval, we postulate a second hypothesis linking the two expectations. We expect that those who are ideologically close to the government but use social media more intensively will be less inclined to approve of the president's performance:

H2. Respondents who are ideologically close to the government and use social media to obtain political information are less likely to agree with the president than other respondents.

Our case

As an upper-middle income country, Chile is one of the most developed countries in Latin America. Since the restoration of democracy in 1990, the country has consolidated a well-functioning democracy with an institutionalized party system. In the late 2000s, Chile had successfully completed four consecutive terms in office under presidents of the center-left, multi-party Concertación coalition. In 2010, for the first time since the restoration of democracy, a center-right candidate, Sebastián Piñera, was elected president. In 2013, the former left-wing president Michelle Bachelet returned to power. Piñera was re-elected in 2017. So between 2006 and 2018, power in Chile alternated between Bachelet and Piñera.

At the end of 2019, massive public protests and street riots put the strength of democracy to the test (Peña & Silva, 2022). As a result of the previously reported dissatisfaction and unease with democracy (Joignant et al., 2017), the street riots triggered the biggest political crisis since the restoration of democracy. Fearing a coup, the right-wing governing coalition under President Sebastián Piñera (2018-2022) brokered an agreement with the left-wing parties and called for a referendum to decide whether to begin a Constitution-writing process. Although this step helped to ease the situation, the political participation of millions of Chileans in street marches underlined the strong political polarization.

Studies on presidential approval in Chile indicate that older voters are more likely to approve of the president (Perelló, 2015; Cabezas & Navia, 2019, p.85). Presidential approval follows a U-shaped trend, with higher approval at the beginning and towards the end of the term (Cabezas & Navia, 2019). Presidents experience a honeymoon in their approval ratings, but this honeymoon can be short-lived (Navia & Perelló, 2019). Ideology influences presidential approval in Chile more than the economic vote (Navia & Soto Castro, 2015). Some recent studies also suggest that corruption scandals — and the perception of corruption in general— - influence presidential approval (Cifuentes Krstulovic & Navia, 2021). Other studies that have looked at democratic legitimacy in Chile have also found that the crisis of democratic representation may have undermined support for democracy and, by implication, approval of the president (Joignant et al., 2017).

Between 2019 and 2022, Chile went through three different social and political processes. First, the Constitution process began with a referendum in October 2020, in which 80% of voters agreed to hold an election for a constitutional convention. In May 2021, Chileans elected a 155-member convention to draft the constitution. The deadline for the new draft was set for July 2022 and a new referendum was scheduled for September 2022, in which Chileans could accept or reject the new Constitution proposed by the convention. Secondly, the impact of the street riots led to a major setback for President Piñera's recognition in office. After many participants in the unrest called for Piñera's resignation and the police were accused of human rights violations for their crackdown on protesters, Piñera's approval rating never recovered. Thirdly, the COVID-19 pandemic triggered a deep economic crisis caused by the curfew imposed by the government. The government's slow response in providing financial aid to the population contrasted with the effective program to provide vaccines when they became available in early 2021. Thus, in the period 2011-2021, Chile was a well-functioning democracy with changing ruling parties, but from 2019 it entered a complicated social and political crisis.

Media consumption in Chile is historically high, partly due to the rapid spread of television in the 1990s and the rapid expansion of Internet use in the last two

decades (Valenzuela et al., 2021; Luna et al. 2022). The news media, especially television, have a major influence on opinion formation in Chile (Porath et al., 2015). It has been established that the two leading newspapers are right-wing in their reporting (Navia & Osorio, 2015).

As figure 1 shows, Chile leads Latin America in Internet usage. The high middle-income country has a similar level to the OECD countries, a group of highly developed democracies. Figure 2 shows the evolution of the use of Facebook and Twitter to obtain political information in Chile from 2011 to 2021. While only one in five people said they used Facebook or Twitter to obtain political information (although Instagram was introduced in 2010, it was not yet widely used that year), in 2021, one in three people used social media to obtain political information. Figure 3 shows the development of approval of the presidency in the CEP surveys between 2011 and 2021.

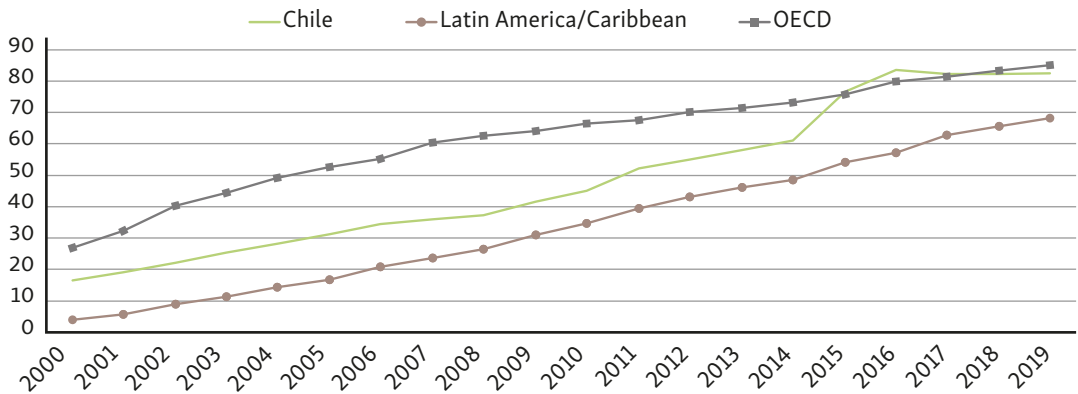


Figure 1. Internet use as share of national population, 2000-2019

Source: World Bank Indicators (2024). <https://data.worldbank.org/indicator>

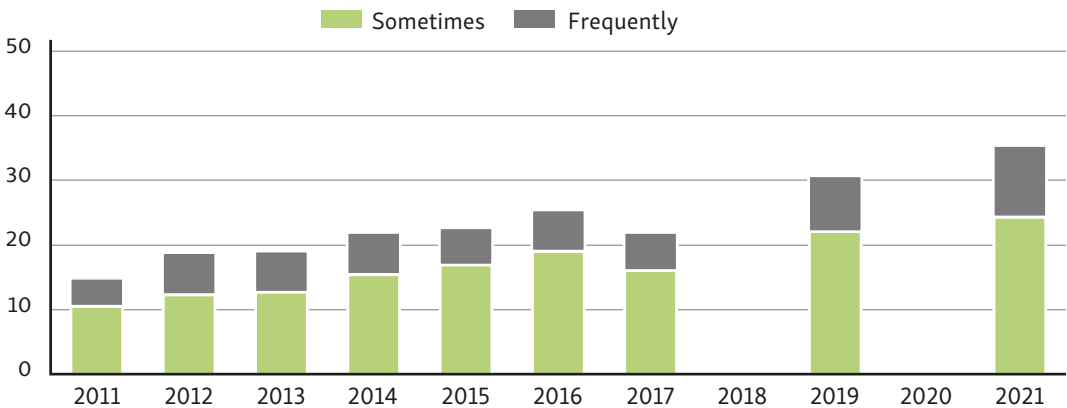


Figure 2. Use of social media to acquire political information in Chile, 2011-2021

Source: Own elaboration with CEP poll data from 2011 to 2021 (2024)

<https://www.cepchile.cl/opinion-publica/encuesta-cep/>

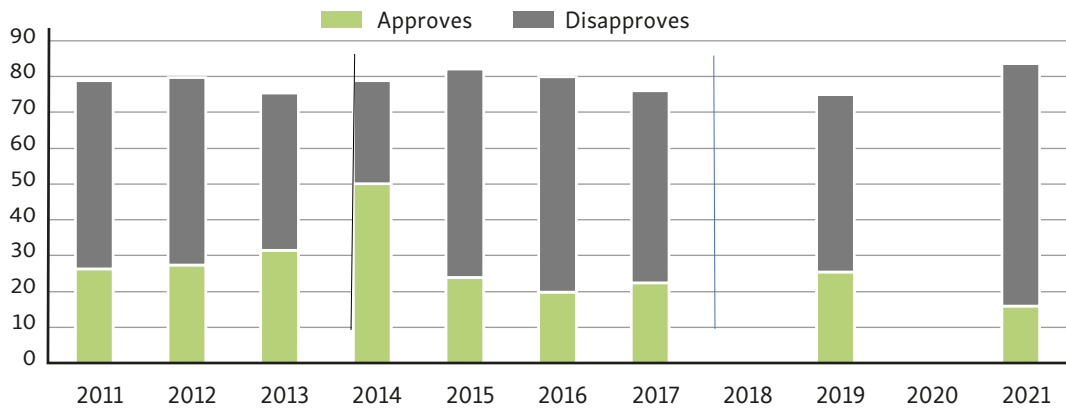


Figure 3. Presidential approval in Chile, 2011-2021

Source: Own elaboration with CEP poll data from 2011 to 2021 (2024)

<https://www.cepchile.cl/opinion-publica/encuesta-cep/>

METHODOLOGY

We rely on a nationwide survey in Chile that is regularly conducted by a private think tank, the Center for Public Studies (CEP, from its Spanish acronym). CEP surveys are conducted on a person-to-person basis and are nationally representative. We use the 9 CEP surveys conducted between 2011 and 2021, which include the question on the use of the media to obtain political information. In 2018, none of the CEP surveys conducted included this question. In 2020, CEP did not conduct a survey for the first time in more than 30 years due to the pandemic.

Our dependent variable is approval of the president. There were three response options: disapprove, neither approve nor disapprove, and approve. We coded these responses into approve (1) and everything else (0).

Our independent variable of interest is the use of social media to obtain political information. We rely on this question: do you follow political issues via social media such as Facebook or Twitter. Respondents have three options: never, sometimes and often. These values are coded as 1, 2 and 3 respectively. As the question was formulated with the intention of distinguishing increasing use of social media, we have retained this coding and not recoded into dichotomous categories.

We compare the use of social media with the use of traditional media — television and newspapers — to obtain political information. To do this, we rely on two CEP surveys that ask about watching political programs on television and reading political news (presumably in print media, although the question is not specified). Here too, the answers are

never, sometimes and often, which we have coded as 1, 2 and 3 respectively.

For hypothesis 1, our independent variable has three indicators: the use of social media (Facebook and Twitter), the use of newspapers and the use of television to obtain political information. We hypothesize that those who use social media to obtain political information will be less likely to give a favorable evaluation of the president, while the use of traditional media will have no effect on approval of the president.

For hypothesis 2, our independent variable of interest is the interaction between the use of social media to obtain political information and ideological affinity with the government. To assess ideological affinity with the government, we use a left-right scale identification question. CEP surveys ask a question on ideology with 7 possible answers: left, center-left, center, center-right, right, none, independent, and other. Since a large percentage of respondents chose none (57.1%), we created four dummy variables for left (17.0%), center (12.0%), and right (13.9%). We then examined whether the person identified with the same ideology as the national government. In the years covered by the study, Chile has had two presidents, the right-winged Sebastián Piñera (2010-2014, 2018-2022) and the left-winged Michelle Bachelet (2014-2018). The presidents take office in March of their first year. Because we are interested in whether respondents identify with the same ideology as the president, we coded all individuals who identified as right-wing and center-right as ideologically aligned with the national government for all years that Piñera was president, and those who identified as left-wing and center-left as ideologically aligned with the national government for all years that Bachelet was president. All others, including those who did not identify on the ideological scale, were coded as 0 in the respective survey. In this way, we do not have to split the dataset into two groups when Piñera was president and when Bachelet was president. To test the interaction effect of social media use and ideological proximity to the government on presidential approval, we created interaction variables to assess the effect of ideological identification and social media use and ideological proximity—or like-mindedness—to the government.

We also consider several controls. First, we control for economic perceptions. We use two questions on retrospective ego-tropic and socio-tropic economic perceptions, i.e., perceptions of the personal economic situation and the economic situation of the country. Respondents can choose between very bad, bad, neither good nor bad, good and very good. We have recoded these values from -2 to 2. We use socioeconomic status (SES) as a control variable. Based on the respondents' answers, their place of residency and the pollsters' assessment, people are categorized into a 5-point category (ABC, C2, C3, D and E, from highest to lowest). We recoded these scores to reflect a 5-point scale from low to high. We also control for education, a 9-point scale ranging from no formal study to postgraduate degrees. We also control for age.

Variable	N	Mean	Std Dev.	Min	Max
Presidential approval	13.139	.278	.448	0	1
H1. Use FB/Twitter for political issues	12.986	1.25	.546	1	3
Identifies with govt ideology	13.139	.151	.358	0	1
Identifies with opposite ideology to govt	11.732	.133	.340	0	1
Identifies w/Govt*FB/Twitter use	12.986	.209	.556	0	3
Left	13.140	.170	.376	0	1
Center	13.140	.120	.325	0	1
Right	13.140	.139	.339	0	1
Watches political programs on TV	13.052	1.69	.714	1	3
Reads politics on newspapers	13.046	1.51	.667	1	3
Age	12.393	3.58	1.30	1	5
Woman	13.139	.604	.489	0	1
Rural	13.139	1.15	.362	0	1
Socio-economic group	13.139	2.75	.839	1	5
Education	13.012	3.94	2.31	0	11
Sociotropic retrospective	13.014	-.351	.836	-2	2
Egotropic retrospective	13.072	-.028	.756	-2	2
Egotropic prospective	12.805	.416	.783	-2	2

Table 1. Descriptive statistics for the dependent and independent variables

Source: Own elaboration based on CEP poll data from 2011 to 2021 (<https://www.cepchile.cl>).

The CEP surveys divide age into five categories: 18-24, 25-34, 35-44, 45-54, 55 and older. We use this variable as a continuous indicator. We also use gender and residency in the Metropolitan Region as control variables. The models have fixed effects for election year. Table 1 shows the descriptive statistics for the dependent and independent variables.

RESULTS

To assess the impact of using social media to obtain political information, we estimated four logit models where the dependent variable is presidential approval, a dichotomous variable. Table 2 shows the results of the models. We included fixed effects by year to account for the growing penetration of Internet access and use, but for visual reasons they are not shown.

In model 1, we show the effects of social media use and ideological identification with the government. In model 2, we add interactions for social media use to obtain political information and ideological attachment to the national government. In model 3, we only include surveys from the years under a left-wing government (2014-2017) and add interaction effects for ideological identification and social media use to obtain political information. In model 4, we only include surveys for the years under a right-wing government (2011-2013, 2018-2021) and also consider interactions between ideological identification and social media use.

The first hypothesis states that respondents who use social media to obtain political information report lower approval of the president than other respondents. The results in model 1 show that those who use Twitter and Facebook are less likely to approve of the president. In model 2, the effect of social media use is not significant, but the effect of the interaction variable is significant and negative. This means that those who use Facebook and Twitter to get political information and who are ideologically aligned with the national government or the opposite ideology (left or right, respectively, when a leftist government is in power) have lower approval of the president than other respondents. Thus, exposure to political information on Facebook and Twitter makes those respondents that have ideological affinity with the government less likely to approve of the president. Similarly, respondents who are ideologically opposed to the president are more likely to indicate a lower approval rating. Models 3 and 4 show samples for years under a left-wing government (2014-2017) and years under a right-wing government (2010-2013, 2018-2021). In model 3, the effect of social media use on presidential approval is not significant for left-wing presidents, while in model 4 this effect is negative. Thus, putting the results of models 1 and 2 into perspective, the results in model 4 suggest that the negative effect of using Facebook and Twitter to obtain political information applies to right-winged presidents, but not to left-winged ones. Thus, the results are consistent with our first hypothesis, but with a caveat. Overall, those who use social media to obtain political information have lower approval of presidents. However, when we differentiate between left-winged and right-winged presidents, the effect is only significant for the latter.

Hypothesis 2 states that respondents who are ideologically close to the government and use social media to obtain political information agree less with the president than other respondents. In model 2, the interaction effect between ideological affinity with the government and social media use is negative for those who identify with the government and for those whose ideology is opposed to that of the government. The use of social media to obtain political information thus has a negative effect on approval of the president for both those

who are ideologically close to the government and those who are ideologically opposed to it. In model 3, the interaction effect between the use of social media and ideological identification with the left also has no significant effect. Among leftists, the use of social media to obtain political information does not lead to lower approval of the president than among other respondents. In model 4, the interaction effect of ideological affiliation with a right-wing president and the use of social media to obtain political information is also not significant for approval of the president.

Some of the effects of the control variables are worth discussing. Those who obtain information about political issues from newspapers are consistently more likely to approve of the president. In one model, those who watch television for information about political issues are also more likely to support the president. These results suggest that the negative effect of obtaining political information on presidential approval is related to Facebook and Twitter, but not to traditional media such as newspapers and television.

The effects of sociodemographic indicators are also consistent with previous findings. Older people are more likely to approve of the president, unless a right-wing president is in power. Women are also more likely to approve of the president — and even more so of Bachelet, the first female president who began her second term in 2014-2018. People in rural areas are also more likely to support presidents. People with higher education are less likely to support the president. People with a higher socio-economic status were more likely to approve of Piñera and more likely to disapprove of Bachelet. This underlines the strong class-based support in Chile for right-wing and left-wing presidents respectively. Consistent with the literature, we also find that people with positive economic prospects are more likely to approve of the president. Thus, support for the president in Chile is explained by the same socio-demographic, economic and ideological determinants as support for the president in other countries.

Figure 4 shows the predicted probabilities for the effect of Facebook and Twitter use on presidential approval based on the estimates in models 1, 3, and 4. In figure 4A, those who are ideologically close to the government are more likely to approve of the president. Among those with and without ideological affinity to the government, approval of the president decreases among those who use Facebook and Twitter more to obtain political information. The decline is more pronounced among those who are ideologically close to the government. This suggests that while the increased use of Facebook and Twitter has a negative impact on approval of the president among all respondents, it is more pronounced among those who are ideologically close to the national government.

VARIABLES	Model 1	Model 2	Model 3 Left Gov	Model 4 Right Gov
H1. Use FB/Twitterfor	-0.226*** (0.0504)	-0.0165 (0.0633)	-0.0373 (0.0920)	-0.284*** (0.0796)
H1. Identifies with govt	1.628*** (0.0582)	1.824*** (0.141)		
H1. Identifies w/Gvt*FB/TWTR		-0.284*** (0.0955)		
H1. Identifies againstGvt*/FB/TWTR		-0.780*** (0.0765)		
H2. Left			1.463*** (0.214)	-1.143*** (0.122)
H2. Right			-0.783*** (0.132)	1.925*** (0.191)
H2. Center			0.494*** (0.121)	0.442*** (0.0930)
H2. Left*Use FB/Twitter			-0.0353 (0.141)	
H2. Right*Use FB/Twitter				-0.177 (0.134)
Watches pol. TV programs	0.0554 (0.0410)	0.0975** (0.0430)	0.00653 (0.0563)	0.0968 (0.0653)
Reads politics in newspapers	0.0847* (0.0456)	0.110** (0.0474)	0.152** (0.0668)	0.117* (0.0683)
Age	0.0697*** (0.0202)	0.0673*** (0.0212)	0.0878*** (0.0270)	0.0399 (0.0319)
Woman	0.134*** (0.0475)	0.142*** (0.0497)	0.219*** (0.0730)	0.0664 (0.0656)
Rural	0.220*** (0.0650)	0.261*** (0.0682)	0.231** (0.0955)	0.251*** (0.0930)
Socioeconomic group	0.0114 (0.0351)	0.0377 (0.0365)	-0.160*** (0.0546)	0.143*** (0.0473)
Education	-0.0886*** (0.0138)	-0.0923*** (0.0144)	-0.150*** (0.0210)	-0.0544*** (0.0192)
Sociotropic retrospective	0.514*** (0.0335)	0.492*** (0.0353)	0.314*** (0.0540)	0.631*** (0.0465)
Egotropic retrospective	0.0655* (0.0350)	0.0700* (0.0366)	-0.0769 (0.0520)	0.178*** (0.0499)
Egotropic prospective	0.557*** (0.0337)	0.581*** (0.0355)	0.922*** (0.0543)	0.253*** (0.0464)
Constant	-1.675*** (0.139)	-1.922*** (0.152)	-0.690*** (0.227)	-1.919*** (0.194)
Observations	11,715	10,531	5,056	6,659

Fixed effect by poll year is not shown.

Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

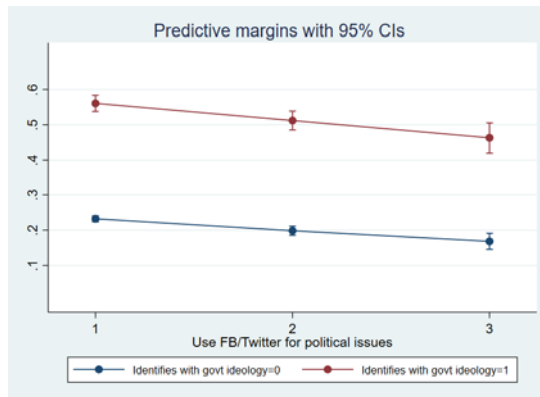
Table 2. Logit models on the use of social media and presidential approval, Chile, 2011-2021

Source: Own elaboration based on CEP poll data from 2011 to 2021 (<https://www.cepchile.cl>).

Figures 4B and 4C are based on models 3 and 4 in table 2. Figure 4B shows that left-wingers are more likely to approve of the president than right-wingers when the president is on the president. However, the slope of the curve is almost flat, suggesting that greater use of Facebook and Twitter has no effect on presidential approval for left-wing presidents. Figure 4C, on the other hand, shows that with a right-wing president, right-wing voters are more likely to approve of the president than left-wing voters, but the effect of Facebook and Twitter use has a stronger negative slope for right-wing respondents. This suggests that the increased use of social media to obtain political information has a negative effect among right-wing voters when there is a right-wing president than among left-wing voters when there is a left-wing president.

The results indicate that the use of Facebook and Twitter does not influence the approval of a president equally on the left and the right. If left-wingers use Facebook and Twitter more frequently, they are no less likely to approve of the president. Right-wingers, on the other hand, are less likely to approve of the president when there is a right-wing president if they use social media more. This suggests that right-wing presidents should be concerned when their supporters use social media to obtain political information.

4A. By govt affinity (Model 1)



4B. By ideology for leftwing governments (Model 3)

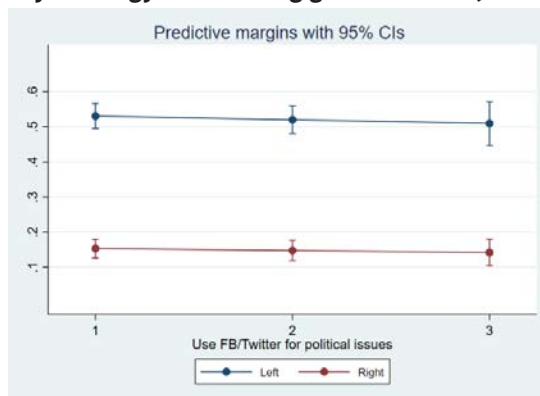


Figure 4 - Continues ▶

4C. By ideology for ightwing governments) (Model 4)

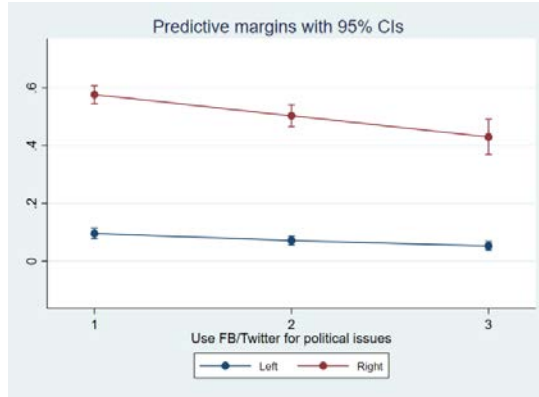


Figure 4. Predicted probabilities for use of FB/Twitter on presidential approval, Chile, 2011-2021

Source: Own elaboration based on CEP poll data from 2011 to 2021 (<https://www.cepchile.cl>).

DISCUSSION

We contribute to the large literature on presidential approval by examining the impact of the use of Facebook and Twitter to obtain political information on presidential approval in Chile between 2011 and 2021. Presidential approval remains an understudied dimension in the extensive research on the effects of social media use on political attitudes and behaviors. We show that in Chile, the use of social media to obtain political information is negatively associated with presidential approval. The use of social media to access political information has a consistently negative impact on presidential approval. Regardless of their ideological position, people who use Facebook and Twitter to access political information are less likely to approve of the president, and this effect is stronger for right-wingers when the president is on the right than for left-wingers when the president is on the left.

People who are more critical of the government might be more inclined to obtain political information. However, the data show that those who get information about political issues in newspapers are more likely to agree with the president, while those who get information about political issues on Facebook and Twitter are more likely to disapprove of the president. As we control for age and other socio-demographic indicators, the models show a robust association between obtaining more political information online and being less likely to approve of the president's job, especially among those on the right who are ideologically close to the president.

Our results could be influenced by the extended period we cover. Between 2011 and 2021, Chile experienced rapid growth in social media use. Therefore, there could be an unobserved effect on presidential approval that occurs for the first time. As social media use becomes more widespread and other social media apps such

as Instagram or Tik-Tok become more widely used, the negative effects of using social media to obtain political information on presidential approval could become more diffuse. The fact that presidents may not have developed communication strategies in the early years of social media use may also play a role in the negative impact of social media use on presidential approval. If governments adopted more aggressive communication strategies on social media, they may have been able to reverse the negative effects we report for Chile.

Further research is needed to determine whether the effects of accessing political news on Twitter or Facebook continue to have a negative impact on presidential approval when governments have kept up with new technologies. As digital natives come to power in many democracies — including Chile, where 36-year-old social media native and avid Twitter user Gabriel Boric was elected president in late 2021 — their social media savvy could have a positive impact on their approval ratings. Just as social media apps are rapidly evolving and social media use is changing, so too should the influence of social media use to gather political information. But for the period between 2011 and 2021, the use of social media to obtain political information had a negative effect on presidential approval in Chile.

FUNDING

We gratefully acknowledge funding from the National Fund for Scientific and Technological Development (ANID-Chile Fondecyt Regular #1231627) and by the Millennium Nucleus Center for the Study of Politics, Public Opinion and Media in Chile (ANID-grant No. NCS2021_063).

REFERENCES

- Aruguete, N. & Calvo, E. (2018). Time to# protest: Selective exposure, cascading activation, and framing in social media. *Journal of Communication*, 68(3), 480-502. <https://doi.org/10.1093/joc/jqy007>
- Bakshy, E., Messing, S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. *Science*, 348(6239), 1130-1132. <https://doi.org/10.1126/science.aaa1160>
- Bartels, L. M. & Jackman, S. (2014). A generational model of political learning. *Electoral Studies*, 33, 7-18. <https://doi.org/10.1016/j.electstud.2013.06.004>
- Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. New Haven, CT: Yale University Press.

- Boukes, M. (2019). Social network sites and acquiring current affairs knowledge: The impact of Twitter and Facebook usage on learning about the news. *Journal of Information Technology & Politics*, 16(1), 36-51. <https://doi.org/10.1080/19331681.2019.1572568>
- Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information, Communication & Society*, 18(5), 524-538. <https://doi.org/10.1080/1369118X.2015.1008542>
- Bucher, T. (2012). Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. *New Media & Society*, 14(7), 1164-1180. <https://doi.org/10.1177/1461444812440159>
- Cabezas, J. M. & Navia, P. (2019). Presidential approval in Chile, 1990-2018: Variance in U-Shaped curves. *Revista Latinoamericana de Opinión Pública*, 8(2), 63-87. <https://doi.org/10.14201/rlop.22354>
- Calvo, E. & Aruguete, N. (2018). # Tarifazo. Medios tradicionales y fusión de agenda en redes sociales (#Tarifazo. Traditional media and agenda melding in social networks sites). *In Mediaciones De La Comunicación*, 13(1), 189-213. <https://doi.org/10.18861/ic.2018.13.1.2831>
- Casero-Ripollés, A. (2018). Research on political information and social media: Key points and challenges for the future. *Profesional De La Información*, 27(5), 964-974. <https://doi.org/10.3145/epi.2018.sep.01>
- Carlin, R. E., Love, G. J., & Martínez-Gallardo, C. (2015) Cushioning the fall: Scandals, economic conditions, and executive approval. *Political Behavior*, 37, 109-130. <https://doi.org/10.1007/s11109-014-9267-3>
- Cifuentes Krstulovic, M. & Navia, P. (2021). El combate a la corrupción como prioridad ciudadana para la acción gubernamental: el caso de Chile, 2000-2019 (Combating corruption as a citizen priority for government action: the case of Chile, 2000-2019). *Opinião Pública*, 27(2), 451-475. <https://doi.org/10.1590/1807-01912021272451>
- Dalton, R. J. (2008). *Citizens Politics: Public Opinion and Political Parties in Advanced Industrial Democracies*. CQ Press.
- Dimitrova, D. V., Shehata, A., Strömbäck, J., & Nord, L. W. (2014). The effects of digital media on political knowledge and participation in election campaigns: Evidence from panel data. *Communication Research*, 41(1), 95-118. <https://doi.org/10.1177/0093650211426004>
- Donovan, K. Kellstedt, P. M., Key, E. M., & Lebo, M. J. (2019). Motivated reasoning, public opinion, and presidential approval. *Political Behavior*, 42, 1201-1221. <https://doi.org/10.1007/s11109-019-09539-8>
- Druckman, J. N. & Holmes, J. W. (2004). Does presidential rhetoric matter? Priming and presidential approval. *Presidential Studies Quarterly*, 34(4), 755-778. <https://doi.org/10.1111/j.1741-5705.2004.00222.x>
- Druckman, J. N., Klar, S., Krupnikov, Y., Levendusky, M., & Ryan, J. B. (2022). (Mis) estimating affective polarization. *The Journal of Politics*, 84(2), 1106-1117. <https://doi.org/10.1086/715603>
- Enli, G. (2017). New media and politics. *Annals of the International Communication Association*, 41(3-4), 220-227. <https://doi.org/10.1080/23808985.2017.1392251>
- Fiorina, M. (1981). *Retrospective Voting in American National Elections*. Yale University Press.

- Guriev, S., Melnikov, N. & Zhuravskaya, E. (2021). 3G Internet and confidence in government. *The Quarterly Journal of Economics*, 136(4), 2533-2613. <https://doi.org/10.1093/qje/qjaa040>
- Hollander, B. A. (2008). Tuning out or tuning elsewhere? Partisanship, polarization, and media migration from 1998 to 2006. *Journalism & Mass Communication Quarterly*, 85(1), 23-40. <https://doi.org/10.1177/107769900808500103>
- Iyengar, S. (1994). *Is Anyone Responsible?* University of Chicago Press.
- Iyengar, S. & Kinder, D. (1987). *News that matters*. University of Chicago Press.
- Iyengar, S. & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of communication*, 59(1), 19-39. <https://doi.org/10.1111/j.1460-2466.2008.01402.x>
- Jacobs, L. & Shapiro, R. (1994). Issues, candidate image, and priming: The use of private polls in Kennedy's 1960 presidential campaign. *American Political Science Review*, 88(3), 527-540. <https://doi.org/10.2307/2944793>
- Jacobson, G. C. (2016). The Obama legacy and the future of partisan conflict: Demographic change and generational imprinting. *The Annals of the American Academy of Political and Social Science*, 667(1), 72-91. <https://doi.org/10.1177/0002716216658425>
- Joignant, A., Morales, M., & Fuentes, C. (Eds.). (2017). *Malaise in Representation in Latin American Countries: Chile, Argentina, and Uruguay*. Springer.
- Jung, J. W. & Oh, J. (2019). Determinants of presidential approval ratings: Cross-country analyses with reference to Latin America. *International Area Studies Review*, 23(3), 251-267. <https://doi.org/10.1177/2233865919888373>
- Keane, J. (2013). *Democracy and media decadence*. Cambridge University Press.
- Kelleher, C. A., & Wolak, J. (2006) "Priming presidential approval: The conditionality of issue effects," *Political Behavior*, 28, 193-210.
- Kim, D., Chung, C. J., & Eom, K. (2022). Measuring online public opinion for decision making: Application of deep learning on political context. *Sustainability*, 14(7), 4113. <https://doi.org/10.3390/su14074113>
- Kinder, D. (1983). *Presidential Traits*. University of Michigan.
- Klein, E. & Robison, J. (2020). Like, post, and distrust? How social media use affects trust in government. *Political Communication*, 37(1), 46-64. <https://doi.org/10.1080/10584609.2019.1661891>
- Kriner, D. L. & Schickler, E. (2014). Investigating the president: Committee probes and presidential approval, 1953-2006. *The Journal of Politics*, 76(2), 521-534. <https://doi.org/10.1017/S0022381613001448>
- Krosnick, J. A. & D. R. Kinder. (1990). Altering the Foundations of Support for the President Through Priming. *American Political Science Review*, 84(2), 497-512. <https://doi.org/10.2307/1963531>
- Levendusky, M. (2013). *How Partisan Media Polarize America*. University of Chicago Press.
- Levendusky, M. & Malhotra, N. (2016). Does Media Coverage of Partisan Polarization Affect Political Attitudes? *Political Communication*, 33(2), 283-301. <https://doi.org/10.1080/10584609.2015.1038455>

- Lewis-Beck, M. S. & Stegmaier, M. (2000). Economic determinants of electoral outcomes. *Annual Review of Political Science*, 3, 183–219. <https://doi.org/10.1146/annurev.polisci.3.1.183>
- Lewis-Beck, M. S. & Stegmaier, M. (2007). Economic models of voting. In R. J. Dalton & H.-D. Klingemann (Eds.), *The Oxford Handbook of Political Behavior* (pp 518–537). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199270125.003.0027>
- Luna, J. P., Toro, S., & Valenzuela, S. (2022). Amplifying Counter-Public Spheres on Social Media: News Sharing of Alternative Versus Traditional Media After the 2019 Chilean Uprising. *Social Media+ Society*, 8(1). <https://doi.org/10.1177/20563051221077308>
- Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science*, 3(2), 126–136. <https://doi.org/10.1111/j.1745-6916.2008.00070.x>
- Monteiro, R. & Vaca Narvaja, H. (2022). La polarización en las redes sociales: actores, burbujas e intensidades (Polarization in social media: actors, bubbles and intensities). *Temas y Problemas de Comunicación*, 20, 52–62. <https://doi.org/10.5281/zenodo.7447088>
- Mueller, J. E. (1970). Presidential Popularity from Truman to Johnson. *The American Political Science Review*, 64(1), 18–34. <https://doi.org/10.2307/1955610>
- Nannestad, P. & Paldam, M. (1997). From the Pocketbook of the Welfare Man: A Pooled Cross-Section Study of Economic Voting in Denmark, 1986–92. *The British Journal of Political Science*, 27(1), 119–136. <https://doi.org/10.1017/S0007123497220053>
- Navia, P. & Osorio, R. (2015). *El Mercurio* lies, and *La Tercera* lies more. Political bias in newspaper headlines in Chile, 1994–2010. *Bulletin of Latin American Research*, 34(4), 467–485. <https://doi.org/10.1111/blar.12364>
- Navia, P. & Perelló, L. (2019). Aventuras de una noche y compromisos de largo plazo. Aprobación presidencial de Sebastián Piñera en Chile, 2009–2014 (One-night stands and long-term commitments: Presidential approval for Sebastián Piñera in Chile, 2009–2014). *Revista de Ciencia Política*, 39(1), 49–73. <https://doi.org/10.4067/S0718-090X2019000100049>
- Navia, P. & Soto Castro, I. (2015). It's not the economy, stupid. ¿Qué tanto explica el voto económico los resultados en elecciones presidenciales en Chile, 1999–2013? (It's not the economy, stupid. ¿How much does the economic vote influence presidential election results in Chile, 1999–2013). *Política* 53(1), 161–185. <https://doi.org/10.5354/0719-5338.2015.38154>
- Newman, N., Fletcher, R., Kalogeropoulos, A., Levy, David A. L., & Nielsen, R. K. (2018). *Reuters Institute Digital News Report 2018*. Reuters Institute for the Study of Journalism. <https://doi.org/10.60625/risj-f09r-ca66>
- Norris, P. (2000). *A Virtuous Circle: Political communications in postindustrial societies*. Cambridge University Press.
- Pariser, E. (2011). *The Filter Bubble: What the Internet Is Hiding from You*. Penguin.
- Peña, C. & Silva, P. (Eds.). (2022). *Social Revolt in Chile: Triggering Factors and Possible Outcomes*. Routledge.
- Perelló, L. (2015). One of these things is sort of like the other: presidential approval and support for government management of the economy in Chile, 2006–2013. *Política. Revista de Ciencia Política*, 53(1), 119–160. <https://doi.org/10.5354/0719-5338.2015.38153>

- Pérez Zafrilla, P. J. (2021). Polarización artificial: cómo los discursos expresivos inflaman la percepción de polarización política en internet (Artificial Polarisation: How Expressive Discourses Inflammate the Perception of Political Polarisation on the Internet). *RECERCA. Revista De Pensament I Anàlisi*, 26(2). <https://doi.org/10.6035/recerca.4661>
- Porath, W., Suzuki, J. J., Ramdohr, T., & Portales, J. C. (2015). Newspaper coverage of three presidential campaigns in Chile: Personalisation and political strategies. *Bulletin of Latin American Research*, 34(4), 451-466. <https://doi.org/10.1111/blar.12366>
- Scherman, A. & Rivera, S. (2021). Social media use and pathways to protest participation: evidence from the 2019 Chilean social outburst. *Social Media+ Society*, 7(4). <https://doi.org/10.1177/205630512110597>
- Settle, J. (2018). *Frenemies: How social media polarizes America*. Cambridge University Press.
- Small, R. & Eisinger, R. M. (2020). Whither presidential approval? *Presidential Studies Quarterly*, 50(4), 845-863. <https://doi.org/10.1111/psq.12680>
- Stier, S., Bleier, A., Lietz, H., & Strohmaier, M. (2018). Election Campaigning on Social Media: Politicians, Audiences, and the Mediation of Political Communication on Facebook and Twitter. *Political Communication*, 35(1), 50-74. <https://doi.org/10.1080/10584609.2017.1334728>
- Sunstein, C. R. (2018). *# Republic: Divided democracy in the age of social media*. Princeton University Press. <https://doi.org/10.1515/9781400890521>
- Tewksbury, D. & Riles, J. M. (2015). Polarization as a function of citizen predispositions and exposure to news on the Internet. *Journal of Broadcasting & Electronic Media*, 59(3), 381-398. <https://doi.org/10.1080/08838151.2015.1054996>
- Valenzuela, S., Bachmann, I., & Bargsted, M. (2021). The personal is the political? What do Whatsapp users share and how it matters for news knowledge, polarization and participation in Chile. *Digital Journalism*, 9(2), 155-175. <https://doi.org/10.1080/21670811.2019.1693904>
- Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., De Vreese, C., Matthes, J., Hopmann, D., Salgado, S., Hubé, N., Stępińska, A., Papathanassopoulos, S., Berganza, R., Legnante, G., Reinemann, C., Sheafer, T., & Stanyer, J. (2017). Political communication in a high-choice media environment: a challenge for democracy?. *Annals of the International Communication Association*, 41(1), 3-27. <https://doi.org/10.1080/23808985.2017.1288551>
- Waisbord, S. (2018). Truth is what happens to news. On journalism, fake news, and post-truth. *Journalism Studies*, 19(13), 1866-1878. <https://doi.org/10.1080/1461670X.2018.1492881>
- Yarchi, M., Baden, C., & Kligler-Vilenchik, N. (2021). Political polarization on the digital sphere: A cross-platform, over-time analysis of interactional, positional, and affective polarization on social media. *Political Communication*, 38(1-2), 98-139. <https://doi.org/10.1080/10584609.2020.1785067>
- Zhuravskaya, E., Petrova, M. & Enikolopov, R. (2020). Political effects of the internet and social media. *Annual Review of Economics*, 12, 415-438. <https://doi.org/10.1146/annurev-economics-081919-050239>

ABOUT THE AUTHORS

JORGE BELMAR SOTO, political scientist from the Universidad Diego Portales (Chile) and holds a certificate in political analysis from the Universidad de Chile. His areas of research are presidential vetoes, the legislative process, and public opinion. He has published in *Latin American Politics and Society*. He is currently a research assistant in the Regular Fondecyt Project #1231627 (ANID). Bicameralism and executive-legislative relations in Chile.

 <https://orcid.org/0000-0002-1079-0232>

VICENTE FAÚNDEZ CAICEDO, associate researcher at the Electoral Political Observatory at the Universidad Diego Portales (Chile). He holds a degree in Political Science and has published in the Journal of Legislative Studies, *Política y Gobierno*, and Representation.

 <https://orcid.org/0000-0001-5350-2969>

PATRICIO NAVIA, full professor of Political Science at Universidad Diego Portales (Chile) and clinical professor of Liberal Studies at New York University. He is the director of the Political Electoral Observatory at Universidad Diego Portales (Chile). He has published widely on democratization, political parties, public opinion, elections, and the legislative process in Chile and other Latin American countries.

 <https://orcid.org/0000-0001-9398-8393>