



Local Government, Social Media and Management of COVID-19: The Case of Chilean Mayoral Communication

DOI:

[10.1080/10584609.2023.2290494](https://doi.org/10.1080/10584609.2023.2290494)

Document Version

Accepted author manuscript

[Link to publication record in Manchester Research Explorer](#)

Citation for published version (APA):

Luna, J. P., Alcatruz, D., Muñoz, C. P., Rosenblatt, F., Maureira, S. T., & Valenzuela, S. (2023). Local Government, Social Media and Management of COVID-19: The Case of Chilean Mayoral Communication. *Political Communication*. <https://doi.org/10.1080/10584609.2023.2290494>

Published in:

Political Communication

Citing this paper

Please note that where the full-text provided on Manchester Research Explorer is the Author Accepted Manuscript or Proof version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version.

General rights

Copyright and moral rights for the publications made accessible in the Research Explorer are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Takedown policy

If you believe that this document breaches copyright please refer to the University of Manchester's Takedown Procedures [<http://man.ac.uk/04Y6Bo>] or contact openresearch@manchester.ac.uk providing relevant details, so we can investigate your claim.



**Local Government, Social Media and Management of COVID-19: The Case of
Chilean Mayoral Communication**

Juan Pablo Luna
Professor
Instituto de Ciencia Política y Escuela de Gobierno
Pontificia Universidad Católica de Chile
jlunaf@uc.cl

Daniel Alcatruz
Research Assistant
Instituto Milenio Fundamento de los Datos, Chile
dalcatruz@udec.cl

Cristian Pérez Muñoz
Assistant Professor
Department of Political Science
University of Florida
cperezmunoz@ufl.edu

Fernando Rosenblatt
Associate Professor
Escuela de Ciencia Política
Universidad Diego Portales, Chile
fernando.rosenblatt@mail.udp.cl

Sergio Toro Maureira
Professor
Escuela de Gobierno y Administración Pública
Universidad Mayor, Chile
sergio.toro@umayor.cl

Sebastián Valenzuela
Associate Professor
Facultad de Comunicaciones
Pontificia Universidad Católica de Chile
savalenz@uc.cl

AUTHOR ACCEPTED MANUSCRIPT
PUBLISHED IN POLITICAL COMMUNICATION, AVAILABLE AT:
<https://doi.org/10.1080/10584609.2023.2290494>

Abstract

Most research on governments' use of social media focuses on the national or federal level. We therefore know little about the way local authorities harness social media platforms to communicate with their constituencies. This paper studies the role structural and political variables played in Chilean mayors' political communication strategies during 2020-2021, a period of municipal elections marked by lockdowns due to the COVID-19 pandemic. We evaluate whether the volume and characteristics of mayors' social media posts are related to political factors (partisanship; alignment or not with the governing block; years in office), socioeconomic characteristics (poverty rate; age profile; health infrastructure; etc.); and the incidence of COVID-19 cases and deaths at the municipal level. We found that mayors' social media communication strategies depend on the functions that different municipalities perform in the territory, and that socioeconomic variables differentiate these activities. More specifically, we found that mayors of poorer communities made more extensive use of social media during lockdown periods than did mayors of more affluent municipalities.

Introduction

Has social media changed how politicians relate to their constituencies? Certainly, social media has significantly reduced the costs politicians must pay to disseminate targeted messages and interact directly with citizens (Karpf, 2012). Social media platforms have broadened the ways leaders can present themselves and have created opportunities for politicians to strategically engage constituents (Blassnig, 2023). While a number of studies have analyzed political leaders'—particularly populists'—use of social media to directly connect with voters (Bene, 2017; Bobba, 2019; Gainous & Wagner, 2014; Jacobs & Spierings, 2019; Schmuck & Hameleers, 2020), we still know relatively little about how structural factors—such as demographic and socioeconomic variables—impact politicians' use of social media to communicate with their constituents. This study analyzes how local governments in Chile use social media (Facebook, Twitter, and Instagram) to communicate and react to national policies across local contexts.

The pandemic and subsequent lockdowns compelled local governments across the world to increase their reliance on digital channels to connect with their constituents (Islam et al, 2020; Garland & Lilleker, 2021; Dawi et al., 2021; Fissi, Gori, & Romolini, 2022).¹ In countries and regions where strict lockdown measures were implemented, such as Chile, local governments' political communication occurred primarily through social media, because the methods politicians traditionally have used to engage their constituents were unavailable.

The COVID-19 pandemic arrived in Chile after a social uprising—a period of intense rioting and massive protests that began in October 2019—when the legitimacy of government and other political institutions were at their lowest levels in Chile's recorded history. In this context, mayors emerged as the most trusted political figures in the country (Castiglioni, 2020). During the pandemic, the national government and its Ministry of Health opted for a municipal-level public health strategy, establishing decentralized lockdown policies across municipalities and metropolitan areas. The government implemented a rather successful

¹ For a recent study of crisis communication by local public authorities via social media, see Splendiani and Capriello (2022). The authors conducted an analysis of Twitter's role in crisis communication by reviewing all earthquake-related messages from local public authorities in four regions of Italy. Their findings indicated that authorities in these Italian regions only used Twitter to provide general information and failed to deliver a comprehensive and nuanced depiction of the disaster.

COVID-19 vaccination campaign,² which was also managed through local health services.³ Both strategies (i.e., the municipal-level lockdown policies and the immunization campaign), and the general positive assessment of their role during the political crisis, gave mayors the opportunity to further differentiate themselves from other political figures whose legitimacy suffered due to the country's generalized crisis of representation. This opportunity was also reinforced by the availability of social media, which allowed mayors to communicate with their constituencies strategically and directly. Social media were, indeed, heavily used by mayors during the pandemic. This case study allows us to pose questions such as: Were there significant differences in the use of social media by mayors? If so, which factors account for observed differences in social media use? Do political variables primarily determine how politicians engage with their constituencies? Or alternatively, do other factors, such as socioeconomic context, shape patterns of social media interaction between mayors and their constituents?

Studying social media messaging in this context of strict lockdown and of the heightened prominence of all mayors (because of the vaccination campaign and citizens' positive view of mayors' role in the aftermath of the political crisis) enables us to better isolate the influence of structural factors on mayors' political communication strategies. The

² According to Mathieu et al. (2020), Chile has vaccinated a higher percentage of its population against COVID-19 than any other Latin American country.

³ Data on the evolution of the COVID-19 pandemic and information regarding the implementation of lockdowns were retrieved from the Ministry of Health's open-source repository, available at:

<https://github.com/MinCiencia/DatosCOVID19/tree/master/output/producto74>.

Chilean case is particularly valuable for elucidating the role played by structural factors, such as poverty, income, state capacity, and infrastructure, as Chile is one of the most unequal countries in Latin America. The variance across municipalities provides an ideal setting for observing the impact of structural factors on the political communication undertaken by municipalities (Guillamón et al., 2016; Sobacı & Hatipoğlu, 2018).

Empirically, we evaluate whether the volume and characteristics of municipal authorities' posts are related to the following factors: 1) a series of indicators that characterize each municipal leadership (e.g., partisanship; alignment or not with the governing block; years in office; gender); 2) a series of indicators that characterize each municipality's socioeconomic characteristics; and, 3) the local and national incidence of COVID-19 cases and deaths at the municipal level. The presence of mayors varying in political alignment—some aligned with the government and others were independent or aligned with the opposition—provides the opportunity to test how different political camps engaged in strategic behavior to support or undermine the national government.

We conducted an analysis of the different communication profiles at the municipal level based on data collected from social media. The information from Facebook and Instagram of each municipality's fan page was collected using the CrowdTangle API. We also collected information using the Twitter API. We built an engagement index to observe its relationship with the number of COVID cases and the population size of each municipality. By using a Structural Topic Model estimation to identify salient topics, we identified 25 topics, out of which 7 were the most salient. We also explored the role of different types of variables (e.g., political, health, demographic, and socioeconomic) in determining relevant variation in how municipal communication strategies engaged at the local level.

We found that mayors' communication strategies via social media depend on the functions that different municipalities perform in the territory, and socioeconomic variables differentiate these activities. Mayors of poorer communities make more extensive use of social media during lockdown periods than do the mayors of more affluent municipalities. This phenomenon can be explained by the fact that what is at stake in official communication in poor municipalities is different from what is at stake in wealthy ones. For instance, poor and high-income households relate to municipal services in distinctive ways. In poor municipalities, lockdowns implied that some critical services and government programs, which are targeted at poor families, were not offered, or had to be restructured. Thus, social media provided a direct and fast means of communication for contacting the targeted population. In the context of pandemic alerts and strict lockdowns, we show that the differences between affluent and poor municipalities are traceable in mayors' communication strategies. The findings suggest that social media platforms, at least in the Chilean political context, do not supplant the influence of structural factors in determining how political leaders communicate and connect with their constituencies. Their use does not constitute a technological disruption in how politics is done in the country. Ultimately, our study accords with a more recent strand of the literature, which offers a nuanced, if pessimistic, account of the political effects of technologies in general, and social media in particular (see, e.g., Bennett & Livingston, 2020).

The paper is organized as follows. Section 1 discusses various explanations of governments' use of social media. Specifically, this section reviews how political leaders utilize social media to engage directly with their constituents. Despite the vast body of literature on the use of social media in campaigns, we emphasize that little is known about how local leaders utilize social media to communicate during crises. Section 2 briefly

describes the impact of the COVID-19 pandemic in Chile and the role mayors played as political actors during this period. Section 3 outlines the methodology and data employed in our study. Finally, Section 4 presents and analyzes the main findings of our study.

1. Social Media and Politics

New technologies have dramatically reduced the costs of communication and, as such, have changed how politicians reach the public. For example, an extensive literature has analyzed the effect of social media on electoral campaigns (Aldrich et al., 2016; Hersh, 2015; Kreiss, 2016; Kreiss & Saffer, 2017; Nickerson & Rogers, 2014; Penney, 2017; Stromer-Galley, 2019). Other studies have examined how leaders—especially populist ones—make use of social media to directly engage with voters (see e.g. Bene, 2017a; Bobba, 2019; Jacobs & Spierings, 2019; Schmuck & Hameleers, 2020). In an era of “audience democracy” (Manin 1995, p. 220), the self-presentation of political actors via direct social media messages to the public has received scholarly attention (e.g., Bene, 2017b; Goldveck, Grimes, and Rogers, 2010; Keller & Kleinen-von Königslöw, 2018; Kruike-meier, 2014). As Blassnig (2023, p. 306) points out, most research on political actors’ self-presentation is done in developed countries and focuses on election campaigns (typically national-level campaigns). Little research has been done regarding political actors’ self-presentation in non-election periods and outside the developed world.

Furthermore, we still know little about the role structural factors—such as demographic and socioeconomic variables—play in politicians’ use of social media to interact with their constituents. During the COVID-19 pandemic, both the demand for and supply of information increased (Islam et al. 2020; Grassau et al., 2021), and social media

played a crucial role during that period. Notwithstanding the ease of quickly reaching a target population, the choice of when and how to approach the population remains in the hands of decision-makers. Governments decide how to reach individuals, what type of messages they distribute, and how often they post messages online. In the case of local governments, prior research demonstrates that social media is a key tool whereby authorities and citizens exchange and distribute information. For instance, a study of Chinese local governments' social media messaging during the COVID-19 outbreak found that these governments employed a different communication strategy than did the central government (Li et al. 2022).

Recent research shows that not all government authorities or institutions use social media in the same way or for the same purposes (Guillamón et al., 2016; Sobacı & Hatipoğlu, 2018). Different political variables might explain why and how local governments utilize social media platforms. For instance, local authorities may use these communication tools as a way to quickly legitimize their decisions. Social media can help local governments establish credibility and trust by promoting transparency and accountability in their actions (Archel et al., 2009; Ramírez et al., 2020; Mathews et al., 2021; Padeiro et al., 2021). Consequently, during the COVID crisis, local governments are likely to have sought legitimacy for their decisions by disclosing them, promoting transparency, and demonstrating their commitment to accountability. Likewise, we can expect citizens to put pressure on local authorities to increase transparency through social media communication (Alcaide Muñoz et al., 2017). By fulfilling this expectation and demonstrating their commitment to accountability, local governments, in turn, enhance their chances of reelection.

Another variable that may explain local leaders' use of social media is political alignment. For instance, the political alignment between mayors and the national government

may explain how mayors communicate their policies or decisions to their constituencies. The interaction and relationship between local and national governments can shape how mayors present their policies or decisions to their constituents. The absence of political alignment between a local government and the national government can alter the relationship between mayors and the central administration, consequently affecting the enactment of national policies at the local level and the disbursement of intergovernmental transfers (Brollo & Nannicini, 2012; Kitsos & Proestakis, 2021). Furthermore, political alignment can influence the decision-making process, as mayors from the party in power at the national level may lean toward endorsing the national government's agenda and policies.

Notwithstanding the role that these political variables might play in explaining mayors' use of social media, the Chilean case enables us to evaluate the influence of structural variables in explaining variation in mayors' use of social media for two reasons. First, Chile experienced severe lockdowns that put all mayors (especially those in the Metropolitan Area of Santiago) on a level playing field; mayors' capacity to act was uniformly restricted, forcing them to use similar communication and contact methods with their constituents. Second, in general, all mayors enjoyed high approval ratings, despite a prevailing atmosphere of mistrust toward national politicians. Under normal circumstances, mayoral activity differs greatly across jurisdictions due to variations in mayors' access to material resources and consequent differing capacity to contact their constituents via different tools. However, during lockdowns social media was their primary communication tool. As such, we might expect all mayors to have used social media similarly, given that the differences in the availability of resources for political use (e.g. the capacity to distribute private goods, services, or the capacity to stage rallies in favor of the administration) that existed prior to the pandemic were not available under lockdown. However, local

governments serve a different social function depending on the socioeconomic conditions, and this might affect how they communicate and use social media.

Political incentives notwithstanding, in this paper we examine how the intensity of the use of social media by city mayors and the contents of those messages are influenced by structural factors, especially the socioeconomic characteristics of the population. Socioeconomic variables can exert a strong influence on the decisions about what and when to communicate. In unequal and developing societies, structural conditions heavily determine the linkage that government authorities seek to structure with citizens. This study shows that social media replicates this pattern in the context of a country with political institutions that suffer from chronic low levels of legitimacy.

People with fewer resources in Latin America make greater use of municipal and local services (see Luna & Seligson, 2007). At least two factors might explain this. On the one hand, the most vulnerable populations make greater use of goods and services produced and distributed through municipal agents. Municipalities are pivotal for poor people's lives, conditioning access to a plethora of welfare services that wealthier segments of the population usually access through private provision (Auyero, 2012). Even when the programs are funded centrally and at the national level, municipalities are the institutional agents in charge of executing different components of those programs, thus serving as the street-level bureaucrats in charge of social assistance. As anticipated above, people with fewer resources may need more institutional support than those who have better access to resources and services of a different nature. In this sense, dependence on the municipality occurs in the absence of other options.

In the case of Chile, the function local governments serve is essentially determined by the socioeconomic context and the need to mediate and communicate to a weakly

organized public. This implies that, during the COVID-19 pandemic, other political factors, such as citizen pressure, the ideological position of political agents, or their electoral goals, should play a lesser role in accounting for the type and intensity of social media use than does the socioeconomic context in which they are delivered.

This adds another element to the debate on the extent to which politicians can pursue novel communicational strategies through the use of social media (see, e.g., Davis & Straubhaar, 2020; Enli & Skogerbø, 2013; Gibson & McAllister, 2015; Hersh, 2015; Lev-On & Haleva-Amir, 2018; Nielsen, 2013). While some argue that social media do indeed afford the opportunity for novel communicational strategies, others believe that social media are simply a tool to perform the same type of tasks that are carried out offline (Luna, Pérez, et al., 2022).

Finally, in this context, municipalities are more central to people's lives (Luna & Mardones, 2016). Mayors may have an incentive to appropriate central policies to strengthen their local leadership. At the same time, people in wealthy districts are informed in other ways and have fewer relationships with their municipality. Therefore, mayors have fewer incentives to develop a more ambitious communication strategy in wealthy districts. Based on these considerations, we posit the following research question: To what extent do communication patterns on social media differ among municipalities of varying socioeconomic levels?

2. The Chilean Case

The pandemic hit Chile at the height of a cycle of social unrest that erupted on October 18, 2019. At that point, political institutions in general, including both the government and the parties in the opposition, reached their lowest levels of legitimacy among the population

(CEP 2019). Political discontent was not new in Chile (Bargsted & Somma, 2016; Luna & Rosenblatt, 2012). Over time citizens became increasingly detached from political institutions and there developed among the populace a generalized perception of abuse by the wealthy (Luna, 2021). For more than a decade, massive mobilizations of students, women, and environmentalists have occurred on the streets of Chile (Somma, 2012; Somma et al., 2021; Somma et al., 2020). Each mobilization focused mainly on a single issue; by contrast, the *estallido social* (social unrest) aimed at the core of the Chilean model (Luna, 2021; Luna, Toro, et al., 2022). The cycle that began in October 2019 gave the final blow to the political system that had been in place in Chile since the democratic transition in 1990. Unlike previous protest movements in Chile, on October 18, 2019, a civic uprising targeted the whole political, economic, and social establishment. The pandemic and the strict lockdowns implemented by the government put an end to street protests. By March 2020, there were almost no protests, and the evolution of the pandemic became the most salient issue. Yet, government institutions had to face the enormous challenges of managing the pandemic in the context of a country that only recently faced heightened mobilizations, very low levels of governmental legitimacy, and serious concerns about the capacity of the state to provide order and stability.

Mayors broke with the general trend of public distrust. They were the political actors whom the public most trusted.⁴ At the height of the social unrest, mayors played an important political role. Mayors became more visible in the media, especially those from the

⁴ See “Estudio Nacional de Opinión Pública N°84” (*Centro de Estudios Públicos*, January 16, 2020). <https://www.cepchile.cl/encuesta/estudio-nacional-de-opinion-publica-n84-diciembre-2019-2/> (last accessed July 4, 2023).

Metropolitan Region of Santiago. The social unrest had intense and, in some cases, very violent local-level dynamics, and mayors were at the forefront of political institutions' struggle to reinstate political order.⁵ The Asociación Chilena de Municipalidades (Chilean Association of Municipalities), which includes most Chilean municipalities, convened to draft a proposed set of structural political reforms in for the country.⁶

Even though Chile has been regarded as a successful case of the dual transition to democracy and a market economy, and has significantly improved the levels of poverty and other social indicators, income inequality has remained high (see e.g. Larrañaga, 2009; López & Miller, 2008; Pribble, 2013). Inequality is very visible in the territory, especially if one observes at the municipal level. One sees marked differences in, for example, the quality of infrastructure, state capacity, and household socioeconomic level (PNUD 2017). Those inequalities also shape a host of relevant political attitudes at the local level (Luna and Medel forthcoming).

⁵ See e.g. “Germán Codina y el plebiscito de los alcaldes: “Nos interesa que los resultados sean políticamente vinculantes” (*El Mostrador*, November 13, 2019).

<https://www.elmostrador.cl/noticias/pais/2019/11/13/german-codina-y-el-plebiscito-de-los-alcaldes-nos-interesa-que-los-resultados-sean-politicamente-vinculantes/> (last accessed July 4, 2023). Also, see e.g, “Chile negocia contra reloj una salida a la crisis” (*El País*, November 13, 2019).

https://elpais.com/internacional/2019/11/13/actualidad/1573665448_105585.html (last accessed July 4, 2023).

⁶ In November 15, 2019 Congress reached an agreement to initiate a process of constitutional reform and the mayors decided to support it.

The national government and its Ministry of Health opted for a municipal-level strategy to manage the pandemic, establishing lockdown policies by communes. The government put in place a protocol, *Plan Paso a Paso* (Step-by-Step Plan), that determined different levels of lockdown. Each week the government informed each municipality whether it needed to change its *Fase* (Phase of the Step-by-Step Plan), depending on the local evolution of cases and the availability of critical-care beds at the national level. Subsequently, the government implemented a highly successful COVID-19 vaccination campaign, also managed through local health services. The government also implemented different social and economic policies that ranged from cash transfers to the distribution of boxes containing essential goods to the poorest households.

As background to these political developments, the Chilean media context changed rather dramatically over the past decade. With an internet penetration level of 92%, social media and messaging applications have become the main source of news and public affairs information (Fernández Medina & Núñez-Mussa, 2022). According to the 2022 Reuters Digital News Report, 53% of Chilean online users get their news through Facebook, 36% through Instagram, and 19% through Twitter. News consumption through traditional media, meanwhile, declined continuously—even during the pandemic. For instance, viewership of television news decreased from 80% to 65% between 2017 and 2022 (Fernández Medina & Núñez-Mussa, 2022). The importance of social media usage among the Chilean population highlights the importance of analyzing the strategies adopted by national and local governments to communicate with the public during a major crisis such as COVID-19.

3. Methodology

To shed light on the variance in Chilean municipal governments' communication strategies related to COVID-19, we first compiled all Facebook, Instagram and Twitter messages posted by all 52 city mayors (drawing on both personal and institutional fan pages and accounts) in the Santiago Metropolitan Region—which comprises 42% of the country's population—between March 3, 2020 (when the first COVID-19 case was detected in Chile) and June 28, 2021 (when municipal elections took place). Our database comprises a total of 264,387 posts.⁷ The information from Facebook and Instagram of each municipality's fan page was collected using the CrowdTangle API. We also collected information using the Twitter API. Each post was coded to distinguish those made while the municipality was under a nationally-decreed mobility restriction or lockdown from those messages posted during normal times.

All social media posts on three social media platforms (Facebook, Instagram, and Twitter) were grouped by municipality and marked according to the proportion of messages posted while under a local mobility restriction or lockdown. Also, an engagement index was computed by counting the recorded reactions (likes, loves, retweets, shares, etc.) to all posts by each municipality. The raw count was then calibrated against the total number of posts and the population size of each municipality.

$$Engagement\ Index = \left(\frac{reactions\ raw\ count}{total\ posts} \right) 100$$

⁷ By “post” we refer to Facebook, Instagram, and Twitter posts made by municipalities.

Second, we generated all the preprocessing typically used in text analysis for Structural Topic Models (STM) estimation (Roberts et al., 2019). We first preprocessed all posts using the package *quanteda* (Benoit et al., 2018). The preprocessing includes the removal of punctuation, accents, and proper nouns referring to the names of municipalities and mayors.

We integrated several external covariates: poverty at the municipal level, number of COVID cases in the municipality, population, a dummy variable identifying rural vs. urban municipalities, the incumbency status of each mayor, and the political alignment of mayors regarding the national government (i.e., pro-government or opposition). The inclusion of these external covariates sought to measure the potential effect of each factors on the relative prevalence of the topics we detected.

We conducted several tests with k different topics. We tested 10 models with k varying between 5 and 50. As shown in Figure A1 in the Appendix, the model with $k=25$ yields the best combination of the four main diagnostic measures, especially for the semantic coherence and exclusivity measures. We then complemented this quantitative analysis with in-depth qualitative data which guided our selection, from among the 25 identified topics, of 7 topics to characterize mayors' social media strategies.

To estimate potential effects we relied on STM (Roberts et al. 2014), a topic model used for topic detection by clustering words that characterize latent dimensions of texts.⁸ Unlike other models, STM does not consider any word order but only seeks to detect topics

⁸ STM models are widely used in research that analyzes large amounts of text. STM allows one to include covariates.

based on the correlation between words. Identifying latent topics in a set of documents helps us evaluate the relationship between the covariates mentioned above at the document level and assesses the prevalence of a specific topic in the relevant corpus.

We used a model to identify 25 topics generated in posts on Facebook, Instagram, and Twitter, of which seven were readily interpretable, relevant, and clear. As Roberts et al. (2014) point out, there is not an ideal or specific number of topics to be extracted; the more topics extracted in the model, the more detailed but less accurate or interpretable are the obtained results. We also selected the 12 words that best characterize each of our retained seven topics. Table 1 in the following section summarizes the results of the analysis.

4. Results

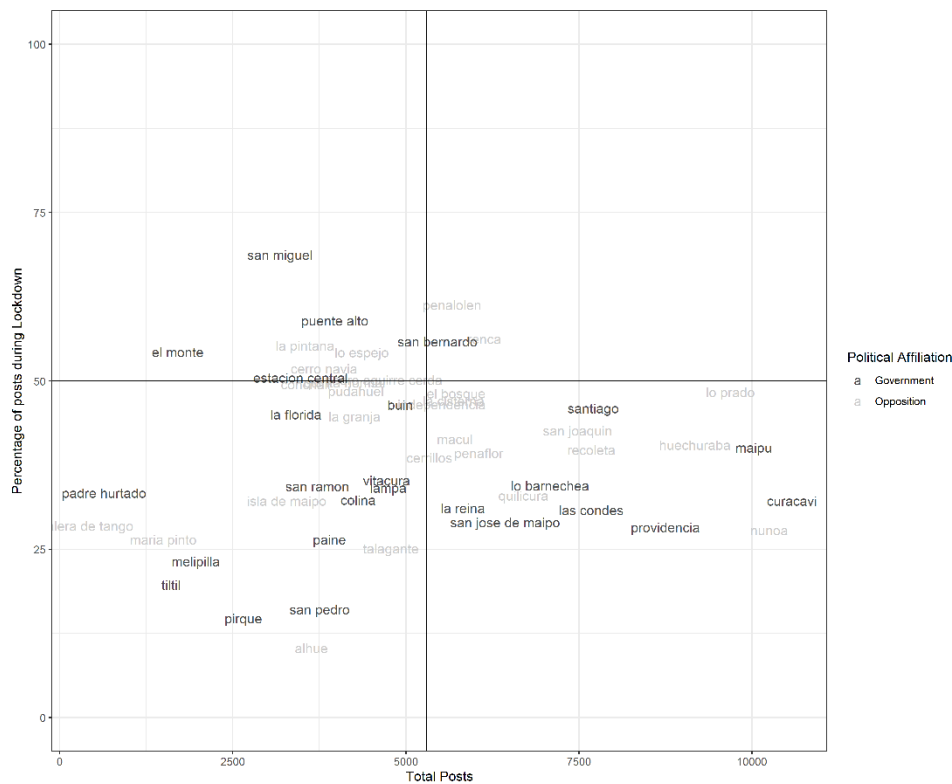
4.1. Overview

Our analysis shows that the communication strategies of mayors through social media are mainly explained by the socioeconomic context in which municipal leaders operate. Poor municipalities posted more frequently under lockdown periods than during normal times, while wealthier and rural municipalities did not vary their posting behavior during lockdown periods (see Figure 1). Thus, we can only observe discontinuities in the communicational strategies of poorer municipalities. Political variables do not determine either the level of engagement or the type of content that mayors communicate (see Figures 1 and 4).

Figure 1 illustrates the number of Facebook, Instagram, and Twitter posts by commune and the municipalities' proportion of such posts made under lockdown. The communes in the upper half of the scatterplot posted more on social media during lockdown

periods. Those municipalities have a specific socioeconomic structure: they tend to be large, populous communes where lower- and middle-income families reside (e.g. Puente Alto). The lockdown context forced governments to rely more on virtual communication to continue providing basic services to the community. More affluent municipalities are overrepresented in the bottom right quadrant. Cases in this quadrant posted a larger fraction of social media messages during normal times. Finally, smaller and poorer communes, as well as most of the rural communes in the Metropolitan area of Santiago, post less often in general and post more during normal times (lower left quadrant). Figure 1 also identifies the political affiliation of each mayor (opposition, government, and independent). This factor, however, is not strongly associated with either the number of posts or the proportion of posts made during lockdown.

Figure 1. Posts by Commune.



Users' engagement with social media posts, i.e. the number of comments and likes, controlling for the number of posts, does not depend either on the level of COVID-19 cases or on the size of the population of each municipality (see Figures 2 and 3). The municipalities that achieve higher levels of social media engagement are poorer and rural; i.e., these municipalities exhibit a greater engagement index per post.

Figure 2. Engagement Index by COVID cases.

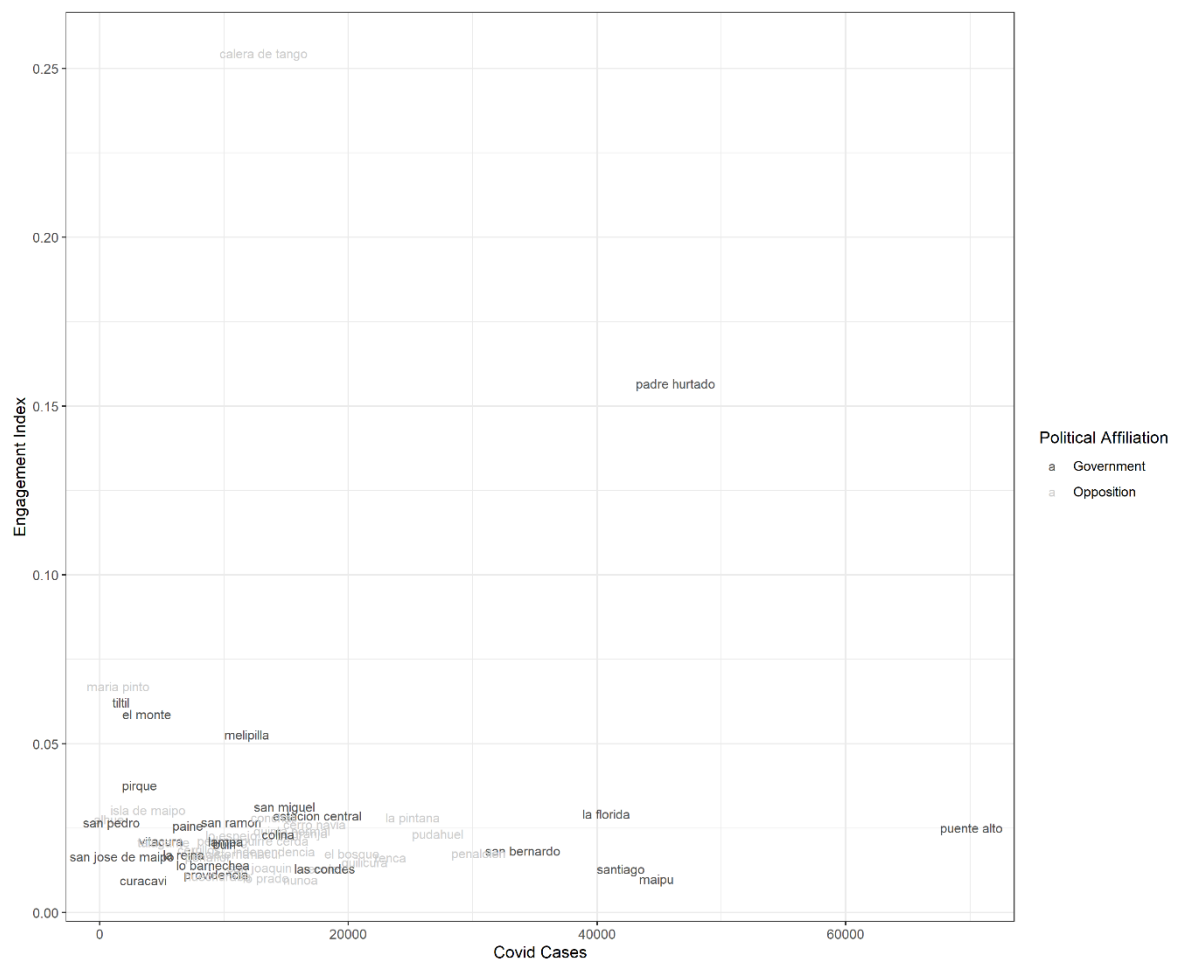
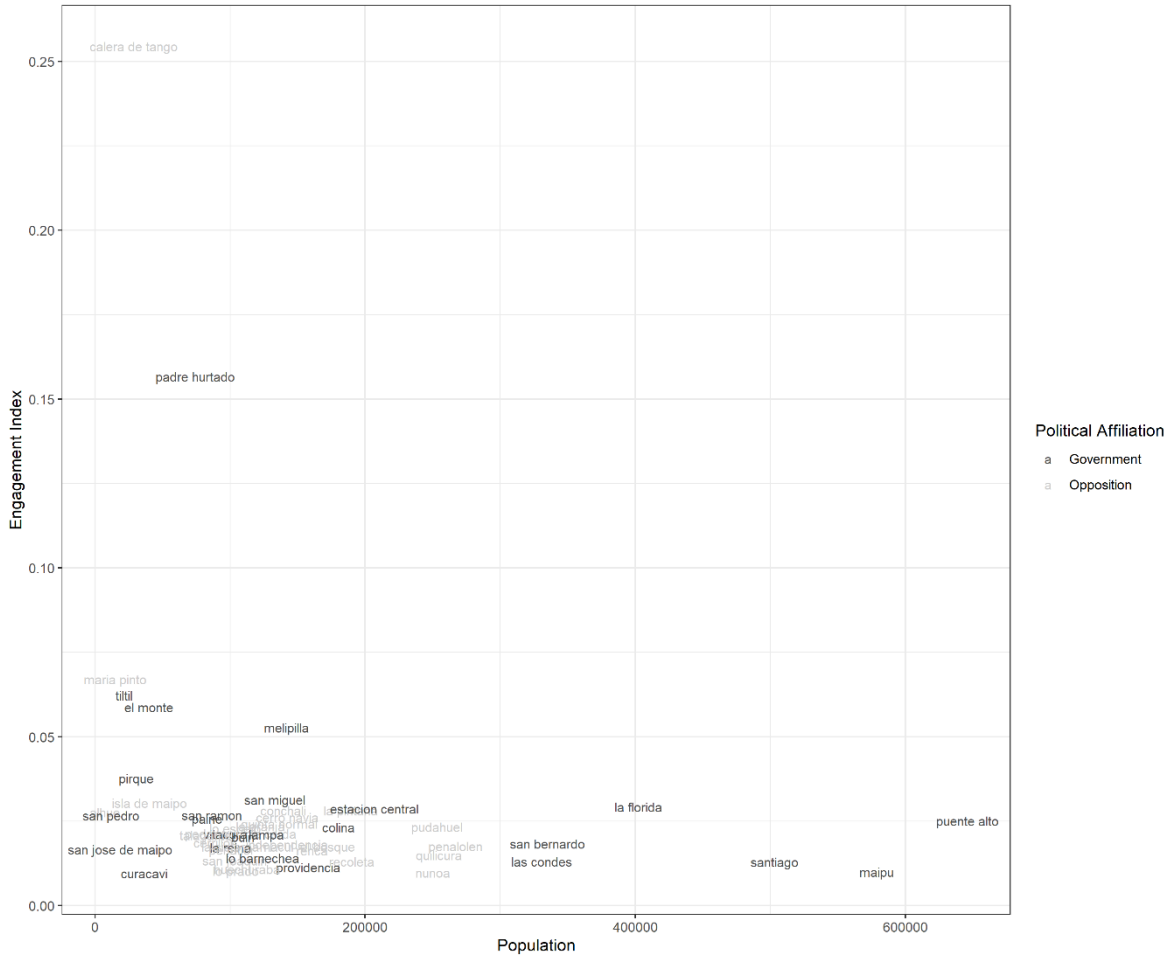


Figure 3. Engagement Index by Population.



4.2. Topic Modelling

We deployed a topic-modeling algorithm to assess content differences in the posting behavior of municipalities. Figures 4 and 5 display our results when restricting the number of possible topics to a 7-k solution.⁹ The results we now briefly discuss point to interesting differences;

⁹ The structure detected in this topic modeling is relatively independent of the period in which posts are made (lockdown vs. normal times).

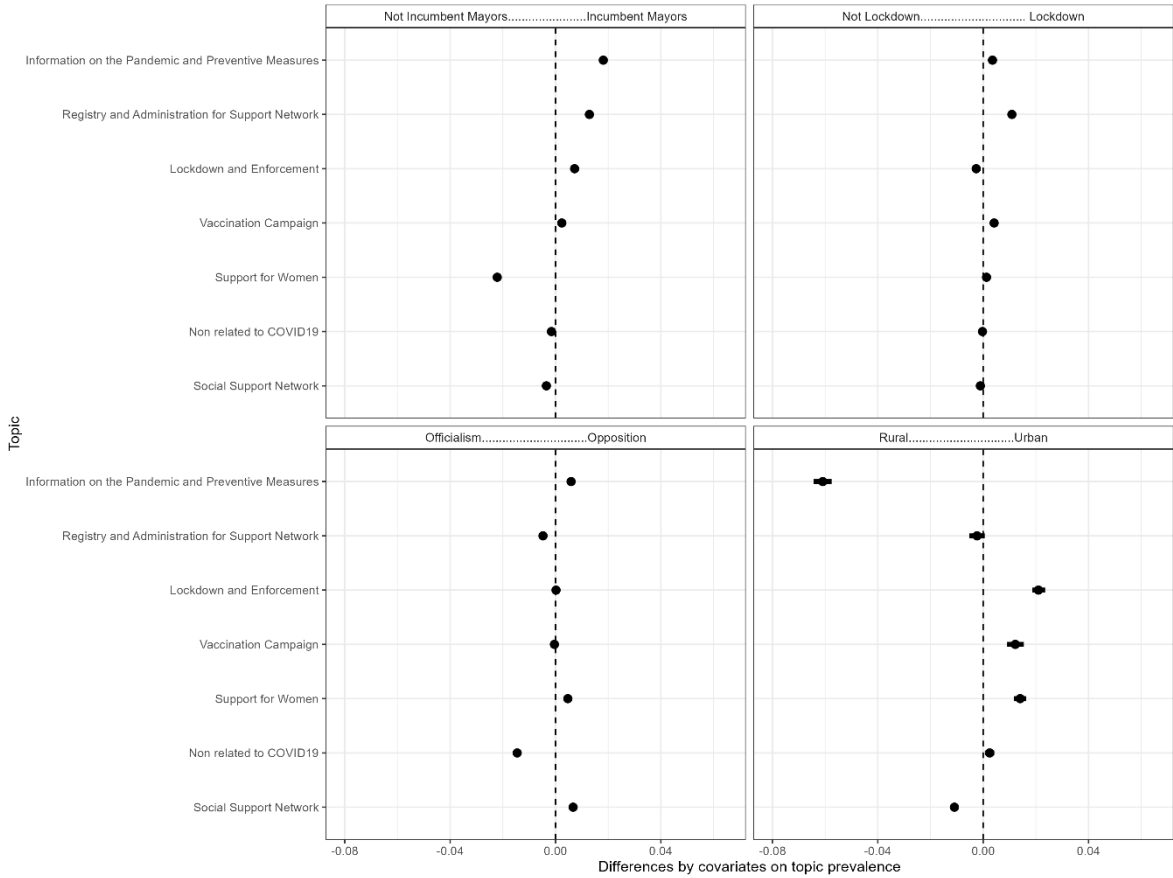
they support the idea that social media has not enhanced the role of political variables in explaining the frequency or content of political communication. Our results show how structural variables heavily influence how political leaders engage with their constituencies. The interesting lesson we can draw from the Chilean case is that this occurs even in a context in which politicians have the incentive (and opportunity) to overcome a legitimacy crisis and while heading toward an electoral contest. Therefore, we fail to observe a significant effect of crucial political variables that are expected to condition mayors' strategizing and communication strategy. At least regarding the content and frequency of politicians' engagement with constituents through social media, we fail to obtain significant results.

Table 1. Top Words by Topic.

Topic	Top-words
Information on the Pandemic and Preventive Measures	medidas, casos, contagios, mascarilla, evitar, manos, recuerda, distancia, contagio, prevención, activos, autocuidado, lavado, llamado, respetar
Non related to COVID19	servicio, parque, informamos, habrá, retiro, basura, público, recolección, puerta, comprensión, atención, aviso, residuos, cerrado, normal
Lockdown and Enforcement	seguridad, cuarentena, ferias, libres, carabineros, permiso, medidas, fiscalización, sanitarias, autoridad, temporal, mascarillas, comisaria, funcionamiento, prevención
Registry for and Administration of Support Network	información, atención, social, revisa, permiso, pago, circulación, vecinas, registro, recuerda, hogares, dudas, consultas, postulación, presencial
Social Support Network	sociales, desarrollo, dejamos, plan, participación, programa, iniciativa, segura, organizaciones, fondos, dirigentes, contingencia, comunidad, importantes, proyectos
Support for Women	mujer, mujeres, familia, violencia, mensaje, vecina, abrazo, amigos, genero, navidad, vecino, conmemoración, madre, internacional
Vaccination Campaign	vacunación, calendario, cesfam, influenza, colegio, vacuna, atención, vacunas, campaña, continua, grupos, horario, centro, cecosf, vacunarse

Figure 4 shows the relationship between each of four covariates (the incumbency status of mayors, whether the mayor was from the same party as the national government, whether or not the municipality was under lockdown at the time of the post, and the predominance of urban or rural dwellers in each municipality) and the prevalence of each of our 7 topics. The estimation is based on the difference between the two values of each covariate on the expected prevalence of each topic. The political variables—incumbency and political alignment with the national government—do not affect the prevalence of any topic. However, the topic “information about the pandemic and preventive measures” tends to be more prevalent in rural municipalities. As expected, under lockdown, the topic “registry for and administration of support network” tends to be more prevalent. Likewise, this topic is more prevalent in rural municipalities than in urban ones. The fact that rural municipalities need to overcome more logistical challenges to target and engage their inhabitants might relate to this result. Rural municipalities are also characterized by having weaker (smaller) bureaucracies, which makes social media more pivotal for deploying information to the population. In contrast, urban municipalities communicate significantly more about quarantine policies and provide information on the vaccination campaign more intensively. This latter result might be explained by their greater population size, which makes enforcement and vaccination efforts more demanding in terms of reaching a broader audience.

Figure 4. Covariate and Topics



Note: Horizontal lines show 95 percent confidence intervals.

Figure 5: Topic Prevalence and Poverty.

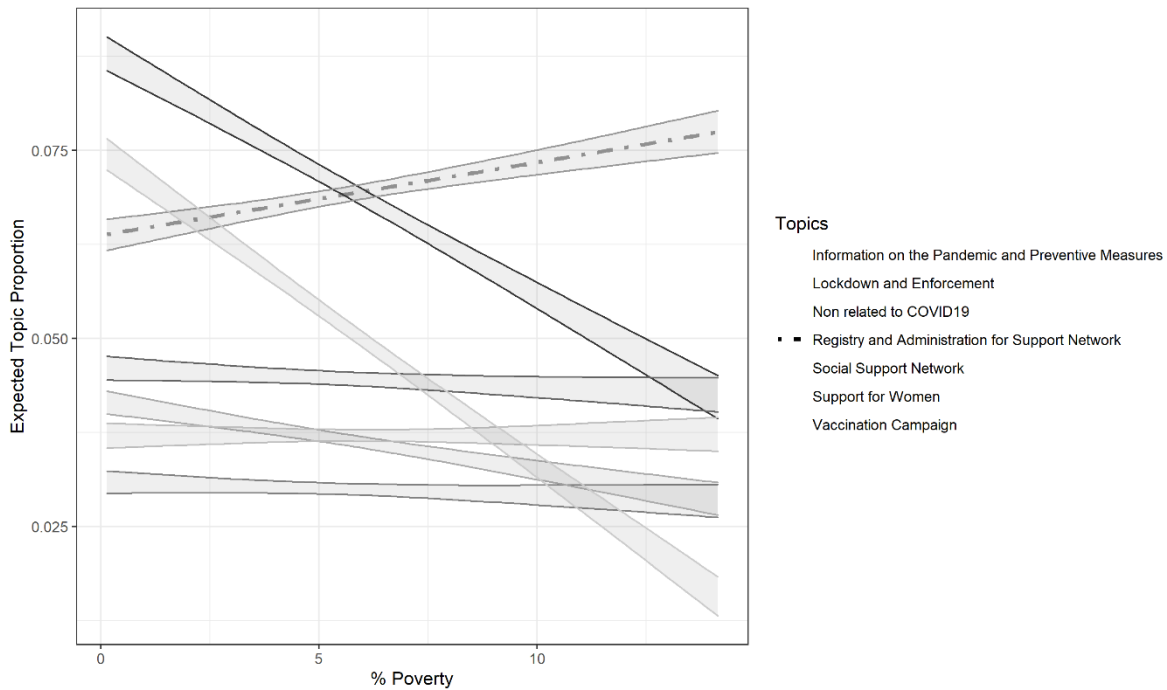


Figure 5 shows that poverty at the communal level is positively related to posts associated with the topic ‘registry and administration for support network’ posts. This further illustrates how socioeconomic variables influence the communication strategy and, more importantly, the type of messages posted by municipalities. While middle- and upper-socioeconomic groups tend to meet their needs via self-provision, the poor rely to a significantly greater degree on state provided-assistance. In the case of Chile, the safety net for distributing resources to tackle the economic effects of COVID-19 has a municipal basis. As stated above, the case of the COVID-19 pandemic in Chile and the strict lockdown the government imposed show how structural factors play a key role in determining the kind of communication strategy local authorities employ. In the context of a severe crisis which put

political institutions to the test, local authorities had to ensure the continued provision of critical government programs and services targeted to the poor.¹⁰

Conclusion

Although the political use of social media remains a fairly recent phenomenon, there is already a vast literature studying it. We know, for example, how politicians around the world have used various social media platforms to compete in national and local elections. Less well known, however, is how elected officials have used social media during the pandemic to deal with scenarios of lockdown and large-scale vaccination during the COVID-19 pandemic. Did elected officials use social media in a similar way during these challenging times, or did the use of this tool vary among different jurisdictions? If the latter is the case, what can explain the variation?

This paper showed variation in the use of social media by mayors of the Santiago Metropolitan Region between March 2020 (when the first COVID-19 case was diagnosed) and May 2021 (when municipal elections took place). Furthermore, it showed that this variation correlates more strongly with socioeconomic variables than with political strategizing or public health considerations. Partisanship or political alliances between the local and the national level do not seem to have significantly influenced mayors' pattern of

¹⁰ We have analyzed the effect of platform on the topics posted by local governments. We observe that municipal authorities used Twitter more frequently than Facebook to communicate issues about COVID-19 prevention. Facebook was used more frequently than Twitter for issues regarding social support. See Figure 2A in the Appendix.

communication of mayors during the pandemic. However, the causal nature of this relationship remains unclear, as various mechanisms could be involved. Further research, therefore, is needed to explore the influence of broadcast media, such as radio and TV, public relations and communication departments in municipalities, the rural/urban divide, and Chile's media system, each of which might influence a local government's social media messaging. For instance, it is conceivable that mayors in wealthier, urban municipalities, who have more extensive public relations teams and receive more media coverage, may place a greater emphasis on social media communication than do their counterparts in poorer, rural municipalities. Given that the available data do not permit us to explore this possibility, the study of these mechanisms must be relegated to future research.

To the best of our knowledge, this is one of the first studies to compare the incidence and variance of COVID-19 messaging by local governments and its possible determinants. Our contribution lies in our observation of the role structural variables play in accounting for social media use by local governments. We do not claim that the variables we identified and political variables are mutually exclusive factors. Rather, we claim that, notwithstanding the role that political variables might play, social media use reflects the social function that governments serve in different socioeconomic contexts.

The main implication of our findings is that, at least in unequal societies where socioeconomic factors map onto structurally different political districts and jurisdictions, the use of social media to connecting with constituents is mainly driven by structural factors. Thus, more broadly, our findings suggest the need to account for the heterogeneity of social media use by politicians, instead of assuming homogeneous effects driven by unified political calculations, consistent incentives, and opportunities associated with contextually invariant social media use by political actors.

Our findings make a significant contribution to the body of literature on political communication, especially in crisis situations like the COVID-19 pandemic. Our research, as one of the few studies to compare the frequency and diversity of COVID-19 messaging by local governments, highlights the importance of evaluating socioeconomic and structural factors alongside political variables in subsequent studies of political communication. Our findings suggest that, rather than assuming uniform effects propelled by collective political calculations, we should acknowledge the diversity of social media usage by politicians, within the various roles that governments assume in different socioeconomic contexts. This perspective offers an avenue for future research, particularly for studies focusing on crisis management and its aftermath. As our research indicates, even in the face of a severe crisis, which provides an opportunity to bolster political legitimacy, and with looming electoral contests, structural variables can take center stage.

References

- Alcaide Muñoz, L., Rodríguez Bolívar, M. P., & López Hernández, A. M. (2017). Transparency in Governments: A Meta-Analytic Review of Incentives for Digital Versus Hard-Copy Public Financial Disclosures. *The American Review of Public Administration*, 47(5), 550-573.
- Aldrich, J. H., Gibson, R. K., Cantijoch, M., & Konitzer, T. (2016). Getting Out the Vote in the Social Media Era: Are Digital Tools Changing the Extent, Nature and Impact of Party Contacting in Elections? *Party Politics*, 22(2), 165-178.

- Archel, P., Husillos, J., Larrinaga, C., & Spence, C. (2009). Social disclosure, legitimacy theory and the role of the state. *Accounting, auditing & accountability journal*, 22(8), 1284-1307.
- Auyero, J. (2012). *Patients of the State: The Politics of Waiting in Argentina*. Duke University Press.
- Bargsted, M. A., & Somma, N. M. (2016). Social cleavages and political dealignment in contemporary Chile, 1995–2009. *Party Politics*, 22(1), 105-124.
- Bast, J. (2021). Politicians, parties, and government representatives on Instagram: A review of research approaches, usage patterns, and effects. *Review of Communication Research*, 9. <https://www.rcommunicationr.org/index.php/rcr/article/view/108>
- Bene, M. (2017a). Go Viral on the Facebook! Interactions Between Candidates and Followers on Facebook During the Hungarian General Election Campaign of 2014. *Information, communication & society*, 20(4), 513-529.
- Bene, M. (2017b). Sharing is caring! Investigating viral posts on politicians' Facebook pages during the 2014 general election campaign in Hungary. *Journal of Information Technology & Politics*, 14(4), 387–402.
- Bennett, W. L., & Livingston, S. (2020). *The Disinformation Age: Politics, Technology, and Disruptive Communication in the United States*. Cambridge University Press.
- Bennett, W. L., & Segerberg, A. (2013). *The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics*. Cambridge University Press.
- Benoit, K., Watanabe, K., Wang, H., Nulty, P., Obeng, A., Müller, S., & Matsuo, A. (2018). Quanteda: An R Package for the Quantitative Analysis of Textual Data. *Journal of Open Source Software*, 3(30), 774-774.

- Blassnig, S. (2023). Content Analysis in the Research Field of Political Communication: The Self-Presentation of Political Actors. In F. Oehmer-Pedrazzi, S. H. Kessler, E. Humprecht, K. Sommer, & L. Castro (Eds.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft – Standardized Content Analysis in Communication Research: Ein Handbuch - A Handbook* (pp. 301-312). Springer Fachmedien Wiesbaden.
- Bobba, G. (2019). Social Media Populism: Features and ‘Likeability’ of Lega Nord Communication on Facebook. *European Political Science*, 18, 11-23.
- Brollo, F., Nannicini, T. (2012). Tying Your Enemy's Hands In Close Races: the Politics Of Federal Transfers In Brazil. *American Political Science Review*, 4(106), 742-761.
- Castiglioni, Rossana. 2020. "La Política Chilena en Tiempos de Pandemia." *Nueva Sociedad* (287): 68-79.
- Davis, S., & Straubhaar, J. (2020). Producing Antipetismo: Media Activism and the Rise of the Radical, Nationalist Right in Contemporary Brazil. *International Communication Gazette*, 82(1), 82-100.
- Dawi, N., Namazi, H., Hwang, H., Ismail, S., Maresova, P, & Krejcar, O. (2021). Attitude Toward Protective Behavior Engagement During Covid-19 Pandemic In Malaysia: the Role Of E-government And Social Media. *Frontiers in Public Health*, (9). March 2021, Article 609716.
- Enli, G. S., & Skogerbø, E. (2013). Personalized Campaigns in Party-Centred Politics: Twitter and Facebook as Arenas for Political Communication. *Information, communication & society*, 16(5), 757-774.
- Esser, F. (2013). Mediatization as a challenge: Media logic versus political logic. In H. Kriesi, S. Lavenex, F. Esser, J. Matthes, M. Bühlmann, & D. Bochsler (Eds.),

- Democracy in the age of globalization and mediatization (pp. 155–176). Palgrave Macmillan UK.
- Fernández Medina, F. J., & Núñez-Mussa, E. (2022). Chile. In N. Newman, R. Fletcher, C. T. Robertson, K. Eddy, & R. Kleis Nielsen (Eds.), *2022 Digital News Report*. Reuters Institute for the Study of Journalism.
- Fissi, S., Gori, E., & Romolini, A. (2022). Social media government communication and stakeholder engagement in the era of Covid-19: Evidence from Italy. *International Journal of Public Sector Management*, *35*(3), 276-293.
- Gainous, J., & Wagner, K. M. (2014). *Tweeting to Power: The Social Media Revolution in American Politics*. Oxford University Press.
- Garland, R., & Lilleker, D. (2021). From consensus to dissensus: The UK's management of a pandemic in a divided nation. In P. Van Aelst & J. Blumler (Eds.), *Political communication in the time of coronavirus* (pp. 17-32). Routledge.
- Gibson, R. K., & McAllister, I. (2015). Normalising or Equalising Party Competition? Assessing the Impact of the Web on Election Campaigning. *Political Studies*, *63*(3), 529-547.
- Golbeck, J., Grimes, J. M., and Rogers, A. (2010). Twitter use by the U.S. Congress. *Journal of the American Society for Information Science and Technology*, *61*(8), 1612–1621.
- Grassau, D., Valenzuela, S., & Puente, S. (2021). What “Emergency Sources” Expect From Journalists: Applying the Hierarchy of Influences Model to Disaster News Coverage. *International Journal of Communication*, *15*, 1349-1371.
- Guillamón, M.-D., Ríos, A.-M., Gesuele, B., & Metallo, C. (2016). Factors influencing social media use in local governments: The case of Italy and Spain. *Government Information Quarterly*, *33*(3), 460-471.

- Hersh, E. D. (2015). *Hacking the Electorate: How Campaigns Perceive Voters*. Cambridge University Press.
- Islam, S., Sarkar, T., Khan, S., Kamal, A., Hasan, S., Kabir, A., ... & Seale, H. (2020). Covid-19-related Infodemic and Its Impact On Public Health: A Global Social Media Analysis. *American Journal of Tropical Medicine and Hygiene*, 4(103), 1621-1629.
- Jacobs, K., & Spierings, N. (2019). A Populist Paradise? Examining Populists' Twitter Adoption and Use. *Information, communication & society*, 22(12), 1681-1696.
- Karpf, D. (2012). *The MoveOn Effect: The Unexpected Transformation of American Political Advocacy*. Oxford University Press.
- Keller, T. R., & Kleinen-von Königslöw, K. (2018). Pseudo-discursive, mobilizing, emotional, and entertaining: identifying four successful communication styles of political actors on social media during the 2015 Swiss national elections. *Journal of Information Technology & Politics*, 15(4), 358–377.
- Kitsos, A., Proestakis, A. (2021). Mediating Distributive Politics: Political Alignment and Electoral Business Cycle Effects On Municipality Financing In Greece. *The Annals of Regional Science*, 1(67), 1-26.
- Kreiss, D. (2016). *Prototype Politics: Technology-Intensive Campaigning and the Data of Democracy*. Oxford University Press.
- Kreiss, D., & Saffer, A. J. (2017). Networks and Innovation in the Production of Communication: Explaining Innovations in U.S. Electoral Campaigning From 2004 to 2012. *Journal of communication*, 67(4), 521-544.
- Kruikemeier, S. (2014). How political candidates use Twitter and the impact on votes. *Computers in Human Behavior*, 34, 131–139.

- Larrañaga, O. (2009). Inequality, Poverty and Social Policy: Recent Trends in Chile. *OECD Social, Employment and Migration Working Papers*(85).
<https://doi.org/10.1787/224516554144>
- Lev-On, A., & Haleva-Amir, S. (2018). Normalizing or Equalizing? Characterizing Facebook Campaigning. *New Media & Society*, 20(2), 720-739.
- Luna, J.P., & Medel, R. (forthcoming). Uneven States, Unequal Societies, and Democracy's Unfulfilled Promises: Citizenship Rights in Chile and Contemporary Latin America. *Latin American Politics and Society*.
- Li, Y., Chandra, Y., & Fan, Y. (2022). Unpacking government social media messaging strategies during the COVID-19 pandemic in China. *Policy & Internet*, 14, 651-672.
- López, R., & Miller, S. J. (2008). Chile: The Unbearable Burden of Inequality. *World Development*, 36(12), 2679-2695.
- Luna, J. P. (2021). *La Chusma Inconsciente: La Crisis de un País Atendido por sus Propios Dueños*. Editorial Catalonia.
- Luna, J. P., & Mardones, R. (2016). Targeted Social Policy Allocations by “Clean” State Bureaucracies: Chile 2000–2009. *Journal of International and Comparative Social Policy*, 32(1), 36-56.
- Luna, J. P., Pérez, C., Toro, S., Rosenblatt, F., Poblete, B., Valenzuela, S., Cruz, A., Bro, N., Alcatruz, D., & Escobar, A. (2022). Much Ado About Facebook? Evidence from 80 Congressional Campaigns in Chile. *Journal of Information Technology & Politics*, 19(2), 129-139.
- Luna, J. P., & Rosenblatt, F. (2012). ¿Notas para una Autopsia? Los Partidos Políticos en el Chile Actual. In F. J. D. L. Sierra (Ed.), *Democracia con Partidos. Informe para la Reforma de los Partidos Políticos en Chile* (pp. 115-268). CEP-CIEPLAN.

- Luna, J. P., & Seligson, M. (2007). *Cultura Política de la Democracia en Chile: 2006*. Vanderbilt University-Instituto de Ciencia Política, PUC-Chile.
- 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>
- Manin, B., 1997. *The Principles of Representative Government*. Cambridge University Press.
- Mathews, C., McGuire, L., Joy, A., Law, F., Winterbottom, M., Rutland, A., ... & Hartstone-Rose, A. (2021). Assessing Adolescents' Critical Health Literacy: How Is Trust In Government Leadership Associated With Knowledge Of Covid-19? *PLoS ONE*, 11(16),
- Mathieu, E., Ritchie, H., Rodés-Guirao, L., Appel, C., Giattino, C., Ortiz-Ospina, E., Hasell, J., Macdonald, B., Beltekian, D., & Roser, M. (2020). Coronavirus Pandemic (COVID-19). Published online at [OurWorldInData.org](https://ourworldindata.org/coronavirus). <https://ourworldindata.org/coronavirus>.
- Nickerson, D. W., & Rogers, T. (2014). Political Campaigns and Big Data. *Journal of Economic Perspectives*, 28(2), 51-74.
- Nielsen, R. K. (2013). Mundane Internet Tools, the Risk of Exclusion, and Reflexive Movements—Occupy Wall Street and Political Uses of Digital Networked Technologies. *The Sociological Quarterly*, 54(2), 173-177.
- Padeiro, M., Bueno-Larraz, B., & Freitas, Â. (2021). Local Governments' Use of Social Media during the COVID-19 Pandemic: The Case of Portugal. *Government Information Quarterly*, 38(4), 101620.

- Penney, J. (2017). Social Media and Citizen Participation in “Official” and “Unofficial” Electoral Promotion: A Structural Analysis of the 2016 Bernie Sanders Digital Campaign. *Journal of communication*, 67(3), 402-423.
- Powell, W. W., & DiMaggio, P. J. (2012). *The New Institutionalism in Organizational Analysis*. University of Chicago Press.
- Pribble, J. (2013). *Welfare and Party Politics in Latin America*. Cambridge University Press.
- Programa de las Naciones Unidas para el Desarrollo—PNUD. (2017). *Desiguales: Orígenes, Cambios y Desafíos de la Brecha Social en Chile*. PNUD.
- Ramírez, Y., Tejada, Á., & Sánchez, M. (2020). Determinants Of Online Intellectual Capital Disclosure by Spanish Local Governments. *Journal of Intellectual Capital*, 2(23), 249-289.
- Roberts ME, Stewart BM, Tingley D (2019). “stm: An R Package for Structural Topic Models.” *Journal of Statistical Software*, 91(2), 1–40.
- Schmuck, D., & Hameleers, M. (2020). Closer to the People: A Comparative Content Analysis of Populist Communication on Social Networking Sites in pre-and post-Election Periods. *Information, communication & society*, 23(10), 1531-1548.
- Sobacı, M. Z., & Hatipoğlu, İ. (2018). *Sub-National Democracy and Politics Through Social Media*. Springer.
- Somma, N. (2012). The Chilean Student Movement of 2011-2012: Challenging the Marketization of Education. *Interface: a journal for and about social movements*, 4(2), 296-309.
- Somma, N., Bargsted, M., Disi Pavlic, R., & Medel, R. (2021). No Water in the Oasis: the Chilean Spring of 2019–2020. *Social Movement Studies*, 20(4), 495-502.

- Somma, N., Garretón, M., Campos, T., & Joignant, A. (2020). Radiografía del “Estallido Social”. In A. Joignant, M. Garretón, N. Somma, & T. Campos (Eds.), *Informe Anual. Observatorio de Conflictos 2020* (pp. 11-21). COES. Centro de Estudios de Conflicto y Cohesión Social.
- Splendiani, S., Capriello, A. (2022). Crisis Communication, Social Media and Natural Disasters – The Use Of Twitter By Local Governments During The 2016 Italian Earthquake. *Corporate Communications: An International Journal*, 3(27), 509-526
- Stromer-Galley, J. (2019). *Presidential Campaigning in the Internet Age* (2nd edition ed.). Oxford University Press.

Appendix

Figure 1A. STM Diagnostics

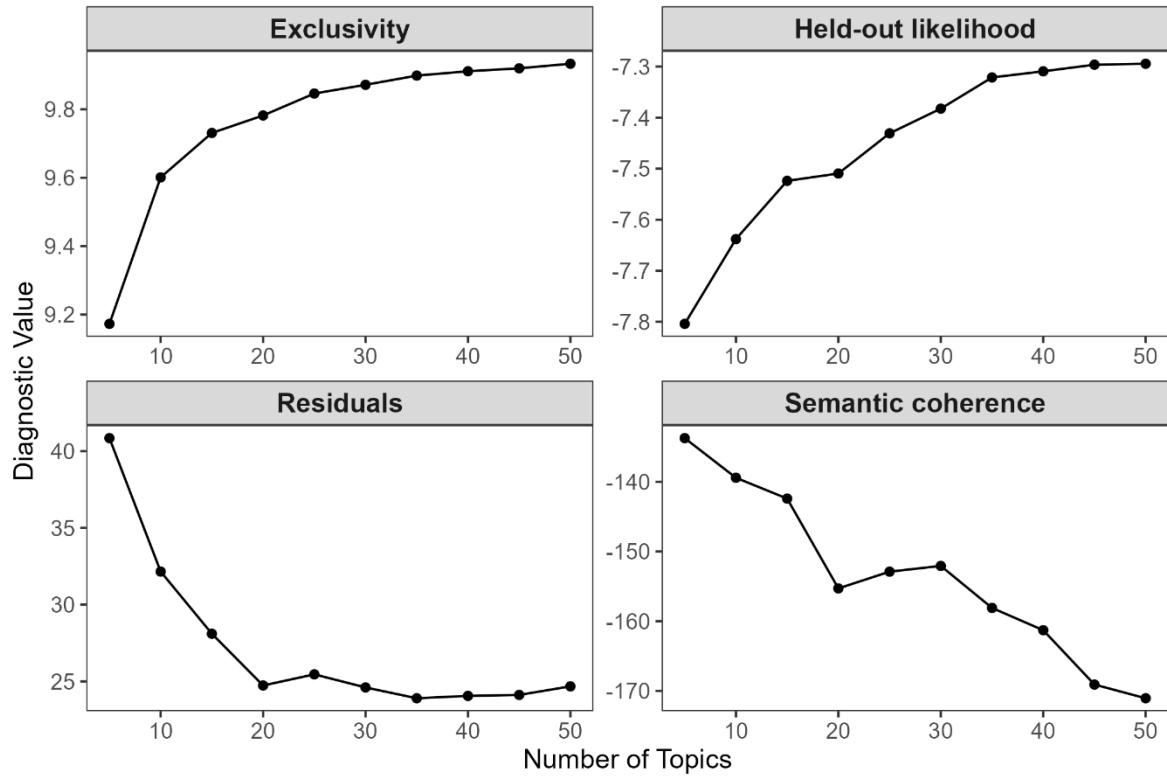


Figure 2A. Topics by Platform

