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Editorial

Why We Should Distinguish Between Mobilization and Participation When Investigating Social Media

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Abstract
In the recent past, social media has become a central channel and means for political and societal mobilization. Mobilization refers to the process by which political parties, politicians, social movements, activists, and other political and social actors induce citizens to participate in politics in order to win elections, convince others of their own positions, influence policies, and modify rulings. While not sufficient on its own for facilitating participation, mobilization is necessary for participation to occur, which justifies examining mobilization specifically to understand how people can be involved in politics. This thematic issue of *Media and Communication* presents various perspectives on the role of social media in mobilization, embracing both its recruitment side (traditional and non-established political actors, social and protest movements) and its network side (the ways citizens respond to mobilization appeals). Taken together, the thematic issue highlights the multifaceted nature and scholarly fruitfulness of mobilization as an independent concept.

Keywords
activism; campaigning; citizenship; political mobilization; social mobilization; new civics; political parties; politicians; social media; social movements

Issue
This editorial is part of the issue "Social Media's Role in Political and Societal Mobilization" edited by Jörg Haßler (LMU Munich), Melanie Magin (Norwegian University of Science and Technology), and Uta Russmann (University of Innsbruck).

1. Introduction

Political and societal mobilization is key to involving citizens in political processes. However, academic consensus has not yet been reached regarding a precise definition of mobilization. Indeed, sociology, political science, and communication research tend to look at the phenomenon from different angles and set conceptually different emphases. One of the most fundamental problems this situation creates is the conceptual conflation of mobilization and participation. While the two can go hand in hand, we argue that mobilization must first be present for participation to occur, although other conditions are also necessary. Mobilization refers to the process by which political parties, politicians, social movements, activists, and other political and social actors induce citizens to participate in politics in order to win elections, convince others of their own positions and influence policies, and modify rulings (Rosenstone & Hansen, 1993). To understand how people can be involved in politics, therefore, mobilization must be examined as an independent concept.

The close connection between mobilization and participation is particularly evident in the observation by Schlozman et al. (2018, p. 50) that people do not actively participate in politics "because they can't, because they don't want to, or because nobody asked." These writers explained that not being asked may be related to isolation in recruitment networks. These networks can be viewed from two perspectives: from the *recruitment*

perspective, suggesting a focus on direct mobilization efforts by political actors (e.g., parties, social movements); and from the perspective of *networks*, such as citizens' social networks (Rosenstone & Hansen, 1993). The two perspectives have in common that modern communication environments in hybrid media systems have multiplied opportunities for coming into contact with both top-down and bottom-up direct mobilization calls (Russmann et al., 2021).

For many decades during the rise of democracies, political and societal mobilization reflected a top-down process (Deutsch, 1961) used by the state and hierarchical organizations (e.g., parties, religious institutions). In that context, political mobilization essentially involved marshaling supporters to cast their ballots, but their participation in political processes was not desired. To date, as articles in this thematic issue of *Media and Communication* reveal, traditional political actors still primarily engage in mobilization as a top-down process. However, since the 1970s, with the emergence of new parties (e.g., the New Left) and new social movements (e.g., anti-nuclear power and environmental movements), mobilization increasingly evolved toward becoming a bottom-up process (von Beyme, 1992). These new actors became agents of mobilization, while being personally affected fostered some citizens' participation with respect to certain causes (von Beyme, 1992). As a result, traditional political actors were increasingly forced to react to the shift in citizens' involvement as they moved toward more participation in political processes. Then in the 21st century, social media provided a new channel and means for mobilization, which since then has grown even stronger, combining both top-down and bottom-up processes.

While the styles and presumed effects of mobilization appeals on social media are similar to those of traditional mobilization appeals, e.g., appearing on partisan-centered posters and in mass-centered TV commercials, social media allows for a more detailed targeting of certain social groups and even individuals. With the use of relatively few resources (compared to traditional mobilization), multiple audiences can be mobilized using different appeals at the same time. Citizens' technical ability to share messages among social media networks might be considered an effective tool for mass-centered mobilization (Russmann et al., 2021).

2. Overview of the Thematic Issue

The 13 articles contained in this thematic issue focus on the role of social media in mobilization from various perspectives and highlight the multifaceted nature and scholarly fruitfulness of the mobilization concept. We collected studies on mobilization's recruitment side (the ways that diverse actors use social media for mobilization) and its network side (the ways that citizens respond to mobilization appeals). Several studies combine both elements, showing their close interconnectedness. The broad spectrum of methods used emphasizes the multiperspectivity of mobilization as an independent concept.

2.1. How Do Traditional Political Actors Use Social Media for Mobilization?

The first three studies featured in this issue show that top-down communication (still) predominates in mobilization efforts by traditional political actors, such as parties and politicians. In the traditional political sphere, mobilization from below (generally) needs to be triggered through mobilization from above.

Anna-Katharina Wurst, Katharina Pohl, and Jörg Haßler (2023) linked political mobilizing appeals theoretically with three campaign functions—information, interaction, and mobilization—to systematize a broad range of varied mobilization appeals. However, their content analysis of Facebook and Instagram posts by political parties and their top candidates in the 2021 German federal election campaign revealed that political parties primarily used their social media communications to mobilize users to vote.

Márton Bene and Gábor Dobos (2023) investigated a still neglected issue—politicians' social media usage at the local level. The results of their study of almost 20,000 Facebook posts from the 3,152 Hungarian municipalities over two years showed that political mobilization on the local level was rather limited compared to the national level. Facebook activity was higher in the case of larger municipalities, politicians in more prominent positions (e.g., mayors), and politicians belonging to a national party.

In another study, Michael Kowal (2023) investigated ways that social media can encourage voters to make campaign donations as a specific form of mobilization. Taking the example of the most viral posts from the 2018 and 2020 US House of Representatives elections, Kowal found that on days when posts went viral, campaign donations for the respective candidate often increased significantly. Given that relatively small, individual donations have most recently become increasingly important in campaign financing in the US, creating viral posts can result in significant real-world consequences.

2.2. How Do Influencers Use Social Media for Mobilization?

Influencers as new political actors are becoming increasingly more important in integrating citizens into political processes. Their importance, however, varies greatly depending on the country's context, as the three articles described next show.

Considering their increased importance as sources of information for young citizens, social media influencers have enormous potential to shape young citizens' political opinions and mobilize them. By means of qualitative interviews, Christina Peter and Luisa Muth (2023) gathered data that showed that young users in Germany

often complement the information they receive from news media sources with information from influencers to make sense of the political information received. The users considered political influencers, distinguished from regular influencers who occasionally address political and social issues, as reliable political information sources.

At the same time, exposure to political influencers can also negatively impact democracies, as Rachel Gibson, Esmeralda Bon, Philipp Darius, and Peter Smyth (2023) demonstrated in the context of the US. Their survey results showed that political influencers' followers tend to be more politically extreme and more likely to follow conspiracy narratives than those who tend not to follow influencers. At the same time, audiences of influencers are more engaged offline and online. The authors concluded that, as more extreme positions are mobilized, political influencers' growing importance might further deteriorate societal consensus in the US.

For protests in authoritarian countries with limited communication freedoms, social media that is not controlled by the state can be particularly important for anti-regime communicators. In a mixed-methods study on the role of Twitter, YouTube, and Facebook in Russia during the Free Navalny protests, Sofya Glazunova and Malmi Amadoru (2023) discovered that social media is a double-edged sword for anti-regime influentials: The large visibility the platforms provide makes the anti-regime influentials dangerous for the regime and, thus, leads to further suppression and existential threats directed towards them.

2.3. How Do Social and Protest Movements Use Social Media for Mobilization?

The three articles discussed next, which address the mobilization strategies of social movements, illustrate that even movements that appear highly professional rely on trial-and-error approaches and personal experience with respect to digital public communication. Moreover, innovative forms of communication, such as memes, have a specific mobilization potential.

Building on the mediatization approach and gathering data through semi-structured interviews, Marlene Schaaf and Oliver Quiring (2023) uncovered ways social media account managers of 29 social movement organizations in Germany adapted to social media logic. The activists did not consider themselves to be experts but, rather, as having adapted to the success criteria for social media by "learning by doing" without necessarily understanding the workings of the underlying algorithms. However, this adaption was limited, for example, regarding the personalization of leaders in grassroots movements or the communication of sensitive issues.

Giuliana Sorce (2023) employed qualitative in-depth, semi-structured interviews with Fridays for Future activists from nine countries to explore the extent to which they were aware of the importance of algorithms in digital mobilization. Despite the common perception of Fridays for Future as a movement of digital natives, the activists' awareness of the way social media algorithms work was not sufficiently strong to enable them to design strategies for optimal algorithmic diffusion, and their efforts to critically reflect on the platforms' profit maximization were minimal.

In addition, Michael Johann, Lukas Höhnle, and Jana Dombrowski (2023) conducted a survey of users who created and shared memes related to the Fridays for Future movement on social media. The results indicated that engaging with memes is positively related to involvement in political issues and network size, which, in turn, are related to general political participation (e.g., voting, demonstrating, volunteering). They concluded that getting people to produce and consume memes on certain political issues can mobilize them by lowering the threshold for potentially more demanding forms of participation.

2.4. (How) Are Citizens Mobilized on Social Media?

The last four articles in this thematic issue examine the citizen perspective on political mobilization campaigns and point to limits of the mobilization potential of social media: Citizens can be mobilized by microtargeting messages and news curation but only under specific conditions; furthermore, online discussions can even have demobilizing effects when perceived as polarizing.

While the debate about online political microtargeting often centers around potential negative outcomes, Emilia Errenst, Annelien Van Remoortere, Susan Vermeer, and Sanne Kruikemeier (2023) focused on potential positive outcomes of targeted civic education ads on Instagram (e.g., increasing political interest, efficacy, and participation). However, their experiment with young adults in Germany did not uncover positive mobilizing effects, leading to the conclusion that such ads likely have an impact only under certain conditions.

Hannah Decker and Nicole Krämer (2023) also used an online experiment to investigate online political microtargeting processes. They examined ways in which people's prior attitudes and personality traits influenced their reception and processing of different microtargeting strategies in political campaigns. Decker and Krämer illustrated that messages are more persuasive and perceived as more positive when relevant to the citizens and in line with their prior attitudes. Furthermore, the citizens' level of extraversion turned out to be a moderating variable with respect to online ads, party evaluations, and voting intentions.

Emilija Gagrčin, Jakob Ohme, Lina Buttgereit, and Felix Grünewald (2023) investigated the impact of users' news curation and networks on mobilization and polarization. Self-reported user data gathered from almost 1,000 participants from a two-wave online panel survey during the 2021 German federal elections showed that users' data footprints can enhance the mobilizing tendencies of news exposure for campaign participation but

only minimally for voter turnout. They found no evidence of news on algorithmic platforms reinforcing existing user attitudes or increasing affective polarization.

Finally, Martina Novotná, Alena Macková, Karolína Bieliková, and Patrícia Rossini (2023) examined what barriers hinder citizens from participating in political online discussions in times of crises. Data gleaned from their semi-structured interviews related to two recent crises (Covid-19 and Russia's war against Ukraine) revealed that the interviewees experienced online conversations as polarizing and a form of disinformation, leading to an unwillingness to participate in future discussions around controversial issues. This applied particularly to citizens who were not as resilient to polarization and disinformation.

3. Conclusion

The broad overview of perspectives on mobilization in modern hybrid media systems collected in this thematic issue proves that examining mobilization as a separate concept in addition to participation is fruitful, despite or precisely because of the multifacetedness of the concept. This thematic issue shows that new political actors, like influencers, have the potential to alter the way mobilization efforts integrate citizens into political processes. With a view to the complexity of today's hybrid information environment with its multitude of political actors and movements, we, therefore, highlight the importance of broadening our understanding of mobilization beyond motivating citizens to vote. Nevertheless, mobilization dynamics appear to be strongly influenced by broader political circumstances in different national contexts, which highlights the urgency for cross-country comparisons to better understand how structural conditions affect mobilization. Not only new actors but also new forms of communication, such as memes, seem to be suitable for tapping into new population groups and, under certain conditions, for mobilizing them as well.

Altogether, the thematic issue points to the lack of a "magic bullet" or a one-size-fits-all solution to integrating citizens into political processes. On the contrary, even microtargeting segments of the population with highly tailored messages only works under certain conditions, and discourse dynamics in online environments can even demobilize, especially in communication-intensive times of crises. Social scientists and communication researchers, in particular, face the exciting challenge of further deciphering which actors, messages, and communication strategies must meet which communication channel and recipient characteristics in order to mobilize citizens politically and societally. We hope this thematic issue will contribute to and stimulate such endeavours.

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Conflict of Interests

The authors declare no conflicts of interest.

References

Bene, M., & Dobos, G. (2023). In the web of the parties: Local politicians on Facebook in Hungary. *Media and Communication*, *11*(3), 141–151. https://doi.org/10.17645/mac.v11i3.6654

Decker, H., & Krämer, N. (2023). Is personality key? Persuasive effects of prior attitudes and personality in political microtargeting. *Media and Communication*, *11*(3), 250–261. https://doi.org/10.17645/mac.v11i3.6627

Deutsch, K. W. (1961). Social mobilization and political development. *American Political Science Review*, *55*(3), 493–514. https://doi.org/10.2307/1952679

Errenst, E., Van Remoortere, A., Vermeer, S., & Kruikemeier, S. (2023). Instaworthy? Examining the effects of (targeted) civic education ads on Instagram. *Media and Communication*, *11*(3), 238–249. https://doi.org/10.17645/mac.v11i3.6614

Gagrčin, E., Ohme, J., Buttgereit, L., & Grünewald, F. (2023). Datafication markers: Curation and user network effects on mobilization and polarization during elections. *Media and Communication*, *11*(3), 262–273. https://doi.org/10.17645/mac.v11i3.6641

Gibson, R., Bon, E., Darius, P., & Smyth, P. (2023). Are online political influencers accelerating democratic deconsolidation? *Media and Communication*, *11*(3), 175–186. https://doi.org/10.17645/mac.v11i3.6813

Glazunova, S., & Amadoru, M. (2023). "Anti-regime influentials" across platforms: A case study of the Free Navalny protests in Russia. *Media and Communication*, *11*(3), 187–202. https://doi.org/10.17645/mac.v11i3.6643

Johann, M., Höhnle, L., & Dombrowski, J. (2023). Fridays for Future and mondays for memes: How climate crisis memes mobilize social media users. *Media and Communication*, *11*(3), 226–237. https://doi.org/10.17645/mac.v11i3.6658

Kowal, M. (2023). The value of a like: Facebook, viral posts, and campaign finance in US congressional elections. *Media and Communication*, *11*(3), 153–163.

https://doi.org/10.17645/mac.v11i3.6661
Novotná, M., Macková, A., Bieliková, K., & Rossini, P. (2023). Barriers to participation in polarized online discussions about Covid-19 and the Russo-Ukrainian war. *Media and Communication*, *11*(3), 274–284. https://doi.org/10.17645/mac.v11i3.6657
Peter, C., & Muth, L. (2023). Social media influencers' role in shaping political opinions and actions of young audiences. *Media and Communication*, *11*(3), 164–174. https://doi.org/10.17645/mac.v11i3.6750
Rosenstone, S. J., & Hansen, J. M. (1993). *Mobilization, participation, and democracy in America: New topics in politics*. Macmillan.
Russmann, U., Haßler, J., Fenoll, V., & Magin, M. (2021). Social media as a campaigning tool in elections: Theoretical considerations and state of research. In J. Haßler, M. Magin, U. Russmann, & V. Fenoll (Eds.), *Campaigning on Facebook in the 2019 European Parliament election* (pp. 23–39). Palgrave Macmillan.
Schaaf, M., & Quiring, O. (2023). The limits of social media mobilization: How protest movements adapt to social media logic. *Media and Communication*, *11*(3), 203–213. https://doi.org/10.17645/mac.v11i3.6635
Schlozman, K. L., Brady, H., & Verba, S. (2018). *Unequal and unrepresented: Political inequality and the people's voice in the new gilded age*. Princeton University Press. https://doi.org/10.23943/9781400890361
Sorce, G. (2023). Stuck with the algorithm: Algorithmic consciousness and repertoire in Fridays for Future's data contention. *Media and Communication*, *11*(3), 214–225. https://doi.org/10.17645/mac.v11i3.6818
von Beyme, K. (1992). Political mobilization and participation. In M. Dierkes & B. Biervert (Eds.), *European social science in transition* (pp. 371–390). Campus.
Wurst, A.-K., Pohl, K., & Haßler, J. (2023). Mobilization in the context of campaign functions and citizen participation. *Media and Communication*, *11*(3), 129–140. https://doi.org/10.17645/mac.v11i3.6660

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Article

Mobilization in the Context of Campaign Functions and Citizen Participation

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Abstract
Mobilization strategies are an essential part of political parties' campaign communication. By mobilizing voters and supporters, parties promote civic participation in politics, the forms of which have multiplied given the possibilities of user activities on social media. To define their online mobilization strategies, parties have to choose which forms of participation (e.g., voting, donating, or liking or sharing a post) they will seek to mobilize. Understanding mobilization as a communicative appeal to engage audiences in participatory actions, in our study we conceptually linked parties' mobilizing appeals with three campaign functions—information, interaction, and mobilization—to systematize different types of mobilization. We applied that categorization to the social media campaigns of parties and top candidates in Germany and conducted a manual quantitative content analysis of 1,495 Facebook and 1,088 Instagram posts published in the run-up to the 2021 federal election. Results show that parties primarily mobilized their audiences to vote and seek out more information (e.g., on the party's website). Although user reactions are generally an important factor of performance on social media, parties mostly avoided calls to like, share, or comment on posts. When compared, the strategies of parties and candidates indicate that mobilization is more the task of parties than of candidates. Differences between Facebook and Instagram can be attributed to the different technical affordances of the platforms. Because Facebook, unlike Instagram, supports clickable links in posts, parties are more likely to encourage users on Facebook to seek out more information online.

Keywords
Facebook; Instagram; online campaigning; political mobilization; political participation; social media

Issue
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1. Introduction

Political parties' primary tasks include promoting civic participation and engaging citizens in the political process. When parties mobilize the electorate to turn out and vote, they involve citizens in democratic politics (Huckfeldt & Sprague, 1992). From the perspective of parties, mobilization strategies are an essential part of their campaign communication. With social media channels added to their campaigning repertoire, parties can bypass traditional gatekeepers and directly address political messages to citizens and, in turn, directly mobilize them. Unlike election posters or TV commercials, which also allow parties to address their messages directly to citizens, digital media offer additional opportunities to communicate with users in more engaging, interactive ways (Lilleker et al., 2011). In the early stages of the internet, enthusiastic voices expected the new medium to improve contact and discussion between citizens and representatives, thereby allowing more people to participate in political processes (Norris, 2003). Especially in the context of social movements such as the Arab Spring, #MeToo, and Black Lives Matter, social media platforms have played an important role in connecting people and facilitating horizontal communication and self-mobilization in the spirit of connective action

(Bennett & Segerberg, 2012), resulting in bottom-up oriented communication. However, in the context of party–user communication, parties use social media primarily as top-down channels of information dissemination, whereas interaction with users is largely absent (Jungherr, 2016; Magin et al., 2017). Parties can not only convey information from the top down but also unidirectionally make appeals to mobilize citizens (Russmann et al., 2021). Those unidirectional appeals thus do not require interaction with citizens but can engage citizens in politics if they follow a party's mobilization appeal.

Following Rosenstone and Hansen's (1993, p. 25) definition, we understand *mobilization* as "the process by which candidates, parties, activists, and groups induce other people to participate." Mobilization refers to the communication of mobilizing actors and their intention to move citizens to participate in political actions. However, successful mobilization implies not only someone who *mobilizes* but also someone who *is mobilized*—that is, someone who participates upon being asked to do so. In that sense, mobilization and participation are conceptually intertwined. There are various ways for citizens to participate in politics, from institutionalized participation in representational contexts, such as voting and supporting a party campaign, to extra-representational activities, such as demonstrating and supporting a social movement (Geise & Podschuweit, 2019), and from manifest participation aimed at directly influencing political decisions to more latent forms, including discussing politics and seeking political information (Ekman & Amnå, 2012). Consequently, parties can call for a range of participatory activities while pursuing different mobilization strategies. However, not all forms of participation are equally valuable for parties. Since parties are the most important organizational units in the representative democratic process, they presumably focus on mobilizing institutionalized forms of participation with campaigns primarily intended to inform citizens about their policies and encourage citizens to vote. By contrast, they rarely call for demonstrations, which are more often a means of social movements. Digital and social media have added several avenues for participation, including activities such as following a political actor on social media and liking, sharing, or commenting on political posts, that have no offline equivalent (Theocharis et al., 2023). From the perspective of party strategy, those activities can increase the visibility and reach of parties' social media campaigns; however, an empirical question remains about how parties refer to those activities alongside traditional and institutionalized forms of participation.

In our study, we focused on mobilization strategies in the top-down communication of political parties and their top candidates on social media. Previous studies have investigated parties' mobilization in contexts encompassing various campaign elements, including information, interaction, personalization, and negative campaigning (e.g., Keller & Kleinen-von Königslöw, 2018; Magin et al., 2017; Stromer-Galley et al., 2021), but have rarely considered specific subtypes of mobilization systematically. Because parties can use social media to mobilize citizens to engage in different participatory actions (e.g., voting, supporting a campaign, seeking political information, or liking and sharing posts on social media), thereby promoting political participation on different levels, we differentiated possible types of mobilization for a more in-depth analysis of party mobilization. To that end, we adopted a broad definition of citizen participation, one including manifest as well as latent participation (Ekman & Amnå, 2012), to examine the mobilization strategies that parties use to achieve their electoral goals.

For a case study, we analyzed the mobilization strategies of parties and top candidates in Germany by conducting a manual quantitative content analysis of their Facebook and Instagram posts published during the 2021 federal election campaign. In our analysis, we compared the mobilizing communication of parties and individual politicians, because both types of actors differ in their social media communication (Haßler et al., 2023), which might influence their mobilization strategy. We also investigated how the technical affordances of Facebook versus Instagram might affect the choice of mobilization appeals used. We concentrated on Facebook and Instagram because both platforms were by far the most-used social media platforms in Germany in 2021 when Facebook was used on a daily basis by 15% of the population more than 14 years old and Instagram by 18% (Beisch & Koch, 2021). By contrast, only 2% of the German population more than 14 years old was active on Twitter, which parties have been shown to seldom use to make appeals to mobilize (Jungherr, 2016; Keller & Kleinen-von Königslöw, 2018). For political actors, Facebook is the more important platform for communicating with supporters (Stromer-Galley et al., 2021) and for reaching the public, whereas Twitter is perceived as a tool for addressing journalists (Boulianne & Larsson, 2023). Accordingly, politicians in Germany tend to use Facebook for campaign activities, whereas Twitter is more often used to discuss political issues (Stier et al., 2018). Past research has usually focused on Facebook and Twitter, whereas Instagram, as the youngest of the three platforms, has remained relatively unexplored in the context of campaign communication, even though Instagram has a high number of users and politicians are relatively active on this platform (Boulianne & Larsson, 2023; Haßler et al., 2023).

2. Mobilization in Political Communication

Rosenstone and Hansen's (1993) work highlighting the centrality of strategic mobilization in participation processes marked a "turning point" in research on civic participation (Green & Schwam-Baird, 2016, p. 158). While previous studies had primarily considered citizens' individual attributes, including education, income,

age, and sense of political efficacy, to explain why some citizens participated more in politics than others, Rosenstone and Hansen (1993) focused on how electoral competition and mobilization affect citizen participation. Defining *mobilization* in a broad sense as occurring in both campaign appeals and private conversations with friends and family, they statistically showed that while individual characteristics can explain some of the decline in voter turnout between 1960 and 1980 in the US, most of it relates to a parallel decrease in parties' campaign efforts. Based on those results, Rosenstone and Hansen (1993, p. 5) theorized that "people participate in politics not so much because of who they are but because of the political choices and incentives they are offered." Years earlier, Snow et al. (1980) indicated the relevance of mobilization in the context of activities within social movements, as simply not being asked was a reason frequently mentioned by people for not participating in activities, along with not having enough time and not knowing anyone who would also participate. Verba et al.'s (1995, p. 269) civic voluntarism model conclusively captures citizens' nonparticipation in politics in the triad of reasons "because they can't, because they don't want to, or because nobody asked." Subsequent randomized experiments have largely confirmed Rosenstone and Hansen's (1993) assumption that campaign efforts can promote voter turnout (Green & Schwam-Baird, 2016), thereby making mobilization an essential condition along with individual prerequisites for political participation.

Even though being asked to participate is an important prerequisite for participation (Verba et al., 1995), the mobilizing effects on citizens' participation are not limited to direct mobilization appeals, because certain elements of information can have such an activating effect that audiences are already mobilized on that basis (Russmann et al., 2021). Research has measured the impact of various communication elements and shown that negative emotions and populist content in particular can have mobilizing effects and, for instance, lead to higher user reactions (e.g., Bene et al., 2022; Bos et al., 2020; Valentino et al., 2011). However, because the effects on voter turnout are multifaceted and depend on citizens' individual attributes and political actors' mobilization (Rosenstone & Hansen, 1993), the effects of particular communication elements, including negative campaigning (Lau et al., 2007), are not unambiguous. Nonetheless, that strand of research has shown that not only explicit mobilization calls can prompt participation, but parties could also pursue a mobilization strategy without such calls and primarily use activating content instead.

2.1. Mobilization in Social Media Communication

With the emergence of social media, new opportunities for online participation have been created that have no direct equivalents offline (Theocharis et al., 2023). By engaging in low-effort participation, citizens can express political interest and support online, for example, by following political accounts, liking, and/or sharing posts. Those new online activities complement the existing range of offline civic participation. Consequently, various mobilization strategies to influence citizens' participation intentions are conceivable for parties' campaigns on social media. Assuming that parties' election campaigns primarily aim to win elections, developing effective communication strategies is essential. That effort involves two objectives that differ according to the electorate targeted (Stuckelberger, 2021). Whereas supporters of one's own party have to be mobilized to go out and vote, especially in electoral systems where voting is not compulsory, swing voters have to be convinced of the party's objectives to get them to vote for one's own party. Direct *calls to vote* are one way for a party to mobilize. Those simple calls to vote can increase the mere awareness of the upcoming election but are more likely to work with already convinced party supporters than with undecided citizens. Because such calls could prove ineffective with undecided citizens, parties may first seek to persuade those by inviting them to discussions on political topics or by providing information in social media posts about the party's policies and referring to further information available on their websites. For an alternative mobilization strategy, parties may also try to encourage users to support the campaign by, for example, becoming active campaign workers and mobilizing other citizens to vote for the party. Although those activities do not directly put votes in the ballot box, they can be decisive for a campaign. Especially on social media, user activities such as liking, sharing, and commenting on posts lead to further dissemination in the network and thus higher visibility of the posts due to network effects and algorithmic curation (Bene et al., 2022). Therefore, producing viral content is an important goal of parties' social media communication (Cremers et al., 2022). In sum, to define their mobilization strategies, parties can choose and combine the various objectives of mobilization to encourage citizens to engage in different forms of participation.

Research on mobilization in parties' online campaigning shows that parties complement the dissemination of information with mobilizing calls to a considerable extent. In the US, social media platforms have become vital tools for mobilization within overall political campaigns (Stromer-Galley et al., 2021). In Europe, parties also use their social media presence to mobilize during campaigns. In Germany, Austria, and Switzerland, in 2013 and 2015, nearly half of the parties' Facebook posts published during national election campaigns contained mobilizing content (Keller & Kleinen-von Königslöw, 2018; Magin et al., 2017). However, their attempts at mobilization are mostly limited to calls to vote. Although parties aim for viral posts to spread their messages (Cremers et al., 2022), they rarely use calls for social media actions (Keller & Kleinen-von Königslöw, 2018). They avoid calls to support their campaigns in

other ways as well—for instance, by donating or becoming a campaign worker—because they fear that such calls for high-effort participation "could scare the voters away" (Magin et al., 2017, p. 1712).

Now that social media have developed into a standard campaign tool (Cremers et al., 2022), the question remains how parties have further developed their online mobilization strategies. Previous studies on mobilization in social media messages have not consistently characterized different types of mobilization and tended to limit them to traditional forms of participation, including calls for political actions such as voting or participating in campaign events (e.g., Stromer-Galley et al., 2021) or to a distinction between online and offline engagement (e.g., Keller & Kleinen-von Königslöw, 2018). An exception is the work of Magin et al. (2017), who operationalized calls to receive information or interact with the party as subtypes of mobilization alongside traditional party-supporting activities. Adopting that operationalization, we propose a systematization based on the central campaign functions of information, interaction, and mobilization (Foot & Schneider, 2006; Geise & Podschuweit, 2019; Lilleker et al., 2011; Magin et al., 2017) to cover the complex targets of mobilization calls directed at citizens.

2.2. Campaign Functions

To systematize possible types of mobilization in parties' social media campaigns, we have conceptually linked mobilizing calls with campaign functions, following the approach of Russmann et al. (2021). The campaign functions that political actors apply in their online campaign messages help them to reach voters and supporters and to integrate citizens into political processes (Geise & Podschuweit, 2019). From the perspective of citizen participation, different forms of participation induce different levels of civic involvement in politics, which build on each other in a multistage process involving the initial stages of informing and interacting as prerequisites for more extensive forms of participation (Arnstein, 1969; Geise & Podschuweit, 2019). By combining the campaign functions of information, interaction, and mobilization with civic participation, we integrate the parties' and citizens' perspectives, as parties seek to mobilize the intended participatory activities of citizens.

2.2.1. Information

Information is the most fundamental prerequisite in voter communication (Russmann et al., 2021). From the perspective of participation, seeking and consuming political information requires the least participatory effort from citizens and is a rather passive activity. Because it is not directly associated with influencing political decisions, Arnstein (1969) has not classified it as a form of active participation but as an essential precondition for further participatory activities. Ekman and Amnå (2012, p. 296), by contrast, have referred to information-seeking and other activities that contribute to "citizens' readiness and willingness to take political action" as *latent participation*, which influences subsequent manifest participation. For a political party, in turn, providing information about their policies, activities, or candidates (Gibson & Ward, 2000) can help to persuade citizens. Empirical evidence suggests that political actors use social media primarily as a top-down channel to disseminate information to their audiences (Magin et al., 2017). While the presentation of information in social media posts is somewhat restricted due to their conventionally limited volume, websites can serve as archives for background information due to their nearly unlimited data volume (Gibson & Ward, 2000). By providing links to their websites or news articles, parties can point to additional informative content and encourage users to follow the links for more detailed information, thereby integrating *calls to inform* in their social media posts.

2.2.2. Interaction

Using online features such as forums, chats, and comment functions of social media, citizens can participate communicatively in vertical discussions with the political elite (Foot & Schneider, 2006) or in horizontal interactions with other citizens (Lilleker et al., 2011). Especially in the internet's early days, expectations were high that citizens would be able to participate more frequently in online public debates and become more involved in politics (Norris, 2003). Meanwhile, in discussions with citizens, parties could obtain a detailed picture of citizens' opinions to tailor their policies accordingly and interactively persuade citizens of their positions (Russmann et al., 2021). However, parties have almost wholly ignored the interaction potential of social media primarily due to their limited resources. Moderating users' comments and leading discussions on social media involves considerable effort (Magin et al., 2021), and given the unpredictability of interactions with citizens, parties may suspect a loss of control over their communication. Nonetheless, social media still provide parties with the opportunity to initiate communicative interactions with users, and by using *calls to interact* in their posts parties can invite users to engage in discussions with politicians or encourage them to leave a comment.

2.2.3. Mobilization

Citizens are mobilized by political actors to support specific goals and to influence political processes and decisions. Digital media are an important tool for connecting people and facilitating horizontal communication and citizens' self-mobilization, which plays an essential role in social movements (Bennett & Segerberg, 2012). Parties integrate mobilization appeals into their top-down communications in order to activate voters and supporters. Along those lines, the campaign function

of mobilization addresses the goal to recruit voters and generate resources by, for instance, raising financial support or attracting new members (Gibson & Ward, 2000). In today's hybrid media context, possibilities for support are extended to specific social media practices such as following an account of a party or candidate or sharing or liking their posts (Theocharis et al., 2023). Studies have shown that parties use social media as a tool to mobilize citizens in election campaigns mostly by focusing on appeals to vote while eschewing other objectives such as donating, supporting the campaign, or sharing party posts (Keller & Kleinen-von Königslöw, 2018; Magin et al., 2017; Stromer-Galley et al., 2021). In the literature on campaign functions, mobilization is often understood as parties' calling on citizens for "one-way support of the party through symbolic or material resources" (Schweitzer, 2011, p. 315). Thus, in the literature, the campaign function of mobilization is closely associated with resource-oriented objectives to support the party's campaign and less associated with a broad range of activities of citizen participation. However, in our study, we conceived participation and mobilization in a broader sense, where political actors can engage citizens in any kind of participatory activity. With civic political participation including latent activities such as informing and interacting (Ekman & Amnå, 2012), mobilization in a broader sense consequently encompasses calls to inform and calls to interact. In our study, we, therefore, translated the literature's narrow understanding of the mobilization function as *calls to support*, which refers to forms of participation that directly benefit the party.

Because the three campaign functions of information, interaction, and mobilization are not independent but build on each other (Geise & Podschuweit, 2019), a sensible combination of those functions can help to ensure a campaign's success (Russmann et al., 2021). According to Arnstein's (1969) levels of participation, parties may first seek to attract users' attention by providing information and convincing voters of their position with persuasive arguments before making a more elaborate attempt to mobilize users, since "voters who are convinced of a party are easier to mobilise" (Russmann et al., 2021, p. 30). Parties may also engage users in interactive discussions to explain their arguments and present their policies. Because information and interaction can serve to convince users to vote for parties, parties might mobilize users for these activities and call users to receive further information or interact with them, thereby priming them for further mobilization (Keller & Kleinen-von Königslöw, 2018). Therefore, we have conceptualized the three types of calls to inform, calls to interact, and calls to support under the collective term *calls to participate* or *mobilization*.

2.3. Mobilization Strategies

When parties develop their mobilization strategies for social media, they can invite users to participate in various ways on- and offline and in activities at different levels. In our study, we analyzed the mobilization strategies of parties in Germany by investigating their calls to inform, interact, and support. In doing so, we address several aspects that have received less attention in research to date. Although the informing function has emerged as central to parties, calls to seek further information, for example, by following links to parties' websites are hardly considered to constitute mobilization. However, the literature on participation indicates that being informed is an essential prerequisite for political participation. Moreover, examining calls to inform can provide insights into whether social media are considered to be stand-alone platforms for information or whether parties want to direct people away from the platform to external sources of information. Although parties have rarely promoted interactivity with citizens due to deeming it too costly and risky, they nevertheless consider interacting with citizens, engaging with them, and involving them in politics to be important (Geise & Podschuweit, 2019). Once parties have developed a "routine presence on social media" (Stromer-Galley et al., 2021, p. 1), their interaction-oriented efforts could increase in order to differentiate themselves from competitors and establish proximity to citizens. Therefore, we consider that campaign function while examining the social media communication of political actors in the 2021 German federal election, and our first research question was:

> RQ1: How did parties and top candidates integrate calls to inform, interact, and support in their 2021 federal election campaigns on Facebook and Instagram?

Because social media platforms allow politicians to communicate directly with voters independent of their associated party (Metz et al., 2020), candidates can set their own priorities and pursue their own mobilization strategies. Studies have shown that self-personalization is of growing importance for candidates who promote themselves in social media campaigns (Metz et al., 2020). In the 2017 federal election campaign in Germany, parties tended to communicate about policies, whereas candidates used more professional personalization in their Instagram posts (Haßler et al., 2023). Germany's electoral system is a personalized proportional representation voting system that combines proportional with direct personal elements. However, the party vote is more decisive for power in the elected Bundestag, and candidates can be elected only by direct election in their own electoral constituency (i.e., only by a part of the population), which might influence the mobilization strategy of parties and candidates. Given the importance of the party vote, parties have great incentives to call to vote. By contrast, candidates who pursue a more personalized communication strategy and who cannot be chosen on the ballot by most citizens might have fewer incentives to mobilize voters. Even so, top candidates, in

becoming well-known figures to represent their parties, can be expected to have an electoral impact beyond their own constituency. We thus compared the mobilization behavior of parties and top candidates by asking our second research question:

> RQ2: To what extent do the mobilization strategies of candidates and parties differ?

Because differences in the digital architectures of the various social media platforms can imply different communication strategies, comparisons of platforms can offer important insights into how their socio-technical characteristics influence the communication of political actors (Bossetta, 2018; Theocharis et al., 2023). In our study, we focused on Facebook and Instagram, because both reach a broad public and because studies have shown that they are frequently used for campaign activities by political actors (Beisch & Koch, 2021; Stier et al., 2018). Although Facebook and Instagram have some similarities—both support publishing video or image content accompanied by a text description, allow liking and commenting on posts, and enable the following of political actors' pages—they also exhibit some differences. Unlike Facebook, Instagram does not provide a feature to share posts, nor is it possible to include clickable links in the description text. This limits the ability of parties to offer additional information from sources outside the platform. The visual logic of Instagram and its perception as a platform that gives a more personal, intimate look at politics (Bossetta, 2018; Haßler et al., 2023) might induce specific communication and mobilization strategies. Although the absence of any option to share posts or integrate links may lower the number of calls to share a post or follow a link on Instagram, the consequences for calls to vote remain unclear. To analyze how the architectural differences of the platforms impact parties' and candidates' mobilization strategies, we formulated our third research question:

> RQ3: To what extent do the mobilization strategies of parties and candidates differ between Facebook and Instagram?

Last, we examined how the relationship between types of mobilization evolves over the course of the election campaign. Candidates in the US have been found to adapt their social media content to the election context by including more calls to action in their posts as the campaign progresses and as election day approaches (Stromer-Galley et al., 2021). Therefore, we assumed that mobilization-oriented efforts in parties' campaigns increase over the course of the election campaign:

> H1: The number of mobilization calls increases as election day approaches.

3. Method

3.1. German Federal Elections

Germany's political landscape is characterized by a multiparty system of six party groups in the national parliament, with one conservative Christian democratic party group (i.e., CDU/CSU) and one social democratic party (i.e., SPD) in the center of the political spectrum, supplemented by minor parties with different ideologies: the liberal party (i.e., FDP), the Green Party (i.e., Bündnis90/Die Grünen), the Left Party (i.e., Die Linke), and the right-wing populist party AfD. In the 2021 German national election, the incumbent chancellor Angela Merkel (CDU) did not rerun for office after 16 years as chancellor. For most of Merkel's time in office (2005–2021), the government was formed by a grand coalition of the two major center parties—the CDU/CSU and SPD—with an interruption in 2009–2013, when the CDU and FDP formed a coalition. In the 2021 federal election, the Greens nominated a candidate for chancellor for the first time, in addition to the two candidates nominated by the CDU and SPD. After the election, the SPD, Greens, and FDP formed the new governing coalition with the SPD providing the new German chancellor, Olaf Scholz.

Following the lead of US President Barack Obama's 2008 election campaign, parties in Germany began to experiment with social media platforms. Since parties elaborated their presence on social media in the 2013 and 2017 elections, social media have become a standard campaign tool with high relevance for party communication (Cremers et al., 2022). Campaigners continue to seize opportunities of social media platforms to reach their target audiences independently of traditional media outlets, to adapt to fast-changing communication environments, and to convince audiences by elaborating their programs (Cremers et al., 2022). However, in past campaigns, parties in Germany have primarily disseminated information in a unidirectional one-to-many format and limited their mobilization-oriented efforts to calling for votes, thereby neglecting other mobilization and interaction potential (Geise & Podschuweit, 2019; Magin et al., 2017).

3.2. Data Sampling and Coding

To analyze the mobilization strategies of parties in Germany during the 2021 federal election campaign, we conducted a manual quantitative content analysis of all available Facebook (N = 1,495) and Instagram posts (N = 1,088) of the German parliamentary parties and their top candidates in the four weeks from August 30 to September 26, 2021. We collected the posts daily using the application programming interface of CrowdTangle. We followed an actor-based approach to generate the sample and considered all posts published on the official Facebook and Instagram accounts

of the SPD (*n* = 233 posts), CDU (*n* = 511), CSU (*n* = 374), Green Party (*n* = 155), FDP (*n* = 213), AfD (*n* = 213), and Left Party (*n* = 113), as well as their top candidates: Olaf Scholz (SPD, *n* = 143 posts), Armin Laschet (CDU/CSU, *n* = 130), Annalena Baerbock (Green Party, *n* = 89), Christian Lindner (FDP, *n* = 89), Alice Weidel (AfD, *n* = 64), Tino Chrupalla (AfD, *n* = 90), Janine Wissler (Left Party, *n* = 99), and Dietmar Bartsch (Left Party, *n* = 67) who has only a Facebook account. Seven coders trained on a detailed coding scheme coded different mobilization calls. For all categories, the entire post, including the visual part (i.e., the image, the first minute of a video, the preview of a link, or the first image of an album) and the text, was coded as to whether the specific category appeared or not. All categories achieved good reliability scores on a reliability test with a sample of 93 Facebook and Instagram posts ($CR_{Holsti} \geq 0.94$; $CR_{BP's\ kappa} \geq 0.85$; Lombard et al., 2002; for reliability scores for each category, see the Supplementary Material).

Regarding calls to participate, we distinguished the subcategories of calls to inform, calls to interact, and calls to support. We also subcategorized off- and online forms of each type of call. First, calls to inform offline consisted of calls to read a flyer of the party, for example, or to get information from traditional media (e.g., newspaper, radio, or TV); calls to inform online, by contrast, included calls to visit the party's website, calls to watch a live stream, and calls to follow the party's social media channels. Second, calls to interact offline included calls to contact a politician in person (e.g., at a party event), by phone, or by letter and to discuss political issues with others, whereas calls to interact online included calls to comment on a post or interact with politicians on online channels. Third, calls to support offline encompassed calls to vote, donate, participate in party events, or volunteer as a campaign worker, whereas calls to support online included calls to share or like a post or use the party's logo in one's own social media profile image.

To draw conclusions about the extent and composition of political actors' mobilization strategies and to compare them with each other, we described the occurrences of calls for participation in parties' and candidates' social media campaigns and compared the respective proportions of posts containing mobilization calls.

4. Results

Parties and candidates in Germany regularly used Facebook and Instagram to mobilize their audiences. In 43% of their posts, they integrated at least one mobilization call. Most parties and candidates (SPD: 42%, CDU/CSU: 46%, FDP: 41%, Left Party: 47%) sought to mobilize in slightly less than half of their Facebook and Instagram posts. Only the AfD (68%) and, most notably, the Greens (81%) sought to mobilize significantly more. Concerning the different types of mobilization (RQ1), the campaigns preferred calls for offline support (39% of all posts), 93% of which were calls to vote. The second-most used type of mobilization was calls to inform online (18%). Calls to support online were also used to a considerable amount (7%) in the social media campaigns of parties and candidates, in which users were primarily asked to donate (i.e., using bank contact information via a provided link), to share and forward the post to friends, and to use a digital frame for the profile image. By contrast, calls for offline information (1%) and interaction both online (0.3%) and offline (0.6%) were neglected in the 2021 online campaign.

Some differences surfaced in the parties' mobilization strategies (Figure 1). Nearly all parties mobilized their audience for offline support, primarily to vote for the party. The Greens, in particular, frequently relied on calls to vote. In addition to those calls for voting, the parties aimed to encourage the users to seize additional offers for external information. Only the AfD on Facebook referred more frequently to its information offerings and calls for online support (i.e., primarily donating) than to mobilizing the vote for its party. However, AfD did not apply that strategy in its Instagram posts but instead behaved similarly to the other parties on Instagram.

Parties and candidates showed different mobilization behaviors (RQ2). Whereas the parties used calls to participate in slightly more than half of their posts (51%), the candidates were somewhat restrained with that type of direct communication and targeted mobilization in only 26% of their posts. Among the candidates, the Green Party candidate sought to mobilize the most, with 45% of her posts containing at least one call to participate and thus echoing her party's mobilization strategy. The two candidates from the Left Party, who used mobilization calls in only 16% of their posts, and the CDU candidate (17%) sought to mobilize the least.

Regarding the overall number of posts aimed at mobilization, hardly any differences emerged between the two social media platforms (RQ3). Both parties and candidates behaved similarly on Facebook and Instagram, with 44% and 42% of the posts containing a mobilization call, respectively. Differences did emerge considering the various types of mobilization. All parties used more calls to access additional information on Facebook than on Instagram. By contrast, they called for offline mobilization slightly more frequently on Instagram.

The temporal course of the online campaign shows that the calls to support offline had a clear time dependency (H1). As election day approached, the parties and candidates used higher shares of calls to vote in their Facebook and Instagram posts. By contrast, the campaign's course did not have such a striking effect on the other types of mobilization. After calls to inform online appeared, in part, more frequently than calls to vote in the first half of the campaign, their share dropped slightly in the second half, whereas calls to support online increased only slightly just before election day (Figure 2).

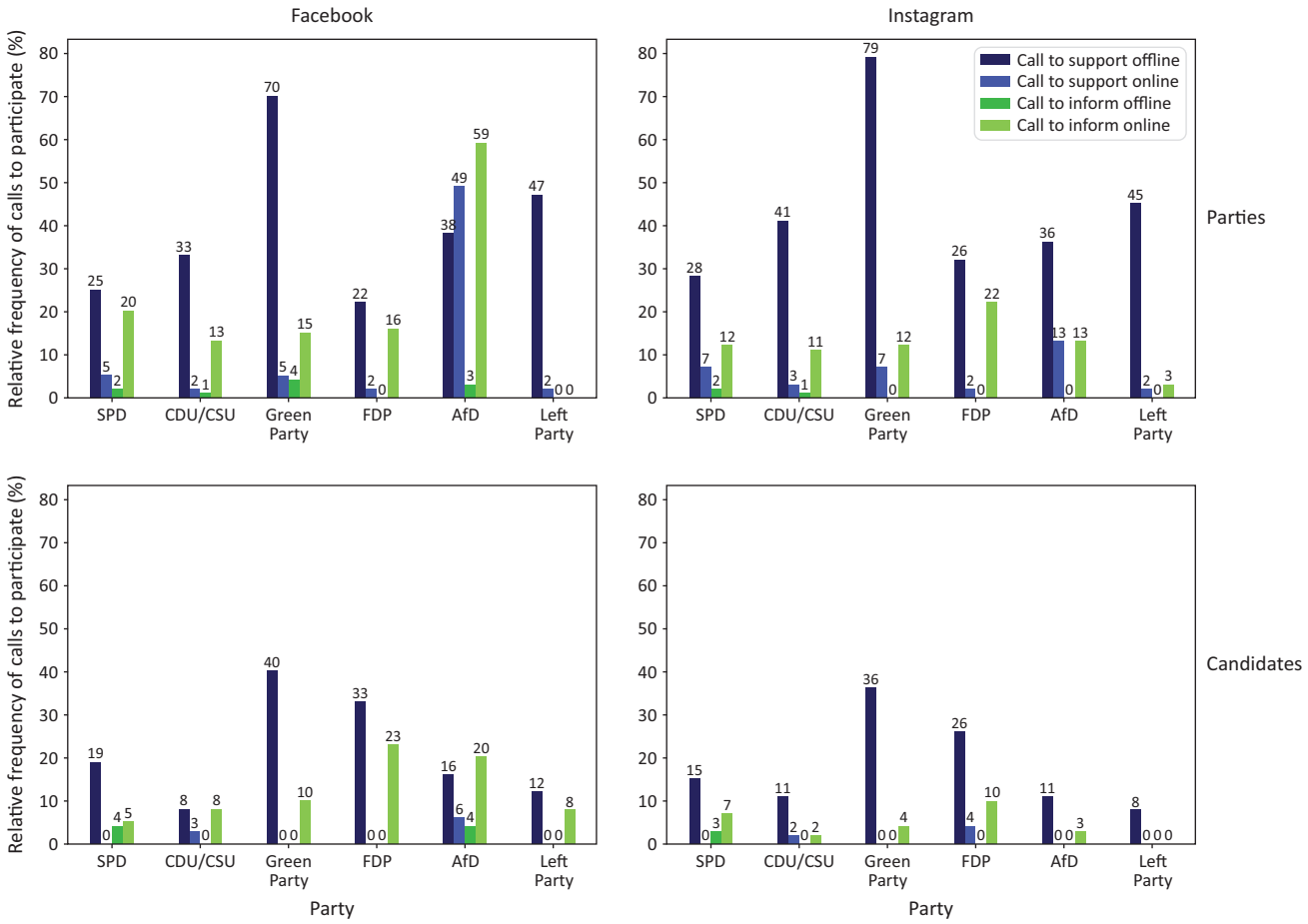

Figure 1. Relative frequency of different types of mobilization per party: Facebook and Instagram posts of parties (Facebook n = 1,029; Instagram n = 783) and candidates (Facebook n = 466; Instagram n = 305). Notes: One post could contain more than one call to participate; the parties are ordered in descending order by their share of votes in the 2021 election.

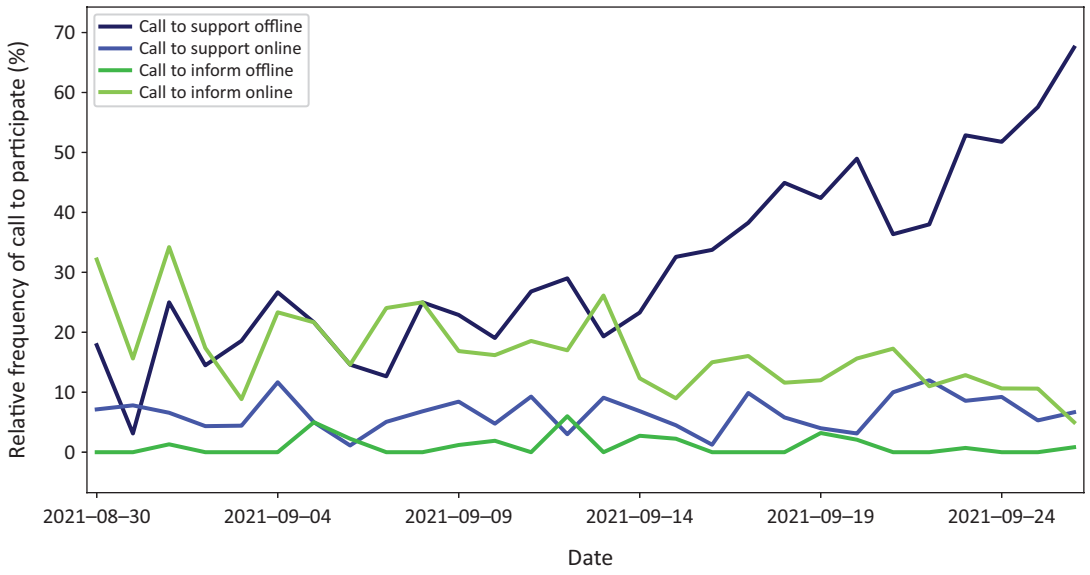

Figure 2. Relative frequency of cumulated calls to participate per day: Facebook and Instagram posts of parties and candidates (n = 2,583). Note: One post could contain more than one call to participate.

5. Discussion and Conclusion

As shown by our analyses, mobilizing citizens is more the task of parties than of candidates in Germany. Approximately half of the parties' posts contained at least one mobilization call, whereas the number of candidates' posts to the same end was significantly lower. Minor differences surfaced in the parties' mobilization strategies on Facebook versus Instagram, which may relate to the technical conditions and the different audiences. Since it is not possible on Instagram to include clickable links in the description text, parties using the platform refer less to offers of external information. Compared with Facebook, Instagram is used by young audiences (Haßler et al., 2023), for whom parties in Germany seem to put forth greater effort to mobilize for the election.

On social media, parties act as independent providers of information and can thus present an unfiltered image of themselves. In turn, users have more opportunities to directly obtain information from different sources. Our analysis of mobilization strategies shows that the information function of social media is embedded in more extensive information campaigns, as parties regularly refer to additional information beyond the post (e.g., on party websites), combined with an indication to get further information and follow the links provided. However, parties primarily use social media communication to mobilize users to go vote. Although user reactions are an important factor of performance and campaigners indeed aim for viral social media campaigns (Cremers et al., 2022), they do little to mobilize users to spread the party's messages or call for other forms of online participation. Instead, parties may try to convince their audiences with shareable content that elicits user reactions. In the end, however, a successful campaign is measured by the outcome of the election. If likes do not translate into votes, then the most successful social media campaign will have achieved nothing. Consequently, and because the audience's attention is limited, especially on social media, the communication of parties focuses on the most decisive mobilization call: the call to vote for the party.

The observed mobilization strategies relate to the German context in different ways. In Germany's personalized proportional representation voting system, which encourages both candidate- and party-focused campaigns, mobilization-oriented efforts are expected from parties and candidates. On social media, however, where a more personalized strategy seems appropriate for candidates (Geise & Podschuweit, 2019; Haßler et al., 2023), candidates do not pursue mobilization as clearly as parties. In Germany's non-compulsory system, voters need to be encouraged to exercise their right to vote, because they are not obliged to do so. Since the primary goal of a campaign is to win the election, mobilizing votes is the top priority. Moreover, due to the state funding of parties in Germany, parties are not dependent on external donors and therefore do not have to call for donations. In addition, it is necessary for parties to distinguish themselves from the other parties in Germany's multiparty system, which can be achieved by informing citizens about party-specific policies and government plans and encouraging them to consume that information. Such mobilization at the level of information is also considered to be important among parties in Germany (Geise & Podschuweit, 2019).

With their focus on calls to vote, the mobilization strategies that we identified are comparable to those of past election campaigns (Geise & Podschuweit, 2019; Magin et al., 2017). Thus, the mobilization strategies within the parties' use of social media seem to have stabilized. Although the internet has potentially broadened the spectrum of forms of participation, parties in Germany (except the AfD) largely limit themselves to promoting information and addressing calls for voting to their audience. In that respect, we did not identify a specific social media strategy focused on the online environment, despite the strong embedding of social media campaigns in the parties' overall campaigns aimed at encouraging voting in the offline world. Instead of interacting with citizens on social media, parties in Germany still prefer unidirectional communication and rely on established party structures for institutionalized citizen participation. Notably, one party—the AfD—made calls to consult additional information, which suggests a comprehensive information strategy directed at citizens. Normatively, however, it is problematic if individual parties disproportionately address citizens with only their selected information. Instead, citizens should have access to a broad spectrum of information from several parties.

Several limitations of our findings warrant consideration and indicate directions for future research. We conducted a single-country study and answered our research questions in the German context while focusing on two social media platforms: Facebook and Instagram. We paid particular attention to institutionalized political communicators and their intentions to mobilize users in a top-down manner, while we empirically omitted processes of bottom-up mobilization and participation and addressed those only in the theoretical considerations. Since citizens can be mobilized by other communication elements, including emotional or catchy messages (Geise & Podschuweit, 2019; Russmann et al., 2021), parties' posts may contain more mobilization potential than we measured with specific mobilization appeals directed at citizens. Even so, our measurement can provide a lower bound of parties' evident mobilization-oriented efforts. Notwithstanding those limitations, the results of our study provide further insights into specific types of mobilization applied by parties and candidates in their social media communication. With a more differentiated view on the various possible types of mobilization, which relate to latent and manifest forms of participation (Ekman & Amnå, 2012), we have transferred the

levels of the participation process (Arnstein, 1969) to the mobilization strategies of political actors. Our conceptualization can be used in future studies to measure calls to participate in more nuanced ways and to examine the success of different mobilization strategies in media effects studies. In research on participation, detailed measurements of political engagement are common practices, and we recommend them for research on mobilization as well. Furthermore, to generalize our results in an international context, cross-national research is essential. Last, because direct mobilization is also possible in traditional media such as election posters and TV commercials, we encourage future studies to consider the hybridity of the modern media system and to extend our findings to cross-media campaigns.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, *35*(4), 216–224. https://doi.org/10.1080/01944366908977225

Beisch, N., & Koch, W. (2021). 25 Jahre ARD/ZDF-Onlinestudie: Unterwegsnutzung steigt wieder und Streaming/Mediatheken sind weiterhin Treiber des medialen Internets [25 years of ARD/ZDF online study: On-the-go use on the rise again and streaming/media libraries continue to drive the media internet]. *Media Perspektiven*, *2021*(10), 486–503.

Bene, M., Ceron, A., Fenoll, V., Haßler, J., Kruschinski, S., Larsson, A. O., Magin, M., Schlosser, K., & Wurst, A.-K. (2022). Keep them engaged! Investigating the effects of self-centered social media communication style on user engagement in 12 European countries. *Political Communication*, *39*(4), 429–453. https://doi.org/10.1080/10584609.2022.2042435

Bennett, W. L., & Segerberg, A. (2012). The logic of connective action. Digital media and the personalization of contentious politics. *Information, Communication & Society*, *15*(5), 739–768. https://doi.org/10.1080/1369118X.2012.670661

Bos, L., Schemer, C., Corbu, N., Hameleers, M., Andreadis, I., Schulz, A., Schmuck, D., Reinemann, C., & Fawzi, N. (2020). The effects of populism as a social identity frame on persuasion and mobilisation: Evidence from a 15-country experiment. *European Journal of Political Research*, *59*(1), 3–24. https://doi.org/10.1111/1475-6765.12334

Bossetta, M. (2018). The digital architectures of social media: Comparing political campaigning on Facebook, Twitter, Instagram, and Snapchat in the 2016 U.S. election. *Journalism & Mass Communication Quarterly*, *95*(2), 471–496. https://doi.org/10.1177/1077699018763307

Boulianne, S., & Larsson, A. O. (2023). Engagement with candidate posts on Twitter, Instagram, and Facebook during the 2019 election. *New Media & Society*, *25*(1), 119–140. https://doi.org/10.1177/14614448211009504

Cremers, K., Goyn, L., Krüper, T., Lehmann, C., & Liehr, A. (2022). Cheapest is dearest, though far from professional: A qualitative study on the use of social media during the federal election 2021 in Germany. In A. Godulla, L. Beck, E. Christiansen, P. A. Johe, T. Krüper, V. Niemsch, & F. Saxinger (Eds.), *Disrupt adapt: New ways to deal with current challenges in media and communication* (pp. 43–71). GESIS. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-81814-2

Ekman, J., & Amnå, E. (2012). Political participation and civic engagement: Towards a new typology. *Human Affairs*, *22*(3), 283–300. https://doi.org/10.2478/s13374-012-0024-1

Foot, K. A., & Schneider, S. M. (2006). *Web campaigning. Acting with technology*. The MIT Press.

Geise, S., & Podschuweit, N. (2019). Partizipation durch Dialog? Mobilisierungsstrategien politischer Akteure im Bundestagswahlkampf 2017 [Participation through dialogue? Mobilization strategies of political actors in the 2017 Bundestag election campaign]. In I. Engelmann, M. Legrand, & H. Marzinkowski (Eds.), *Politische Partizipation im Medienwandel* [Political participation in the changing media] (pp. 157–191). Böhland & Schremmer.

Gibson, R., & Ward, S. (2000). A proposed methodology for studying the function and effectiveness of party and candidate web sites. *Social Science Computer Review*, *18*(3), 301–319. https://doi.org/10.1177/089443930001800306

Green, D. P., & Schwam-Baird, M. (2016). Mobilization, participation, and American democracy. *Party Politics*, *22*(2), 158–164. https://doi.org/10.1177/1354068815605678

Haßler, J., Kümpel, A. S., & Keller, J. (2023). Insta-

gram and political campaigning in the 2017 German federal election. A quantitative content analysis of German top politicians' and parliamentary parties' posts. *Information, Communication & Society*, *26*(3), 530–550. https://doi.org/10.1080/1369118X.2021.1954974

Huckfeldt, R., & Sprague, J. (1992). Political parties and electoral mobilization: Political structure, social structure, and the party canvass. *American Political Science Review*, *86*(1), 70–86. https://doi.org/10.2307/1964016

Jungherr, A. (2016). Twitter use in election campaigns: A systematic literature review. *Journal of Information Technology & Politics*, *13*(1), 72–91. https://doi.org/10.1080/19331681.2015.1132401

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. https://doi.org/10.1080/19331681.2018.1510355

Lau, R. R., Sigelman, L., & Rovner, I. B. (2007). The effects of negative political campaigns: A meta-analytic reassessment. *The Journal of Politics*, *69*(4), 1176–1209. https://doi.org/10.1111/j.1468-2508.2007.00618.x

Lilleker, D. G., Koc-Michalska, K., Schweitzer, E. J., Jacunski, M., Jackson, N., & Vedel, T. (2011). Informing, engaging, mobilizing or interacting: Searching for a European model of web campaigning. *European Journal of Communication*, *26*(3), 195–213. https://doi.org/10.1177/0267323111416182

Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human Communication Research*, *28*(4), 587–604. https://doi.org/10.1111/j.1468-2958.2002.tb00826.x

Magin, M., Podschuweit, N., Haßler, J., & Russmann, U. (2017). Campaigning in the fourth age of political communication. A multi-method study on the use of Facebook by German and Austrian parties in the 2013 national election campaigns. *Information, Communication & Society*, *20*(11), 1698–1719. https://doi.org/10.1080/1369118X.2016.1254269

Magin, M., Russmann, U., Fenoll, V., & Haßler, J. (2021). Information greater than mobilisation greater than interaction: Contours of a pan-European style of social media campaigning. In J. Haßler, M. Magin, U. Russmann, & V. Fenoll (Eds.), *Political campaigning and communication. Campaigning on Facebook in the 2019 European Parliament election: Informing, interacting with, and mobilising voters* (pp. 303–331). Palgrave Macmillan.

Metz, M., Kruikemeier, S., & Lecheler, S. (2020). Personalization of politics on Facebook: Examining the content and effects of professional, emotional and private self-personalization. *Information, Communication & Society*, *23*(10), 1481–1498. https://doi.org/10.1080/1369118X.2019.1581244

Norris, P. (2003). Preaching to the converted? Pluralism, participation and party websites. *Party Politics*, *9*(1), 21–45. https://doi.org/10.1177/135406880391003

Rosenstone, S. J., & Hansen, J. M. (1993). *Mobilization, participation, and democracy in America*. Macmillan.

Russmann, U., Haßler, J., Fenoll, V., & Magin, M. (2021). Social media as a campaigning tool in elections: Theoretical considerations and state of research. In J. Haßler, M. Magin, U. Russmann, & V. Fenoll (Eds.), *Political campaigning and communication. Campaigning on Facebook in the 2019 European Parliament election: Informing, interacting with, and mobilising voters* (pp. 23–39). Palgrave Macmillan.

Schweitzer, E. J. (2011). Normalization 2.0: A longitudinal analysis of German online campaigns in the national elections 2002–9. *European Journal of Communication*, *26*(4), 310–327. https://doi.org/10.1177/0267323111423378

Snow, D. A., Zurcher, L. A., & Ekland-Olson, S. (1980). Social networks and social movements: A microstructural approach to differential recruitment. *American Sociological Review*, *45*(5), 787–801. https://doi.org/10.2307/2094895

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

Stromer-Galley, J., Rossini, P., Hemsley, J., Bolden, S. E., & McKernan, B. (2021). Political messaging over time: A comparison of US presidential candidate Facebook posts and tweets in 2016 and 2020. *Social Media + Society*, *7*(4). https://doi.org/10.1177/20563051211063465

Stuckelberger, S. (2021). Mobilizing and chasing: The voter targeting of negative campaigning—Lessons from the Swiss case. *Party Politics*, *27*(2), 341–350. https://doi.org/10.1177/1354068819852252

Theocharis, Y., Boulianne, S., Koc-Michalska, K., & Bimber, B. (2023). Platform affordances and political participation: How social media reshape political engagement. *West European Politics*, *46*(4), 788–811. https://doi.org/10.1080/01402382.2022.2087410

Valentino, N. A., Brader, T., Groenendyk, E. W., Gregorowicz, K., & Hutchings, V. L. (2011). Election night's alright for fighting: The role of emotions in political participation. *The Journal of Politics*, *73*(1), 156–170. https://doi.org/10.1017/S0022381610000939

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.

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Article

In the Web of the Parties: Local Politicians on Facebook in Hungary

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Abstract
The study examines the Facebook use of elected local politicians over two years in Hungary. To gain insights into the role of local politicians in social-media-based local publics in Hungary, a large-scale data collection has been conducted to capture the Facebook activity of all elected local representatives (mayors and councilors; *N* = 19,503) from the 3,152 Hungarian municipalities. Our research uncovers the level (adoption, activity) and direct audience (number of followers) of their Facebook activity and shows how these patterns are conditioned by political (party, electoral competitiveness, bandwagon effect) and contextual (size, average income of the population, development level of the local Facebook sphere) factors. We show that local politicians are mostly active in larger municipalities, while a larger proportion of the population can be reached directly in smaller communities. The activity of local politicians is largely driven by political considerations, while demand-side factors are less important.

Keywords
Facebook; Hungary; local politics; local representatives; municipalities; social media

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1. Introduction

While the emergence of social media is usually associated with expanded global connectedness, it also helps to create densely connected local communities, thereby providing space for evolving local public spheres of actors, ideas, and actions. These digital local publics can be incredibly important to maintain local community life in the age of the "news desert" when news media consumption is increasingly focused on national media outlets (Martin & McCrain, 2019). Local politicians can be key actors in and promoters of these local digital publics, whose pages can function as central hubs of local public life (Thorson et al., 2020). In this way, their activities play an important role in the political mobilization of the local population by enabling citizens to engage with locally relevant content, helping residents to connect, and thereby developing a well-functioning local digital public sphere (Ellison & Hardey, 2013).

However, our knowledge of local politicians' social media activity is limited. People's personal social media-based experiences with local politics differ according to their local politicians' social media activities. To understand these differences, our central goal is to uncover the patterns of local politicians' Facebook usage and the structural factors that shape them. In this study, we investigate local politicians' Facebook use in Hungary. We map the extent to which mayors and councilors use Facebook and are followed by residents and test various theoretical explanations of how political incentives and contextual factors influence their activities on this platform. For this purpose, we draw upon an exceptionally broad dataset that covers all elected local politicians from every Hungarian municipality and their Facebook

activity over two years. We focus on Facebook because previous research has shown that it is the central platform of the local digital public since other social media sites tend to be more interest- or entertainment-driven with much weaker local-level activities (Thorson et al., 2020), and also because it is the only social media platform in Hungary that is extensively used politically (Bene & Farkas, 2022).

Hungary is a system that is "democratic in form but authoritarian in substance" (Körösényi et al., 2020, p. 22). Since 2010, the right-wing party Fidesz has won four elections with two-thirds of the seats in parliament. These supermajorities have been used to implement centralizing reforms that have fundamentally changed the entire political system. This also applies to the field of political communication sphere: A highly centralized, extensive network of media outlets was created, including the entire public service media conglomerate, which transmits governmental actors' messages uncritically to the audience (Merkovity & Stumpf, 2021). In this context, social media has become an increasingly important mobilization channel for the opposition (Bene et al., in press). Although Fidesz's dominance has been virtually unchallenged over the past 12 years, stronger cooperation between opposition parties has led to electoral victories in several urban areas, including the capital. Thus, while the national level is dominated by a single party, the local level shows much greater diversity. Further, as the relative success of the opposition was attributed to its social media activity (Bene et al., in press), since the local election, Fidesz has made significant efforts to strengthen its position on these platforms, especially on Facebook (Bene & Farkas, 2022). Nonetheless, it is unclear to what extent local digital publics are affected by the fierce political competition between competing blocs. While the institutional autonomy of local governments has shrunk over the last decade (Dobos, 2022), the more demand-driven (contextual factors) and less politically motivated patterns of Facebook use by local elected officials suggest some kind of substantial autonomy at the communication level. In this highly polarized political context, it is therefore important to question whether local politicians' Facebook activity is driven by their political motives or the contextual characteristics of the respective municipality.

2. Theoretical Background

2.1. Costs and Benefits of Using Social Media in Local Politics

The literature on social media and politics demonstrated that there are benefits but also costs and even risks associated with active social media presence (for an overview, see Jacobs & Spierings, 2016). Most of these can also be relevant to activities at the local level, albeit with slightly different meanings (Mabillard et al., 2021). Benefits include politicians' opportunity to inform their constituents about locally relevant issues and their political work, to manage and perform their public image, and to interact directly with their voters. These are particularly important aspects in the local political context, where it is difficult to communicate publicly important information to the respective population, which mostly consumes national or regional news content (Martin & McCrain, 2019).

However, the costs, risks, and other demotivating factors associated with using social media are also significant. While creating a page is costless, maintaining an effective, active, and sophisticated social media presence requires resources, time, and expertise (Jacobs & Spierings, 2016). These are in short supply at the local level, especially in lower-ranked positions and smaller communities (Jacobs & Spierings, 2016). Moreover, interactivity does not have only positive sides. As at the national level, local politicians also fear losing control over their image and are concerned about reputational risk due to negative, challenging, or even aggressive interactions (Mabillard et al., 2021; Thorson et al., 2020). In a more densely linked local community, such interactions may cause more damage to politicians, as commenters are more likely to have personal relationships with the recipients of the message than in a national context. On the other hand, the lack of interactivity is also a deterring force. Local politicians are often followed less and many of their posts receive little or no response (Silva et al., 2019). This perceived indifference can demotivate political actors to invest more effort, time, and resources in their social media presence, but it can also be seen as something that threatens their reputation.

At the national level, we have extended knowledge that benefits outweigh costs and other demotivating factors, and politicians actively use social media platforms (Williams & Gulati, 2013). However, it seems that benefits and costs have somewhat different meanings in local contexts. Most importantly, fewer resources are available at the local level to address challenges and build an effective social media presence, while the "danger of interactivity" is more pronounced in both terms (i.e., challenging comments and limited engagement).

There has been little research on the social media activities of politicians at the local level. The few available studies were conducted in the early phase of social media platforms (Djerf-Pierre & Pierre, 2016; Metag & Marcinkowski, 2012) and often focused only on larger municipalities (Szmigiel-Rawska et al., 2018). This study aims to fill this gap by covering all elected local politicians from all Hungarian municipalities on Facebook. We focus on three frequently investigated dimensions of Facebook use: adoption (opening a page), activity (number of posts), and size of the directly available audience (number of followers). Given the lack of knowledge on this topic, our first research question is a descriptive one about the presence of local politicians on Facebook:

RQ1: To what extent do elected local politicians, such as mayors and members of city councils, (a) use Facebook in terms of adoption and activity and (b) are followed by users in different types of municipalities?

2.2. Structural Explanations Behind Local Politicians' Social Media Use

Our second research question goes beyond the descriptive approach and investigates the structural factors that explain the activities of local politicians. Several studies have been conducted to examine the factors shaping politicians' social media performance at the national level (e.g., Williams & Gulati, 2013); however, as Larsson and Skogerbø (2018) pointed out, local politicians have markedly different social media preferences.

We argue that while the benefits and demotivating factors of using Facebook for local politicians are more or less identical, certain political and contextual factors create additional incentives for politicians to overcome the aforementioned challenges and establish an active presence on this platform. Undoubtedly, structural factors are not the only factors shaping these decisions, as personal characteristics and perceptions (Metag & Marcinkowski, 2012) may also be important. However, there are no theoretical reasons to expect that personal factors such as age, gender, education level, or attitudes toward social media operate differently in local politics than at the national level, where they have been extensively studied in the literature. In addition, a practical limitation of including personal factors in our analysis is that this information is hardly accessible to politicians in lower-ranked positions. For these reasons, we focus exclusively on structural factors that are thought to be specific to local-level political activity. By identifying these factors, we can understand why local Facebook publics function differently across municipalities. We argue that politicians' Facebook usage can be shaped by both political and context-specific considerations. Beyond uncovering the role of different political and contextual factors in these individual decisions, we are particularly interested in whether political or municipality-specific factors are more decisive in local politicians' social media usage behavior:

RQ2: What political and contextual factors explain elected local politicians' (a) adoption, (b) activity on Facebook, and (c) size of the follower base?

2.2.1. Political Factors

Mayors and local representatives are political actors whose actions are likely to be shaped by political considerations. These political considerations may be determined both by the political background of the politicians and by the specific political context of their municipalities. Starting with the former, broadly speaking, there are two types of politicians at the local level. Some elected politicians are official representatives of national political parties, while others are independent or supported by local organizations. Party politicians arguably have the extra motivation to be active on Facebook. They are local promoters of their national parties as they represent them at the level closest to people's everyday experiences. Research has demonstrated that internal organizational pressure is a crucial factor in politicians' use of social media (Graham & Avery, 2013) and that it is a typical party strategy to reach and persuade voters at the local level (Karlsen & Skogerbø, 2015; Schäfer, 2021). Moreover, as important local information hubs, local politicians may have the benefit of being followed by non-partisan and politically less engaged voters, who are the most difficult to reach by party campaigns. Therefore, parties may pressure local politicians to engage in effective social media activities. In addition, party-affiliated local politicians may be able to draw on resources from their parties; parties can provide their local representatives with instructions, training, consultancy, and shareable materials (Klinger & Russmann, 2017). For these reasons, we expect that local politicians affiliated with national parties are more likely to use Facebook (H1a), post more actively (H1b), and gather more followers (H1c) than non-partisan politicians.

In the Hungarian context, the differences between national political blocs are also important, as the political sphere is highly unbalanced in terms of access to resources and media visibility (Körösényi et al., 2020). However, we can argue for both scenarios. On the one hand, the ruling Fidesz–KDNP party alliance is an extremely centralized and disciplined political organization (Metz & Várnagy, 2021), which makes it easier to coordinate and instruct local representatives in line with the party's national strategy. Moreover, Fidesz–KNDP is the most well-resourced actor in the political arena, and the party's local branches can also benefit from this situation. Opposition parties, on the other hand, may place greater emphasis on social media, as their access to both national and local media is very limited. In contrast, Fidesz–KNDP can rely on an extensive and locally embedded partisan media network and a more resource-intensive offline billboard and door-to-door campaigning (Bátorfy & Urbán, 2020). As a result, they may see Facebook as a complementary tool rather than a central communication tool. Given these contradictory arguments, an open research question is formulated to investigate which party bloc is more active in terms of adoption and activity and more followed on Facebook (RQ2a).

However, local politicians may be motivated to be active on Facebook not only by their parties but also by the electoral context. Even if they believe that an active social media presence provides limited electoral benefits (Mabillard et al., 2021), this small contribution (Elvestad & Johannessen, 2017) is still important in a highly competitive electoral context. Most local politicians want to maintain their positions, and if these are more engendered, the perceived benefits may outweigh

the costs and risks associated with using social media. Studies have shown that heightened political competition measured by the electoral margin of the last election, significantly increases the activity of national political actors (Williams & Gulati, 2013), as well as local political actors, such as municipalities (Faber et al., 2020; Silva et al., 2019), local parties (Whitesell et al., 2022), and mayors of large cities (Szmigiel-Rawska et al., 2018). However, there is no evidence regarding the extent to which ordinary local politicians are affected by the political context. In line with the theoretical argument and previous research, we expect that local politicians in municipalities where the last election was more competitive, as measured by electoral victory, are more likely to use Facebook (H2a), be active (H2b), and be followed (H2c).

Local politicians can also be politically motivated by the examples of their peers; if elected representatives see that their fellow politicians are members of the local Facebook public, they are also incited to be actively present there. The bandwagon effect is a well-known and widely demonstrated explanation for politicians' social media activities (Klinger & Russmann, 2017). This effect was investigated at different political levels in an early study by Metag and Marcinkowski (2012), who found that it exists only at the level of local politicians regarding their attitudes toward personal websites. In line with this theory, we expect that politicians are more likely to use Facebook (H3a), be active on the site (H3b), and have more followers (H3c) in municipalities where other politicians are also present on the platform.

2.2.2. Contextual Factors

It is not only the political composition in which municipalities differ. The social media strategies of political actors may be shaped by the non-political contextual characteristics of their municipalities.

In smaller communities, people can be reached effectively in other ways, while mediatized communication is a greater need with a larger population (Jacobs & Spierings, 2016). In addition, the relative cost of using social media is higher when targeting a smaller population, as an active social media presence requires the same amount of time and effort regardless of audience size. In addition, perceived indifference (i.e., low levels of engagement) may be a more common experience in smaller municipalities, where a smaller number of people are targeted by communications from local politicians. The association between population size and social media use has been confirmed in studies investigating municipalities' Facebook activity (Faber et al., 2020; Guillamón et al., 2016; Lev-On & Steinfeld, 2015; Silva et al., 2019), as well as in an early study focusing on local government officials (Djerf-Pierre & Pierre, 2016). Therefore, we hypothesize that local politicians in larger municipalities are more likely to adopt Facebook (H4a), post more frequently (H4b), and be more followed (H4c).

The supply side can also be shaped by the demand side. A more social media-savvy population can be an important incentive to use social media. The general economic status of residents may play a role in this regard, as it can be seen as a proxy for the sociocultural status of the population. More privileged people tend to be more educated, more interested in politics, and more likely to use social media for news consumption; therefore, they have a greater demand for locally relevant political information (Haro-de-Rosario et al., 2018). Research on municipalities' social media use produced mixed findings: Positive (Lev-On & Steinfeld, 2015; for local parties, see Whitesell et al., 2022), negative (Guillamón et al., 2016), and insignificant relationships (Silva et al., 2019) can be found in the literature. Nevertheless, in line with our theoretical argument, we assume that local politicians in municipalities with wealthier populations are more likely to use Facebook (H5a), post (H5b), and be followed more (H5c).

Nonetheless, local politicians do not exist in a vacuum but are embedded in the local political public sphere. This is an important contextual factor that, despite its theoretical relevance, has hardly been studied in the local political context. Arguably, the role of Facebook in the local public sphere varies from municipality to municipality: In some places, it is a central part of the local community's life, while in others it plays a rather marginal role in the discussion of local issues. Previous research has shown that the presence of hyperlocal digital media outlets can stimulate online activity among local community members, including political actors (Hujanen et al., 2021). However, the role of the local Facebook public in a more general sense has not yet been studied. Accordingly, we expect local politicians' adoption rates (H6a), activities (H6b), and follower rates (H6c) to be associated with the development level of the local Facebook public because the more important Facebook's role is in a community, the more motivated local politicians are to actively use it.

3. Data and Methods

The local level in Hungary has a strong mayor-form horizontal power-sharing structure (Dobos, 2022). Municipalities are governed by a body of elected councilors and a directly elected mayor. While formally the councilors are responsible for decision-making and the mayor oversees executive functions, in practice the mayor can effectively control the work of the council. As we aimed to map Facebook activity across the full spectrum of Hungarian local politics, we included every elected politician, both mayors and councilors, of Hungary's 3,152 municipalities, with the exception of the capital, Budapest, which can be considered a mezzo-level unit (see Dobos, 2022). Between March and May 2021, we collected data on nearly 20,000 local politicians (3,152 mayors and 16,351 councilors) with the help of 20 coders. To ensure quality, we implemented double

coding with a supervisor in charge of comparing coding results. This procedure results in highly valid observations, as only cases confirmed by two observers (at least one coder and the supervisor) are considered acceptable. The coders checked whether politicians had Facebook pages, recorded the number of their followers, and identified the local Facebook groups and official pages of the municipalities. Using this process, we captured the Facebook pages of 330 mayors and 901 councilors. To measure the activity of local politicians, we downloaded every post on their pages in the two years following the 2019 local elections (14/10/2019—12/10/2021) via CrowdTangle. The fact that we covered the entire Hungarian local public over an extended period of time means that our observations can be automatically generalized to the population. Nonetheless, to avoid treating meaningless associations as proof of our hypotheses, we draw upon common significance tests.

An important limitation of our data collection method is that, although we covered two years, the data were collected at two points in time: first, when we collected the pages, and second, when we downloaded the posts. This means that local politicians who had pages at any point during this period, but not at the time of data collection, were treated as if they had not had pages during the entire period. In addition, posts that were posted during this period but later deleted could not be included in our data collection. While it is impossible to determine the extent to which this circumstance biases our data, it is not plausible that elected officials delete pages during the first half of their term. Although personal reasons may lead a few politicians to make this decision, a small number of such cases would not bias our results given the size of our dataset. This is also true for deleted posts; it is possible that some posts were deleted, but they are probably not on a level in our aggregated dataset that could significantly distort our observations.

The political context is described using two variables. Local political competitiveness is measured by the electoral margin, that is, the vote difference between the first and second strongest candidates in the 2019 mayoral election, based on data from the National Election Office. Furthermore, we categorized the partisan leaning of the local actors by identifying whether they were politicians of the governing party Fidesz, the opposition coalition, any other minor national party, a local party, or whether they were independent. The categorization was based on previously published works (Dobos, 2022; Kovarek & Littvay, 2022).

We also completed our database by using municipal-level contextual variables. Regarding population size, we used the data of the Hungarian Central Statistical Office for 2021, while we downloaded information on the per capita payroll taxes of the citizens (to measure the average level of income of the population) from the National Regional Development and Spatial Planning Information System.

To measure the intensity of the local Facebook public, we used two proxies: the number of followers of official municipal pages and the number of members of the largest local Facebook group. Clearly, the local Facebook public is a complex phenomenon with several important actors and activities (e.g., hyperlocal media outlets, local NGOs, celebrities, etc.), but in large-scale data collection, it would be difficult to obtain more fine-grained data from each municipality in a valid manner. For this reason, we opt for these two proxies, which are relatively easy to define and identify but say something relevant about overall Facebook activity at the local level. To obtain comparable results, we divide these numbers by the population size of each municipality.

Regarding the modeling strategy, separate models were fitted to mayors and councilors. Since our three dependent variables have different properties, we need to apply different regression models. Adoption was measured as a dummy variable (1 = *has a Facebook page*); therefore, it was explained by the logit model. The number of posts is an overdispersed count variable that was analyzed with a negative binomial regression. The number of followers was measured as a proportion of the population size of a given municipality (number of followers/population size). We fitted a linear regression model to the logarithmically transformed version of this variable. Although there is only one mayor in each municipality, there are multiple council members; therefore, in the case of councilors, our data are nested. For this reason, a multilevel modeling strategy is used in models drawing upon councilor data with random intercepts at the municipality level, while the models based on the mayors' data are simple.

4. Findings

4.1. Descriptive Results

In line with RQ1, we first descriptively assess the Facebook presence, activity, and follower base of local politicians. Overall, there are not any public pages for elected politicians in 85% of municipalities, but this high percentage is mainly due to the large overrepresentation of small villages (85%) in our sample; moreover, 92% of small villages, 71% of larger villages, and 38% of ordinary cities are municipalities without a public Facebook presence of elected politicians. Our results suggest that there is a connection between municipality size and adoption rate (Figure 1). Politicians are less active in smaller communities, both in terms of the existence of Facebook pages and the number of posts. The political elite of small villages is rarely present on Facebook. Above the 5,000-inhabitant threshold, the usage rate increases significantly, and nine out of 10 mayors of large cities have Facebook pages. The proportion of mayors using Facebook is much higher in each population category, and they also post more frequently than councilors. The only exception is the category of the smallest

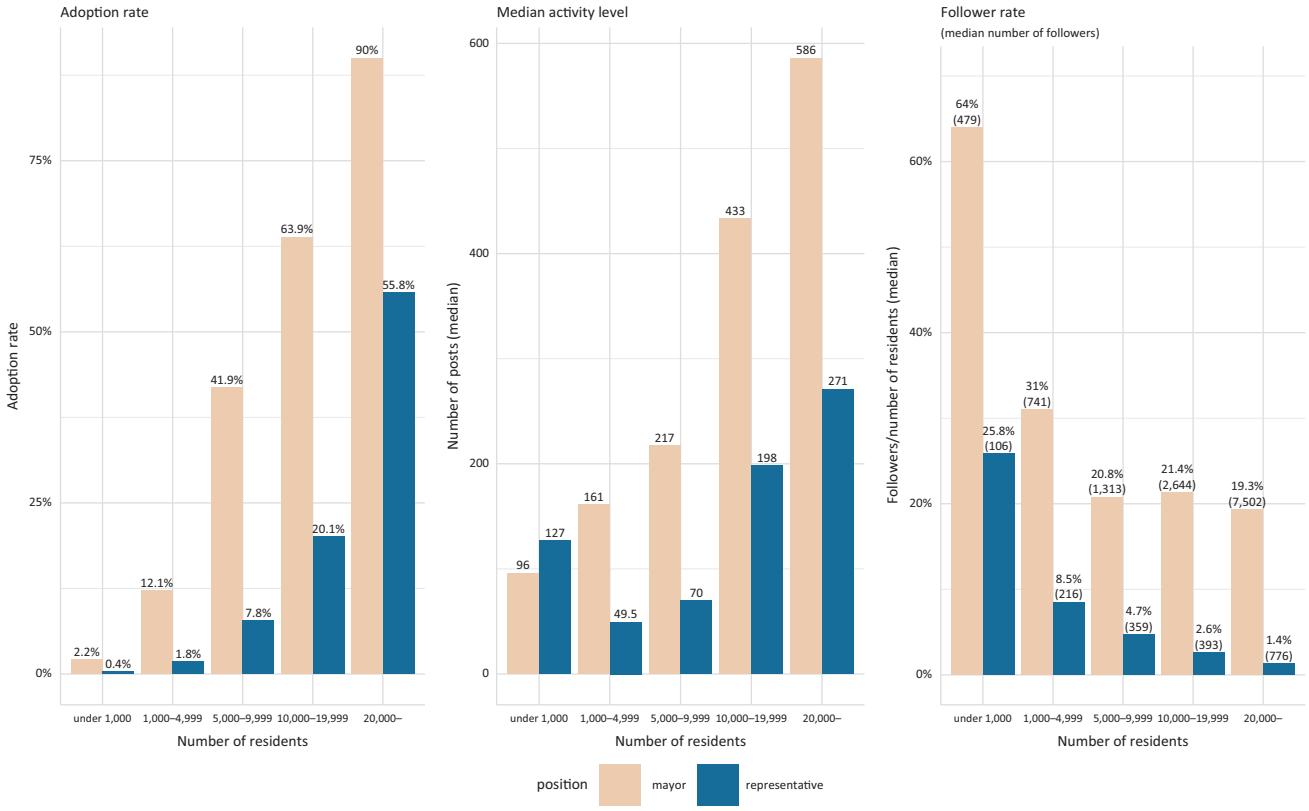

Figure 1. Adoption rate, median activity level, and follower rate of local politicians by the size of the municipality (2020–2022).

villages, but, in this group, there are only 25 councilors who use Facebook. Facebook presence seems to be important for local councilors only in larger cities.

In general, politicians' activities are not very high in either municipality type. Since the research period is 730 days, this means that even mayors of large cities publish on average less than one post per day, while mayors of smaller municipalities are characterized by an activity of one post per week. Councilors have even lower activity: They post on Facebook every three days, even in the largest municipalities.

Our results suggest that it is easier to reach citizens in smaller municipalities because a higher proportion of residents follow local politicians in these municipalities. The average mayor of a small village is followed by two-thirds of citizens, while this rate drops to one-third in larger villages and to one-fifth in towns and cities. These numbers are smaller for councilors, as they reach only 1–5% of the population in municipalities with more than 5,000 inhabitants.

4.2. Explanatory Analysis

Table 1 shows the results of the regression models. As the (pseudo) R^2 values show, most of the models have substantial explanatory power, but leave a large part of the variance unexplained. This variance is likely associated with personal factors. Analysis of political factors shows that party affiliation influences Facebook-related behavior among local politicians (Figure 2). All else being equal, the probability of having a Facebook page is significantly higher for Fidesz-affiliated mayors (19%) than for independent mayors (11%). While this probability is about the same for mayors from other national parties as it is for Fidesz mayors, the differences between these party-affiliated and nonparty-affiliated mayors are not significant, as the confidence intervals are quite large due to the small number of non-Fidesz-affiliated partisan mayors. In terms of activity, the predicted count of Facebook posts for Fidesz-affiliated mayors is 538, while for independent mayors it is 320, which is not significantly different from the post count of other partisan mayors.

However, the results for councilors paint a different picture. The probability of having a Facebook page is higher for opposition politicians (7%) than for Fidesz-affiliated (2.7%) or independent (2.7%) representatives. Meanwhile, Fidesz and opposition councilors are much more active than independents. In terms of followers, there are less clear differences. Although the mayors of the two dominant political blocs (Fidesz and the opposition coalition) have more followers, there are no significant differences in the follower rates of the partisan councilors.

In conclusion, H1 can only be partially confirmed: Politicians' activities are influenced by partisan leaning,

Table 1. Regression models explaining local politicians' adoption of, activity, and follower rate on Facebook.

	Adoption		Activity		Follower rate (log)	
	Mayor	Councilors	Mayor	Councilors	Mayor	Councilors
Predictors	Odds ratios [1]	Odds ratios [2]	Incidence rate ratios [3]	Incidence rate ratios [4]	Estimates [5]	Estimates [6]
(Intercept)	0.00***	0.00***	28.69***	7.98***	2.03***	3.07***
Party: Government	**1.84*****	1.01	**1.68*****	**2.22*****	**0.22***	0.13
Party: Opposition	1.84	**2.65*****	1.38	**2.17*****	**0.52****	0.28
Party: Other national parties	**2.81***	1.24	1.05	1.52	−0.02	−0.01
Electoral margin	**0.43*****	**0.36*****	1.00	1.04	0.11	−0.06
Fellow politicians on Facebook	**1.92*****	0.95	1.09	**0.54****	**0.29****	−0.12
Population size (log)	**2.79*****	**3.67*****	**1.25*****	**1.31*****	**–0.37*****	**–0.64*****
Population income	1.00	1.00	1.00	1.00	**–0.00****	−0.00
Size of Facebook group	1.09	**1.27***	1.10	0.93	0.06	−0.07
Followers of local government Facebook page	1.03	0.96	1.12	0.89	**0.15***	0.04
Random effects						
σ^2		3.29		0.72		1.04
τ_{00}		1.96_{place}		0.23_{place}		0.09_{place}
ICC		0.37		0.24		0.08
Ncorre		$3{,}152_{place}$		226_{place}		282_{place}
Observations	3,152	16,349	287	779	321	883
(Pseudo) R^2	0.344	0.489/0.680	0.323	0.234/0.420	0.305/0.285	0.404/0.450

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; [1] logit-model; [2] multilevel logit-model with a random intercept on the level of municipalities; [3] negative binomial model; [4] multilevel negative binomial model with a random intercept on the level of municipalities; [5] OLS model; [6] multilevel linear model with a random intercept on the level of municipalities; for odds and incidence rate ratios values below 1 indicate a negative relationship; for OLS estimates negative relationships are indicated by a negative sign.

but these effects vary for different positions and parties. Adoption and follower rates are higher for Fidesz-affiliated mayors than for independents, and both ruling party mayors and councilors are more active. For opposition party mayors, the small number of cases prevents us from having robust results, but their councilors have a Facebook page with a higher probability, are more active, and have more followers than their independent colleagues. For the two largest party blocs, significant differences can only be found in the rate of adaptation of councilors, as opposition representatives are more likely to open a page.

Our results show that the intensity of the electoral contest clearly influences the adoption rate: The probability of having a Facebook page is higher in the case of local politicians in municipalities with a lower electoral margin in the 2019 election (i.e., H2a is supported). The electoral margin does not affect other factors: The politicians of more competitive local political arenas are neither more active on Facebook nor do they have more followers (H2b and H2c are rejected).

The analysis revealed some evidence of the bandwagon effect: If there is at least one politician in the local government who has a Facebook page, the mayor of that municipality will create a Facebook page with a higher probability (with no Facebook activity: 12%; with a Facebook page of a fellow politician: 21%), and they will have more followers. Similar effects are not observed for councilors; moreover, the activity of councilors even decreases with the emergence of another politician's

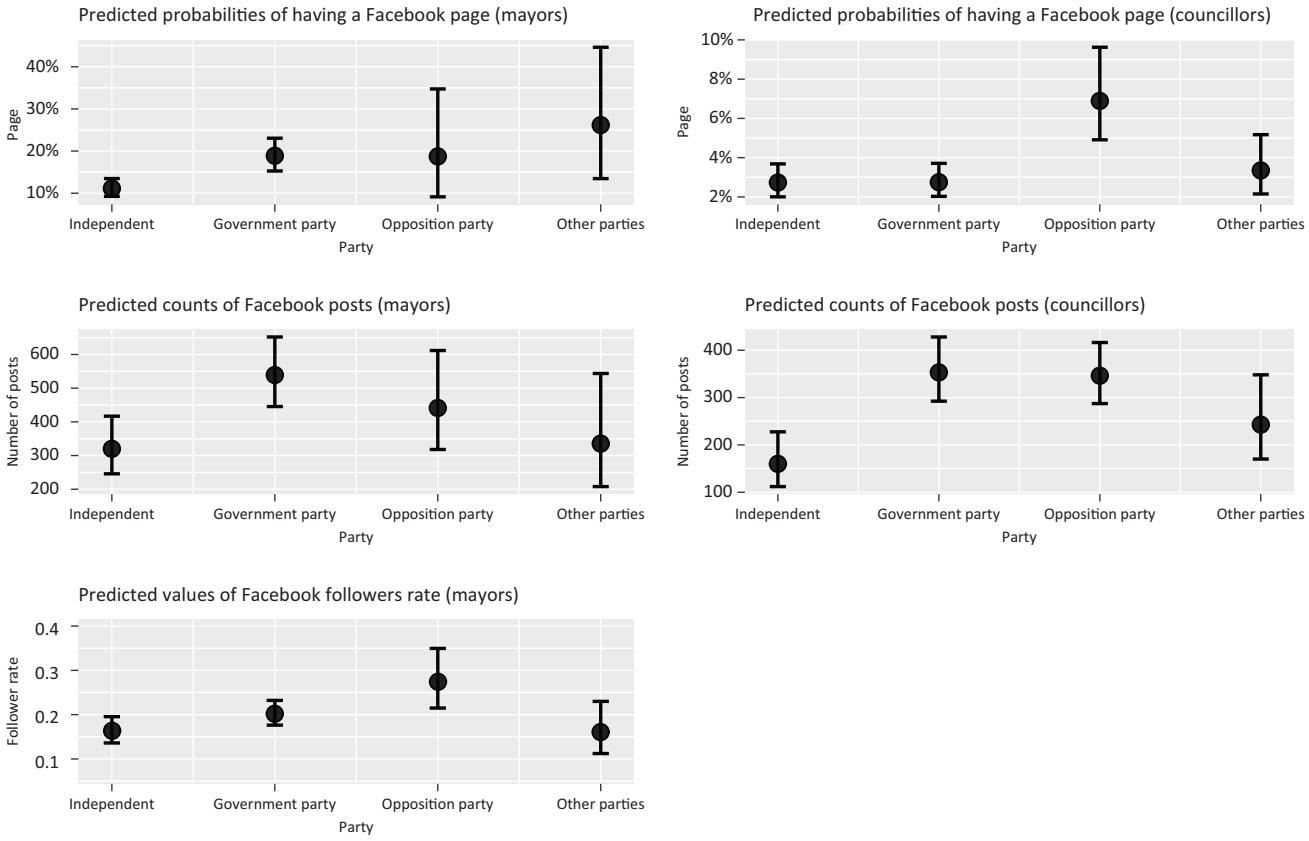

Figure 2. Predicted probabilities of local politicians' Facebook activities.

Facebook page. The reason for this could be that this "other politician" is usually the mayor, who is more in the spotlight and likely to have precedence in sharing information (H3a and H3c are supported for mayors but not for councilors; H3b is rejected).

Regarding contextual factors, our results show that population size has a massive effect on local social media communication. The probabilities of adaptation and activity are higher for mayors and councilors of larger municipalities (H4a and H4b are supported). Interestingly, there is a negative relationship between population size and follower rate, meaning politicians reach a higher proportion of citizens in smaller communities (H4 is rejected). An increase in citizens' income has no effect on politicians' social media activity (H7a and H7b are rejected). Surprisingly, the wealthier the citizens are, the less likely they are to follow the mayor's Facebook page (H7c is rejected).

Finally, the analysis shows that the intensity of the local Facebook public has only a minor effect on politicians' activities. In municipalities where the local Facebook group has more followers relative to the population size, the councilors have a higher adoption rate; however, this does not lead to higher activity or more followers, and the follower rate of the local government's official page has no effect at all (H8a is partially supported for councilors, but not for mayors; H8b and H8c are rejected).

5. Conclusions

While social media is an established tool for actors in national politics, we have little knowledge of social media usage at the local level. However, it is important to increase our knowledge of local politicians' social media presence, as their activities can play an important role in shaping the amount of local content on social media platforms, and thereby, the local information supply for citizens' information consumption (Ellison & Hardey, 2013). Our research is the first attempt to explore the entire local political Facebook sphere of a single county, with the goal of mapping politicians' social media usage, not limited to larger cities.

We argued that the costs and benefits associated with politicians' social media use are different at the local level than at the national level, as fewer available resources (Jacobs & Spierings, 2016) are paired with heightened "danger of interactivity" (Mabillard et al., 2021; Thorson et al., 2020). Indeed, our findings show that social media usage at the local level is not as universal as in the national political scene, while Facebook has been generally and actively used by national politicians in Hungary for years (Bene & Farkas, 2022). Most local politicians, especially in smaller municipalities, do not open public pages. Our results also confirmed that Facebook activity is related to the type of political position: Politicians in larger communities and in a more

prominent position (mayor vs. councilor) are more likely to use Facebook actively. In large cities, mayors have a similar adoption rate to politicians at the national level, while politicians in municipalities with fewer than 5,000 inhabitants rarely communicate via Facebook. Even in municipalities with populations of 5,000–10,000, the adoption rate does not reach the 50% threshold, despite the fact that popular demand for social media activity by politicians in smaller municipalities appears to be high. This is indicated by the large proportion of citizens in small communities who follow existing Facebook pages, although in smaller communities personal relationships may also motivate the following activity. Nonetheless, this is an important insight because it is a widely shared claim that social media is generally used by political actors. However, our findings suggest that this view is based on "methodological nationalism" (Chernilo, 2006) and that the use of social media in subnational political contexts is not so self-evident, even in a country with extremely high nationwide adoption and activity rate (Bene & Farkas, 2022). This also means that many people, especially those who do not live in large cities, can only connect with their national-level representatives on Facebook, which can lead them to focus on national rather than local political processes.

In light of these patterns, we aimed to uncover the structural factors that shape the level of Facebook use by local-level elected politicians. The research concludes that different types of Facebook-related outcomes are explained by different factors; moreover, these factors also differ by political position. According to our findings, local politicians' Facebook activity is primarily influenced by political factors, but less so by contextual factors, with the exception of population size. Political incentives are clearly important: Belonging to a national party motivates local politicians to be more active, as they represent and popularize their political group at the local level (Karlsen & Skogerbø, 2015). This motivation seems to be particularly important for Fidesz-affiliated mayors, while in the case of opposition parties, councilors are the more active actors. This can be explained by the specificities of the Hungarian context. The opposition is a wide coalition of several parties and councilors usually represent different parties, while opposition mayors have to represent the whole coalition and not just individual parties. Therefore, opposition councilors may be motivated to actively represent their parties in the local public sphere. These findings suggest that national parties use and support their local representatives to reach voters at the level they live (Schäfer, 2021). However, future research is needed at the content level to uncover the extent to which partisan mayors and councilors use their pages to explicitly promote their parties.

The intensity of the electoral contest primarily affects entry costs; that is, politicians of the more contested arenas tend to create Facebook pages but are not motivated to be active after the election. The electoral contest may only be relevant in the context of campaigns. We observed the first part of the electoral cycle, when elected officials may not be very concerned about their positions. Nonetheless, although local politicians clearly respond to the local electoral contest, we can exclude the possibility that a permanent Facebook campaign is motivated by strong competitors. However, in an electoral situation, these politicians can easily activate their existing social media infrastructure and conduct more active Facebook campaigns. The presence of other politicians on Facebook stimulates mayors' Facebook presence, which also shows that mayors are sensitive to the local political context. This is a sign of a local "bandwagon" effect (Metag & Marcinkowski, 2012) but it is limited to mayors. Councilors are not affected by the Facebook presence of other politicians, perhaps because the "other" politician is usually the mayor, who is perceived as standing at a different level, where Facebook presence is more of a requirement than at the level of councilors.

As noted earlier, the most important influencing contextual factor is population size. However, politicians in smaller municipalities have the comparative benefit of being able to reach a larger portion of the population than elected representatives in larger communities. Mayors and councilors in larger municipalities face an uncomfortable situation: While they need to use social media platforms to communicate with constituents, it is not enough to rely solely on their central page, as it still has a limited reach. City mayors and councilors need to draw on other social media-based (e.g., Facebook groups, ads) or offline channels to impact their voters. This aspect has yet to be explored, as existing studies only emphasize the positive effect of population size on social media activity (Faber et al., 2020; Guillamón et al., 2016; Lev-On & Steinfeld, 2015; Silva et al., 2019) and ignore the audience dimension.

The local Facebook context does not seem to be an important factor, and politicians' strategies are less related to the state of the local Facebook public. This is surprising given the few reports showing that well-developed local Facebook publics are integrated, densely connected, and interactive entities that play an important role in local political processes (e.g., Thorson et al., 2020). It seems that while politicians are receptive to the local political context, they are less sensitive to the demands of the local public; their activity in this context is not demand-driven. Nevertheless, it is important to note that the extension or development of the local Facebook public is measured by two proxy variables that are raw indicators of the concept. For instance, hyperlocal media (Hujanen et al., 2021) and local NGOs (Thorson et al., 2020) play a crucial role in local public spheres; however, methodological limitations prevented us from including them in this study. Future studies may help to understand how political actors' social media activities and the local public sphere as a whole relate to each other.

The main limitation of our study is the generalizability of our findings to a different context. Our research

employed a uniquely large dataset; however, it is limited to the Hungarian political context. We assume that political incentives and population size may be important factors in other countries as well, but future studies should confirm this assumption. Nonetheless, this is the first study that covers politicians from the entire field of local politics and is not limited to large cities. Moreover, our empirical investigation was limited to a few key dependent and independent variables; however, other factors could be at play. We have already mentioned other potential actors in the local public sphere, but beyond structural aspects, personal factors may also be relevant. An important but unavoidable limitation of our approach is that only public Facebook pages are considered. Mayors and councilors may use their private profiles for political communication, especially in smaller municipalities. However, these private profiles cannot be included in large-scale data collection because it is difficult to define a "threshold" from which a private profile can be considered "official," and also because Facebook does not allow data scraping from private pages. Nonetheless, because of this fact, we might underestimate the extent of Facebook activity at the local level if we do not take into account these "semi-public" forms of Facebook communication. Finally, our study focused only on raw indicators of Facebook activity but did not address actual communication by mayors and councilors on these platforms. Future studies should employ content analysis to determine how local politicians use social media platforms.

If we agree with the proposition that the presence of local politicians on Facebook plays a key role in the development of local Facebook public and the provision of locally relevant information to users (Ellison & Hardey, 2013; Thorson et al., 2020), it is important to note that, based on our results, this effect may be most prevalent in larger municipalities, where national parties are important actors in local political life. This conclusion suggests that local public activity is largely driven by national political interests, raising questions about the substantive autonomy of local political spheres. This is a particularly important question in the Hungarian context, where the institutional autonomy of local politics is shrinking and strong centralizing tendencies prevail (Dobos, 2022). Independent, locally embedded elected representatives can counter these trends by contributing to the functioning of strong local publics, but it seems that these actors are reluctant to rely more on social media. The lack of partisan incentives for these actors is not counterbalanced by the demands of the local population. Another important lesson that can be drawn from the analysis of the Hungarian case is that the local public does not create itself; the key actors of the local public sphere do not become active because there is a demand from citizens for local public life on social media. It seems that politicians do not react to local conditions, but rather are motivated by external factors such as the interests of their nominating parties and the intensity of the electoral contest. Therefore, it can be assumed that the local public is an area for the mobilization efforts of national parties and that local politicians serve as local promoters of their national parties (Karlsen & Skogerbø, 2015). However, it is a task for future research to assess the role that national political interests play in the local digital public.

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Conflict of Interests

The authors declare no conflict of interests.

References

Bátorfy, A., & Urbán, Á. (2020). State advertising as an instrument of transformation of the media market in Hungary. *East European Politics*, *36*(1), 44–65. https://doi.org/10.1080/21599165.2019.1662398

Bene, M., & Farkas, X. (2022). Ki mint vet, úgy arat? A 2022-es választási kampány a közösségi médiában [What goes around comes around? The 2022 electoral campaign in social media]. *Századvég*, *2*(2), 131–160.

Bene, M., Petrekanics, M., & Bene, M. (in press). Facebook as a political marketing tool in illiberal context: Mapping political advertising activity on Facebook during the 2019 Hungarian European Parliament and local election campaigns. *Journal of Political Marketing*.

Chernilo, D. (2006). Social theory's methodological nationalism: Myth and reality. *European Journal of Social Theory*, *9*(1), 5–22. https://doi.org/10.1177/1368431006060460

Djerf-Pierre, M., & Pierre, J. (2016). Mediatised local government: Social media activity and media strategies among local government officials 1989–2010. *Policy & Politics*, *44*(1), 59–77. https://doi.org/10.1332/030557315X14434624683411

Dobos, G. (2022). The expansion and the limits of national politics at the local level. In A. Gendźwiłł, U. Kjaer, & K. Steyvers (Eds.), *The Routledge handbook of local elections and voting in Europe* (pp. 293–302). Routledge.

Ellison, N., & Hardey, M. (2013). Developing political conversations? *Information, Communication & Society*, *16*(6), 878–898. https://doi.org/10.1080/1369118X.2012.740495

Elvestad, E., & Johannessen, M. R. (2017). Facebook and

local newspapers' effect on local politicians' popularity. *Northern Lights*, *15*(1), 33–50. https://doi.org/10.1386/nl.15.1.33_1

Faber, B., Budding, T., & Gradus, R. (2020). Assessing social media use in Dutch municipalities: Political, institutional, and socio-economic determinants. *Government Information Quarterly*, *37*(3), Article 101484. https://doi.org/10.1016/j.giq.2020.101484

Graham, M., & Avery, E. J. (2013). Government public relations and social media: An analysis of the perceptions and trends of social media use at the local government level. *Public Relations Journal*, *7*(4), 1-21.

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. https://doi.org/10.1016/j.giq.2016.06.005

Haro-de-Rosario, A., Sáez-Martín, A., & del Carmen Caba-Pérez, M. (2018). Using social media to enhance citizen engagement with local government: Twitter or Facebook? *New Media & Society*, *20*(1), 29–49. https://doi.org/10.1177/1461444816645652

Hujanen, J., Dovbysh, O., Jangdal, L., & Lehtisaari, K. (2021). Towards (hyper) local public sphere: Comparison of civic engagement across the Global North. *Media and Communication*, *9*(3), 74–84. https://doi.org/10.17645/mac.v9i3.3929

Jacobs, K., & Spierings, N. (2016). *Social media, parties, and political inequalities* (1st ed.). Palgrave Macmillan.

Karlsen, R., & Skogerbø, E. (2015). Candidate campaigning in parliamentary systems: Individualized vs. localized campaigning. *Party Politics*, *21*(3), 428–439. https://doi.org/10.1177/1354068813487103

Klinger, U., & Russmann, U. (2017). "Beer is more efficient than social media"—Political parties and strategic communication in Austrian and Swiss national elections. *Journal of Information Technology & Politics*, *14*(4), 299–313. https://doi.org/10.1080/19331681.2017.1369919

Körösényi, A., Illés, G., & Gyulai, A. (2020). *The Orbán regime: Plebiscitary leader democracy in the making* (1st ed.). Routledge.

Kovarek, D., & Littvay, L. (2022). Greater than the sum of its part(ie)s: Opposition comeback in the 2019 Hungarian local elections. *East European Politics*, *38*(3), 382–399. https://doi.org/10.1080/21599165.2022.2038571

Larsson, A. O., & Skogerbø, E. (2018). Out with the old, in with the new? Perceptions of social (and other) media by local and regional Norwegian politicians. *New Media & Society*, *20*(1), 219–236. https://doi.org/10.1177/1461444816661549

Lev-On, A., & Steinfeld, N. (2015). Local engagement online: Municipal Facebook pages as hubs of interaction. *Government Information Quarterly*, *32*(3), 299–307. https://doi.org/10.1016/j.giq.2015.05.007

Mabillard, V., Zumofen, R., & Keuffer, N. (2021). Digital communication in Swiss cities: A closer look at the low adoption and usage of social media platforms in a technologically advanced and innovative country. *Information Polity*, *26*(4), 341–354. https://doi.org/10.3233/IP-200294

Martin, G. J., & McCrain, J. (2019). Local news and national politics. *American Political Science Review*, *113*(2), 372–384. https://doi.org/10.1017/S0003055418000965

Merkovity, N., & Stumpf, P. B. (2021). Migrants during halftime: The framing of Hungarian political news during the FIFA World Cup. *East European Politics*, *37*(2), 292–310. https://doi.org/10.1080/21599165.2020.1781095

Metag, J., & Marcinkowski, F. (2012). Strategic, structural, and individual determinants of online campaigning in German elections. *Policy & Internet*, *4*(3/4), 136–158. https://doi.org/10.1002/poi3.14

Metz, R., & Várnagy, R. (2021). "Mass," "movement," "personal," or "cartel" party? Fidesz's hybrid organisational strategy. *Politics and Governance*, *9*(4), 317–328. https://doi.org/10.17645/pag.v9i4.4416

Schäfer, A. (2021). Digital heuristics: How parties strategize political communication in hybrid media environments. *New Media & Society*, *25*(3), 522–539. https://doi.org/10.1177/14614448211012101

Silva, P., Tavares, A. F., Silva, T., & Lameiras, M. (2019). The good, the bad and the ugly: Three faces of social media usage by local governments. *Government Information Quarterly*, *36*(3), 469–479. https://doi.org/10.1016/j.giq.2019.05.006

Szmigiel-Rawska, K., Łukomska, J., & Tavares, A. F. (2018). Social media activity and local civic engagement in Poland. In A. Kankanhalli, A. Ojo, & D. Soares (Eds.), *Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance* (pp. 279–287). Association for Computing Machinery. https://doi.org/10.1145/3209415.3209516

Thorson, K., Medeiros, M., Cotter, K., Chen, Y., Rodgers, K., Bae, A., & Baykaldi, S. (2020). Platform civics: Facebook in the local information infrastructure. *Digital Journalism*, *8*(10), 1231–1257. https://doi.org/10.1080/21670811.2020.1842776

Whitesell, A., Reuning, K., & Hannah, A. L. (2022). Local political party presence online. *Party Politics*, *29*(1), 164–175. https://doi.org/10.1177/13540688211056617

Williams, C. B., & Gulati, G. J. (2013). Social networks in political campaigns: Facebook and the congressional elections of 2006 and 2008. *New Media & Society*, *15*(1), 52–71. https://doi.org/10.1177/1461444812457332

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Article

The Value of a Like: Facebook, Viral Posts, and Campaign Finance in US Congressional Elections

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Abstract
Social media has become a dominant force in American political life, from Twitter and Facebook to newer rivals like Instagram and TikTok. As American elections have also grown increasingly expensive, campaigns have sought to capitalize on social media success through campaign donations. The most successful social media posts can garner thousands of likes and millions of views focusing attention on the candidate and presenting a fundraising opportunity. In this study, I examine the impact of viral posts (those receiving more than 5,000 likes or those in the top 1% of likes) on the number and amount of campaign donations a candidate receives on the date of the post. Combining social media data from Facebook and campaign finance donations during the 2018 and 2020 House of Representatives elections, I find that viral posts can dramatically increase a candidate's fundraising on those dates. This finding suggests that candidates can increase their fundraising through increased social media success.

Keywords
campaign finance; campaign fundraising; congress; elections; political campaigns; social media; US elections; viral posts

Issue
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1. Introduction

Modern American political campaigns are expensive, and candidates devote an immense amount of time and effort to fund their campaigns. Due to the intense demands, candidates and consultants are always looking for an edge in efficiently raising money from donors. Coupled with the rise of social media as not only a major societal phenomena but also one in politics, it is only logical that members of Congress would turn to social media as a place where success could be leveraged to provide campaign fundraising results. For American politicians particularly, social media has become a critical venue for offline political mobilization. Donald Trump's 2016 presidential campaign demonstrated to the ordinary observer that social media could be and would be a major part of American campaigns going forward. A new generation of candidates for Congress such as Representative Alexandria Ocasio-Cortez embraced social media and rode success in that venue to becoming a household name. While candidates do use social media for direct fundraising appeals, those posts may not be the most engaging. Candidates and political action committee fundraising emails are sent with such frequency that they have become a social media punchline and are frequently ignored. Candidates compete for attention in the social media sphere, and to be successful in this area they must create engaging content. In 2022, for example, Pennsylvania Democratic Senate candidate John Fetterman utilized a viral marketing campaign to get engagement and social media views for his campaign, including a cameo (a short, paid video from celebrities for special occasions) from *Jersey Shore* star Snooki and flying an airplane banner over a crowded Jersey Shore beach to challenge the residency of his opponent. In that race, Fetterman outraised his Republican opponent, Dr. Memhet Oz, a television celebrity himself, by $23 million. But how much of the fundraising success of a congressional candidate can be attributed to their success on social media?

Campaign donations are a form of mobilization. Scholars have found that candidate visits in presidential elections can both mobilize donors as well as countermobilize opponents (Heersink et al., 2021). In 2020, visits by then-President Donald Trump and Vice Presidential candidate Kamala Harris mobilized donors, while visits from then-candidate Joe Biden and Vice President Pence did not. Candidates can use social media as a way to mobilize donors, making posts that appeal to donors and mobilize supporters (Auter & Fine, 2018). Non-profits can also use Facebook as a way to mobilize potential donors (Bhati & McDonnell, 2020). Social media can be used to increase voter turnout (Bond et al., 2012). Candidates can use social media as a mechanism to spread their messages, even if they are only reaching those who already support them, rather than persuading (Gainous & Wagner, 2014). However, even preaching to the choir can be important for campaigns. Activating and engaging supporters to turn out to vote is crucial for campaigns. Mobilization of supporters can be nearly as important as persuasion.

This study attempts to answer the question of how social media success and campaign fundraising success go together. I combine social media data from candidates for the US House of Representatives in the 2018 and 2020 elections with campaign fundraising data. I argue that higher-performing candidates on social media translate to greater fundraising success. Rather than relying on media coverage for their campaigns, candidates can utilize social media as a mechanism to directly interact with constituents and donors and generate "buzz" or increased attention. Social media provides greater control over messaging for candidates than other forms of media (Gainous & Wagner, 2014), and achieving social media success can launch candidates that may be ignored by the media. I find that viral posts (those with more than 5,000 likes or in the top 1% of likes) lead to more individual campaign contributions on the date of a post. Members raise significantly more through individual contributions (both in the amount and the number of contributions) on the dates they have a viral Facebook post, even when taking into account other metrics of popularity and other advantages. These findings are significant and demonstrate the importance of social media not only as a launching point for a political candidate like Donald Trump but as a mechanism for candidates to raise funds.

2. Social Media, Elections, and Campaign Finance

2.1. Campaign Finance in American Elections

American elections are expensive, and compared to many national political systems, fairly unique. In 2020, candidates for Federal elections (president, House of Representatives, and Senate) received nearly $7.9 billion in campaign contributions (Open Secrets, 2021a). Candidates for the House of Representatives alone raised $1.9 billion. This significantly outpaces the spending on elections in other democracies. For example, in the 2019 parliamentary elections, Boris Johnson and the Conservative Party spent £16 million (about $21 million) in his victory (Cowburn, 2020). For comparison, Donald Trump alone spent $773 million, and outside groups spent an additional $313 million, on his losing 2020 presidential campaign (Open Secrets, 2021b). Americans contribute large amounts to political campaigns in the comparative context, but in the relative context of the American economy and particularly the size of the federal government's budget, some have wondered why there isn't more money in American politics (Ansolabehere et al., 2003).

It is important to note that this study focuses on the American context. While nearly all democratic nations require some amount of money to fund elections, how they go about raising that money varies significantly, and the US stands out in its funding system. It must be noted that American elections, particularly on the campaign fundraising side, are unique. American elections are candidate-centric (i.e., La Raja & Schaffner, 2015), in part due to late 20th and early 21st century reforms such as the Bipartisan Campaign Finance Reform Act, which dramatically reduced the fundraising ability of formal party organizations. This led in part to the development of the "extended party network" approach to American politics, which emphasized the coalitions between voters, interest groups, candidates, and formal party organizations to succeed in American elections (Bawn et al., 2012). The focus shifted away from parties, candidates who sought and won their parties' nomination were forced to rely on their own personal networks and brands to find funding. Importantly, while America has had strict limits on direct contributions to candidates, the amount a candidate could spend is unlimited. This limits on donations but not on overall spending means that American elections are fairly unique. Among Western democracies, only Finland shares these limits on donations, but not on spending rules (Waldman, 2014). Due to this heavy reliance on contributions from individuals and political action committees (PACs), the US is an ideal case study for the role of social media on campaign donations. American politicians must solicit large numbers of contributions from individuals in relatively small amounts, and can not rely on the party organization to fund their campaigns. The majority of political finance literature has focused on the American context, but a growing literature is attempting to find language and comparative frameworks to analyze across nations (Scarrow, 2007).

The unique cost of American elections means that candidates must continually seek funding for their campaigns. Members expend significant time and effort to raise money. In 2012, the Democratic Congressional Campaign Committee in a presentation to new Members of Congress advised that members should expect to spend four hours each day on "call time," outreach

efforts to potential donors soliciting campaign contributions (Grim & Siddiqui, 2013). Given this immense time and energy devoted to the task, it only makes sense that candidates for Congress would seek better and more efficient ways to reach out to potential donors.

On the campaign contribution supplier side, there are two major sources of funding, PACs and individual donors. PACs allow for the aggregation of resources to better coordinate the campaign activities of various interest groups such as corporations, trade associations, union members, and various other groups and overcome collective action problems (Olson, 1965). Corporations give widely to incumbents in the hopes of gaining access (Hall & Wayman, 1990). PACs can also coordinate through the extended party networks in order to help elect their preferred candidates (Desmarais et al., 2014). Corporations and executives give to further their influence (Bonica, 2016). American politicians are generally more responsive to wealthier interests (Bartels, 2010; Hacker & Pierson, 2010; Olson, 1965). Fitting with Hall and Wayman's (1990) findings that donations may buy time and access, Broockman and Kalla (2016) find that members of Congress are more likely to meet with donors than other constituents.

While PACs are still critical, individual contributions are disproportionately important to Congressional candidates. Individual donors made up 62.4% of funds for House Republican candidates in 2020, and 66.4% for Democrats (Open Secrets, 2021b). Small donors (those who give less than $200) made up 16.9% of Democratic contributions compared to 49.5% from large donors (those who give more than $200). For Republicans, it was 22.1% and 40.3%, respectively. However, most Americans do not give to candidates, with only about 16% of Americans donating to them (Hughes, 2017). Initially after the *Citizens United v. F.E.C.* (2010) Supreme Court decision, and subsequent decisions which eased restrictions on corporate and wealthy donors, a small group of mega-rich donors began to dominate the political landscape (Confessore et al., 2015). Campaigns, particularly on the Democratic side, began to seek ways to counter this. Ultimately, they turned to larger numbers of small individual donations.

Individual donors are significantly different from those who do not contribute to American campaigns. They are more ideologically polarized, and donors respond to higher-stakes elections (Hill & Huber, 2017). Individual donors are also wealthier on average than non-donors (Bartels, 2010). Individuals are more likely to donate to members who overlap with their policy positions, and to candidates on committees that are related to their occupation, but the size of the donation is largely out of the control of the candidate (Barber et al., 2017).

Individual donors can give for a multitude of reasons including material or social interests (Brown et al., 1995; Francia et al., 2003) or for ideological reasons (Barber, 2016; Barber et al., 2017). But individuals may also give for consumptive reasons, simply because they enjoy participating in politics and treat donations as a consumptive good (Ansolabehere et al., 2003; Gimpel et al., 2008). For many, participating in politics is a hobby (Hersh, 2020). Appealing to ideological extremes may also be a consideration, as more ideological candidates raise more from individuals (Ensley, 2009), and individuals target their donations ideologically to candidates that share their views (McCarty et al., 2006).

While all of these are certainly factors to consider, the political landscape is changing rapidly. The costs of elections are rising, and candidates have needed to seek new and innovative ways to fundraise to keep pace. Perhaps the largest shift in campaign finance patterns surrounding individual donations is the rise of online fundraising and small donors. Major campaigns have turned toward increased data availability and the internet to advance their campaign fundraising. The Obama re-election campaign was driven largely by small donors in 2012, with more than half of his donors giving less than $200 (Malbin, 2012). Today, small donor aggregators and online fundraising sites like ActBlue for Democrats and WinRed for Republicans are major players. Bernie Sanders received nearly 9 million individual donations in the 2020 Democratic Presidential Primary with the help of online fundraising (Grayer & Nobles, 2020). In only three months in 2022, ActBlue raised $513 million on behalf of Democratic candidates from small donors entirely online, including $89 million in only one week (Navarro, 2022) following the *Dobbs v. Jackson Women's Health Decision* (2022) which overturned *Roe v. Wade* (1973), the case that solidified abortion rights in America. ActBlue's Republican rival WinRed collected only $155 million during the same three-month period. The world of campaign finance seems to have arrived in the online and social media age.

2.2. Social Media and Political Campaigns

Social media has been widely adopted by members of Congress. Early adopters of social media in Congress were driven in part by partisan, cohort, and ideological factors (Peterson, 2012). By 2016, all senators and nearly all members of the House of Representatives had adopted social media platforms such as Facebook and Twitter (Straus & Glassman, 2016a). Donald Trump's 2016 campaign demonstrated the immense power of social media stardom on American campaigns. Perhaps most importantly, it demonstrated that social media success could be translated into real-world results.

Members of Congress engage in three major forms of political communication activities: credit claiming, advertising, and position-taking (Mayhew, 1974). Members must continually seek re-election, and to do this effectively they must continually advertise themselves to constituents. Social media represents one of the lowest-cost ways for members to advertise to their constituents in an unmediated fashion (Lassen & Brown, 2011). Members of Congress use it for a variety

of purposes, from advertising their policy positions (Golbeck et al., 2010), to learning about, getting feedback from, and even adopting, the issue preferences of their constituents (Barbera et al., 2019). They can also use it as a form of homestyle, the way in which members of Congress represent their constituents (Fenno, 1978), such as promoting their constituent service or policy positions (Russell, 2018a). Members also promote their political positions and provide information to constituents (Hemphill et al., 2013). Importantly for this study, they rarely use social media to request direct political action from constituents.

Different types of candidates use social media differently. Incumbents tweet differently than challengers (Evans et al., 2013). Incumbents are less likely to attack their opponents than challengers, are more likely to use personal posts, and are less likely to tweet about their campaign directly. Other factors, such as gender (Evans & Clark, 2016; Hemphill et al., 2021), and party (Evans et al., 2013; Hemphill et al., 2021; Russell, 2018b) also contribute to how candidates use social media.

Social media can influence not only online political behavior by individuals but also offline results. Social media activity can lead to offline political activity such as participating in political protests (Vissers & Stolle, 2014). It can also lead to more charitable donations (Mano, 2014), and be indicative of political behaviors like voting (DiGrazia et al., 2013).

The widespread adoption of social media has brought about dramatic shifts in the world of marketing and beyond. The definition of what constitutes a "viral" post is one of subjectivity. Nahon and Hemsley (2013, p. 2) define viral as "what stands out as remarkable in a sea of content." When discussing virality on social media, one study notes "although there is no universal definition of the phenomenon, it is generally understood to happen when a social media post unexpectedly reaches an unusually large audience" (Han et al., 2020, p. 576). Even among scholars, virality is a bit like Justice Potter Stewart's definition of obscenity in his concurring opinion in *Jacobellis v. Ohio* (1964), "I know it when I see it." The question of what leads to content becoming viral is one that scholars have attempted to answer, with some believing that what goes viral is random (Cashmore, 2009), while others argue there are shared characteristics of what goes viral (Berger & Milkman, 2012). Virality has become a key concept in fields such as marketing, computer science, communication, and many others (Han et al., 2020). What goes viral on social media can vary in terms of characteristics. Berger and Milkman (2010) find a relationship between positive affect and virality in *The New York Times* articles, in contrast to classical communication theory on news diffusion which emphasizes negative news (Galtung & Ruge, 1965). However, Hansen et al. (2011) find that both positive non-news content and negative news content are more likely to go viral, concluding, "If you want to be cited, sweettalk your friends and serve bad news to the public!" (2011, p. 12). For anyone who has looked at the social media feeds of political candidates and members of Congress, this is a strategy that they will recognize.

While a large amount of scholarship has been conducted on the role of social media in political campaigns, far less has been done on the relationship between social media success and fundraising success. Campaigns may use social media such as Facebook as a mechanism for facilitating campaign donations and serve as an important way for candidates to introduce themselves to donors and voters (Kreiss et al., 2018). Looking at the candidate Facebook campaign strategy in 2010, Auter and Fine (2018) find that challengers use Facebook as a means to launch their campaigns and appeal for participation in offline mobilization and fundraising. Social media efforts can also backfire. Republican candidates for Congress who criticized Donald Trump online raised less than their counterparts who did not (Fu & Howell, 2020). Some studies have found that members of Congress may consider campaign contributions when posting on social media, particularly about the interests of industries that may financially support them (Yano et al., 2013). Others have found that incidental exposure to news on social media can impact online and offline behavior such as campaign contributions based on surveys during the 2016 presidential election (Yamamoto & Morey, 2019). More recent scholarship has found that adoption of Twitter by candidates for Congress results in about a 1–3% increase in campaign contributions. But overall, the relationship between social media and campaign contributions has not been given adequate attention in the academic literature given the importance of campaign contributions in American elections.

I propose that social media plays an integral role in campaign fundraising in American elections. I hypothesize that candidates for Congress who are more successful on social media will enjoy greater fundraising success. In particular, I argue that high-visibility posts, the ones that go viral and gain the most exposure and get the most interactions, will be major drivers for individual campaign contributions. Viral posts can focus attention on the candidate, raise their visibility, and ultimately lead to more individuals donating to the candidate in their wake.

3. Data and Methods

This article investigates the relationship between social media success and campaign fundraising and relies upon two main and significant datasets. First, to measure social media success, I use data from the Facebook pages of the Congressional candidates. I measure fundraising success through individual campaign donations obtained from the Center for Responsive Politics. I focus on the 2018 and 2020 elections for the US House of Representatives. I choose to focus on House elections for several reasons. First, House candidates are up for re-election every two years. This means that candidates must be actively campaigning in each election cycle,

unlike senators who are only up for re-election every six years. Secondly, there are 435 districts of the House of Representatives, compared to only 100 Senators. This provides significantly more variation among candidates and more opportunities to test theories related to social media and campaign fundraising. Finally, given that senators are one of only 100 and one of two in any given state, they are far more likely to enjoy name recognition in their state, but also nationally, than members of the House. Therefore, it would be expected that House members would have more to gain through adept social media usage in terms of making a name for themselves and the subsequent rewards that could come with it.

Facebook is the dominant social media site in the US, with more users than competitors like Twitter or TikTok (Gramlich, 2021). In 2021, 69% of American adults reported using Facebook, a number that has not seen any significant change since 2016. Only 40% of Americans used Instagram, higher than the 23% that used Twitter or the 21% that used TikTok. Of Facebook users, seven-in-ten visit the site daily, and it is used across the age, racial, political, and educational spectrum (Gramlich, 2021). The partisan differences in other social media platforms are also largely absent from Facebook.

After the 2016 Cambridge Analytica scandal, Facebook tightened access to their data for researchers. To access Facebook data, researchers must apply for access to the Facebook Crowdtangle API. This service allows researchers to get information on publicly available pages and groups, including the text of posts, the number of followers, likes, comments, and other metrics. Crowdtangle also offers the significant advantage of allowing researchers to access historical data dating back to the creation of a given page. This combination of attributes makes Crowdtangle an ideal platform for researchers interested in social media and political communication.

In total, I analyze a total of 601,238 (277,663 in 2018, 326,536 in 2020) Facebook posts from candidate campaign pages, including both incumbents and challengers, by 844 unique pages across the two election cycles. I use posts from the campaign accounts of candidates, not official accounts. For incumbent members of Congress, there are strict rules governing social media usage. Members are not allowed to use official funds or Congressional staff for any campaign purpose (Straus & Glassman, 2016b). Any official Congressional communications staff may only post content that is "germane to the conduct of the Member's official and representational duties" (p. 3). This precludes any campaign-related activity. As such, many members of Congress have both an official Congressional Facebook account run by Congressional staff, and a second campaign account run by separate campaign staff.

For this study, I define social media success in two ways: (a) Many Facebook posts by candidates for Congress get relatively few likes, as depicted in Figure 1. A significant number of posts get very little or no engagement at all as measured by likes. The number of likes drops dramatically after a few dozen, with a very long

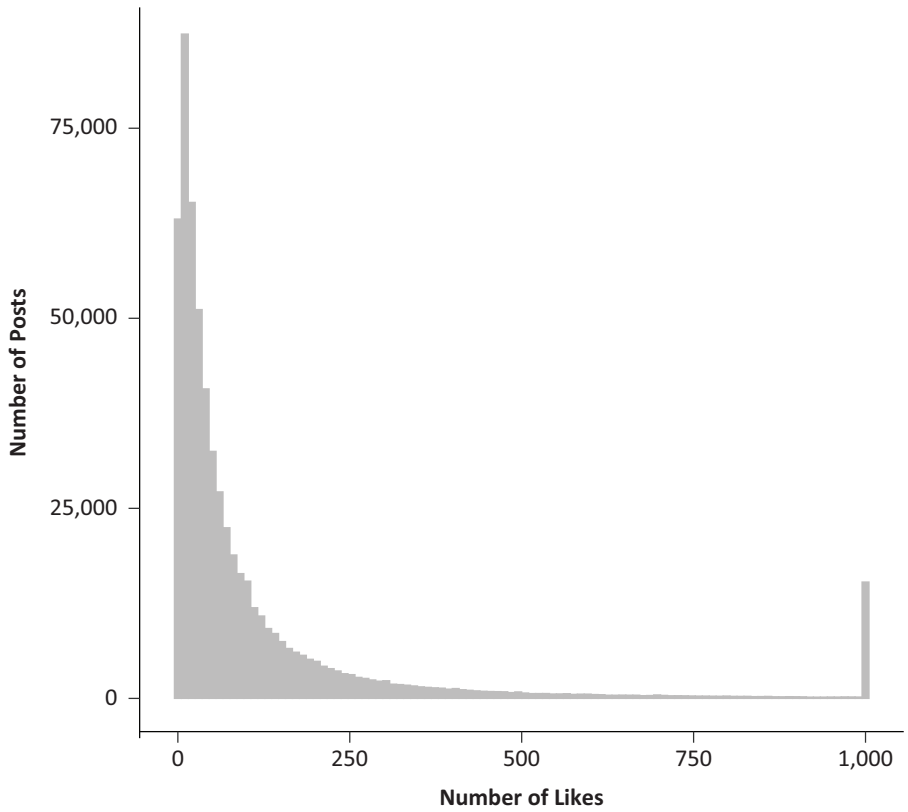

Figure 1. Number of likes per Facebook post. Note: Posts with 1,000 or more likes are included together.

tail. The average number of likes for all posts is 176.66, with a median of only 44. Since most posts do not get significant engagement, it is unlikely they will lead to significant campaign contributions. Most people who see a post will not donate. For this study, I propose a relatively high bar for a post to be considered successful. The first metric is using the top 1% of posts measured by the number of likes. The top 1% of posts are those that receive more than 2,228 likes. In his study, this is operationalized as a dummy variable, with posts in the top 1% labeled as 1, and those that are not labeled as 0. The second metric (b) for viral success is even more strict and follows the work of Han et al. (2020), who use the metric of 5,000 retweets on a tweet for the definition of virality. Based on their measure, .33% of all tweets in their study reach the threshold of virality. Facebook does not have a retweet feature but utilizes the like measure instead. This is an even higher bar than the top 1%. Only .38% of posts reach this threshold, comparable to the above finding of .33% of tweets reaching viral status. Like that study, we again employ a binary metric of viral posts, any that receives over 5,000 likes is coded as 1, and those with fewer are coded as zero.

It is important to note that the definition of virality can be defined in several different ways. As a robustness check, I also used an even stricter threshold of the top .1% of posts by members of Congress. The results remain substantively the same, so I opt to only use the first two metrics discussed, the top 1% of posts and those with over 5,000 likes.

To account for the potential that only the most popular accounts receive the most likes and subsequent donations, I also control for the total number of likes an account, rather than the post, has at the time of posting. Viral posts accounts do have significantly more followers than non-viral posts. However, the number of accounts reaching viral status is not negligible. Out of the 844 unique accounts, 79 (9.4%) have posts that reach viral status (over 5,000 likes), and 169 (20%) accounts make it into the top 1%. The top posts are not monopolized by a few individuals, even though those who make it, on the whole, are more popular on Facebook. While those party leaders are more highly represented in these ranks, such as Speaker Nancy Pelosi and incoming Democratic leader Hakeem Jeffries, there are significant upstarts and challengers on the list. This includes Republican newcomers such as Representatives Marjorie Taylor-Green and Lauren Boebert and rising Democratic stars like Representative Alexandria Ocasio-Cortez and Katie Porter. It also includes some high-profile challengers like Amy McGrath who lost to Kentucky Representative Andy Barr in 2018 before later becoming the Democratic nominee to challenge Senate Republican Majority Leader Mitch McConnell in 2020. To account for whether it is the posts themselves, or simply the number of likes and followers an account has that may be driving campaign contributions, I include the logged number of page likes at the time of each post.

To further account for the expectations and popularity of any given representative, I also include a measure developed by Facebook, overperformance (for full details, please see https://help.crowdtangle.com/en/articles/2013937-how-do-you-calculate-overperforming-scores). Essentially, the overperformance metric takes into account the expected performance of a given post versus the actual performance (Crowdtangle, 2022). This metric looks at the number of likes, reactions, shares, and comments for the 100 previous posts from any given account. The bottom and top 25% of posts are dropped from the calculation. The remaining posts are then used as a reference for the newest post at the same time point after posting. This post is then compared to the average and the difference is multiplied by the weighted account metric. By including this metric of overperformance, it is possible to control for those posts that are more or less popular even within a given account.

I also include standard metrics which would be expected to influence the number of campaign contributions any given candidate receives. The most significant from the literature is incumbency (Ansolabehere & Snyder, 2002; Fouirnaies & Hall, 2014; Hall & Wayman, 1990). Incumbents enjoy significant advantages when it comes to fundraising from different sources, such as corporations (Kowal, 2018). While incumbents tend to do better at fundraising, some challengers may receive more coordinated funding and enjoy greater electoral success (Desmarais et al., 2014). More competitive seats also tend to draw more fundraising interest. To account for this, I utilize the Cook Partisan Vote Index (PVI; Cook Political, 2022). I consider any race with a PVI for either party of less than 5 points to be competitive. Those races with a PVI under 5 are coded as 1, and those over 5 are coded as 0. Open seats tend to be higher profile, with more focus on changing traditional factors that drive fundraising success (Berkman & Eisenstein, 1999). For this reason, I code candidates in open-seat races without an incumbent as 1, and those where an incumbent is present as 0. The party is also included in the model, with Democrats coded as 1 and Republicans and independents as 0. Democrats enjoy a significant fundraising advantage over Republicans from small donors and individual donors (Blake & Zubak-Skees, 2022; Davis, 2020). Because of the success of online fundraising operation Act Blue on the Democratic side, we would expect to see Democrats having a fundraising edge over Republican candidates when it comes to individuals and small donors.

The second major source of data is the Center for Responsive Politics, a non-profit that aggregates data from the Federal Election Commission (FEC). All candidates for federal elective office in the US (president, House of Representatives, and Senate) must file reports at regular intervals with the FEC For House candidates, this must be done quarterly. Candidates for Congress by law must report all individual contributions over $200. Many campaigns choose to report amounts below this threshold.

However, in recent cycles, candidates have relied increasingly on small donors, and many of these contributions are routed through third-party organizations such as ActBlue or WinRed. As these are separate PACs, all contributions which pass through these organizations are reported to the FEC, giving more complete coverage of campaign contributions. For contributions over $200, the FEC requires the disclosure of various donor-level characteristics such as employer, occupation, and zip code. The Center for Responsive Politics, through its website (https://www.opensecrets.org), provides a platform for individuals, journalists, and researchers to analyze FEC data, including downloading of bulk data by researchers. For this study, I include all individual campaign donations to candidates for the House of Representatives in the 2018 and 2020 election cycles. In total, I examine 4,968,594 donations to House candidates (1,691,287 in 2018 and 3,277,307 in 2020).

For this article, I focus on contributions that occur on the date of a post. I do this because the life cycle of a social media post is incredibly short. Facebook posts per minute peak immediately after posting, and by six hours have become stale, with views plateauing and getting minimal views going forward (Castillo et al., 2014). Posts on Facebook receive the most engagement (likes and comments) in the first two to four hours, and rarely after 24 hours (Fiebert et al., 2014). If a potential donor is to be motivated by a post, it makes sense that they would be exposed very soon after the post is made. If they are motivated to donate by a viral post, it makes theoretical sense that they will do so soon after exposure. They are unlikely to see a two-week-old post, and theoretically even less likely to donate because of it.

I utilize ordinary least squares (OLS) regression models to test the effects of social media success on fundraising. I create models for three dependent variables: the total number of donations to a candidate on the date of a post, the total dollar amount received by the candidate on the date of a post, and the logged dollar amount received by the candidate on the day of the post. For all three variables, I create two separate models which test the two metrics for viral posts as independent variables, those posts that are in the top 1% of likes, and those that receive over 5,000 likes. I also include control variables for the party, incumbency, open seat, competitive district, the logged number of page likes at the time of posting, and Facebook's measure of overperformance.

4. Results

I make several significant findings in this article. First, I find that viral posts are followed by significantly more campaign donations than non-viral posts (these results are reported in Table 1). Candidates receive an average of $8,483.40 on the date of viral posts, compared to only $2,708.58 on non-viral post dates. The median non-viral post is followed by $0 in contributions, however, the median viral post is followed by $1,969 in contributions. It is not only the dollar amount of donations that increase on the dates of viral posts, but also the number. Viral post dates receive an average of 71 contributions, whereas, on non-viral post dates, candidates receive an average of 7 donations.

It is possible that other confounding factors play a role in the amount a candidate raises. This includes things like being an incumbent, in a more competitive district, and open seat, or even simply the candidates social media popularity in general. For this reason, I create OLS models to test for these factors, with results presented in Tables 2 and 3. Ultimately, I find that post-performance plays a significant role in both the dollar amount received by the candidate as well as the number of posts. In all models tested, a post being viral (more than 5,000 likes) or in the top 1% of likes has either the largest or second largest effect in the model. In all cases, the coefficients are statistically significant and positive.

Fitting with the existing theories, this study finds that many of the control variables are also statistically significant and in the expected direction. In each model and each viral specification, being a Democrat is statistically and positively associated with increased fundraising success. Competitive seats also result in greater fundraising

Table 1. Viral and non-viral post contributions.

Statistic	Mean	Median	Max
Non-Viral			
Likes	134.52	44	
Comments	29.63	4	28,624
Contrib. $	2,708.58	0	5,500,500
Contrib. Num.	7.80	0	1,696
N	602,058		
Viral			
Likes	11,072.4	7,837	174,607
Comments	1,851.79	1,061	56,940
Contrib. $	8,483.40	1,968	379,114
Contrib. Num.	71.01	14	2,930
N	2,329		

Table 2. OLS model results, viral posts (>5,000 likes).

			Dependent Variable
	Date Log Number (1)	Date Number (2)	Date Number (3)
Page Likes (log)	.23*** (.01)	363.50*** (7.31)	1.43*** (.01)
Incumbent	−.92*** (.01)	−1,767.70*** (57.03)	−5.94*** (.09)
Democrat	2.32*** (.01)	2,382.01*** (47.85)	9.17*** (.08)
Overperforming	−.01** (.01)	2.64*** (.75)	.01 (.01)
Viral	2.51*** (.08)	5,190.25*** (376.48)	60.12*** (.59)
Open	.53*** (.01)	248.68*** (61.73)	−1.91*** (.10)
Competitive	.49*** (.01)	685.73*** (20.66)	1.62*** (003)
Constant	.03*** (.01)	−1,274.03*** (68.02)	−6.97*** (.11)
Observations	600,704	604,036	604,036
R^2	.14	.01	.07

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; totals are for the total amount and number of contributions individual contributions received on the date of a post.

success, with positive coefficients and significant results. Open seat results also fit with existing theory, with positive coefficients for each model. However, unlike existing theory, incumbency is associated with negative effects on campaign donations.

In terms of metrics of post-success, the log number of page likes is positively and significantly associated with greater fundraising success. However, Facebook's metric of overperformance in some models, but is significant in others. As such, I argue that this metric is not the best measure to assess these posts.

5. Conclusion

This study finds that social media success is indicative of campaign fundraising success. Candidates for Congress who are more successful on social media raise more money on days when they have viral posts than on other dates. This is an important finding for the literature surrounding campaign finance as well as social media in campaigns. By demonstrating that candidates receive more contributions on the dates of viral posts, I find that candidates who are more successful on social media can

Table 3. OLS model results, top 1% of posts, by likes.

			Dependent Variable
	Date Log Number (4)	Date Number (5)	Date Number (6)
Page Likes (log)	.22*** (.02)	360.86*** (7.34)	1.37*** (.01)
Incumbent	−.92*** (.02)	−1,767.19*** (57.03)	−5.97*** (.09)
Democrat	2.32*** (.02)	2,387.73*** (47.86)	9.27*** (.07)
Overperforming	−0.01** (.02)	2.57*** (.75)	−.01 (.01)
Top 1%	1.66*** (.05)	2,968.47*** (235.56)	41.45*** (.37)
Open	.52*** (.02)	238.04*** (61.74)	−2.07*** (.10)
Competitive	.49*** (.02)	684.16*** (20.66)	1.61*** (.03)
Constant	.03*** (.01)	−1, 264.90*** (68.02)	−6.77*** (.11)
Observations	600,704	604,036	604,036
R^2	.14	.01	.07

Notes: * $p < .05$; ** $p < .01$; *** $p < .001$; totals are for the total amount and number of contributions individual contributions received on the date of a post.

capitalize on their success in the real world. A viral post can bring in an additional $5,190 to the candidate, and a post in the top 1% can bring in an additional $2,968, controlling for other factors. This is a significant increase in fundraising, given that candidates bring in on average $2,730 per day. Viral posts can more than double the amount raised by candidates.

This research presents one case study of the offline mobilization effects of social media. The American political finance system is highly unusual in a comparative context. The lack of spending limits, but the relatively strict limits on individual direct contributions mean that candidates for Congress in the US must continually find ways to mobilize donors. The relative ease of clicking a like button on a post is one thing. Candidates, however, cannot run a campaign on likes. At the end of the day, they need real, on-the-ground results. Certainly, the most important type of mobilization culminates in the voting booth, but to get there candidates must run a campaign, and that requires money. Candidates are constantly seeking an edge on how to efficiently raise the most contributions. That necessity may be somewhat unique to the American context, but the observation that there are real-world effects of social media success lends another piece of evidence to the importance of social media on political mobilization offline. Future studies should address the limitation of a single case study, with a more comparative perspective on the role of virality and social media success on political fundraising.

Social media has become a dominant force in daily life. The most successful influencers and social media personalities can earn millions of dollars per year and become household names. A single viral TikTok or Youtube video can launch a career and lead to internet stardom. I find that social media success can lead to financial benefits for political candidates as well, through an increase in campaign contributions. Social media likes and shares may not only be useful in promoting a candidate's name recognition, but also in bolstering their campaign coffers. This article adds to a growing literature that demonstrates online political behavior can have real-world political effects. These findings take a promising first step in understanding how social media success and viral posts can lead to increased political fortunes.

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Conflict of Interests

The author declares no conflict of interests.

References

Ansolabehere, S., de Figueredo, J. M., & Snyder, J. M., Jr. (2003). Why is there so little money in U.S. politics? *Journal of Economic Perspectives*, *17*(1), 105–130.

Ansolabehere, S., & Snyder, J. M. (2002). The incumbency advantage in U.S. elections: An analysis of state and federal offices, 1942–2000. *Election Law Journal*, *1*(3), 315–338.

Auter, Z. J., & Fine, J. A. (2018). Social media campaigning: Mobilization and fundraising on Facebook. *Social Science Quarterly*, *99*(1), 185–200.

Barber, M. J. (2016). Donation motivations: Testing theories of access and ideology. *Political Research Quarterly*, *69*(1), 148–159.

Barber, M. J., Canes-Wrone, B., & Thrower, S. (2017). Ideologically sophisticated donors: Which candidates do individual contributors finance? *American Journal of Political Science*, *61*(2), 271–288.

Barbera, P., Casas, A., Nagler, J., Egan, P. J., Bonneau, R., Jost, J. T., & Tucker, J. A. (2019). Who leads? Who follows? Measuring issue attention and agenda setting by legislators and the mass public using social media data. *American Political Science Review*, *113*(4), 883–901.

Bartels, L. M. (2010). *Unequal democracy: The political economy of the new gilded age*. Princeton University Press.

Bawn, K., Cohen, M., Karol, D., Masket, S., Noel, H., & Zaller, J. (2012). A theory of political parties: Groups, policy demands and nominations in American politics. *Perspectives on Politics*, *10*(3), 571–597.

Berger, J., & Milkman, K. L. (2010). *Social transmission, emotion, and the virality of online content*. Wharton Research Paper.

Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, *49*(2), 192–205.

Berkman, M., & Eisenstein, J. (1999). State legislators as congressional candidates: The effects of prior experience on legislative recruitment and fundraising. *Political Research Quarterly*, *52*(3), 481–498.

Bhati, A., & McDonnell, D. (2020). Success in an online giving day: The role of social media in fundraising. *Nonprofit and Voluntary Sector Quarterly*, *49*(1), 74–92.

Blake, A., & Zubak-Skees, C. (2022, July 21). GOP's 2022 small-dollar fundraising as Democats' lead grows. *The Washington Post*. https://www.washingtonpost.com/politics/2022/07/21/gops-2022-small-dollar-fundraising-sputters-democrats-lead-grows

Bond, R. M., Farriss, C. J., Jones, J. J., Kramer, A. D., Mayhew, C., Settle, J., & Fowler, J. H. (2012). A 61-million-person experiment in social influence and political mobilization. *Nature*, *489*(2012), 295–298.

Bonica, A. (2016). Avenues of influence: On the political expenditures of corporations and their directors and executives. *Business and Politics*, *18*(4),367–394.

Broockman, D., & Kalla, J. (2016). Congressional officials grant access due to campaign contributions: A randomized field experiment. *American Journal of Political Science*, *60*(3), 545–558.

Brown, C., Powell, L., & Wilcox, C. (1995). *Serious money: Fundraising and contributing in presidential nomination campaigns*. Cambridge University Press.

Cashmore, P. (2009). *YouTube: Why do we watch?* CNN. http://edition.cnn.com/2009/TECH/12/17/cashmore.youtube/index.html

Castillo, C., El-Haddad, M., Pfeffer, J., & Stempeck, M. (2014). Characterizing the life cycle of online news stories using social media reactions. In S. Fussell & W. Lutters (Eds.), *CSCW 2014: Filter bubbles & news* (pp. 211–223). ACM.

Confessore, N., Cohen, S., & Yourish, K. (2015, August 1). Small pool of rich donors dominates election giving. *The New York Times*. https://www.nytimes.com/2015/08/02/us/small-pool-of-rich-donors-dominates-election-giving.html

Cook Political. (2022). *Partisan vote index*. https://www.cookpolitical.com/pvi-0

Cowburn, A. (2020, October 7). Boris Johnson's victory at 2019 general election cost conservatives over £16m, figures show. *The Independent*. https://www.independent.co.uk/news/uk/politics/boris-johnson-election-2019-spending-campaign-conservatives-b859020.html

CrowdTangle [Software] (2022). Meta.

Davis, S. (2020, October 22). "Fundraging" fuels democratic money advanage over GOP in most races. *NPR*. https://www.npr.org/2020/10/22/925892007/fundraging-fuels-democratic-money-advantage-over-gop-in-most-races

Desmarais, B. A., La Raja, R. J., & Kowal, M. S. (2014). The fates of challengers in U.S. house elections: The role of extended party networks in supporting candidates and shaping electoral outcomes. *American Journal of Political Science*, *59*(1), 194–211.

DiGrazia, J., McKelvey, K., Bollen, J., & Rojas, F. (2013). More tweets, more votes: Social media as a quantitative indicator of political behavior. *PLOS One*, *8*(11), Article e79449.

Ensley, M. (2009). Individual campaign contributions and candidate ideology. *Public Choice*, *138*, 221–238.

Evans, H. K., & Clark, J. H. (2016). "You tweet like a girl!": How female candidates campaign on Twitter. *American Politics Research*, *44*(2), 326–352.

Evans, H. K., Cordova, V., & Sipole, S. (2013). Twitter style: An analysis of how house candidates used Twitter in their 2012 campaigns. *PS: Political Science & Politics*, *47*(2), 454–462.

Fenno, R. (1978). *Home style: House members in their districts*. Little, Brown and Company.

Fiebert, M. S., Aliee, A., Yassami, H., & Dorethy, M. D. (2014). The life cycle of a Facebook post. *The Open Psychology Journal*, *7*, 18–19.

Fouirnaies, A., & Hall, A. B. (2014). The financial incumbency advantage: Causes and consequences. *The Journal of Politics*, *76*(3), 711–724.

Francia, P., Herrnson, P., Green, J., Powell, L., & Wilcox, C. (2003). *The financiers of congressional elections: Investors, ideologues, and intimates*. Columbia University Press.

Fu, S., & Howell, W. G. (2020). The behavioral consequences of public appeals: Evidence on campaign fundraising from the 2018 congressional elections. *Presidential Studies Quarterly*, *50*(2), 325–347.

Gainous, J., & Wagner, K. (2014). *Tweeting to power: The social media revolution in American politics*. Oxford University Press.

Galtung, J., & Ruge, M. (1965). The structure of foreign news: The presentation of the Congo, Cuba, and Cyprus crises in four Norwigian newspapers. *Journal of Peace Research*, *2*(1), 64–90.

Gimpel, J., Lee, F., & Pearson-Merkowitz, S. (2008). The check is in the mail: Interdistrict funding flows in congressional elections. *American Journal of Political Science*, *52*(2), 373–394.

Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the U.S. congress. *Journal of the American Society of Information Science and Technology*, *61*(8), 1612–1621.

Gramlich, J. (2021). *10 facts about American and Facebook*. Pew Research Center. https://www.pewresearch.org/fact-tank/2021/06/01/facts-about-americans-and-facebook

Grayer, A., & Nobles, R. (2020, March 1). Bernie Sanders raised massive $46.5 million in February, campaign announces. *CNN*. https://www.cnn.com/2020/03/01/politics/bernie-sanders-fundraising-february/index.html

Grim, R., & Siddiqui, S. (2013, January 8). Call time for congress shows how fundraising dominates bleak work life. *The Huffington Post*. https://www.huffpost.com/entry/call-time-congressional-fundraising_n_2427291

Hacker, J. S., & Pierson, P. (2010). *Winner take all politics: How Washington made the rich richer—And turned its back on the middle class*. Simon & Schuster.

Hall, R. L., & Wayman, F. W. (1990). Buying time: Moneyed interests and the mobilization of bias in congressional committees. *American Political Science Review*, *84*(3), 797–820.

Han, Y., Lappas, T., & Sabnis, G. (2020). The importance of interactions between content characteristics and creator characteristics for studying virality in social media. *Information Systems Research*, *31*(2), 576–588.

Hansen, L. K., Arvidsson, A., Nielsen, F. A., Colleoni, E., & Etter, M. (2011). Good friends, bans news—Affect and virality in Twitter. In *Future Information Technology: 6th International Conference, FutureTech 2011, Proceedings Part II* (pp. 34–43). Springer Berlin Heidelberg.

Heersink, B., Napolitano, N. G., & Peterson, J. C. (2022). The mixed effects of candidate visits on campaign donations in the 2020 presidential election. *American Politics Research*, *50*(3), 320–325.

Hemphill, L., Otterbacher, J., & Shapiro, M. A. (2013).

What's congress doing on Twitter? In A. Bruckman & S. Counts (Eds.), *Proceedings of the 2013 Conference on Computer Supported Cooperative Work* (pp. 877–886). ACM.

Hemphill, L., Russell, A., & Schopke-Gonzalez, A. M. (2021). What drives U.S. congressional members' policy attention on Twitter? *Policy & Internet*, *13*(2), 233–256.

Hersh, E. (2020). *Politics is for power: How to move beyond political hobbyism, take action, and make real change*. Scribner.

Hill, S. J., & Huber, G. A. (2017). Representativeness and motivations of the contemporary donorate: Results from merged survey and administrative records. *Political Behavior*, *39*, 3–29.

Hughes, A. (2017). *5 facts about U.S. political donations*. Pew Research Center. https://www.pewresearch.org/fact-tank/2017/05/17/5-facts-about-u-s-political-donations

Kowal, M. S. (2018). Corporate politicking, together: Trade association ties, lobbying, and campaign giving. *Business and Politics*, *20*(1), 98–131.

Kreiss, D., Lawrence, R. G., & McGregor, S. C. (2018). In their own words: Political practitioner accounts of candidates, audiences, affordances, genres, and timing in strategic social media use. *Political Communications*, *35*(1), 8–31.

La Raja, R. J., & Schaffner, B. F. (2015). *Campaign finance and political polarization: When purists prevail*. University of Michigan Press.

Lassen, D. S., & Brown, A. R. (2011). Twitter: The electoral connection? *Social Science Computer Review*, *29*(4), 419–436.

Malbin, M. (2012). *48% of president Obama's 2011 money came from small donors—Better than doubling 2007. Romney's small donors: 9%*. Campaign Finance Institute. http://cfinst.org/Press/PReleases/12-02-08/Small_Donors_in_2011_Obama_s_Were_Big_Romney_s_Not.aspx

Mano, R. S. (2014). Social media, social causes, giving behavior and money contributions. *Computers in Human Behavior*, *31*, 287–293.

Mayhew, D. (1974). *Congress: The electoral connection*. Yale University Press.

McCarty, N., Poole, K., & Rosenthal, H. (2006). *Polarized America: The dance of ideology and unequal riches*. MIT Press.

Nahon, K., & Hemsley, J. (2013). *Going viral*. Polity.

Navarro, A. (2022, July 20). ActBlue processed more than half a billion dollars in three-month period. *CBS News*. https://www.cbsnews.com/news/actblue-donations-record-second-quarter-fundraising

Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Harvard University Press.

Open Secrets. (2021a). *Elections overview*. Center for Responsive Politics. https://www.opensecrets.org/elections-overview?cycle=2020

Open Secrets. (2021b). *Donald Trump (R)*. Center for Responsive Politics. https://www.opensecrets.org/2020-presidential-race/donald-trump/candidate?id=N00023864

Peterson, R. D. (2012). To tweet or not to tweet: Exploring the determinants of early adoption of Twitter by house members in the 111th congress. *The Social Science Journal*, *49*(4), 430–438.

Russell, A. (2018a). The politics of prioritization: Senators' attention in 140 characters. *The Forum*, *16*(2), 331–356.

Russell, A. (2018b). U.S. senators on Twitter: Asymmetric party rhetoric in 140 characters. *American Politics Research*, *46*(4), 695–723.

Scarrow, S. E. (2007). Political finance in comparative perspective. *Annual Review of Political Science*, *10*, 193–210.

Straus, J. R., & Glassman, M. E. (2016a). Social media in congress: The impact of electronic media on member communications. *Congressional Research Service*.

Straus, J. R., & Glassman, M. E. (2016b). *Social media in the house of representatives: Frequently asked questions*. Congressional Research Service.

Vissers, S., & Stolle, D. (2014). Spill-over effects between Facebook and on/offline political participation? Evidence from a two-wave panel study. *Journal of Information Technology & Politics*, *11*(3), 259–275.

Waldman, P. (2014, April 4). How our campaign finance system compares to other countries. *The American Prospect*. https://prospect.org/power/campaign-finance-system-compares-countries

Yamamoto, M., & Morey, A. C. (2019). Incidental news exposure on social media: A campaign communication mediation approach. *Social Media + Society*, *5*(2), 1–12.

Yano, T., Yogatama, D., & Smith, N. A. (2013). A penny for your tweets: Campaign contributions and Capitol Hill microblogs. In *Proceedings of the Seventh International AAAI Conference on Weblogs and Social Media* (pp. 737–740). ACM.

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Article

Social Media Influencers' Role in Shaping Political Opinions and Actions of Young Audiences

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Abstract
Social media influencers have become an indispensable part of social media, informing audiences, especially young ones, about various topics, such as beauty, lifestyle, or food. Recently more political influencers have emerged, and regular influencers have increasingly taken positions on political and societally relevant topics, including climate justice and gender equality. Yet, empirical evidence on how both types of influencers are perceived by their audiences and how they might impact young audiences regarding political action is scarce. Hence, the present study set out to investigate adolescents' and young adults' use and perception of social media influencers in the context of political information dissemination, opinion formation, and mobilization. With the help of qualitative interviews of young people in Germany (16–22 years), we show that while the mainstream media seems to still be the primary source of political information, influencers focused on politics are increasingly used to make sense of this information. The presumed impact ranges from amplifying the effects of existing opinions to opinion formation and changes in voting intentions based on the assessment provided by the influencer. Regular influencers who talk about political topics occasionally are not perceived as reliable sources of political information.

Keywords
digital opinion leadership; incidental news exposure; political influencers; political mobilization; social media influencers

Issue
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1. Introduction

So-called influencers have become an indispensable part of social media, especially in the lives of adolescents and young adults. These communicators use online platforms, such as YouTube, Instagram, and TikTok, to inform their followers about various topics and to promote products through partnerships with companies. Previous research on influencers has mainly been concerned with marketing (e.g., Durau, 2022; Enke & Borchers, 2019) and has occasionally examined the spread of problematic beauty ideals (e.g., Lowe-Calverley & Grieve, 2021; Naderer et al., 2022). However, over the last couple of years, a new trend of political activism has emerged. On the one hand, an increasing number of political and/or social activist influencers have appeared, who focus on political and societally relevant topics and attempt to initiate social change (Duckwitz, 2019). On the other hand, more "regular" influencers are taking a stand on political issues, such as gender equality, climate justice, and sustainable lifestyles (Byrne et al., 2017; Chwialkowska, 2019), even though this is not their primary focus. The potential of social media influencers (SMIs) as opinion leaders is increasingly recognized by political actors, both in the context of elections as well as by single politicians seeking to increase their popularity among a younger audience. Influencers' popularity, reach, and impact combined with the youth's demand for

political information that is age-appropriate, entertaining, and comprehensible makes SMIs an important, yet understudied research topic in political communication.

Hence, the present study set out to investigate the role of influencers in shaping the political opinions of adolescents and young adults and to explore potential mobilizing effects, especially in the context of elections. In particular, we were interested in how often adolescents and young adults come across political information in the context of influencer communication and how they perceived influencers' impact on themselves and others in this context. Based on a theoretical framework that draws from digital opinion leadership and incidental news exposure, we conducted 12 qualitative interviews with adolescents and young adults (16 to 22 years) in Germany regarding their use and perception of influencers' content in the context of political information dissemination, opinion formation, and mobilization.

2. Theoretical Framework

Social media have become an integral part of people's everyday lives. In 2022, around 4.62 billion people were estimated to use social media, which is more than half of the world's population (We Are Social et al., 2023). Especially in younger age groups, the use of social media, in general, and social networks, in particular, is widespread. In Germany, where this study was conducted, more than 98% of adolescents use social media, with social networks such as YouTube and Instagram being among the most popular (Medienpädagogischer Forschungsverbund Südwest, 2022). When it comes to information about politics and news, adolescents predominantly turn to online and social media to find information. When asked how they inform themselves about daily news topics online, search engines (39%), Instagram (30%), and TikTok (25%) were the three top answers, with news apps (16%) and online newspapers (15%) only being of secondary importance as sources (Medienpädagogischer Forschungsverbund Südwest, 2022). In a similar study, Hasebrink et al. (2021) found that non-journalistic sources like influencers play a slightly more important role in adolescents' informational media use than journalistic sources, while the opposite is true for young adults. In addition, even though both age groups judge journalistic sources to be more important for opinion formation than non-journalistic ones, the latter also seems to play a substantial role, especially for younger audiences that are not politically interested. In this context, we set out to explore how adolescents and young adults come across news and political information provided by different types of SMIs and how this might relate to political action.

2.1. Social Media Influencers as Digital Opinion Leaders

Social networks enable all kinds of users to create and share all kinds of information with others, although a majority of users can be described as passive (e.g., browsing other profiles without engaging in social interactions; Verduyn et al., 2017). In this social network context, a new group of communicators has emerged, the so-called SMIs (Hudders et al., 2020). The range is somewhere between ordinary users and celebrities, which earned them the nickname "micro-celebrities" (Senft, 2008). Influencers use their outreach to inform their followers about specific topics and allow them to peek into their everyday life (Freberg et al., 2011). The combination of broad outreach along with a supposed closeness to their followers as "one of them" makes influencers especially successful, which has attracted companies seeking to use them as a marketing tool (Enke & Borchers, 2019).

Definitions of influencers differ with regard to the research focus. In marketing, influencers are defined by their commercial orientation and their number of followers (e.g., Enke & Borchers, 2019; Hudders et al., 2020). Freberg et al. (2011, p. 90) define influencers as "a new type of third-party endorser who shape audience attitudes through blogs, tweets, and the use of other social media." Schach (2018, p. 31) describes them as individuals who, due to their digital network, personality strength, topic expertise, and communicative activity, have perceived credibility regarding certain topics and can make them accessible to a broad group of people through digital channels. In media effects research, influencers are defined by their core element, which involves exerting influence over others in specific areas (Grenny et al., 2013).

In this regard, SMIs can be conceptualized as what Lazarsfeld et al. (1944) called "opinion leaders," especially because they possess two central characteristics that are deemed to make opinion leaders successful—charisma and communicative competence, described by Katz (1957) as the "who one is" dimension—as well as their content-related expertise ("what one knows"; Katz, 1957). Regarding the latter, opinion leaders can be distinguished by whether they possess expertise in single areas (monomorphic opinion leaders) or on multiple topics (polymorphic opinion leaders; Merton, 1949; Richmond, 1980). Thus, SMIs as opinion leaders can be conceptualized as semi-professional communicators, who range somewhere between friends and role models, which is why followers are more likely to trust their recommendations (Freberg et al., 2011; Stehr et al., 2015). So far, studies have shown that influencers are capable of affecting brand attitudes and purchase intentions, especially in the context of typical influencer topics, such as fashion and lifestyle (Casalo et al., 2018; Hudders et al., 2020). However, it remains unclear whether these effects translate to political information and thus to opinion formation and political activism in this context.

2.2. From Beauty Influence to Political Mobilization: Social Media Influencers as Change Agents?

Previous research on SMIs has mostly focused on the context of advertising and marketing (e.g., Enke & Borchers,

2019; Hudders et al., 2020; Schouten et al., 2019), involving topics such as fashion, lifestyle, or food (e.g., Qutteina et al., 2019; Wiedmann et al., 2010). Marketers have recognized the potential of influencers as a marketing tool due to their persuasiveness and trustworthiness as well as their strong connection to their audiences. In the context of brand endorsement, Durau (2022, p. 2012) refers to SMIs as change agents "who have the ability to shape and change their follower's behaviors with their content." In this study, we are interested in whether the impact of influencers also translates to political news, and thus, whether influencers are capable of impacting the political opinions of adolescents and young adults and, based on that, their political actions. In recent surveys of German adolescents and young adults, more than half reported using social media as a weekly news source, with about 25% indicating it is their main news source (Hölig & Behre, 2021; Medienpädagogischer Forschungsverbund Südwest, 2022). However, it remains unclear where social media stems from, what role influencers play in the dissemination of information, and how they can contribute to the political mobilization of members of this age group. Thus, in this study, we explore whether SMIs can also function as change agents in the political sphere, with the potential to mobilize young audiences.

In particular, we are interested in two sorts of influencers and their respective impacts: (a) political influencers, who we define as influencers that primarily focus on the dissemination of political and/or societally relevant information while having no or only a secondary commercial interest, and (b) "regular" influencers, who primarily focus on non-political topics (e.g., fashion, lifestyle, or travel) while also having a strong commercial interest. Regarding their content-related expertise on political topics, political influencers as monomorphic opinion leaders can be distinguished from regular influencers, who may nevertheless include political or societally relevant topics in their everyday communications about other topics with a more commercial focus (e.g., beauty or lifestyle). While it can be assumed that followers turn to the first group primarily for political information, followers of the second group might be exposed to political information incidentally, that is, "while they are not consciously looking for it" (Ahmadi & Wohn, 2018, p. 2; see also Kümpel, 2022). The question arises as to how followers evaluate this information and whether they perceive such polymorphic SMIs as credible sources of political information. We claim that incidental exposure to political and societally relevant topics through regular influencers could be important for adolescents and young adults, especially when they have no or little political interest. Several studies have shown that a majority of internet users come across news incidentally via social media, especially younger people (e.g., Hermida et al., 2012; Purcell et al., 2010; Swart et al., 2017).

The present study set out to investigate the role of SMIs in informing and mobilizing adolescents and young adults in the political context. Specifically, we were interested in how (often) adolescents and young adults come across political information in the context of SMI communication and how they perceive influencers' impact on themselves and others, especially in comparison to traditional sources, such as politicians or news. Three research questions guide our empirical approach:

RQ1: How do adolescents and young adults encounter political information through SMIs?

RQ2: What influence do they attribute to SMIs on themselves and others in the political sphere?

RQ3: What potential do SMIs have when it comes to the political mobilization of adolescents and young adults?

3. Methodological Approach

To answer our research questions, 12 qualitative, semi-standardized guided interviews were conducted with young people between the ages of 16 and 22 (see Table 1). To ensure the intersubjective comprehensibility of the study, a category-guided approach was adopted. The category system was deductively developed and operationalized in an interview guide, which was divided into the following different blocks: media usage in general and for political information, influencer usage and definition, the credibility of media and influencers, the perceived impact of influencers regarding politics on self and others, and general information.

For the recruitment of participants, a conscious selection was carried out based on theoretical criteria of age and gender while also aiming for some heterogeneity in terms of formal education. We chose an age range of 16 to 22 years because interviewees should be of voting age to examine the relevance of influencers for their political actions, such as voting decisions (it is possible to vote from the age of 16 in 11 of 16 German federal states; Kramliczek, 2020). Moreover, at this age, increased usage of influencers (e.g., Berg, 2017; Emde-Lachmund & Klimmt, 2018) as well as an incipient political interest can be expected (Müller, 2017). According to Lazarsfeld et al. (1944), many first-time voters do not yet have a consolidated political opinion, so a higher influencer impact on their political opinions and aligned political actions could be expected.

The initial search for potential participants was carried out by contacting young people on Instagram who had commented under an influencer's post and whose profiles showed their age. This recruitment method turned out to be very cumbersome, however, so we switched to recruiting via third party-contacts (Meyen et al., 2011, p. 75). We asked acquaintances to make suggestions for other participants based on the age range and the prerequisite of influencer usage. However, due to limited resources and time restraints, it was

Table 1. Interviewee outline.

Number	Alias	Sex	Age	Profession
1	Johanna	Female	16	Pupil
2	Sina	Female	17	Pupil
3	Anna	Female	18	Pupil
4	Lea	Female	19	Student
5	Hannah	Female	19	Student
6	Milena	Female	20	Student
7	Hilla	Female	22	Student
8	Tobi	Female	16	Pupil
9	Marco	Male	18	Apprentice
10	Emil	Male	19	Student
11	Benjamin	Male	21	Student
12	Michael	Male	21	Student

particularly difficult to recruit male respondents aged 16 to 17 as well as people with a lower level of formal education. Since this study aimed to obtain initial insights on youth's perceptions of political information disseminated by influencers, and due to the limited resources of the study, the goal was to conduct eight to 12 interviews. In practice, interviews were conducted until theoretical saturation was reached. We subsequently recruited more interviewees from the 18–19-year-old age group because their answers varied the most. Among other age groups, theoretical saturation was achieved faster.

Before we started the interview phase from the 23rd of October 2020 to the 6th of November 2020, we tested the interview guide (see Supplementary File) for comprehensibility and length. Before the interviews, the participants were briefed on how their data would be used and informed about the study's methodology. The interviews lasted between 25 and 45 minutes. The first two interviews could be held in person. The remaining ones were conducted via the online applications Zoom and Teams due to the contact restrictions imposed by the Covid-19 pandemic. The interviews were recorded, transcribed, pseudonymized, and then analyzed with the help of qualitative content analysis (Mayring, 2015), using a deductively formed and inductively adapted category system guided by the research questions and the theoretical framework (Mayring, 2015, p. 86; Meyen et al., 2011, p. 171). The analysis was conducted using a coding frame that was developed based on the category system to ensure a systematic approach (see Supplementary File; Mayring, 2015). This coding frame contained coding rules for each category with an example and was inductively adjusted during the coding process. The transcripts were analyzed using the software program MAXQDA. The semantic validity of the coding frame in terms of coding rules, category definitions, and anchor examples was checked by senior scientists. Construct validity was ensured due to the partly deductive creation of the coding rules (Mayring, 2015). Reliability was increased by altering ambiguous categories in the research process (Mayring, 2015), with the final coding round using all of the added categories. Since the content analysis was only conducted by one person, intercoder reliability did not have to be tested (Mayring, 2015). Based on the evaluation, a user typology was carried out according to Meyen et al. (2011). The criteria were developed based on the material and theoretical framework to structure the results and predict political mobilization potential. With this typology, every person could be matched with a user type according to the answers in the interview. In the first step, a table was made for every person, including their answers in the most important categories: political interest, political participation, influencer image, frequency of influencer usage, and information usage. In the second step, these categories were extended by our evaluation of each respondent regarding the perceived trustworthiness of influencers and the tendency to see influencers as digital opinion leaders and to form parasocial relationships with them (factors that are known to strengthen the potential impact of influencers on followers). In the third step, we looked for similarities between the interviewees regarding these criteria, which led to a distinction of four user types, which were named after the usage motives (see Table 2). This process was carried out several times to account for the heterogeneity of the material and to finally develop separable user types. After consolidating the types, the criteria of each type were used to determine their potential to be politically mobilized by influencers.

4. Results

4.1. Influencer Usage

The patterns of use give first indications of the potential opinion leadership and mobilization power SMIs have on adolescents and young adults. The reasons for following influencers vary greatly. The respondents follow influencers based on interest in the respective topic, for sympathy reasons, entertainment, or political information. Three interviewees expressed an intentional use of

influencers who voice political views and address topics that are socially and politically relevant. Further, as expected, some interviewees reported incidental exposure to political views by influencers who have no political focus but express political views or share political information nevertheless. This happened mostly during major societal events, such as the Covid-19 pandemic, when many influencers commented on the lockdown measures taken by the government. This unintended contact with political views and information shows a potential influence on followers that are not primarily interested in politics. In addition, it indicates polymorphic opinion leadership (Merton, 1949) on the part of the influencers that affects the interviewees with regard to multiple topics.

4.2. Political Opinion Formation and Opinion Leadership

When it comes to political information and opinion formation, the interviewees use influencers as complementary sources, while their primary sources of political information are mostly traditional mainstream media. Influencers become important for information about topics that are not covered by traditional news broadcasts but are deemed relevant for political opinion formation. In addition, the respondents consult influencers when they want to comprehend or evaluate information distributed by traditional media. For example, one interviewee uses influencers to make sense of political news from traditional outlets:

> To think about it for yourself, is this good or is this not so good, when you don't have so much information about it right now, I find it difficult. That's why I find it nice to hear from people with whom I know I always agree, why is this good now, why is this bad now? (I5)

All interviewees reported forming political opinions based on classic media sources because the information is verified and controlled. In the second step, they seem to follow influencers who align with their political views and help them make sense of political news and how to think and act upon it. Taken together, these cases show the great potential of SMIs' opinion leadership, such that influencers add to what adolescents and young adults learn from traditional news outlets and provide them with complexity reduction as well as orientation (Stehr et al., 2015). In this regard, some answers also point to the fact that influencers might have a substantial impact on how their followers think about a given political topic:

> When the news tells you about the new EU agricultural reform, you might think to yourself: "Okay, that sounds pretty good." And then I would have to start researching myself: Is it that good? What does it really say? And that takes an incredible amount of time. Then I look at Luisa Neubauer, and I know what she's doing is good and then she tells me: "This and this is stupid, that's why we don't want it." "Ah okay, then we don't want that." (I5)

Regarding the perceived impact of SMIs on the political beliefs of their audiences, the views of the respondents diverge. Political influencers are perceived as more competent and reliable when it comes to political information than regular influencers. In particular, the political information they provide is viewed as more trustworthy and neutral if the respondents believe their primary focus is on the dissemination and discussion of political and societally relevant information and not on promoting products. Nearly all the interviewees agreed that influencers are more credible if they present reliable information that is backed up by sources. Further attributes identified in prior research that play a role in the perceived credibility of influencers are likability, identification, similar interests, the relevance of information, as well as similar political opinions (Casalo et al., 2018; Cohen, 2001; Duckwitz, 2019; Hovland et al., 1953). Additionally, seriousness and expertise, authenticity, charisma, and consistency in the influencer's way of communicating are important to the respondents. An example to which some interviewees referred is a video on YouTube by German political influencer Rezo in which he criticizes the German party CDU, the ruling party at that time (Rezo, 2019). The video was published right before the 2019 European elections and was the most-viewed YouTube video in Germany that year. The respondents expressed the importance of consistent communication by influencers regarding political information, suggesting that monomorphic opinion leaders are deemed more reliable when it comes to political information. The interviewees believed that influencers' effect on political opinions is stronger when the audience anticipates serious content and substantial knowledge about it, which is the case for political influencers rather than regular influencers.

4.3. Mobilization Potential

Next, we consider the political mobilization potential of influencers on the interviewed adolescents and young adults. In particular, we were interested in how they estimated the impact of influencers on their and others' voting intentions. Regarding perceived influence on others, most of the respondents indicated that younger users are especially influenced in their political opinion formation and voting decisions since they represent the largest user group of influencers. The interviewees claimed that sympathy and identification with influencers as well as the perception of influencers as role models account for this high level of impact at such a young age. Further, people who mainly inform themselves with the help of SMIs judge themselves to be particularly susceptible to being politically mobilized since they form a one-sided and less objective political opinion. All the participants estimated that the strongest

effect of influencers was on an age group that did not include their age (either younger or older). This suggests a third-person effect (Davison, 1983), and this finding should be examined further in follow-up studies.

Looking at mobilization potential, the interviewees indicated that the influencers' political mobilization power is indirect because the respondents frequently have consolidated political opinions of their own. Depending on the area of interest of the recipients, political opinions conveyed by influencers are perceived positively or negatively. People who are interested in politics and enjoy political information also enjoy being informed by influencers, but mostly on issues that agree with their own opinions. In this regard, one respondent stressed that the mobilization potential of influencers is higher for users who are particularly engaged in politics. In line with research on classical opinion leadership (Lazarsfeld et al., 1944), influencers are thus perceived to strengthen rather than modify their young followers' political opinions and voting intentions. One respondent noted this influence in discussions about subjects related to their interests and political views:

> As I said, if the political orientation is similar. When the topics are close to one's heart. If you have already read similar information that is taken up again. Then, of course, that confirms your own orientation in the first place. But also the feeling that you can trust this person. Yes, so often these influencers are feminists themselves. That's why I always take everything seriously that is addressed there. Which is also related to the fact that I find them credible. (I7)

This influence is perceived as stronger if there is continuous exposure to the influencer and his or her political opinion. Thus, it seems that acceptance of the influencer's opinion and trust is built over a longer period. One respondent pointed out that algorithms also play a role in the mobilization force of influencers since they can intensify the amount of content a follower is exposed to by an influencer: The more one consumes an influencer's content, the more the algorithm displays this influencer's content in the follower's feed. In addition, influencers covering topics like environmental protection are judged to have a higher influence on voting decisions, as this topic is of high relevance for young people.

Even though the interviewees mainly use traditional media as a primary source of political information, there is some evidence that some of them also explicitly use influencers to make voting decisions. For example, I1 stated that she strongly relies on information provided by the German YouTube vlogger MrWissen2Go in making her voting decisions. In addition, she pointed out that she sometimes finds it difficult to distinguish between professional media and influencers, as professional media outlets, especially those targeting a young audience (the YouTube vlogger MrWissen2Go belongs to the public broadcasting service ZDF), often collaborate with influencers who discuss social and political issues. As an example, she mentioned the Instagram channel Funk, which belongs to the public broadcasting service in Germany. This could point to a larger issue for young people when it comes to judging the credibility of a source.

As discussed in the previous subsection, the political influencer Rezo (2019) can be identified as an example of an influencer with mobilization power. His video was published right before the European elections and influenced respondents with its well-founded statements based on reliable sources. It went viral and gained considerable media attention, causing other influencers to release supporting statements (Peters, 2019). One interviewee, who was not yet eligible to vote in the 2019 European elections, stated that, after seeing this video, "the CDU would have been out of the question for me." Another interviewee said that the video had influenced her, although it only strengthened her political opinion. Some interviewees stated the video was only one factor in their decision to vote in the 2019 European elections, along with information about the parties, reports in the traditional media, conversations with their families, and their political preconceptions.

In summary, the interviews suggested that the impact of influencers varies greatly among individuals. While there is some evidence that their messages can be decisive for some, in general, we found their impact to have an amplifying nature. Their perceived impact also depends on classical opinion leader characteristics, such as expertise and knowledge, likability, credibility, and matching political views.

4.4. User Types

Based on the findings described above, we identified four different user types whose political ideas and voting choices are affected by influencers to varying degrees: the Politics Enthusiast, the Versatile Interested, the Entertainment Seeker, and the Commercial User (see Table 2).

A political influencer has the largest impact on the opinions of young users who are engaged in politics and use political influencers intentionally. These would be the Politics Enthusiast and the Versatile Interested types. However, the latter is only somewhat influenced by the subjects the influencer discusses in terms of political views and opinions. In the few instances when regular influencers discuss politics, Entertainment Seekers may be persuaded to change their political views as well. The Commercial User is more influenced by product recommendations because these are the kinds of topics discussed by the regular SMIs the Commercial User follows.

The Politics Enthusiasts and the Versatile Interested type have the highest mobilization potential since they are influenced regarding their political views and voting choices. For the former, this impact seems to amplify

Table 2. User types and their characteristics.

	User types			
Characteristics	The Politics Enthusiast	The Versatile Interested	The Entertainment Seeker	The Commercial User
Interviewee	I5 and I7	I2, I3, and I10	I1, I8, I9, and I12	I4, I6, and I11
Political interest	Very high	High	Medium	Medium
Intended usage of influencers	Political Information	Information and inspiration	Diversion and entertainment	Tips and recommendations
Image of influencers	Influence and information of their audience, political and non-political	Information and influence on certain topic areas	Certain purposes, like the entertainment of an audience	Brand ambassador and product marketing
Information usage	Traditional media and SMIs complementary	Traditional media and online media; usage of SMIs possible	Traditional media and online media	Traditional media
Digital opinion leadership	Existent	Existent in the used subject area; potential for political SMIs	Possible in the rare usage of political SMIs	Not possible, only for product recommendations
Trustworthiness	High	High for perceived expertise	High for perceived expertise	Low; higher for sympathy and identification
Political mobilization potential	High; SMI with similar political opinions are used	Medium; high for the reception of well-founded information	Low; existent for rare usage of political SMIs with expertise	Very low; rare confrontation with political SMI

rather than change their political views, whereas, for the latter, influencers can help to make sense of political information and thus influence them in a certain direction. For both types, political influencers function as political opinion leaders who are attributed with expert knowledge and credibility.

In the few instances when regular influencers discuss politics, Entertainment Seekers may be persuaded to change their political views as well. However, these users mainly follow influencers for entertainment reasons, so political mobilization is rather unlikely. The same is true for Commercial Users, who seem to be more focused and thus more persuaded by product recommendations than political content.

5. Discussion

The current study set out to explore the potential of SMIs in relation to the political socialization and mobilization of young audiences. Through 12 qualitative interviews, we investigated the perceived impact of both political and regular influencers on political opinion formation and political actions, such as voting intention. Our aim thus was to look not only at the intentional use of SMIs but also at incidental exposure to news and political information through regular influencers who take a stand on political issues. In this regard, our findings point to the fact that the role of political influencers should not be underestimated. It is important to note that our data were collected in 2020, and since then, several studies on the relevance of SMIs for political action have been published. While it would have been awkward to use these studies for theoretical reasoning, we will refer to them to discuss our findings in light of the current state of research.

Regarding the use of political influencers, Knupfer et al. (2023) showed that active engagement with "greenfluencers" (SMIs with a special focus on sustainability and environmental awareness) is positively related to different forms of environmental activism for German adolescents. However, due to the use of cross-sectional data, it remained unclear whether engagement with these influencers can increase such activities or whether adolescents already engaging in such activities are more likely to also follow greenfluencers. Our results point to the latter, as political influencers are predominantly used by those who are already politically interested. In line with quantitative surveys, our results further confirm that traditional media sources, such as quality (online) news outlets, are still judged as more trustworthy for political information

by young audiences, and political influencers are used as a supplementary source that helps them make sense of this complex information (Hasebrink et al., 2021; Hölig & Behre, 2021). Thus, their impact seems to be limited when it comes to opinion change. Further, most of the interviewees reported following influencers who disseminate political or societally relevant information only when their general political view aligns with their own. In such cases, the impact of these influencers on oneself and others is evaluated as positive, while influencers holding other political opinions are viewed negatively. This confirms experimental findings by Naderer (2023), who found that perceived similarity with the influencer on political topics predicted the intention to take political action. In this context, and in line with prior research on public opinion leaders, influencers seem to be capable of reinforcing rather than changing the audience's attitudes and behaviors. However, some answers also indicated a rather strong impact of influencers on their followers, especially on younger or undecided ones. The fact that influencers take a stand on topics provided by legacy media in a more neutral way can lead followers to form opinions and take action based on the influencers' evaluation of a given topic. It is important to note that while the stimulation of political action might initially seem positive, it can also have detrimental consequences (for example, the spread of conspiracy theories and extremist views; Riedl et al., 2021).

In addition, our results indicate that most political influencers as monomorphic opinion leaders who focus primarily on political information are judged as credible sources for political guidance. Meanwhile, regular influencers who take a stance on political or societally relevant topics only occasionally were viewed as less credible and judged to lack the knowledge to present such topics reliably. Here, our findings are consistent with those of Naderer (2023), who reported that such "unlikely" sources of political information might still stimulate political action when there is a fit between one's views and those of the influencer. Similarly, Knupfer et al. (2023) showed that a parasocial relationship with influencers seems to be important for fostering political action for individuals with little or no political interest (see also Schmuck et al., 2022).

Certainly, this study has some limitations. First, our results are based on 12 interviews with adolescents and young adults in Germany, which limits the generalizability of our findings, as we can only make assumptions within the national context of Germany. Most recent studies on this topic have also focused on young Germans (e.g., Knupfer et al., 2023; Schmuck et al., 2022), so cross-national comparisons regarding influencers' impact in different countries with divergent political systems would be helpful to broaden the results. Second, due to limited resources, we were not able to conduct substantially more interviews, and thus we could not employ more quotation criteria (e.g., regional variety or political orientation). Regarding our user typology, we are confident that the four identified types are generalizable since all are based on several cases, but we cannot exclude the possibility that a larger sample would yield additional and more refined user types. Since we recruited via third-party contacts in our environment, we predominantly reached people over the age of 18 with a higher level of education. However, the interviews revealed a broad range of answers regarding political interest and the use of influencers, so we are confident that our results and user types provide a coherent picture. Our results also match those of other studies (e.g., Hasebrink et al., 2021), which found that adolescents and young adults judge legacy media as more important sources of political information and opinion formation. However, interviewing younger people and people with a lower level of education could offer even more detailed and nuanced insights into the mobilization potential of influencers. Another important aspect to note is that our interviews took place during the Covid-19 pandemic, which represents a special case, particularly with regard to how and how often regular influencers included political topics within their stories. Thus, this could have led to a higher level of incidental exposure to political content through regular influencers compared to other times. It might be assumed that the role of regular influencers in sharing political information becomes more important in the context of specific events (e.g., the Russian aggression on Ukraine), which could be further investigated, for example, through content analyses.

The empirical approach based on qualitative interviews allowed us to dig deep into young audiences' perceptions and evaluations of the political impact and mobilization potential of SMIs, but it did not allow us to capture the actual effect influencers have on adolescents and young adults, even though our results are largely in line with newer quantitative and experimental studies (e.g., Knupfer et al., 2023; Naderer, 2023; Schmuck et al., 2022). Especially regarding the dissemination of political messages by regular influencers, it would be fruitful for follow-up studies to investigate whether their credibility and impact in this area are as limited as suggested by our interviews or if these results can also be partly attributed to social desirability. Further, we did not define the different types of influencers for the interviewees but instead asked them for their assessments of what constitutes an influencer in general and a political influencer in particular. Hence, the influencer definitions differed between the interviewees, which could have led to differences in their evaluations of the perceived impact of the influencer types. This is an ongoing issue that should be kept in mind when researching influencers since the platforms and platform actors change rapidly. Accordingly, future studies should pay special attention to who can be defined as a political influencer, what kind of political information is disseminated, and how it is perceived by audiences. For instance, Suuronen et al. (2022) showed that while only a small minority of Finnish influencers reported talking about formal politics, a majority

engages in lifestyle-related, societally relevant political topics, such as health and nutrition. In addition, as Riedl et al. (2021) pointed out, most political influencers also engage in the promotion of commercial products, which might reduce their credibility as political agents.

Taken together, considering the current state of research, our findings have several implications both for influencer communication as well as for political communication in general. First, political influencers may affect young people's political ideas as digital opinion leaders because young people perceive them as capable of disseminating information in addition to traditional media. Even respondents who do not follow political influencers can be persuaded by their content if they see something that strikes them as important and credible, such as the video by the influencer Rezo before the European election in 2019. Second, traditional media are still the primary trusted source of political information, but social media in general, and (political) influencers in particular, seem to play a role in orientation and opinion formation when it comes to the evaluation of the information provided by news outlets. In this regard, one's political views and interests play a role in the usage of influencers to form political opinions and actions. Thus, the political mobilization of young audiences through SMIs is possible but varies among individuals. Mobilization factors include the usage of social media as the main information source, the algorithm of the social media platform, and the political interests of the respondent. Further, the mobilization power of influencers depends on their credibility and the usage motives of their followers. Third, influencers, in general, may be especially powerful in disseminating what Suuronen et al. (2022) called lifestyle-related politics: personally experienced topics of general interest for society, such as nutrition, health behavior, or sustainable lifestyles. Riedl et al. (2021) argued that influencers' power as social agents lies in the way they present political topics: "Despite meaningful content, political influencers still focus on a casual, down-to-earth appearance to maintain high credibility among their followers. In that sense, political influencers make politics look easy." While this might initially seem like a good thing, a current study by Schmuck et al. (2022) suggests that the "simplification of politics" can be a double-edged sword, as it can not only spark political interest but also foster political cynicism. Thus, future research needs to focus on boundary conditions that could explain when adolescents and young adults might benefit from political communication through SMIs and how literacy programs can address this new form of political communication.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author.

References

Ahmadi, M., & Wohn, D. Y. (2018). The antecedents of incidental news exposure on social media. *Social Media & Society*, *4*(2). https://doi.org/10.1177/2056305118772827

Berg, A. (2017). *Kinder und Jugend in der digitalen Welt* [Children and adolescents in the digital world]. Bitkom. https://www.bitkom.org/Presse/Anhaenge-an-PIs/2017/05-Mai/170512-Bitkom-PK-Kinder-und-Jugend-2017.pdf

Byrne, E., Kearney, J., & MacEvilly, C. (2017). The role of influencer marketing and social influencers in public health. *Proceedings of the Nutrition Society*, *76*(3), 21–23. https://doi.org/10.1017/S0029665117001768

Casalo, L. V., Flavian, C., & Ibanez-Sanchez, S. (2018). Influencers on Instagram: Antecedents and consequences of opinion leadership. *Journal of Business Research*, *117*, 510–519. https://doi.org/10.1016/j.jbusres.2018.07.005

Chwialkowska, A. (2019). How sustainability influencers drive green lifestyle adoption on social media: The process of green lifestyle adoption explained through the lenses of the minority influence model and social learning theory. *Management of Sustainable Development*, *11*(1), 33–42.

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, *4*(3), 245–264. https://doi.org/10.1207/S15327825MCS0403_01

Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly*, *47*(1), 1–15. https://doi.org/10.1086/268763

Duckwitz, A. (2019). *Influencer als digitale Meinungsführer: Wie Influencer in sozialen Medien den politischen Diskurs beeinflussen—und welche Folgen das für die demokratische Öffentlichkeit hat* [Influencers as digital opinion leaders: How influencers in social media influence political discourse—And what consequences this has for the democratic public sphere]. Friedrich-Ebert-Stiftung.

Durau, J. (2022). The relevance of social media and corporate influencers as potential change agents in corporate communications. In M. Karmasin, S. Diehl, & I. Koinig (Eds.), *Media and change management* (pp. 211–229). Springer. https://doi.org/10.1007/978-3-030-86680-8_12

Emde-Lachmund, K., & Klimmt, C. (2018). News consumption around age 14: A typology of adolescents' preferred media, topics, and outcome expectations. In R. Kühne, S. Baumgartner, T. Koch, & L. Hofer (Eds.), *Youth and media: Current perspectives on media use and effects* (pp. 97–113). Nomos. https://doi.org/10.5771/9783845280455

Enke, N., & Borchers, N. S. (2019). Social media influencers in strategic communication: A conceptual framework for strategic social media influencer communication. *International Journal of Strategic Communication*, *13*(4), 261–277. https://doi.org/10.1080/1553118X.2019.1620234

Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, *37*, 90–92. https://doi.org/10.1016/j.pubrev.2010.11.001

Grenny, J., Patterson, K., Maxfield, D., McMillan, R., & Switzler, A. (2013). *Influencer: The new science of leading change*. McGraw-Hill.

Hasebrink, U., Hölig, S., & Wunderlich, L. (2021). *#UseTheNews: Studie zur Nachrichtenkompetenz Jugendlicher und junger Erwachsener in der digitalen Medienwelt* [#UseTheNews: Study on the news literacy of adolescents and young adults in the digital media world] (Working Paper No. 55). Hans-Bredow-Institut. https://doi.org/10.21241/ssoar.72822

Hermida, A., Fletcher, F., Korell, D., & Logan, D. (2012). Share, like, recommend: Decoding the social media news consumer. *Journalism Studies*, *13*(5/6), 815–824. https://doi.org/1080/1461670X.2012.664430

Hölig, S., & Behre, J. (2021). Aktuelle Entwicklungen bei der Nachrichtennutzung in Deutschland: Befunde aus dem Reuters Institute Digital News Survey 2021 [Current developments in news usage in Germany: Findings from the Reuters Institute Digital News Survey 2021]. *Media Perspektiven*, *11*, 575–587.

Hovland, C. I., Irving, L. J., & Kelley, H. (1953). *Communication and persuasion: Psychological studies of opinion change*. Yale University Press.

Hudders, L., De Jans, S., & De Veirman, M. (2020). The commercialization of social media stars: A literature review and conceptual framework on the strategic use of social media influencers. *International Journal of Advertising*, *40*(3), 327–375. https://doi.org/10.1080/02650487.2020.1836925

Katz, E. (1957). The two-step flow of communication: An up-to-date report on an hypothesis. *Public Opinion Quarterly*, *21*(1), 61–78. https://doi.org/10.1086/266687

Knupfer, H., Neureiter, A., & Matthes, J. (2023). From social media diet to public riot? Engagement with "greenfluencers" and young social media users' environmental activism. *Computers in Human Behavior*, *139*, Article 107527. https://doi.org/10.1016/j.chb.2022.107527

Kramliczek, P. (2020, February 14). Wählen mit 16? Nicht in Bayern! [Voting with 16? Not in Bavaria!]. *BR*. https://www.br.de/nachrichten/bayern/waehlen-mit-16-nicht-in-bayern,RqUIdOY

Kümpel, A. S. (2022). Social media information environments and their implications for the uses and effects of news: The PINGS framework. *Communication Theory*, *32*(2), 223–242. https://doi.org/10.1093/ct/qtab012

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1944). *The people's choice: How the voter makes up his mind in a presidential campaign*. Duell, Sloan and Pearce.

Lowe-Calverley, E., & Grieve, R. (2021). Do the metrics matter? An experimental investigation of Instagram influencer effects on mood and body dissatisfaction. *Body Image*, *36*, 1–4. https://doi.org/10.1016/j.bodyim.2020.10.003

Mayring, P. (2015). *Qualitative Inhaltsanalyse: Grundlagen und Techniken* [Qualitative content analysis: Basics and techniques] (12th ed.). Beltz Verlagsgruppe.

Medienpädagogischer Forschungsverbund Südwest. (2022). *JIM-Studie 2022—Jugend, Information, Medien: Basisuntersuchung zum Medienumgang 12–19-Jähriger* [JIM study 2022—Youth, information, media: Basic study on media use by 12–19 year olds]. https://www.mpfs.de/fileadmin/files/Studien/JIM/2022/JIM_2022_Web_final.pdf

Merton, R. (1949). Patterns of influence: A study of interpersonal influence and of communication behaviour in a local community. In P. F. Lazarsfeld & N. Stanton (Eds.), *Communication research* (pp. 180–219). Duell, Sloan and Pearce.

Meyen, M., Löblich, M., Pfaff-Rüdiger, S., & Riesmeyer, C. (2011). *Qualitative Forschung in der Kommunikationswissenschaft: Eine praxisorientierte Einführung* [Qualitative research in communication studies: A practice-oriented introduction]. Springer.

Müller, P. (2017). *Social media und Wissensklüfte: Nachrichtennutzung und politische Informiertheit junger Menschen* [Social media and knowledge gaps: News usage and political informedness of young people]. Springer. https://doi.org/10.1007/978-3-658-23158-3

Naderer, B. (2023). Influencers as political agents? The potential of an unlikely source to motivate political action. *Communications*, *48*(1), 93–111. https://doi.org/10.1515/commun-2021-0006

Naderer, B., Peter, C., & Karsay, K. (2022). This picture does not portray reality: Developing and testing a disclaimer for digitally enhanced pictures on social media appropriate for Austrian tweens and teens. *Journal of Children and Media*, *16*(2), 149–167. https://doi.org/10.1080/17482798.2021.1938619

Peters, B. (2019, May 24). Nein zur CDU, nein zur SPD—70 Youtuber stellen sich hinter Rezo [No to CDU, no to SPD—70 Youtubers get behind Rezo]. *Süd-*

deutsche Zeitung. https://www.sueddeutsche.de/politik/rezo-video-youtuber-1.4462172

Purcell, K., Rainie, L., Mitchell, A., Rosenstiel, T., & Olmstead, K. (2010). *Understanding the participatory news consumer*. Pew Research Center. https://www.pewresearch.org/internet/2010/03/01/understanding-the-participatory-news-consumer

Qutteina, Y., Hallez, L., Mennes, N., De Backer, C., & Smits, T. (2019). What do adolescents see on social media? A diary study of food marketing images on social media. *Frontiers in Psychology*, *10*, Article 2637. https://doi.org/10.3389/fpsyg.2019.02637

Rezo. (2019, May 18). *Die Zerstörung der CDU* [The destruction of the CDU] [Video]. YouTube. https://www.youtube.com/watch?v=4Y1lZQsyuSQ&pbjreload=101

Richmond, V. P. (1980). Monomorphic and polymorphic opinion leadership within a relatively closed communication system. *Human Communication Research*, *6*, 111–116. https://doi.org/10.1111/j.1468-2958.1980.tb00131.x

Riedl, M., Schwemmer, C., Ziewiecki, S., & Ross, L. M. (2021). The rise of political influencers—Perspectives on a trend towards meaningful content. *Frontiers in Communication*, *6*, Article 752656. https://doi.org/10.3389/fcomm.2021.752656

Schach, A. (2018). Botschafter, blogger, influencer: Eine definitorische Einordnung aus der Perspektive der Public Relations [Ambassadors, bloggers, influencers: A definitional classification from a public relations perspective]. In A. Schach & T. Lommatsch (Eds.), *Influencer relations* (pp. 24–47). Springer.

Schmuck, D., Hirsch, M., Stevic, A., & Matthes, J. (2022). Politics—Simply explained? How influencers affect youth's perceived simplification of politics, political cynicism, and political interest. *The International Journal of Press/Politics*, *27*(3), 738–762. https://doi.org/10.1177/19401612221088987

Schouten, A. P., Janssen, L., & Verspaget, M. (2019). Celebrity vs. influencer endorsements in advertising: The role of identification, credibility, and product–endorser fit. *International Journal of Advertising*, *39*(2), 258–281. https://doi.org/10.1080/02650487.2019.1634898

Senft, T. M. (2008). *Camgirls: Celebrity and community in the age of social networks*. Peter Lang.

Stehr, P., Rössler, P., Leißner, L., & Schönhardt, F. (2015). Parasocial opinion leadership media personalities' influence within parasocial relations: Theoretical conceptualization and preliminary results. *International Journal of Communication*, *9*, 982–1001. https://doi.org/1932–8036/20150005

Suuronen, A., Reinikainen, H., Borchers, N. S., & Strandberg, K. (2022). When social media influencers go political: An exploratory analysis on the emergence of political topics among Finnish influencers. *Javnost—The Public*, *29*(3), 301–317. https://doi.org/10.1080/13183222.2021.1983367

Swart, J., Peters, C., & Broersma, M. (2017). Navigating cross-media news use: Media repertoires and the value of news in everyday life. *Journalism Studies*, *18*(11), 1343–1362. https://doi.org/10.1080/1461670X.2015.1129285

Verduyn, P., Ybarra, O., Résibois, M., Jonides, J., & Kross, E. (2017). Do social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review*, *11*(1), 274–302. https://doi.org/10.1111/sipr.12033

We Are Social, Hootsuite, & DataReportal. (2023). *Anzahl der Social-Media-Nutzer weltweit in den Jahren 2012 bis 2023 (in Milliarden)* [Number of social media users worldwide from 2012 to 2023 (in billions)]. Statista. https://de.statista.com/statistik/daten/studie/739881/umfrage/monatlich-aktive-social-media-nutzer-weltweit

Wiedmann, K.-P., Hennigs, N., & Langner, S. (2010). Spreading the word of fashion: Identifying social Influencers in fashion marketing. *Journal of Global Fashion Marketing*, *1*(3), 142–153. https://doi.org/10.1080/20932685.2010.10593066

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Article

Are Online Political Influencers Accelerating Democratic Deconsolidation?

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Abstract
Social media campaigning is increasingly linked with anti-democratic outcomes, with concerns to date centring on paid adverts, rather than organic content produced by a new set of online political influencers. This study systematically compares voter exposure to these new campaign actors with candidate-sponsored ads, as well as established and alternative news sources during the US 2020 presidential election. Specifically, we examine how far higher exposure to these sources is linked with key trends identified in the democratic deconsolidation thesis. We use data from a national YouGov survey designed to measure digital campaign exposure to test our hypotheses. Findings show that while higher exposure to online political influencers is linked to more extremist opinions, followers are not disengaging from conventional politics. Exposure to paid political ads, however, is confirmed as a potential source of growing distrust in political institutions.

Keywords
democratic deconsolidation; digital campaigning; micro-influencers; online election; online influencers; social media

Issue
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1. Introduction

Views about the direction of digital democracy and indeed democratic regimes more generally have taken an increasingly negative and even dystopian turn in recent years (Foa & Mounk, 2019; Persily, 2017). As talk of decline has intensified, discussion around the emergence of a new type of political actor—the online influencer—has increased. These actors are seen as important alternative voices in the political debate, feeding news and information that often runs counter to conventional political narratives to their large networks of followers. While several studies have linked the growth of online political influencers (OPIs) to the rising tide of voter disaffection and polarisation, the evidence also shows they may be helping to counter such trends by increasing participation, particularly among disengaged citizens. This article advances this debate by profiling the political attitudes and behaviours of OPIs followers in the US 2020 presidential election campaign using original online survey data. Specifically, we look at whether higher exposure to OPIs content is associated with key indicators of democratic deconsolidation and decline, or conversely a more engaged and mobilized audience. We use the results to speculate on their longer-term political consequences.

2. Literature Review

To better understand the implications of OPIs for representative democracy we integrate three relevant fields of research. Firstly, we locate OPIs within a broader discussion of the internet's impact on democracy. We then review the work on OPIs themselves and attempt to define them and their political impact. Finally, we outline the democratic deconsolidation thesis and how the findings from current OPIs studies track against its core arguments.

2.1. The Internet and Political Participation

The arrival of the internet as a mass medium in the early 1990s prompted speculation about its potential to revitalize democracy (Rheingold, 1993). A meta-analysis of the first decade of findings on the topic by Boulianne (2009) provided a very modest endorsement with positive effects seen as increasing over time and online news consumption identified as the key stimulus to higher political engagement. The arrival of Web 2.0 Tools prompted a new wave of hopes for "e-participation" as new online exclusive activities such as blogging and virally sharing political content took off, particularly among younger cohorts (Gil de Zúñiga et al., 2010). Boulianne's (2015) follow-up review article revealed that social media continued the pattern of modest mobilizing effects, particularly concerning informal modes of engagement. Oser and Boulianne's (2020) recent meta-analysis of studies of digital media use and participation, however, proved more sceptical of the internet's capacity to mobilize citizens in terms of moving the politically inactive to engage in the political process. Focusing only on studies using panel data the authors found that positive effects were concentrated largely among those already engaged, with any increases in participation therefore reinforcing rather than eroding existing representational bias.

At the macro level, serious questions about the democratizing effect of the internet gathered steam following the Cambridge Analytica scandal of 2016 and the election of Donald Trump (Persily, 2017). Attention increasingly focused on the use of manipulative micro-targeting practices by rogue domestic and foreign actors although not all scholars were convinced of the power of these techniques (Baldwin-Philippi, 2017). In the absence of a new meta-review of studies since 2016, it does appear the jury is out as to whether scholars' worst fears are being realised. Some studies continue to reach positive conclusions about the relationship between digital media use and engagement, particularly regarding informal participation among younger citizens (Ida et al., 2020; Lin & Chiang, 2017; Ohme, 2019). However, others report negative effects on voter turnout and exclusion as campaigns increase their reliance on digital data and related micro-targeting techniques (Endres & Kelly, 2018; Kim et al., 2018). Analysis of the 2016 US presidential election, in particular, presented a disturbing picture of how social media was used to disseminate false information to the electorate and polarize the debate (Allcott & Gentzkow, 2017). The expansion of a more extremist political discourse since that election and its shift out of public forums such as Twitter into sub-cultures such as 4Chan and 8Chan has only served to heighten fears about the subversive impact of these new technologies (Benkler et al., 2018).

2.2. The Growth of Political Influencers

Arguments associating the internet and particularly social media use with democratic decline have been accompanied by an increasing number of studies pointing to the growth of a range of new influential political actors. These so-called OPIs or "micro-celebrities" are emerging as important alternative sources of information and cues for voters in recent elections (Riedl et al., 2021). While there is no commonly accepted definition of an OPI, most accounts focus on their informal or quasi-official status vis-a-vis more established campaign actors. For Fischer et al. (2022, p. 259), political influencers "neither represent established professional news media nor political parties," leaving their activities largely unregulated. For others, the line is more blurred with some studies considering elected politicians such as Trump, Bolsonaro, Salvini, and Modi as OPIs based on their overt criticism of, and distance from mainstream politics (Casero-Ripollés, 2021; Starita & Trillò, 2022). Shmargad (2022) brings some helpful clarity to this question by using the prior work of Wheeler (2013) that distinguished celebrity politicians from politicised celebrities to separate "influential politicians" from "politicised influencers." While the latter may have a strong ideological outlook, they typically lack a formal partisan affiliation. In addition, the latter are also more likely to retweet the posts of the former, and they receive a very high number of retweets. Taking an even longer view on the question of what constitutes an influencer, scholars have returned to post-war work on two-step flow communication to identify a newer form of online "opinion leaders" (Naderer, 2023). Although similarly pivotal in the communication chain to their pre-digital counterparts, these new leaders are less likely to derive authority from their "real world" social status and direct networks. Instead, they rely on more specialist expertise to build extensive online networks through which they exert indirect influence.

In addition to a lack of precision in identifying who political influencers are, the extent, and nature of their impact on elections and society remains unclear. Numerous studies have presented them as key actors in the spread of misinformation, extremist views, and voter polarization (Dash et al., 2022; Lewis, 2018; Veilleux-Lepage et al., 2022). The 2018 Brazilian presidential election in particular was seen as an occasion in which OPIs defined as "internet personalities and 'public' people" involved in the campaign on Twitter played a key role in stoking a hyper-partisan debate and spreading disinformation, particularly among far-right users (Soares & Recuero, 2021, p. 5). Outside of the electoral context, they are also attributed with playing a significant role in fuelling conspiracy theories around Covid-19 and government vaccine programmes (Darius & Urquhart, 2021; Hiaeshutter-Rice et al., 2021). Finally, on the anti-democratic scorecard, OPIs have also served as useful tools for authoritarian regimes to surreptitiously counter and control anti-government narratives (Tan, 2020)

Other studies have presented OPIs role in a more positive light, showing how they have helped to fight

back against the flow of divisive narratives by promoting more credible sources that inform public discussion and increase political engagement (Allgaier, 2020; Peres-Neto, 2022). Early prototypes of OPIs are seen to have played a critical role in mobilizing global pro-democracy protests such as those that took place in the Arab world over a decade ago (Ayish, 2020). Questions have also been raised about the extent to which they are dominated by extreme right-wing views. Alexandre et al. (2022) analysis of Twitter debates in the first month of Trump's presidency concluded that the most prominent voices were those of established left-wing journalists and news outlets. Work by Park et al. (2015) around the same time in South Korea also identified a clear liberal bias in the following for OPIs. In addition, while they may inject a more emotive and cynical tone into political debates, studies in European and particularly Scandinavian democracies have concluded this can bring a broader and more diverse audience into the public discussion (Ödmark, 2021). Whether this variance in OPI orientation is temporal or contextual is an interesting unaddressed question in this literature. While it may be that the ideological outlook of OPIs has shifted rightward over time, it may also be contextually determined with newer and less stable democracies giving rise to more populist and radical right-wing OPIs, while established regimes enjoy more of a mix that alternates in line with the governing ideology.

To date systematic evidence regarding the negative or positive effects of OPIs is limited. At the micro-level, in terms of individuals' political attitudes and engagement, the picture is particularly sparse and somewhat ambiguous. Early work by Park et al. (2015) on followers of OPIs in South Korea found they consumed a more limited range of news sources and had low levels of political knowledge. Work by Dekoninck and Schmuck (2022) on the impact of political influencers during recent national elections in Austria using a two-wave panel, however, found they had a positive effect on followers' online participation, which they argued (but did not test) was likely to extend to offline participation in a "gateway" manner. Naderer's (2023) experimental research, again in Austria, found that social media influencers who typically did not post about politics had a stronger mobilizing effect on followers when they did so, particularly among those with lower levels of political interest. Similarly, work by Schmuck et al. (2022) in Germany using survey panel data presented a qualified "yes" to the question of whether influencer exposure increased young people's levels of engagement in politics. While OPI content did appear to simplify perceptions of politics among this group this was found to have both beneficial and detrimental outcomes in that it increased their interest in key issues but also led them to become more cynical on certain topics. In behavioural terms, Shmargad's (2022) study of OPIs in the 2016 US congressional elections concluded they had helped prompt turnout, particularly for those who were less well-known and resourced.

In addition to a lack of definitional agreement on what an OPI is, and its effects, considerable variance exists in the methods used to detect them and interpret their core message. Some scholars combine rich contextual knowledge with qualitative methods to pre-select high-profile accounts (Peres-Neto, 2022; Veilleux-Lepage et al., 2022). Others adopt a range of objective measures drawn from reputational surveys of experts and platform users (Ryu & Han, 2021; Schmuck et al., 2022) or automated computational methods. The latter can range from simple follower-based metrics (Dash et al., 2022) to more in-depth social network and algorithmic analysis of a relevant retweet database to expose those "nodes" or accounts that are deemed most influential (Acharoui et al., 2020; Shmargad, 2022). While measures of centrality are most commonly relied on to signal influence, conventional "link-based" metrics to identify political influencers have been questioned, with more nuanced measures around the quality of messages and interactions seen as more useful (Dubois & Gaffney, 2014). If an inductive or data-driven approach is taken, a mixed method approach that combines these techniques with a more qualitative analysis of accounts and the content of messages is regarded as important, particularly if one seeks to understand how these actors gain their visibility (Soares & Recuero, 2021).

2.3. Online Political Influencers and the Deconsolidation of Democracy

The preceding review has shown how the two main theories of internet effects—mobilization and reinforcement—proceed from the understanding that digital technology has a positive effect on democratic participation, although they reach different conclusions about the benefits of this at the macro level. Since the middle of the last decade, both the optimist and realist view of the gains delivered by society's increasing use of online technology has come under pressure from a more pessimistic scenario that links digital and particularly social media communication with declining political engagement and a rise in support for extremist views. This shift in perspective links, in turn, to a broader negative pivot in the democracy literature, with scholars warning we are entering a period of "democratic deconsolidation" (Foa & Mounk, 2016, 2019) and possibly "backsliding" into authoritarianism (Levitsky & Ziblatt, 2019). In their seminal article on the topic, Foa and Mounk (2016) argue that contemporary scholars are naïve to dismiss the signs that a deep and serious structural malaise is taking root within the "supposedly consolidated democracies" of Europe and North America. The warning signs they contend are evident in two main respects—a withdrawal from democratic institutions and rising support for authoritarian alternatives. The former is manifest in what are, in some cases, precipitous declines in the key behavioural and attitudinal supports that underpin the healthy functioning of democracy. This includes

citizens failing to regularly "show up" in elections, a waning commitment to its core values, and the belief that its processes can be used to effect real political change. The latter by an increasingly overt rejection of, and aversion to democratic models of government and support for anti-democratic alternatives.

Taking these arguments a step further, more recent accounts have pursued the second trend to contend that a growing number of democracies are now undergoing a process of "backsliding," whereby autocratic and illiberal actions of elites that flout the rule of law and undermine constitutional checks and balances on governmental power become increasingly commonplace and accepted by the public. While some of this acceptance may simply reflect an apathetic detachment among the public, the more worrying interpretation is that happening through an active endorsement and selection of anti-system populist leaders by an increasingly polarised and divided electorate that views their opponents as fraudulent and illegitimate. While this has largely been a process associated with countries with a shorter history of democracy, the problem is increasingly seen as affecting well-established democracies such as the US and the UK. Donald Trump's attempts to delegitimise the 2020 presidential election and the attempted prorogation of parliament by the Conservative government in 2019 are cited as evidence of this regressive turn (Russell et al., 2022).

Although the conclusion that democracies globally are now facing terminal decline has been subject to challenge (Inglehart, 2016), scholars of these trends are careful to point out that they are a long time in the making, their causes are multi-faceted, and the symptoms may often be missed—democracies don't die overnight. As such, one would not expect the recent rise of a newly networked class of political voices on social media to constitute a critical or even major driver of these developments. That said, the direct attribution of OPI status to populist leaders and as amplifiers of alt-right, extremist, and conspiratorial narratives do raise important questions about the extent to which they are linked, even in symptomatic or epiphenomenal terms with the current spiral of decline that democracies now find themselves facing. It is this question that this article seeks to take a first step toward systematically investigating, using fresh evidence from one of the most prominent cases of deconsolidation and backsliding—that of the US—currently in view.

3. Research Hypotheses

Our literature review has shown how advances in digital technology have sparked a cycle of hopes and fears for democratic politics that have collided with a growing despondency about the extent to which the public and elites inherently value and support the representative institutions and norms that sit at the heart of this model of government. This downward spiral has occurred alongside the growth of a new type of political actor—OPIs. The extent to which these influencers are contributing to trends toward deconsolidation has not been subject to extensive empirical analysis. The evidence that exists is patchy and inconclusive in that it appears to both support and reject this thesis. In this article, we subject these claims to fresh analysis using original survey data that specifically measures individuals' exposure to OPIs and other political actors' content during a highly competitive election and in a high social media use context.

We do so by specifying a series of hypotheses about the likely audience and potential impact of political influencers on voters that is based primarily on deductive inference from the deconsolidation thesis. We augment and develop these expectations where possible, with the findings from the limited set of empirical studies about the characteristics of political influencers' audiences. A key characteristic of deconsolidation democracy is that "citizens sour on democratic institutions, become more open to authoritarian alternatives, and vote for anti-system parties" (Foa & Mounk, 2019, p. 1). From what we know about the audience of influencers in ideological terms, opinion is divided with some authors concluding they communicate with a predominantly right-wing and more radicalised audience, while others have revealed a left-wing bias. As such if OPIs are part of the deconsolidation trend, we might anticipate that their followers would be more likely to hold extremist views, occupying both left and right-wing ends of the political spectrum, and show a stronger pattern of support for candidates opposing the established political mainstream or status quo. In addition, we would expect to find a stronger scepticism and distrust of the core institutions and processes designed and lower satisfaction in general with the state of democracy. Finally, while Foa and Mounk (2019) do not explicitly consider an increased susceptibility to conspiracy theories as an indicator of democratic deconsolidation it is not a huge theoretical leap to connect an increased belief in these counter-narratives, many of which centre on the existence of corrupt "deep" state, with dislocation from the established mechanisms of representative government. Given the frequent association of OPIs with the circulation of conspiracy stories and fake news, we include a hypothesis reflecting this linkage in the beliefs of their followers.

Expectations about general levels of political engagement and participation are more ambiguous or mixed. Although Foa and Mounk (2016) cite declining turnout and participation in the democratic process as a "warning" sign of deconsolidation, there is an alternative argument to consider that those demonstrating the strongest signs of deconsolidation are more likely to turn out for a populist leader and/or vote "against" the establishment candidate. A similar logic can be applied to expectations about these individuals' interest in politics, in that studies so far suggest those receiving influencer content, and particularly those who are most likely to be affected by

it, generally pay less attention to politics and are less likely to participate in politics, although they may be more drawn to more expressive e-participation modes. Whether this holds in a high-profile close election in which there is a clear anti-system candidate to support, however, is unclear.

To further explore these questions, we set out and test the following hypotheses. The first set consists of more deductively driven hypotheses that explicitly draw on the deconsolidation thesis that citizens are withdrawing or "soured" on democracy in general, are less trusting of key political institutions, and are more attracted to anti-system populist candidates:

H1: Individuals with higher exposure to OPIs are more likely to be ideologically extreme.

H2: Individuals with higher exposure to OPIs are more likely to support populist or anti-system candidates.

H3: Individuals with higher exposure to OPIs are less likely to trust democratic institutions and the mainstream media (MSM).

H4: Individuals with higher exposure to OPIs are less likely to be satisfied with democracy in the US.

H5: Individuals with higher exposure to OPIs are more likely to believe conspiracy theories.

The second set of hypotheses is more inductively derived and while linked to the deconsolidation argument, follows findings from the extant literature:

H6: Individuals with higher exposure to OPIs are likely to pay less attention to politics.

H7: Individuals with higher exposure to OPIs are less likely to participate in politics, but when they do so, it is via newer online modes rather than traditional offline modes.

4. Data and Methods

To test our hypotheses we make use of data from an online survey conducted by YouGov US during the 2020 presidential election campaign (16 September–20 October 2020). An overall sample (*N*) of 5,379 was generated from YouGov's main panel to be nationally representative of the target population, i.e., all US adults aged 18 and above, based on education level, age, gender, ethnicity, region, and 2016 past vote. A subset of 3,956 respondents from the total sample completed a specialist module of questions regarding the online campaign and specifically sources of information received during the campaign. YouGov included weights that were applied to the achieved sub-sample to optimise the representativeness and survey responses to all US adults.

4.1. Dependent Variables

The survey data was used to measure the dependent variables specified in H1–H7 and a range of controls. Specifically, the outcomes specified in H1 and H2 were operationalised as binary variables that measured ideological extremism (extremist vs. moderate/centre self-placement) and support for an anti-system candidate (voted for Trump). H3 was operationalised with two 10-point scales that measured trust in the federal government and the MSM. H4 used a standard four-point index measuring respondent satisfaction with democracy. H5 was measured as whether the respondent accepted as definitely or most likely true that Covid-19 was a hoax promoted by the international media or linked to the use of 5G technology. H6 was tested using a 0–10-point scale of attention to politics. H7 was tested using three different dependent variables. The first was a binary measure of whether the individual reported that they had voted or not. The second was a 0–6-point index that measured whether respondents had engaged in a range of more traditional modes of participation (joined in a protest, shown support via a button, sticker, or yard sign, attended a meeting, discussed politics, tried to persuade others, or donated to a political organization). The third measure was a 0–4-point index that measured engagement in a range of new online-specific modes of participation. A final point to note is that both turnout and vote choice were recorded post-election by YouGov for all respondents in their national panel, and responses were appended to our campaign survey dataset. The results from our test of H2 and H7 (vote choice, turnout) can thus be interpreted, albeit cautiously, with a more causal framework. All other outcome variables were measured in conjunction with the exposure measures and they permit inferences of association only. Details of the questions and variable coding are reported in the Supplementary File.

4.2. Independent Variables

4.2.1. Measuring Exposure to Online Political Influencers

Our core variable of interest was the levels of respondents' exposure to OPIs. The question of what constitutes an OPI and how to measure exposure to their views has provoked a range of methodological responses. Some studies have adopted an entirely author-led and contextual approach to specifying relevant actors, while others have taken the quantitative route, using a range of social media metrics to identify key "nodes" within a given Tweet corpus. Our method lies in between these two poles in that we rely on a subjective definition of an OPI that is based on self-reported exposure by a nationally representative sample of voters during an election campaign. Taking a survey-based approach to identifying and measuring exposure to OPIs has been featured

in the prior literature. Work by Ryu and Han (2021) used small *N* expert surveys and qualitative analysis to generate a set of identifiable influencers that were then used in a larger *N* study. Other scholars have described an OPI to respondents using some specific examples and then asked if they follow one (Schmuck et al., 2022). In this study, we follow this latter approach but do not provide named individuals as prompts. Specifically, we asked how often in the past month (on a five-point scale from never to several times a day) they recalled having seen "non-sponsored content about the election or political issues posted by people or organizations I don't know personally, but that I follow or like on social media." In not offering specific examples, we recognize that there is a potential loss of precision and reliability in our measurement. However, this is weighed against the potential for introducing bias by priming respondents negatively or positively toward the question, given only a small set of OPIs can be named. In addition, by naming OPIs there is a risk we impose our perception as a research team of who "ideally" fulfils the role, rather than leaving this to respondents. Finally, on practical grounds, the survey instrument has a longitudinal and comparative dimension and will be fielded again in the US 2024 Presidential election and forthcoming European national elections. For comparative purposes, therefore, we were keen to ensure the question wording remained as consistent as possible across time and space.

A second issue that the wording of our OPI measure requires us to confront directly is the extent to which it allows for the inclusion of elected politicians and candidates. This conflation is not inherently problematic since as noted, the literature is somewhat ambiguous on this point with Trump himself often referred to as an OPI, given his prolific use of Twitter to share what are obviously personal views on topics. Furthermore, although our question does allow for the inclusion of a candidate or elected politician, any conflation may be mitigated by the fact that it is not asked as a "standalone" item but is part of a wider battery that asks respondents to discriminate between their exposure to informal online content from people they do or do not know and formal content (paid ads) from parties and candidates (see the Supplementary File, Appendix 2, for the full wording of the question).

4.2.2. Measuring Exposure to Other Types of Political Content

In a bid to further test whether the profile of those following OPIs was particularly indicative of the deconsolidation thesis, we compared it against the profiles of those with higher exposure to three other types of campaign content. This included campaign ads from parties and candidates using the same five-point scale as for OPIs. We also measured exposure to news media divided into mainstream news media sources (broadcast and cable TV, print, and public radio) and alternative media sources (independent news sites, blogs, and talk radio). The former was measured on a 0–12-point scale and the latter on a 0–6-point scale. The correlations between all four exposure measures are reported in the Supplementary File, Appendix 2, Table A2. None was over 0.5.

4.2.3. Control Variables and Estimation Methods

In addition to our main exposure measures of interest, we also included a range of standard controls: gender, age, income, education level, ethnicity/race, and employment status. We also control for the impact of party identification (party ID) and, where appropriate, levels of like/dislike toward the two candidates Trump and Biden with a feeling thermometer variable. Details of questions and variables are reported in the Supplementary File, Appendix 2, Table A2. To test our hypotheses, we used STATA version 14 to conduct a series of binary logistic and ordinary least squares regression (OLS) analyses, selected as appropriate to the distribution of the outcome variables. Listwise deletion was used to deal with missing data.

5. Results

Turning first to our main explanatory measures of interest, in terms of frequency of exposure (detailed figures reported in detail in the Supplementary File, Appendix 2, Table A1) it is clear that respondents saw all types of content, except alternative media, quite regularly. Exposure to online ads was typically higher and more frequent than exposure to OPIs with just under three-quarters of the sample having seen some sponsored content from a candidate or party in the past month, and typically several times a day. This compared to just over half reporting seeing content from an OPI, which was spread more evenly across the week. On average MSM and alternative media appeared to gain less of an audience daily. Checks for multi-collinearity were performed and yielded no obvious cause for concern (see Supplementary File, Appendix 2, Table A2).

Tables 1 and 2 provide the results of our core analysis and show that our expectations about the political characteristics of those with higher exposure to OPIs are partially supported, particularly regarding attitudes.

The findings from Model 1 show support for H1 in that those following OPIs are more likely to hold ideologically extreme views. They are also more likely to subscribe to conspiracy theories (H5) as Model 5 shows, at least regarding those linked with the pandemic. Concerning support for populist candidates and a "withdrawal" or souring on the democratic project (H3 and H4); however, our expectations are not met. Followers of OPIs are not significantly more supportive of anti-establishment candidates or critical of democratic institutions. While a null finding is interesting and appears to reduce worries that OPI followers are more detached

Table 1. Factors predicting exposure to online US 2020 election content: Models 1 to 4.

	Model 1 (Ideological extremism)		Model 2 (Vote Trump)		Model 3a (Trust in Federal Government)			Model 3b (Trust in MSM)			Model 4 (Democracy dissatisfaction)		
Independent variable	*b*	(*SE*)	*b*	(*SE*)	*b*	(*SE*)	*beta*	*b*	(*SE*)	*beta*	*b*	(*SE*)	*beta*
Age	0.000	0.003	0.029***	0.006	−0.029***	0.003	0.177	−0.017***	0.003	−0.086	0.000	0.001	0.000
Gender (reference male)	−0.082	0.084	−0.278	0.189	0.049	0.098	0.009	−0.021	0.105	−0.003	−0.032	0.036	−0.016
Income	0.023	0.014	0.055	0.029	−0.028	0.016	−0.034	−0.013	0.017	−0.013	0.000	0.006	0.000
Education (reference no high-school)													
High-school graduate	−0.440*	0.209	0.425	0.504	−0.154	0.226	−0.026	0.002	0.280	0.000	−0.127	0.099	−0.059
College plus	−0.454*	0.211	0.891	0.498	−0.229	0.230	−0.040	−0.142	0.281	−0.020	−0.169	0.099	−0.080
Ethnicity (reference white)													
Black	−0.215	0.133	−1.107**	0.369	0.225	0.169	0.024	0.508**	0.175	0.045	0.100	0.061	0.030
Hispanic -0.069	0.122	−0.401	0.283	0.712***	0.141	0.086	0.575***	0.160	0.057	0.157**	0.052	0.052	
Other	−0.527**	0.170	−0.882*	0.354	0.218	0.187	0.021	0.102	0.214	0.008	0.068	0.068	0.019
Party ID (reference Independent)													
Democrat	0.912***	0.130	−0.923**	0.287	0.359*	0.154	0.063	2.512***	0.156	0.361	−0.009	0.059	−0.005
Republican	1.333***	1.31	1.039***	0.224	0.840***	0.167	0.143	−0.853***	0.160	−0.120	0.088	0.062	−0.042
Employed (reference Unemployed)													
Full-time employed	−0.173	0.098	0.739**	0.218	0.003	0.112	0.001	−0.192	0.121	−0.026	−0.032	0.042	−0.015
Part-time employed	−0.120	0.145	0.735*	0.349	0.200	0.175	0.021	−0.073	0.184	−0.006	−0.132**	0.060	0.042
Like Biden	—	—	−0.032***	0.004	0.023***	0.002	0.282	—	—	—	0.004***	0.001	0.138
Like Trump	—	—	0.042***	0.004	0.035***	0.002	0.477	—	—	—	0.012***	0.001	0.464
Exposed to political ads	−0.036	0.025	0.125*	0.058	−0.060*	0.030	−0.039	−0.081*	0.032	−0.043	0.003	0.011	0.005
Exposed to OPIs	0.084**	0.026	0.010	0.061	0.004	0.030	0.002	0.006	0.031	0.003	−0.001	0.011	−0.008
Exposed to MSM	−0.046**	0.014	0.009	0.034	0.143***	0.018	0.160	0.395***	0.018	0.365	0.003	0.007	0.008
Exposed to alternative media	0.138***	0.024	0.011	0.059	0.025	0.030	0.017	−0.129***	0.030	−0.072	0.021	0.011	0.039
Constant	−0.364		−4.731***		2.141***			2.968***			1.656***		
(Pseudo)r^2	0.058		0.693		0.240			0.435			0.191		
N	2,847		2,521		2,921			2,947			2,853		

Notes: Models 1 and 2 use binary logistic regression and report pseudo *R* square; Models 3a, 3b, and 4 use OLS and report *R* square and standardized betas; significance levels = * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 2. Factors predicting exposure to online US 2020 election content: Models 5 to 7c.

	Model 5 (Conspiracy belief)		Model 6 (Political attention)			Model 7a (Turnout)		Model 7b (Traditional participation)			Model 7c (New participation)		
Independent variable	*b*	(*SE*)	*b*	(*SE*)	*beta*	*b*	(*SE*)	*b*	(*SE*)	*beta*	*b*	(*SE*)	*beta*
Age	−0.021***	0.003	0.027***	0.003	0.175	0.043***	0.004	0.001	0.002	0.012	−0.005***	0.001	−0.073
Gender	−0.194	0.102	−0.561***	0.089	−0.105	−0.236	0.145	−0.118*	0.046	−0.042	−0.027	0.036	−0.013
Income	−0.051**	0.017	0.102***	0.014	0.133	0.128***	0.027	0.061***	0.008	0.150	0.027***	0.006	0.087
Education (reference no high-school)													
High-school graduate	0.277	0.239	−0.058	0.232	−0.010	0.497	0.264	0.072	0.087	0.025	−0.037	0.069	−0.016
College plus	−0.090	0.244	0.485*	0.231	0.089	1.630***	0.282	0.445***	0.091	0.156	0.152*	0.072	0.069
Ethnicity (reference white)													
Black	0.385*	0.160	−0.253	0.156	−0.030	−0.196	0.218	−0.436***	0.069	−0.097	−0.320***	0.050	−0.092
Hispanic	0.180	0.143	−0.010	0.135	−0.001	−0.559**	0.178	−0.308***	0.061	−0.076	−0.123*	0.050	−0.039
Other	0.367*	0.177	−0.301	0.178	−0.031	−0.384	0.250	−0.029	0.095	−0.006	−0.123	0.067	−0.032
Party ID (reference independent)													
Democrat	−0.741***	0.152	1.231***	0.148	0.228	1.439***	0.174	0.472***	0.065	0.168	0.235***	0.049	0.108
Republican	0.560***	0.144	1.223***	0.148	0.220	1.276***	0.180	0.066	0.063	0.023	0.127*	0.049	0.056
Employed (reference unemployed)													
Full-time employed	−0.227	0.118	−0.135	0.100	−0.024	0.399*	0.176	−0.086	0.055	−0.029	−0.096*	0.043	−0.042
Part-time employed	0.131	0.168	−0.130	0.149	−0.014	0.127	0.244	0.024	0.087	0.005	0.039	0.063	0.011
Like Biden	—	—	—	—	—	—	—	0.103***	0.014	0.137	0.066***	0.011	0.114
Like Trump	—	—	—	—	—	—	—	0.135***	0.016	0.175	0.150***	0.013	0.249
Exposed to political ads	−0.031	0.031	0.083**	0.029	0.057	0.096*	0.043	0.036***	0.008	0.083	0.033***	0.006	0.096
Exposed to OPIs	0.110***	0.031	0.156***	0.027	0.104	0.108*	0.050	0.087***	0.014	0.119	0.087***	0.011	0.153
Exposed to MSM	−0.051**	0.017	0.159***	0.015	0.189	0.041	0.025	0.036***	0.008	0.083	0.033***	0.006	0.096
Exposed to alternative media	0.267***	0.028	0.166***	0.026	0.118	0.006	0.042	0.087***	0.014	0.119	0.087***	0.011	0.153
Constant	−0.407		2.784***			−3.464***		−0.240*			0.087		
(Pseudo)r^2	0.141		0.277			0.271		0.273			0.254		
N	3,044		3,044			2,525		3,044			3,044		

Notes: Models 5 and 7a use binary logistic regression and report pseudo *R* square; Models 6, 7b, and 7c use OLS and report *R* square and standardized betas; significance levels = * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

from the democratic process, it is important to note that current feelings of dissatisfaction with democracy in the US may be driven by other motivations. Although for some voters it may reflect a rejection of what they see as a corrupted and/or unworkable system (i.e., deconsolidation), for others it may express their deep disillusionment that democracy has been "taken over" by anti-democratic forces, and is, in fact, a more positive endorsement or plea for more democracy. Given that the two most significant predictors of democratic dissatisfaction in the model (Model 4) are positive feelings toward Biden and Trump, this dual interpretation of expressions of dissatisfaction with US democracy, at least during the 2020 presidential election is given some credibility. The lack of a link between OPIs and democratic dissatisfaction shown here, therefore, while it might ease concerns over their destabilizing influence on politics arguably requires further analysis to discriminate the underlying rationale for voters' unhappiness in this regard.

Regarding levels of political engagement more generally, the results from Models 6 and 7a–c show that those following OPIs are more interested and active, both offline and online. While these findings run counter to our hypotheses and present a more positive picture of OPI followers in some regards than anticipated, they also raise some questions about their positive impact on public debate in the short and longer term. Given the more radical and fringe views they hold, their higher level of engagement is likely to contribute to increasing the volume of polarised opinion and circulation of misinformation and fake news during and between elections. Such a combination of extremism, irrationality, and activism while it may not be caused by following OPIs, does suggest that a growth in their followers while it may not contribute directly to democratic deconsolidation, is not likely to promote a greater consolidation and political consensus within US society.

The findings for our other measures of campaign exposure help to further enrich this picture and are worth some discussion at this point. Notably, it seems that those following more conventional and established sources of news, i.e., the MSM are, as one might expect, among the most moderate, engaged, and trusting of government. For those reporting high exposure to campaign ads, however, the picture is rather different. Clearly, the Trump campaign was the main beneficiary of this targeted online contact in terms of vote support (Model 2) and the individuals who saw more online ads were also among the least likely to trust the federal government or MSM. Given that vote choice was recorded and added to the survey data post-election (as was turnout), it is possible to interpret its relationship to ad exposure in a more causal manner than our other dependent variables. Furthermore, the fact that the Trump campaign was the biggest spender on Facebook and Instagram advertising (outspending the Democrats by over 10 million dollars between June–November 2020), lends face validity at least to the idea that paid advertising was influential on voters' decisions (Korsunska et al., 2020). Since the trust variables were measured simultaneously with the exposure variables, an argument that social media advertising is increasing public cynicism toward the federal government and mainstream sources is less sustainable but forms an interesting question for future research to explore. Certainly, the fact that campaign ads were found to exert more influence on voter choice than OPIs at this point suggests that from a purely practical standpoint, candidates seeking to leverage influencers to mobilize support should continue to invest in paid appeals, at least in the short term. The longer-term potential impact of this strategy for accelerating declining trust in public institutions, however, points to the importance of research to pinpoint where and how campaign ads may be undermining this more diffuse and very critical support for democracy.

Finally, the profile of those who reported higher exposure to alternative media sources (from both right and left) is the most similar to that of OPIs regarding being both more ideologically extreme and subscribing to conspiracy theories. They also participate more actively in politics and as one might expect, are significantly more distrustful of mainstream news media sources. Given that the correlation between OPI and alternative media exposure is low (see Supplementary File, Appendix 2, Table A2), it would appear they are drawn from the same active but marginalised sector of the electorate, but consume news and information from different sources. As with OPIs followers, therefore, a growth in the audience for alt-media outlets is unlikely to help moderate political divides in US society.

6. Conclusions

This article examines the role that a new type of political actor—the OPI—is playing in contemporary elections, and specifically the claim they are contributing to a "deconsolidation" of democracy. Using self-reported measures of OPI exposure, we have examined the attitudinal profile of those following them and their impact on voters' behaviour.

Our results have confirmed that greater consumption of OPI content is associated with holding views that run counter to mainstream public opinion, both in general ideological terms and specific beliefs that Covid-19 is a global media hoax and/or a product of 5G technology. More exposure to OPIs, however, is not linked to higher support for populist candidates or distrust of key institutions. Indeed, far from disengaging with democracy, those following this new crop of opinion leaders are more likely to engage via existing channels of political influence. Our findings thus provide some initial reassurance on the central question of whether OPIs are contributing to the deconsolidation of democracy. Viewed from the broader lens of this thematic issue's focus on mobilization, the findings are arguably more ambiguous.

Based on Rosenstone and Hansen's (1993) elite-led definition of mobilization, our finding that pre-election exposure to OPIs is a significant predictor of turnout (reported post-election) suggests these influencers may constitute a new force for electoral mobilization. Adopting the wider attitudinal, extra-institutional, and disruptive lens on mobilization articulated by Moskalenko and McCauley (2009) and Cameron (1974) however, the linkage of OPI followers with extremist and conspiracy beliefs and engagement in more expressive modes of online participation may signal more destabilizing and conflictual outcomes. Such concerns are amplified by recent research in the US on the correlates of conspiracy thinking which has identified support for violence against the government as one of its core traits (Enders et al., 2023). Of course, we accept the reliance of our analysis on self-reported exposure and primarily cross-sectional data limits the extent to which we can draw any firm predictions about the long or short political effects of OPIs.

However, what does appear more likely is that OPIs are contributing to the fragmentation of the news media environment and increasing polarisation of public opinion. In contrast, online political advertising does appear to emerge as a cause for some concern. Those who experience more of this micro-targeted content are more likely to support the anti-establishment candidate and exhibit significantly less trust in democratic institutions and the credibility of mainstream news sources. Whether this is a direct result of online ad content, or more indirectly linked to concerns about data privacy and potential vote manipulation is a question for future analysis to explore.

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Conflict of Interests

The authors declare no conflict of interests.

References

Acharoui, Z., Alaoui, A., Ettaki, B., Zerouaoui, J., & Dakkon, M. (2020). Identifying political influencers on YouTube during the 2016 Moroccan general election. *Procedia Computer Science*, *170*, 1102–1109. https://doi.org/10.1016/j.procs.2020.03.061

Alexandre, I., Jai-sung Yoo, J., & Murthy, D. (2022). Make tweets great again: Who are opinion leaders, and what did they tweet about Donald Trump? *Social Science Computer Review*, *40*(6), 1456–1477. https://doi.org/10.1177/08944393211008859

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, *31*(2), 211–236. https://doi.org/10.1257/jep.31.2.211

Allgaier, J. (2020). Rezo and German climate change policy: The influence of networked expertise on YouTube and beyond. *Media and Communication*, *8*(2), 376–386. https://doi.org/10.17645/mac.v8i2.2862

Ayish, M. (2020). A youth-driven virtual civic public sphere for the Arab world. In S. Splichal (Ed.), *The liquefaction of publicness: Communication, democracy and the public sphere in the internet age* (pp. 66–74). Routledge.

Baldwin-Philippi, J. (2017). The myths of data-driven campaigning. *Political Communication*, *34*(4), 627–633. https://doi.org/10.1080/10584609.2017.1372999

Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. Oxford University Press.

Boulianne, S. (2009). Does internet use affect engagement? A meta-analysis of research. *Political Communication*, *26*(2), 193–211. https://doi.org/10.1080/10584600902854363

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

Cameron, D. R. (1974). Toward a theory of political mobilization. *The Journal of Politics*, *36*(1), 138–171.

Casero-Ripollés, A. (2021). Influencers in the political conversation on twitter: Identifying digital authority with big data. *Sustainability*, *13*(5), Article 2851. https://doi.org/10.3390/su13052851

Darius, P., & Urquhart, M. (2021). Disinformed social movements: A large-scale mapping of conspiracy narratives as online harms during the Covid-19 pandemic. *Online Social Networks and Media*, *26*, Article 100174. https://doi.org/10.1016/j.osnem.2021.100174

Dash, S., Mishra, D., Shekhawat, G., & Pal, J. (2022). Divided we rule: Influencer polarization on Twitter during political crises in India. In C. Budak, M. Cha, & D. Quercia (Eds.), *Proceedings of the Sixteenth International AAAI Conference on Web and Social Media* (Vol. 16, pp. 135–146). AAAI Press.

Dekoninck, H., & Schmuck, D. (2022). The mobilizing power of influencers for pro-environmental behavior intentions and political participation. *Environmental Communication*, *16*(4), 458–472. https://doi.org/10.1080/17524032.2022.2027801

Dubois, E., & Gaffney, D. (2014). The multiple facets of influence: Identifying political influentials and opinion leaders on Twitter. *American Behavioral Scientist*, *58*(10), 1260–1277. https://doi.org/10.1177/0002764214527088

Enders, A. M., Diekman, A., Klofstad, C., Murthi, M., Verdear, D., Wuchty, S., & Uscinski, J. (2023). On modeling the correlates of conspiracy thinking. *Scientific Reports*, *13*(1), Article 8325. https://doi.org/10.1038/s41598-023-34391-6

Endres, K., & Kelly, K. J. (2018). Does microtargeting mat-

ter? Campaign contact strategies and young voters. *Journal of Elections, Public Opinion and Parties*, *28*(1), 1–18. https://doi.org/10.1080/17457289.2017.1378222

Fischer, T. S., Kolo, C., & Mothes, C. (2022). Political influencers on YouTube: Business strategies and content characteristics. *Media and Communication*, *10*(1), 259–271. https://doi.org/10.17645/mac.v10i1.4767

Foa, R. S., & Mounk, Y. (2016). The danger of deconsolidation: The democratic disconnect. *Journal of Democracy*, *27*(3), 5–17. https://doi.org/10.1353/jod.2016.0049

Foa, R. S., & Mounk, Y. (2019). *Democratic deconsolidation in developed democracies, 1995–2018*. Archive of European Integration. http://aei.pitt.edu/102389

Gil de Zúñiga, H., Veenstra, A., Vraga, E., & Shah, D. (2010). Digital democracy: Reimagining pathways to political participation. *Journal of Information Technology & Politics*, *7*(1), 36–51. https://doi.org/10.1080/19331680903316742

Hiaeshutter-Rice, D., Chinn, S., & Chen, K. (2021). Platform effects on alternative influencer content: Understanding how audiences and channels shape misinformation online. *Frontiers in Political Science*, *3*, Article 642394. https://doi.org/10.3389/fpos.2021.642394

Ida, R., Saud, M., & Mashud, M. I. (2020). An empirical analysis of social media usage, political learning and participation among youth: A comparative study of Indonesia and Pakistan. *Quality & Quantity*, *54*, 1285–1297. https://doi.org/10.1007/s11135-020-00985-9

Inglehart, R. F. (2016). The danger of deconsolidation: How much should we worry? *Journal of Democracy*, *27*(3), 18–23. https://doi.org/10.1353/jod.2016.0053

Kim, Y. M., Hsu, J., Neiman, D., Kou, C., Bankston, L., Kim, S. Y., Heinrich, R., Baragwanath, R., & Raskutti, G. (2018). The stealth media? Groups and targets behind divisive issue campaigns on Facebook. *Political Communication*, *35*(4), 515–541. https://doi.org/10.1080/10584609.2018.1476425

Korsunska, A., Stromer-Galley, J., McKernan, B., Rossini, P., Hemsley, J., & Bolden, S. E. (2020). *Illuminating 2020 report: The 2020 general election campaign advertising on Facebook*. Illuminating. https://news.illuminating.ischool.syr.edu/2020/12/04/illuminating-2020-report-the-2020-general-election-campaign-advertising-on-facebook

Levitsky, S., & Ziblatt, D. (2019). *How democracies die*. Crown.

Lewis, R. (2018). *Alternative influence: Broadcasting the reactionary right on YouTube*. Data & Society Research Institute. https://datasociety.net/wp-content/uploads/2018/09/DS_Alternative_Influence.pdf

Lin, T. T., & Chiang, Y. H. (2017). Dual screening: Examining social predictors and impact on online and offline political participation among Taiwanese internet users. *Journal of Broadcasting & Electronic Media*, *61*(2), 240–263. https://doi.org/10.1080/08838151.2017.1309419

Moskalenko, S., & McCauley, C. (2009). Measuring political mobilization: The distinction between activism and radicalism. *Terrorism and Political Violence*, *21*(2), 239–260. https://doi.org/10.1080/09546550902765508

Naderer, B. (2023). Influencers as political agents? The potential of an unlikely source to motivate political action. *Communications*, *48*(1), 93–111. https://doi.org/10.1515/commun-2021-0006

Ödmark, S. (2021). Making news funny: Differences in news framing between journalists and comedians. *Journalism*, *22*(6), 1540–1557. https://doi.org/10.1177/1464884918820432

Ohme, J. (2019). When digital natives enter the electorate: Political social media use among first-time voters and its effects on campaign participation. *Journal of Information Technology & Politics*, *16*(2), 119–136. https://doi.org/10.1080/19331681.2019.1613279

Oser, J., & Boulianne, S. (2020). Reinforcement effects between digital media use and political participation: A meta-analysis of repeated-wave panel data. *Public Opinion Quarterly*, *84*(S1), 355–365. https://doi.org/10.1093/poq/nfaa017

Park, S., Lee, J., Ryu, S., & Hahn, K. S. (2015). The network of celebrity politics: Political implications of celebrity following on Twitter. *The ANNALS of the American Academy of Political and Social Science*, *659*(1), 246–258. https://doi.org/10.1177/0002716215569226

Peres-Neto, L. (2022). Journalist-twitterers as political influencers in Brazil: Narratives and disputes towards a new intermediary model. *Media and Communication*, *10*(3), 28–38. https://doi.org/10.17645/mac.v10i3.5363

Persily, N. (2017). The 2016 US election: Can democracy survive the internet? *Journal of Democracy*, *28*(2), 63–76. https://doi.org/10.1353/jod.2017.0025

Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Addison-Wesley.

Riedl, M., Schwemmer, C., Ziewiecki, S., & Ross, L. M. (2021). The rise of political influencers—Perspectives on a trend towards meaningful content. *Frontiers in Communication*, *6*, Article 752656. https://doi.org/10.3389/fcomm.2021.752656

Rosenstone, S. J., & Hansen, J. M. (1993). *Mobilization, participation, and democracy in America*. Palgrave Macmillan.

Russell, M., Renwork, A., & James, L. (2022). *What is democratic backsliding, and is the UK at risk?* The Constitution Unit. https://www.ucl.ac.uk/constitution-unit/sites/constitution_unit/files/backsliding_-_final_1.pdf

Ryu, E. A., & Han, E. (2021). Social media influencer's reputation: Developing and validating a multidimen-

sional scale. *Sustainability*, *13*(2), Article 631. https://doi.org/10.3390/su13020631

Schmuck, D., Hirsch, M., Stevic, A., & Matthes, J. (2022). Politics–simply explained? How influencers affect youth's perceived simplification of politics, political cynicism, and political interest. *The International Journal of Press/Politics*, *27*(3), 738–762. https://doi.org/10.1177/19401612221088987

Shmargad, Y. (2022). Twitter influencers in the 2016 US congressional races. *Journal of Political Marketing*, *21*(1), 23–40. https://doi.org/10.1080/15377857.2018.1513385

Soares, F. B., & Recuero, R. (2021). Hashtag wars: Political disinformation and discursive struggles on Twitter conversations during the 2018 Brazilian presidential campaign. *Social Media + Society*, *7*(2), 1–13 https://doi.org/10.1177/20563051211009073

Starita, G. D., & Trillò, T. (2022). "Happy Monday friends! Coffee?" Matteo Salvini, good morning selfies, and the influencer politician. *Contemporary Italian Politics*, *14*(3), 331–351. https://doi.org/10.1080/23248823.2021.2005339

Tan, N. (2020). Digital learning and extending electoral authoritarianism in Singapore. *Democratization*, *27*(6), 1073–1091. https://doi.org/10.1080/13510347.2020.1770731

Veilleux-Lepage, Y. D., Kisyova, M. E., & Newby, V. F. (2022). Conversations with other (alt-right) women: How do alt-right female influencers narrate a far-right identity? *Journal for Deradicalization*, *31*, 35–72.

Wheeler, M. (2013). *Celebrity politics*. Polity.

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Article

"Anti-Regime Influentials" Across Platforms: A Case Study of the Free Navalny Protests in Russia

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Abstract
The full-scale invasion of Ukraine by Russia in 2022 has put the future of the Russian opposition further at stake. The new limitations towards political, internet, and press freedoms have led to a severe disintegration of the anti-regime movement in Russia, including its leaders like Alexey Navalny. Digital platforms had previously hosted anti-Kremlin narratives online and played a role in the facilitation of Russian anti-regime protests. The latest scalable anti-regime rallies to date were the Free Navalny protests, caused by the imprisonment of Navalny in 2021. Digital platforms strengthened the voice of the Russian regime critics; however, their growing visibility online caused further suppression in the country. To understand this paradox, we ask which main anti-regime communicators were influential in the protests' discussions on Twitter, YouTube, and Facebook, and how platform features have facilitated their influence during the Free Navalny protests. We develop a multi-platform methodological workflow comprising network analysis, social media analytics, and qualitative methods to map the Russian anti-regime publics and identify its opinion leaders. We also evaluate the cultures of use of platforms and their features by various Russian anti-regime communicators seeking high visibility online. We distinguish between contextual and feature cultures of platform use that potentially aid the popularity of such actors and propose to cautiously confer the mobilisation and democratisation potential to digital platforms under growing authoritarianism.

Keywords
digital platforms; Navalny; non-systemic opposition; political influence; social media; Russia

Issue
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1. Introduction

In the 2010s, international digital platforms such as YouTube, Twitter, and Facebook served as trusted mediums for enabling the information flow between different anti-regime groups and independent media in the country. These groups were dealing with increased limitations on political, press, and internet freedoms in Russia that have curtailed their information and diminished their capacity to effectively communicate online, mobilising their supporters, and jeopardising their political influence. By the time of the full-scale invasion of Ukraine by Russia in 2022, digital platforms became targets of law enforcement bodies: Facebook was banned by a Moscow court, and access to Twitter was restricted by the Russian censorship body Roskomnadzor. To date, it is not clear who can maintain anti-regime communication in an already dictatorial Russia, just as it is not clear how international digital platforms can continue to facilitate prominent alternative political communicators in the country.

To investigate these pressing issues of Russian society, we turn to the events preceding the 2022 full-scale invasion the last most visible and mass anti-regime protests to date, the Free Navalny protests (January to

April 2021) surrounding the imprisonment of the opposition leader Alexey Navalny, where digital platforms and their features were used to highlight prominent critics of the regime. In this article, we ask:

> RQ1: Which anti-regime communicators were influential in the protests' discussions on Twitter, YouTube, and Facebook?
>
> RQ2: How did platform features and affordances facilitate their influence in such online debates?

We address both methodological and theoretical gaps in this article; first, by introducing a multi-platform methodological workflow comprising various Application Programming Interface (API) data collection techniques, social media analytics, and network analysis methods to detect the most visible anti-regime communicators across digital platforms. Secondly, we extend the knowledge on the cultures of use of various digital platforms and their features by prominent anti-regime communicators in Russia. We label such actors "anti-regime influentials," who most visibly contributed to anti-regime political debates during the Free Navalny protests in 2021.

Our findings reveal differences in the cultures of use of digital platforms by anti-regime influentials, which we explain through contextual and region-specific factors that make some platforms preferable mediums for various communicators. We also discuss the variety of platform features and affordances that made anti-regime communicators more prominent but also put them at greater risk towards Russian law enforcement bodies. Such analysis, in general, helps to better understand the role and mobilising potential of platforms in the communication of protest movements in authoritarian Russia, and their further development and deployment in future political contexts.

2. The Russian Political Regime and the Opposition

In the last decade, Russia has transitioned further down the authoritarian path from electoral authoritarianism (Golosov, 2011) towards a dictatorship (Avtoritarism my uzhe proshli, 2021). In these conditions, the Russian opposition experienced "troubled transformations": from being labelled as a "dying species" in the mid-2000s (Gel'man, 2005), through a brief rebirth period during the protests For Fair Elections in 2011 (Gel'man, 2013), to experience a further crackdown since the late 2010s (Gel'man, 2015). Aside from activists, many independent media outlets and journalists were marginalised too (e.g., the editorial of *lenta.ru* in 2014), while high-profile journalists (e.g., Yuri Dud) moved solely to platforms. These ousted actors sought alternative formats of uninterrupted communication with their audiences online since the late 2010s (Glazunova, 2022).

Despite the multiple constraints of Russia's political regime, in the 2010s, Russian opposition activists like Alexey Navalny, his colleagues and associates like Lyubov Sobol, Ilya Yashin, and others were able to form a digital resistance to the regime (Glazunova, 2022) and organise a series of anti-establishment rallies between 2017 and 2019. Notwithstanding their unsuccessful election attempts, these activists gained prominence on digital platforms, where they also recruited supporters for their political causes using practices of investigative journalism, digital activism, and populist rhetoric (Glazunova, 2022). By the 2020s, the movement itself seriously deteriorated due to—among other reasons—pressure from law enforcement bodies and active censorship towards them. The last protests organised by Navalny's movement were held in 2021 to demand the release of the imprisoned activist.

In 2020, Navalny was poisoned, evacuated to Germany for treatment, and upon his arrival to Russia (January 17, 2021) was detained at the airport, and then imprisoned (February 2, 2021). Before his arrival, Navalny and his team had published several resonant investigations on YouTube into who poisoned Navalny and Vladimir Putin's properties. The large protests in Navalny's support were held on January 23 and 31 and February 2, mobilising thousands of supporters across Russian cities. On February 14, due to severe suppression towards protesters, Navalny's associates announced a flash mob instead, "Love is stronger than fear," gathering people with lanterns and lit torches. They also launched a campaign for citizens to register on their website, Free Navalny, if they are ready to participate in protests. The organisers promised to hold protests if the number of registered participants reached 500,000. However, the database of registered protesters with their email addresses was leaked on April 2 and later was allegedly used by law enforcement bodies for raids and prosecution (Yapparova & Dmitriev, 2021). The last mass protests in Navalny's support were held on April 21.

This period, from January to April, covering Navalny's arrival to Russia and associated protests, presents a particular interest: they were the last visible protests organised by Navalny's movement. The full-scale invasion of Ukraine in February 2022 triggered multiple anti-war protests in Russia; however, they were not comparable in scale and, among other things, in the online prominence of the actors facilitated by digital platforms (which at that moment were not fully banned in the country). Before proceeding to the methodology on how to detect such actors across platforms, we discuss platform features and affordances, their role in Russian protests, as well as how they can facilitate the political influence of various communicators.

3. Affordances, Platforms, and Influentials

3.1. Platform Features and Affordances

Various features of digital platforms shape users' communication and ultimately configure how networked

publics, "publics that are restricted by networked technologies," are defined (Boyd, 2011, p. 39). In social media research, this inter-relationship between technology and human agency is studied through the frame of "affordances" (Boyd, 2011, p. 39) that enable to understand "dynamics or types of communicative practices and social interactions that various features afford" (Bucher & Helmond, 2017, p. 239). On an abstract level, affordances shape people's participation and constitute dynamics and conditions set by the technologies and platforms. Boyd (2011, p. 46) distinguishes four high-level affordances:

1. Persistence: Online expressions are automatically recorded and archived.
2. Replicability: Content made out of bits can be duplicated.
3. Scalability: The potential visibility of content in networked publics is great.
4. Searchability: Content in networked publics can be accessed through search.

One of the central reasons why political communicators turn to social media is its communicative potential to reach bigger audiences and make their content as visible as possible—in what Boyd (2011) refers to as "scalability." Digital platforms can make content go viral; however, the scale and audiences are not guaranteed, as the public chooses what to amplify (Boyd, 2011). However, various platform algorithms with or without human intervention also define what can be visible or popular on the platform. Tufekci (2018), for instance, explored the role of recommendation algorithms on YouTube that amplified more radical content, while Noble (2018) investigated Google's search algorithms that enacted racism and reinforced oppressive social relationships. In the context of the Free Navalny protests, while networked publics organically determine various opinion leaders discussing the protests, specific features of the platforms helped them amplify and facilitate their political influence.

These particular features of the platforms, located within the materiality of the platform (Bucher & Helmond, 2017) and the user interface, afford multiple actions such as replying, clicking, sharing, and others, and are called "low-level affordances." Here and later, we use the term "platform features," to clearly distinguish between the communicative dynamics and conditions that technologies afford (high-level affordances, e.g., scalability) and material elements of user interface that allow different communication actions (low-level affordances, e.g., retweets). While networked publics can confer the status of opinion leaders to various communicators in particular events, such features as retweets on Twitter, reactions on Facebook, recommendation algorithms on YouTube, and others potentially contribute to and facilitate their political influence. In an authoritarian regime, such features can be a powerful alternative conducive to people's participation in politics. Before proceeding to the specifics of such dynamics between the Russian networked publics, opinion leaders, and platform technologies, we first determine what platform features can potentially contribute to the political influence of opinion leaders on platforms and enact their scalability.

3.2. Influence

The political influence of anti-regime political actors online is difficult to determine, due to the ambiguous terminology in the field and various influence metrics. In academic literature, scholars refer to them as opinion leaders (Katz & Lazarsfeld, 1955), political influencers (Lewis, 2018), crowdsourced elites (Papacharissi, 2014), political influentials (Dubois & Gaffney, 2014), and other terms. The definition of opinion leaders stems from the two-step flow communication theory (Katz & Lazarsfeld, 1955) and was based on a person's ability to impact their personal ties by exerting social pressure and social support and was also determined by the degree of influence on people's influence and behaviour (Rogers, 1962, p. 354). The theory has evolved since then: Modern opinion leaders no longer rely on information from traditional media and can distribute information first-hand online (Walter & Brüggemann, 2020).

In a methodological sense, scholars tend to identify opinion leaders on various platforms differently, mostly because platforms have different features that are used to measure their influence. Papacharissi (2014, p. 46), exploring Twitter communication "elites," notes: "Elite nations, organisations, or individuals typically dominate news streams online through the logic of tweeting and retweeting," as observed in the Arab Spring movement. But another group of opinion leaders emerged comprising bloggers, activists, and intellectuals, all of whom became leaders in Twitter discussions; they were engaging with the media elite by retweeting, mentioning, and engaging in other platform features. This elite formation happened due to the "fluid and organic progressions of practices claimed by the crowd and crowdsourced" (Papacharissi, 2014, p. 47). Retweets and mentions, in this logic, are useful in defining most interactions among users, and such influence is associated with being seen as an expert in the community (Dubois & Gaffney, 2014, p. 1263).

Lewis (2018, p. 1) analysed the "alternative influence network" on YouTube, "an assortment of scholars, media pundits, and internet celebrities who use YouTube to promote a range of political positions." They build their influence by referencing and including other people in video content. Indicators of influence on YouTube are materialised through the features of views, shares, and likes. The platform famously measures influence through the number of subscriptions on the platform and rewards channels with the YouTube Creator Award and the subscriber number status (e.g., diamond, gold, silver, etc.). However, YouTube's platform architecture boosts

the status of an influencer through recommendation algorithms. Algorithms recommend personalised sets of videos for users based on, among other things, YouTube's related video algorithm, user clicks, watch time, survey responses, and other user activity (Goodrow, 2021). Algorithms at various times have been met with pushback from experts: Noble notes that algorithms are far from neutral, and mathematical formulations driving automated decisions are "made by human beings" (Noble, 2018, p. 1) that define our social interactions on platforms. It is not clear to what extent YouTube recommendation algorithms are based on user personalisation and user experiences rather than automated decisions determined by Google employees. In any case, such confluence of factors, including the algorithm of the related videos and driving recommendation algorithms, highlighted the communication of particular channels during the Free Navalny protests and drove more views and subscriptions to their channels.

On Facebook, engagement, outreach, and sentiments are considered key indicators of influencers (Arora et al., 2019). They are embedded in the influencer index on social media developed by researchers from marketing studies. The features responsible for such indicators are reactions, comments, and shares; they reveal the post-level engagement on the platform with the content. Apart from visibility, Gerodimos and Justinussen (2015) have explored the participatory potential of Facebook features when users engaging with politicians' content can affect decision-making, which was found to be limiting and top-down on the platform.

We listed the most intrinsic features of the platforms that can facilitate the political influence of various communicators. Based on the literature review above but also on the limitations of APIs determining the data structure collected from each platform, we pre-determined the set of features for our three platforms to measure political influence (see Section 4). In our case, these are retweets and mentions for Twitter, recommendation algorithms and subscriptions for YouTube, and user engagement on Facebook (likes, comments, reactions, and shares). Our purpose, thus, was not to find a standardised influence indicator across platforms. Drawing from cross-platform research (Rogers, 2018), we note that platforms have different cultures of use and different features. For instance, hashtags on Twitter would not have an equal meaning or influence on Facebook. The more prosperous approach is to study a political event across platforms, based on the platform's intrinsic features, specifically the features that facilitate the political influence of the critics of the Russian regime.

3.3. The Role of Digital Platforms in Russian Protests

The communication of the regime-critical actors can be seen as an amalgamation of communicators, environments, and discursive practices, what Toepfl (2020) broadly called "authoritarian publics." The discursive practices that allow visible criticism of the leadership of the country, its policies, and other authoritarian practices distinguish Navalny's movement among others in Russia not least due to the role of digital platforms in their communication. Social media do play a role in framing Russian contentious politics (Nechai & Goncharov, 2017, p. 271). Protesters' discursive practices can rely on offline and online structures and mechanisms that offer individuals variety and diversity of modes of participation in anti-regime protests, what Lokot (2021) dubbed "augmented dissent." She highlights the cases of Euromaidan protests in Ukraine in 2013–2014 and anti-corruption protests in Russia in 2017 organised by Navalny's movement and the centrality of platform affordances that were vital in shaping power relations between citizens and the state during those protests. However, these relationships as well as the role of various platforms in it were constantly transforming since at least the protests For Fair Elections (2011–2012), where platforms famously played distinct roles in the rallies' facilitation and mobilisation of support.

Facebook helped spread anti-regime information and mobilise support for 2011–2012 demonstrations to a greater extent than Russian analogues like VK (former VKontakte) or Odnoklassniki (White & McAllister, 2014). Twitter and Facebook helped raise the audience's awareness of electoral fraud during the 2011 parliamentary election through, among other platform features, scrolling "recommended links to outside outlets as well as through friends' commentaries and discussions" (Reuter & Szakonyi, 2013, p. 33). Litvinenko points out that while social media allow the activation of horizontal and bottom-up linkages for political mobilisation, in the case of the 2011–2012 protests, digital publics searched and relied on charismatic leaders with a clear vision, while their absence impacted the "revolutionary mood" (Litvinenko, 2012, p. 186) negatively. Therefore, both vertical and horizontal communication were important for successful online mobilisation during the For Fair Elections protests.

That did not change in the later series of anti-corruption protests in 2017 organised by Navalny. Anti-government users on Twitter were found to be "much more instrumental in consolidating offline communities of politically active individuals" than pro-government users (Nechai & Goncharov, 2017, p. 279). Glazunova (2022) discusses how various platform features of YouTube such as "click," "like," and "share" were used by Alexey Navalny in his YouTube videos as a "call for action" in the 2017 protests. They acquired political meaning in an authoritarian regime and were seen as a safer and effortless form of political participation for citizens. However, law enforcement and censorship bodies in Russia have eventually increased the volume and tightened the penalties for activities on the internet and social media. By 2021, the Russian human rights project Online Freedoms Project (2021) recorded 451,518 individual interventions in internet freedom in Russia (one

and a half times more than in 2020); most incidents (427,000) were associated with the prohibition of information on various grounds, as well as blocking individual pages, sites, and IP addresses.

Due to this, by the time of the late 2010s, the nature of augmented dissent in Russia became "strategic, contested, and survival-oriented" (Lokot, 2021, pp. 163–164). The Russian protesters faced growing state pressure both on protest squares and online, which has since only worsened for the Russian regime critics and reached its culmination during the full-scale invasion of Ukraine by Russia in 2022. Despite social media's potential for citizen self-organisation, without functioning anti-regime public opinion leaders, the prospects of successful online mobilisation are bleak in Russia. However, the Free Navalny protests showed how digital platforms and their affordances still highlighted prominent anti-regime communicators.

3.4. Anti-Regime Influentials

Anti-regime digital publics in Russia comprise not only activists but other political communicators too, including journalists, anonymous online groups, media outlets, comedians, bloggers, and ordinary users, who promote anti-authoritarian and anti-Kremlin agendas on digital platforms. The existence of such anti-regime publics on Twitter, for example, can be traced back to the 2011–2012 protests For Fair Elections and beyond (Dehghan & Glazunova, 2021; Kelly et al., 2012; Nechai & Goncharov, 2017; Spaiser et al., 2017). These publics are led by various opinion leaders on different platforms facilitated by their features, whom we call anti-regime influentials. In an authoritarian context, these are political communicators, who share an anti-authoritarian and anti-regime ethos (Herasimenka, 2020), spread anti-regime discourses, and possess and exercise various degrees of political influence online facilitated by digital platforms and their features. They are at high risk of facing persecution, censorship, and surveillance for their political activities but also political influence online. We avoid using the term "influencers" in this context and use the more neutral "influentials" (Dubois & Gaffney, 2014), as the term "influencers" has a commercial connotation in the literature, as put by Abidin (2015, p. 1): influencers "monetise their following by integrating 'advertorials' into their blog or social media posts," which not always are incentives for Russia's political actors.

Overall, using the case study of the Free Navalny protests that gathered large anti-regime publics, we develop a methodological workflow to map these publics on various platforms, to identify anti-regime influentials, and to get an idea of different cultures of platforms use during the major anti-regime protests in Russia. We discuss the methodology of assessment and the influence metrics in the next section.

4. Methods

4.1. Platforms

We chose international tech giants like YouTube, Twitter, and Facebook for the analysis as they were previously shown as alternative and trusted forums for anti-regime communication in the 2010s. Russian domestic platforms like VK and Odnoklassniki are known for assisting surveillance and censorship of anti-regime communication. There are no trustworthy reports on the audiences of social media platforms in Russia. International sources estimate that in February 2021, there were 99 million social media users in Russia, 67.8% of the total population (Datareportal, 2021). In 2021, Russian VK remained the most popular platform (73% of users), YouTube came in second (68%), Facebook was used by 37% of users, and Twitter by 14% (Buchholz, 2021).

4.2. Data Collection

We collected different types of publicly available data from three platforms. Table 1 presents the data-gathering tools and APIs deployed for each platform. The terms "Navalny," "Free Navalny" (a slogan and name for protests), and "protests" in the Russian language were used as the search queries for the period from January 1 to April 30, 2021, when four major demonstrations were held. We aimed to collect data using these broad terms connected to the protests and then filtered anti-regime influentials using quantitative and qualitative methods for each platform (see further Sections 2.2, 2.3, and 2.4). We used multiple analysis techniques to first map the anti-regime public and then identify the anti-regime influentials on each social media platform (Twitter, YouTube, and Facebook) depending on the nature of the data. Figure 1 depicts the overall method we followed. For each platform, we used different methods such as social media analytics and network analysis, followed by a qualitative analysis of the top 25 influentials per each platform discussing the Free Navalny protests. Due to the different sizes of the datasets, we used a purposive sampling of the first (top) 25 accounts, pages, groups, profiles, or channels per each platform that share similar traits or specific characteristics (homogenous sampling), e.g., known critics of the regime that are communicating in the Russian digital public spheres. However, we also made a note of influential actors that appeared in the networks and datasets along with anti-regime communicators.

4.3. Twitter

Following Dubois and Gaffney (2014), to identify anti-regime influentials on Twitter, we first constructed both retweet and mention networks using the statistical programming language R. We visualised the retweet and mention networks using the network analysis software

Table 1. Data collection tools.

Platforms	Keywords (translated to English)	Period	Application Programming Interface	Tools	Data type (publicly available)	No. of data points
Twitter	Navalny; Free Navalny; protests	January 1 2021–April 30 2021	Twitter API	TweetQuery; Twitter Academic API	Tweeting activity data	3,494,461 unique tweets
YouTube			YouTube API	YouTube Data Tools (Rieder, 2015)	List of video descriptions and statistics retrieved by a search query	4,683 videos
Facebook			CrowdTangle API	CrowdTangle	Facebook posting activity data	339,184 Facebook posts

Gephi (Bastian et al., 2009) and ForceAtlas2 graphic layout algorithm (Jacomy et al., 2014). We focussed on retweets and @-mentions networks that allowed us to measure the most interaction within the network (Dubois & Gaffney, 2014). The retweets allow users "to generate content with pass-along value," while the mentions allow users "to engage others in a conversation" (Cha & Gummadi, 2010, p. 12). As we were interested in seeing if there were distinct anti-regime communities within these networks, we then applied the Louvain modularity detection algorithm (Blondel et al., 2008) provided by Gephi. After identifying the anti-regime cluster(s) of the retweet and mention networks, we chose the top 25 anti-regime influentials and ranked by the highest weighted in-degree metric (a standard measure of assessing the popularity and/or influence on the platform; Dubois & Gaffney, 2014), in the network followed by a qualitative analysis of these accounts.

4.4. YouTube

To identify influentials on YouTube, we used the video network tool YouTube Data Tools (Rieder, 2015) to collect the data and construct a channel network. We collected 4,683 videos via the Video List Module which forms a list of video infos and statistics based on search queries (Rieder, 2015). We then chose the top-viewed 50 videos from the list to construct a network of related channels for these videos by the platform. The algorithm of related videos is a "building block" for YouTube's recommendation algorithm (Davidson et al., 2010). Through YouTube Data Tools, we obtained a network file that comprises a network of relations between channels by inputting the same search queries (see Table 1). We then visualised the network using Gephi and the ForceAtlas2 algorithm (Jacomy et al., 2014). As the network did not show distinctive polarised communities, we manually chose the top 25 YouTube anti-regime channels with the highest weighted in-degree in the network connected with anti-regime actors in Russia and qualitatively analysed them. For these YouTube channels in our network, we compiled the YouTube Creator Award status based on the subscriber count (YouTube Creators, n.d.). Such gradation looks as follows: silver (100,000); gold (1,000,000); diamond (10,000,000); red diamond (100,000,000).

4.5. Facebook

As we were limited to analysing only Facebook public spaces (pages, groups, and public profiles), we leveraged

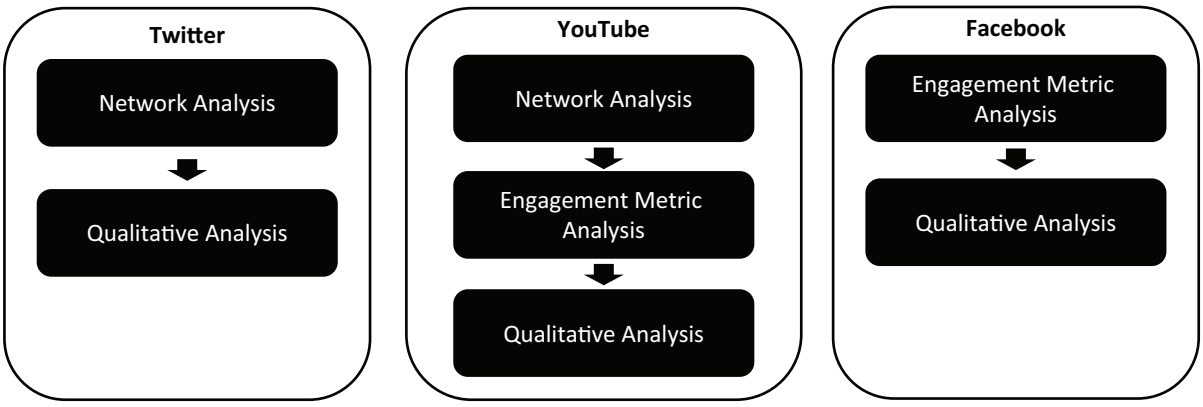

Figure 1. Influentials' identification method.

an engagement metric analysis to identify Facebook anti-regime influentials. We first removed the duplicate posts in our dataset, and then for each Facebook account (i.e., page, group, and profile). In this section, we employed social media analytics to compute the engagement with the Facebook public space, using the standard formula for Facebook studies (Figure 2). Along with the total engagement metric, we leveraged a qualitative analysis to identify the top 25 anti-regime influentials on Facebook from a complete list of actors.

4.6. Qualitative Analysis

Applying our expert knowledge of Russian politics, we then analysed and categorised Russian anti-regime influentials for each platform. Apart from individuals, we included critical media outlets, anonymous political discussion groups, and humoristic accounts, as they also possess political influence online and are part of the suppression processes inside the country. Satiric accounts and comedians are also providers of political information.

We note here the fluidity of the different statuses of anti-regime influentials. To be able to survive in a rigid autocratic environment, such actors "try on" several political communication roles (journalist, politician, blogger, or activist; Glazunova, 2022). A good example here is Navalny himself, who was an activist, ran for political office, produced journalistic investigations on YouTube, and is an active blogger (Glazunova, 2022). There is also the fluidity in their relation to Russia's political system. Non-systemic opposition leaders on some occasions were elected or appointed at different times (e.g., Ilya Yashin was a chairman of the Council of Deputies of the Krasnoselsky Municipal District in Moscow). Being part of the political system, they regularly criticised the establishment, and on these grounds were ousted from politics. Some journalists were working for mainstream media and then moved to the platforms (e.g., Yury Dud'). One radio station, the Echo of Moscow, is an exceptional case here: it was funded by state oil and gas company Gazprom; however, the outlet moderately criticised major state policies and gave voice to the opposition (e.g., Alexey Navalny was a frequent guest of the radio station, while a known critic of the Russian regime like writer Dmitry Bykov was a regular host on Echo). In this sense, the Echo of Moscow was more liberal than independent (as of 2022, the outlet was shut down by Gazprom Media). Online media outlet *Meduza* has its headquarters in Latvia, due to previous suppression of its editorial in Russia. Due to these factors, the following categorisation of the influentials in Supplementary File (Appendix 1) remains largely broad, however, it considers the specificities of the Russian political context.

Finally, we acknowledge the controversy of political stances and allegiances of some of the actors over time (e.g., anti-regime publicist and journalist Aleksandr Nevzorov was an official representative of Vladimir Putin during the 2012 presidential election). We include actors that are known for critical stances of the Russian regime; however, we do not evaluate the evolution or controversy of their political views.

4.7. Limitations

The focus on pro-Navalny protests potentially limits our results to anti-regime actors connected, discussing, or sympathising with Navalny. They might not include other actors who did not speak on the topic of Navalny's protests (in the analysis, we captured the criticism of Navalny by the former Yabloko party leader Grigory Yavlinskii on Facebook, see Section 5.3). We analysed only a total of 75 popular accounts and not all the publics. We did not analyse private messaging apps Telegram and WhatsApp as current privacy restrictions, technological limitations, and ethical concerns make reliable and meaningful data collection near impossible.

5. Findings

Using the suggested methodological workflow, we identified the anti-establishment influentials discussing the Free Navalny protests on three platforms (RQ1).

5.1. Twitter

The Twitter dataset is the largest dataset among the three platforms (3.5 million unique tweets). Figure 3 demonstrates general posting activity on Twitter during the Free Navalny protests. The peaks of the activity are associated with major demonstrations in support of Navalny (on January 23, and February 2, less so on January 31 and April 21). The discussions subsequently deteriorated since March due to the protests' leaders being imprisoned or arrested, their web resources banned, and the media outlets recognised as "foreign agents" amongst other measures. Another factor contributing here is a move by Roskomnadzor which limited the speed of access to Twitter due to the platform's non-compliance with the requirements of the Russian legislation from March 10, 2021; this largely affected the mobilisation potential and information sharing about protests with international audiences.

$$\text{Total Engagement} = \frac{\text{reactions} + \text{comments} + \text{shares}}{\text{Number of posts}}$$

$$\text{Reactions} = \text{like} + \text{angry} + \text{care} + \text{love} + \text{haha} + \text{wow} + \text{sad} + \text{thankful}$$

Figure 2. Formula for total engagement with Facebook posts. Source: Arora et al. (2019).

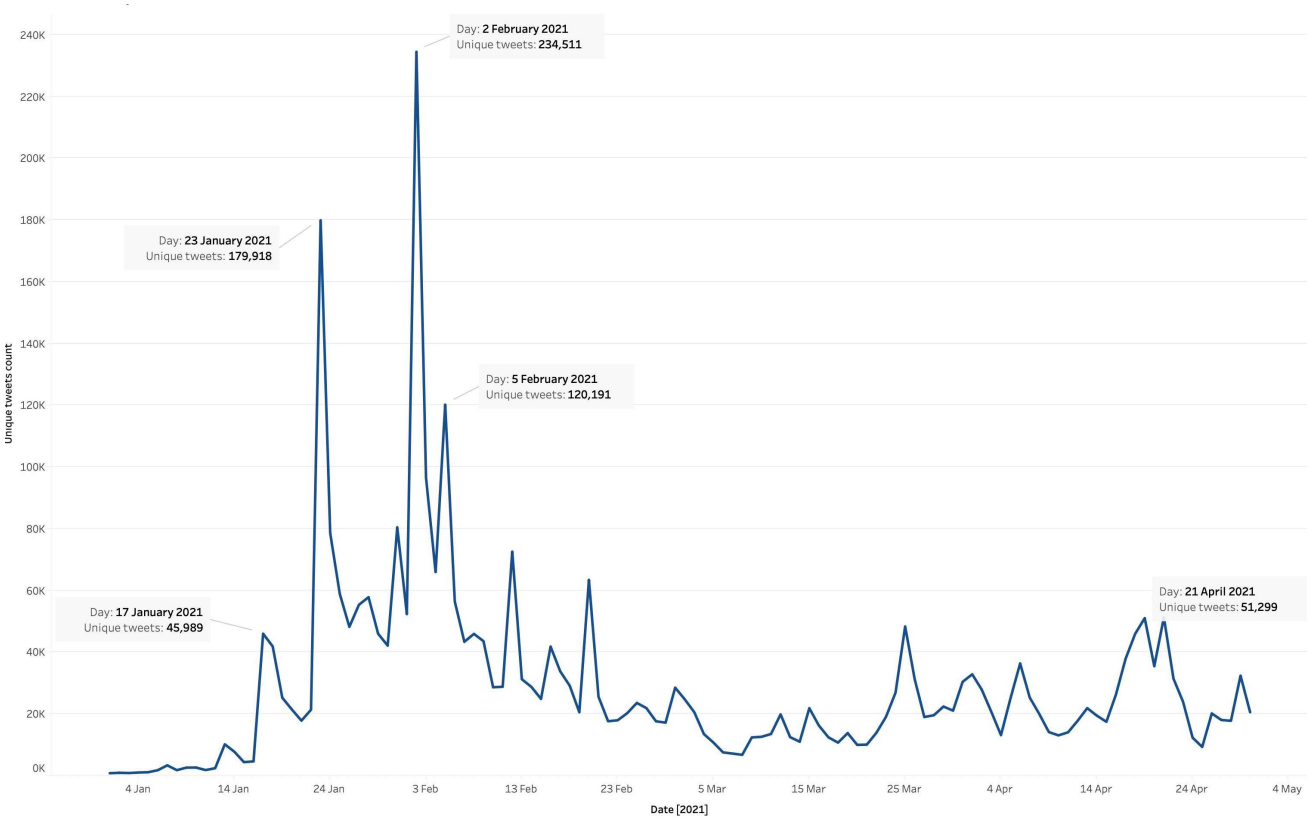

Figure 3. Twitter activity January–April, 2021 (3,454,294 unique tweets).

We further analysed the retweet and mention networks in R and Gephi (Figures 4 and 5) to filter anti-regime online crowds. The networks showed the established polarisation of pro-Kremlin and anti-Kremlin clusters of users (Dehghan & Glazunova, 2021; Kelly et al., 2012; Spaiser et al., 2017); we label them pro-regime and anti-regime clusters, respectively. At the core of the anti-regime clusters are the users led by the non-systemic opposition and critical news media. Through retweets, they are joined by a small cluster of users led by feminist and LGBTQIA+ activists and users from Ukraine involved in the transnational discussion of the topic. Feminist, urban, and LGBTQIA+ activists had a significantly lower weighted in-degree score in the networks, sometimes 17 times less than top-ranked accounts; therefore, they were not explored in this article. In mentions, such sub-clusters mostly repeat but were somehow enlarged by Russian urban activists and other international users. In this article, we are interested in the anti-regime influentials that were at the core of the protests' discussions inside Russia. We did not find pro-regime actors within top accounts of anti-regime clusters (they were mostly concentrated in the pro-regime cluster and therefore excluded). Supplementary File (Appendix 2) depicts the top 25 influentials detected through the mentions and retweets networks sorted by highest weighted in-degree.

Twenty-two out of 25 influentials can be found both among the most retweeted and mentioned accounts. These are accounts of the opposition activists (8 out of 25) that were at the forefront of the Navalny movement: Alexey Navalny, Lyubov Sobol, Mariya Pevchikh, Kira Yarmysh, Leonid Volkov, Ivan Zhdanov, Ruslan Shaveddinov, and Ilya Yashin. Despite Navalny's imprisonment, his social media accounts remain active and are maintained by his team. Some of these individuals were also operating from abroad (e.g., Ivan Zhdanov), and some were present or helped to organise the protests and were arrested during protests (e.g., Yarmysh, Sobol).

There were nine critical media outlets (out of 25) such as TV Rain, *The Insider*, Echo of Moscow, Radio Svoboda, Mediazona, *Meduza*, Navalny LIVE, and OVD-info. DW in Russian and MBKH media appeared only amongst the most retweeted accounts. Media outlets like Radio Svoboda, *Meduza*, BBC Russian, and DW in Russian are foreign media outlets for Russian-speaking audiences; the rest are critical domestic media outlets (e.g., TV Rain) and activists' media. The exception here is the Echo of Moscow, a state-sponsored media outlet.

A satirical anti-government account, @prof_preobr (named after Professor Preobrazhensky from Mikhail Bulgakov's novel), and one blogger among the most mentioned accounts, Rustem Adagamov, known for his LiveJournal blogging under the nickname *drugoi* (in English: "Other"), were in the list too. Other influentials were accounts of Navalny's team, the Open Russia movement, created by previously imprisoned businessman in exile Mikhail Khodorkovsky, an anonymous

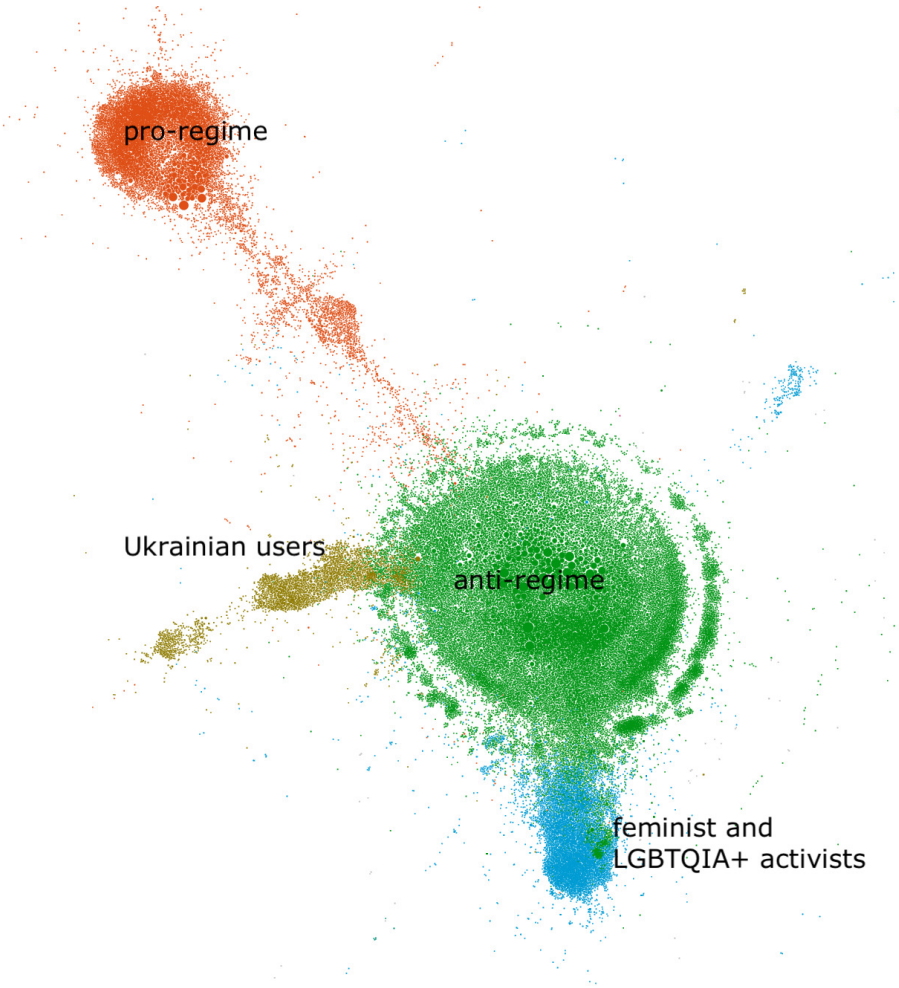

Figure 4. Twitter retweets network. Notes 73,300 nodes; filtered by out-degree >2.

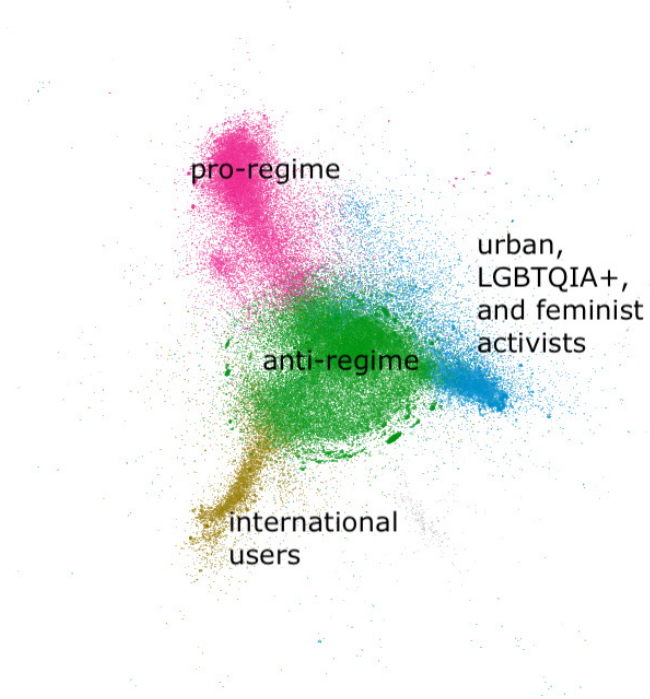

Figure 5. Twitter mentions network. Notes: 100,358 nodes; filtered by out-degree >2.

account discussing politics, and the account of an ordinary user, unnamed in the article for ethical reasons.

Overall, Twitter's anti-regime influentials are represented by traditional opinion leaders who are "most likely to send out first-hand and/or reliable information and have a professional reputation" about the protests (Dubois & Gaffney, 2014, p. 1270). Satiric, blogger, and ordinary user accounts were present in the list too which points to the organic nature of their influential status assigned by the online crowds (Papacharissi, 2014).

5.2. YouTube

YouTube's dataset was the smallest in the sample (4,683 videos). YouTube activity during the protests is shown in Figure 6. As per Twitter, the peaks represent the dates of the major Free Navalny demonstrations. YouTube activity also declined in March; however, unlike Twitter, the largest peak of activity was documented on April 21, with 140 videos posted on the topic—the day of the last large protest in a series.

We constructed a network of related channels for the 50 most viewed videos using Gephi (see Figure 7) and excluded three pro-government (domestic television channels Rossiya 24, Rossiya 1, and Russia's state-sponsored media outlet for foreign audiences, RT in Russian) and three irrelevant channels from the list. Interestingly enough, in 2022, YouTube banned all those pro-government news channels due to Russia's full-scale invasion of Ukraine. We ranked the top 25 anti-regime channels from the network by weighted in-degree in the network and matched their YouTube status based on the number of subscribers at the time of data collection. The results are in Supplementary File (Appendix 3). Eighteen out of the 25 top YouTube channels, potentially most recommended by the platform, were the channels with the gold status; the remaining seven were with the silver status.

There are fewer opposition activists and politicians (two) prominent on YouTube compared to Twitter. Only Navalny and Yashin appeared here, while other activists were ranked below the top 25. YouTube influentials were mostly represented by critical news media and journalists (16 out of 25). Some of the critical media outlets already appeared on Twitter (TV Rain, DW in Russian, Navalny LIVE, Echo of Moscow, Radio Svoboda, and MBKH media), while some were distinctive for YouTube (Current Time, RusNews, and *RBK*), but the personal channels of journalists (6 out of 16) are the most relevant as they have recently become very popular in Russia.

Glazunova (2022) describes how the new generation of journalists-YouTubers emerged as a popular trend in Russian journalism. Often disgraced in mainstream media, journalists used YouTube to perform high-quality journalism, supported by the revenue offered by the platform. These are channels in our list like VDud' by Yuri Dud, Beware Sobchak by Ksenia Sobchak, And to Talk*?* by Irina Shikhman, Editorial by Aleksey Pivovarov, and Varlamov by Ilya Varlamov. These journalists possibly reported on the movement before or during this time. The combination of the popularity of the genre on Russian YouTube, as well as YouTube's algorithms, most likely pointed to already popular channels and videos.

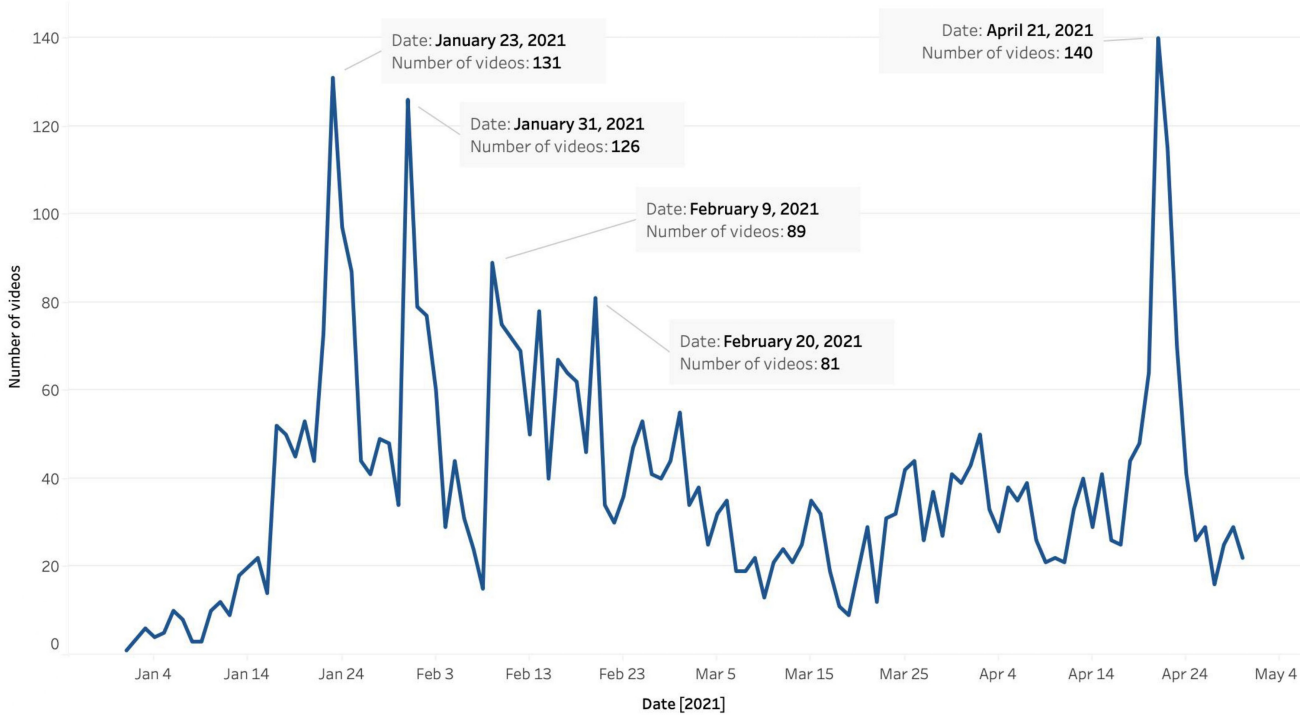

Figure 6. YouTube activity January–April, 2021 (4,683 videos).

Two accounts belong to Ukrainian journalist Dmitry Gordon, who has invited Russian opposition personas to his YouTube show. Another group of influentials on YouTube comprises Russian comedians and standuppers such as Ilya Sobolev and Danila Poperechny, or the satiric channel 55x55 with multi-million followers. Their content contained anti-regime sentiments, or it is possible that viewers who watch oppositional content also watch these channels on Russian YouTube as a part of the recommendation algorithm. There were two bloggers on the list: the former journalist and lawyer Mark Feigin, and an ordinary user not mentioned here for ethical reasons.

Driven by related-video algorithms and user behaviour on the platform, we saw that journalists-YouTubers and media outlets are dominant in the anti-regime discussions on YouTube. This confirms YouTube's status as an alternative news medium "that alters the truth claims of news and the professional hegemony of news making" (Sumiala & Tikka, 2013, p. 318). YouTube potentially recommended already popular channels with hundreds of thousands of subscriptions, which points either to the characteristics of the algorithms or the users' habits when they watch the most popular channels and videos. We also note that YouTube algorithms possibly promoted pro-government news for anti-regime videos too.

5.3. Facebook

The Facebook dataset is medium-sized (339,184 posts). Facebook activity during the protests repeats the activity of Twitter and YouTube (Figure 8). The activity spikes coincide with major protests and the day of Navalny's

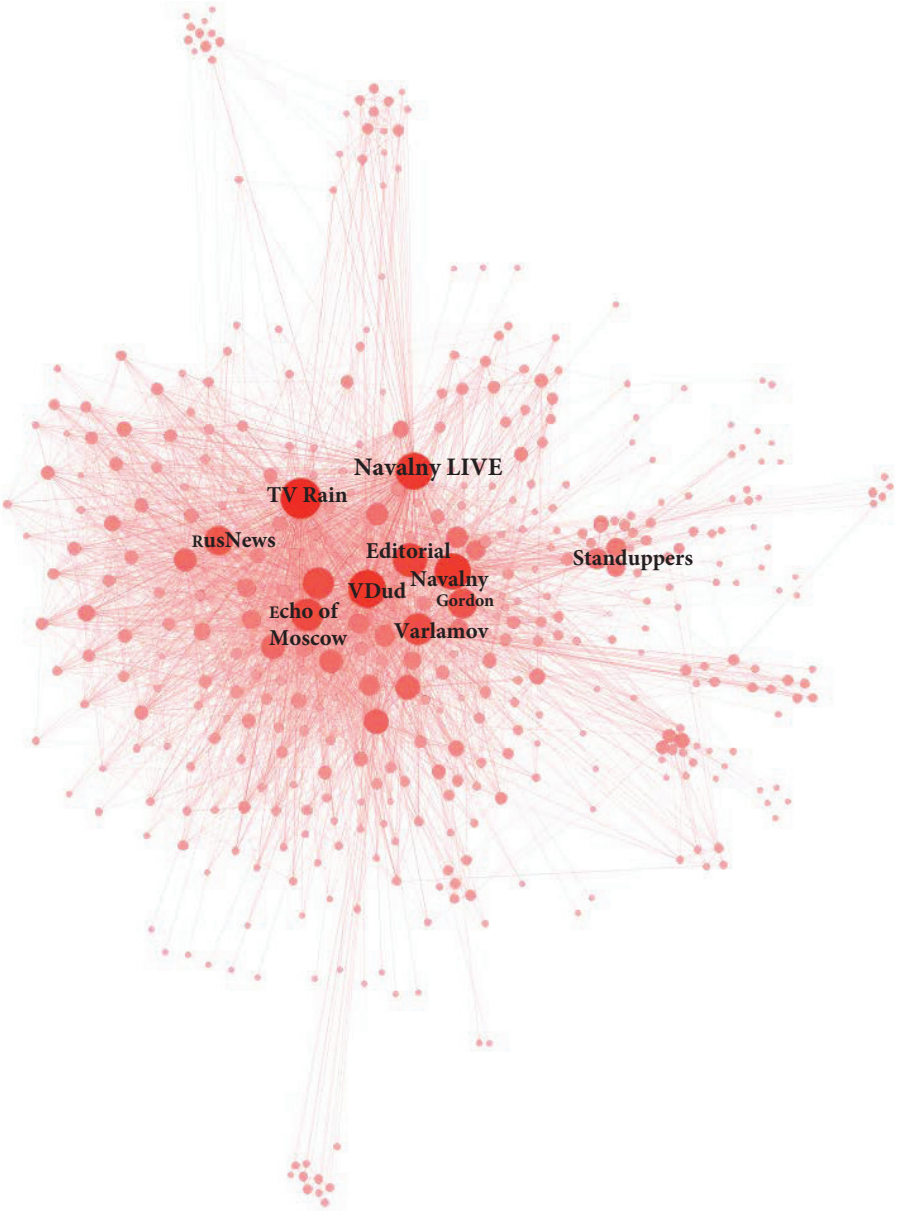

Figure 7. YouTube network of related channels during pro-Navalny protests. Notes: Number of nodes = 429; number of edges = 4,614.

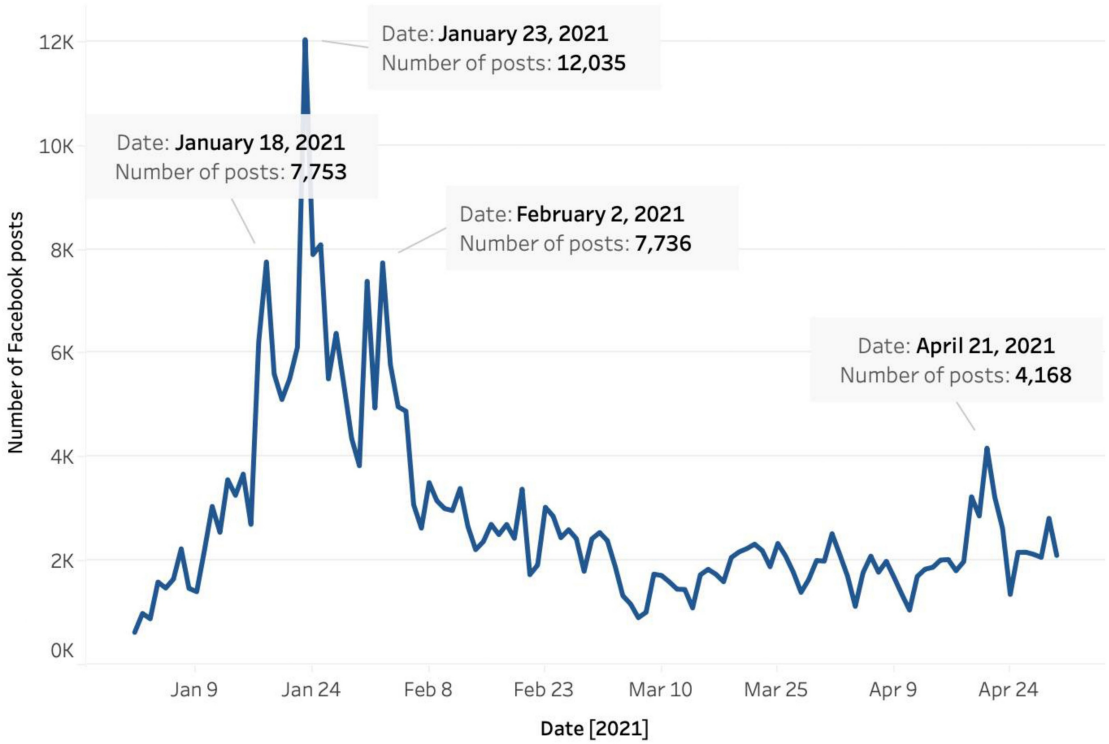

Figure 8. Facebook activity during January–April, 2021 (339,184 unique Facebook posts).

imprisonment (February 2). The decay of the discussions is observed starting from mid-February with a small spike during the last protest of April 21, which points to the similar trajectories of the information flows about protests on three platforms. We calculated the total engagement with Facebook posts. Twenty-five accounts were then manually selected from the ranked list with the highest engagement based on the authors' knowledge of Russian politics. Due to a different methodology applied to Facebook, we were unable to computationally establish the polarisation of anti-regime and pro-regime groups, pages, and public profiles. Therefore, we manually assessed the top accounts with the highest average engagement to filter foreign accounts, unrelated accounts, and pro-regime accounts. In total, we excluded 131 accounts; the majority of them were Ukrainian accounts (also Armenian, Georgian, Bulgarian, Latvian, and others). There were several pro-government accounts: a pro-government journalist from Channel 1, Irada Zeinalova, and an account of News of Channel 1. The results are in Supplementary File (Appendix 4). Most spaces were Facebook pages (17) and verified public Facebook profiles (eight), which points to cultures of user engagement with Facebook spaces. The influentials were known opposition leaders (13 out of 25) who were not directly involved in Navalny's movement.

Apart from Navalny's colleagues (Evgeny Roizman, Ilya Yashin, and Lyubov Sobol), Grigory Yavlinsky, for example, was also on the list. The founder of the liberal Yabloko party, Yavlinsky criticised Putin but also Navalny at the time, labelling him as a "national populist" (Yavlinsky.ru, 2021). Lev Schlosberg, another Yabloko deputy of the Pskov regional parliament (2011–2015) deprived of the mandate, signed an open address to Putin and expressed concern over a threat to Navalny's life at the time. Another anti-regime activist on the list is Mikhail Khodorkovsky, a former political prisoner figuring in the Yukos case in the early 2000s (Dixon & Day, 2010). Other activists were the leaders of the 2011–2012 protests. First in the ranking is writer Boris Akunin (real name: Grigory Chkhartishvili), who regularly expresses his disagreement with Putin's politics. Tatyana Lazareva, a Russian TV host, took part in the 2011 protests; together with Alexey Navalny, Dmitry Bykov, Ilya Yashin, Boris Akunin, and journalist Leonid Parfyonov, they gave speeches at the 2011 protests. Most of these leaders were elected to the then-formed Russian Opposition Coordination Council aimed at coordinating dissent in the country, which dissolved after a year. Facebook was one of the primary forums for communication during the protests in 2011 (White & McAllister, 2014), and has continued to be a platform for the anti-regime critique by the same actors.

There were seven accounts with satirical content. Humoristic content tends to attract more engagement with posts on the platform in general. The account of the pseudo-politician Vitaly Nalivkin consists of video sketches about resonant political events in Russia. In February 2021, the creators released a parody on Navalny's YouTube investigation of Putin's palace featuring Nalivkin, dubbed *Nalivkin's Palace*, which gathered more than a million views and was posted on Facebook too. Five critical and opinion journalists were prominent on Facebook including Alexander Nevzorov,

Mikhail Zygar, Leonid Parfyonov, Andrei Loshak, and Arkady Babchenko, as well as the Current Time outlet, and an account of a non-for-profit organisation.

6. Discussion and Conclusion

Our mixed-methods workflow allowed us to map anti-regime publics on three platforms that were discussing the Free Navalny protests and identify anti-regime influentials facilitated by digital platforms. In addition to the self-organisation of digital publics that is enabled by digital platforms in Russia, the top-down communication of anti-regime influentials is equally vital for successful online mobilisation and the organisation of anti-regime rallies. Our analysis showed that in most of the cases (75 total), platforms with their features aided the scalability (Boyd, 2011) of already popular anti-regime communicators in Russian politics. These were at the core: the heads of Navalny's movement (Twitter), the 2011 protests leaders (Facebook), Yabloko politicians (Facebook), critical domestic media outlets and journalists (all platforms), satiric and humoristic accounts (all platforms), and to a lesser extent bloggers and ordinary users. There can be a variety of reasons impacting their high visibility on each platform, including the demographics of audiences on these platforms and the communication strategies of anti-regime influentials. While we did not explore the causality and impact of the factors that aid the visibility of anti-regime influentials, we did observe the cultures of use of digital platforms by the prominent Russian regime critics on two levels: a contextual level and a platform features level.

On the contextual level, we saw the confluence of general platform specifics that make them preferable forums for various groups of political communicators seeking scalability and region-specific (Russia-specific) characteristics. Twitter generally is known as a platform for traditional opinion leaders such as journalists, politicians, and media outlets, joined by the "crowd-sourced" elites (Papacharissi, 2014) comprising activists, bloggers, intellectuals, and ordinary users. Given the long-established political polarisation between anti-regime and pro-regime groups of the Russian-speaking Twitter (Dehghan & Glazunova, 2021; Kelly et al., 2012; Spaiser et al., 2017), it was unsurprising to find the major leaders of Navalny's movement and critical news media dominating the discussion of the protests. The former tried to mobilise their supporters for rallies, political campaigns, and flash mobs using Twitter. Less prominent groups of LGBTQIA+, urban, feminist activists found should be explored in future research. In 2022, when most of the anti-regime influentials were suppressed by the regime, the feminist movement in Russia stepped up as major anti-war advocates, enabling horizontal linkages to mobilise supporters and employing feminist aesthetics (Bredikhina, 2023).

YouTube, generally known as a global alternative news medium, has become a trusted forum for independent media outlets and journalists in Russia. Relative resistance of YouTube to Russian law-enforcement bodies' censorship (Glazunova, 2022) attracted a lot of independent journalists and media outlets to the platform, a development that was confirmed by our findings. Lastly, Facebook is previously known to have a positive impact on citizen protests worldwide (Fergusson & Molina, 2020), though, on the negative side, there were no effects found on regime change, democratisation, or governance. In Russia, Facebook helped anti-regime communicators and protest leaders to facilitate the protests and spread anti-regime information in 2011–2012 (Reuter & Szakonyi, 2013; White & McAllister, 2014) and maintained their popularity throughout the years. However, it is safe to assume that it has not attracted a new generation of activists and related user engagement on the platform since. The large proportion of humour and satiric accounts found among anti-regime influentials brings the role of humour in authoritarian regimes to the fore. Its potential as a digital resistance tactic in Russia should be explored further.

The platform features embedded in the platforms' infrastructures revealed how the networked publics were shaped during the protests and whom they made more visible than others (RQ2). There were only two influentials that appeared on all three platforms: Alexey Navalny and Ilya Yashin. Both Navalny and Yashin were previously found to be effective online communicators who employ digital technologies of the platforms to the fullest (Glazunova, 2022). Russian anti-regime publics continue to rely on top-down communication from charismatic leaders (Litvinenko, 2012). We saw how different platform features aid in the visibility of different groups of actors criticising the Russian regime. However, YouTube algorithms potentially boosted the influence of known pro-regime news channels before their total ban on the platform in 2022.

The scalability (Boyd, 2011) of these actors enabled by the above-mentioned platform features (and beyond) acquires a different meaning in the conditions of authoritarian Russia. To rephrase Boyd (2011, p. 46), "The potential visibility of content in networked publics is great" on platforms for anti-regime influentials in Russia but—threatening their existence. In most cases, the growing political influence and mobilising potential of anti-regime influentials is a reason for their further suppression by the regime. For years the Russian regime could not respond appropriately to the fast-growing, networked, and horizontal structure of connections between regime critics; they preferred to stifle them with a top-down and hierarchical approach targeting anti-regime influentials (Glazunova, 2022). Digital media play a double-edged sword in these processes.

Since 2021 most of the revealed anti-regime influentials have been suppressed in Russia—a process intensified during the full-scale invasion of Ukraine in 2022. Most of the movement's leaders at the time of writing were imprisoned like Navalny and Yashin, detained for

short terms (e.g., Roizman), or fled the country (e.g., Sobol). Many anti-regime media outlets were branded as "foreign agents," meaning they receive foreign financing or are under foreign influence (e.g., Mediazona) or are liquidated (e.g., Echo of Moscow). The authors of Nalivkin sketches were charged with hooliganism in 2021. The "augmented dissent" (Lokot, 2021), partly facilitated by platform features and affordances, goes hand in hand with suppression in Russia. Apart from physical repressions of the opposition, the censorship arsenal has also transformed and become advanced: Lately, Russia uses the automated system Oculus to identify and remove anti-regime posts online. The growing prominence of anti-regime influentials has not gone unnoticed; it is constantly monitored and actioned by the regime. Therefore, digital platforms with their features should be cautiously conferred an optimistic mobilising and democratic potential in authoritarian regimes like Russia. The physical absence of prominent leaders (both online and on squares) targeted by law enforcement (Litvinenko, 2012) has indeed limited the mobilising capacity of the opposition movement. This could be seen even from the decline in the volume of communication since Navalny's imprisonment (February 2, 2021) on all three platforms. Later, several Russian anti-war protests in 2022–2023 lacked effective coordination and vocal opinion leaders and gathered fewer people than the Free Navalny protests.

However, such snapshot analysis and suggested methodological workflow can help to evaluate the state of the anti-regime communication flow and its opinion leaders across platforms and over time, inform on cultures of their use in Russia, and potentially be adapted to other authoritarian contexts with regional specifics, platforms, and their features. The long-term benefit of such an approach can be the identification of targeted groups of political minorities online struggling with authoritarianism across the world and the elaboration of viable communication strategies for them by various stakeholders, including digital platforms.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Files

Supplementary material for this article (four files) is available online in the format provided by the author (unedited).

References

Abidin, C. (2015). Communicative intimacies: Influencers and perceived interconnectedness. *Ada: A Journal of Gender, New Media, and Technology*, 8, 1–16.

Arora, A., Bansal, S., Kandpal, C., Aswani, R., & Dwivedi, Y. (2019). Measuring social media influencer index—Insights from Facebook, Twitter and Instagram. *Journal of Retailing and Consumer Services*, *49*, 86–101. http://doi.org/10.1016/j.jretconser.2019.03.012

Avtoritarism my uzhe prozhli. Eto diktatura. [We passed authoritarianism already. This is a dictatorship now]. (2021, May 5). *Meduza*. https://meduza.io/feature/2021/05/05/avtoritarizm-my-uzhe-proshli-eto-diktatura

Bastian, M., Heymann, S., & Jacomy, M. (2009). Gephi: An open source software for exploring and manipulating networks. *Proceedings of the Third International ICWSM Conference*, *3*(1), 361–362.

Blondel, V. D., Guillaume, J. L., Lambiotte, R., & Lefebvre, E. (2008). Fast unfolding of communities in large networks. *Journal of Statistical Mechanics: Theory and Experiment*, *2008*(10), Article P10008. https://iopscience.iop.org/article/10.1088/1742-5468/2008/10/P10008

Boyd, D. (2011). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *A networked self: Identity, community, and culture on social network sites* (pp. 39–58). Routledge.

Bredikhina, M. (2023). On feminist aesthetics and anti-propaganda in Russia. *Arts*, *Multidisciplinary Digital Publishing Institute*, *12*(1), Article 6. https://www.mdpi.com/2076-0752/12/1/6

Bucher, T., & Helmond, A. (2017). The affordances of social media platforms. In J. Burgess, T. Poell, & A. Marwick (Eds.), The *SAGE handbook of social media* (pp. 233–253). SAGE.

Buchholz, K. (2021). *Russia's most popular social media networks*. Statista. https://www.statista.com/chart/26988/most-popular-social-media-in-russia

Cha, M., & Gummadi, K. P. (2010). Measuring user influence in Twitter: The million follower fallacy. *Proceedings of the International AAAI Conference on Web and Social Media*, *4*(1), 10–17.

Datareportal. (2021). *Digital 2021: The Russian Federation*. https://datareportal.com/reports/digital-2021-russian-federation?rq=russia

Davidson, J., Liebald, B., Liu, J., Nandy, P., Van Vleet, T., Gargi, U., & Sampath, D. (2010). The YouTube video recommendation system. In J. Davidson, B. Liebald,

J. Liu, P. Nandy, T. Van Vleet, U. Gargi, S. Gupta, Y. He, M. Lambert, B. Livingstone, & D. Sampath (Eds.), *Proceedings of the fourth ACM conference on recommender systems* (pp. 293–296). ACM. https://doi.org/10.1145/1864708.1864770

Dehghan, E., & Glazunova, S. (2021). "Fake news" discourses: An exploration of Russian and Persian tweets. *Journal of Language and Politics*, *20*(5), 741–760. https://doi.org/10.1075/jlp. 21032.deh

Dixon, S., & Day, M. (2010). The rise and fall of Yukos: A case study of success and failure in an unstable institutional environment. *Journal of Change Management*, *10*(3), 275–292.

Dubois, E., & Gaffney, D. (2014). The multiple facets of influence: Identifying political influentials and opinion leaders on Twitter. *American Behavioral Scientist*, *58*(10), 1260–1277. https://doi.org/10.1177/0002764214527088

Fergusson, L., & Molina, C. (2020). *Facebook causes protests* (Documento CEDE No. 41). SSRN. https://ssrn.com/abstract=3553514

Gel'man, V. (2005). Political opposition in Russia: A dying species? *Post-Soviet Affairs*, *21*(3), 226–246. https://doi.org/10.2747/1060-586X.21.3.226

Gel'man, V. (2013). Cracks in the wall: Challenges to electoral authoritarianism in Russia. *Problems of Post-Communism*, *60*(2), 3–10. https://doi.org/10.2753/PPC1075-8216600201

Gel'man, V. (2015). Political opposition in Russia: A troubled transformation. *Europe-Asia Studies*, *67*(2), 177–191. https://doi.org/10.1080/09668136.2014.1001577

Gerodimos, R., & Justinussen, J. (2015). Obama's 2012 Facebook campaign: Political communication in the age of the like button. *Journal of Information Technology & Politics*, *12*(2), 113–132. https://doi.org/10.1080/19331681.2014.982266

Glazunova, S. (2022). *Digital activism in Russia: The communication tactics of political outsiders*. Springer.

Golosov, G. V. (2011). The regional roots of electoral authoritarianism in Russia. *Europe-Asia Studies*, *63*(4), 623–639. https://www.jstor.org/stable/27975569

Goodrow, C. (2021, September 15). On YouTube's recommendation system. *YouTube Official Blog*. https://blog.youtube/inside-youtube/on-youtubes-recommendation-system

Herasimenka, A. (2020). *Adjusting democracy assistance to the age of digital dissidents* (No. 15). German Marshall Fund of the United States. https://www.jstor.org/stable/resrep26756

Jacomy, M., Venturini, T., Heymann, S., & Bastian, M. (2014). ForceAtlas2, a continuous graph layout algorithm for handy network visualization designed for the Gephi software. *PLoS ONE*, *9*(6), Article e98679.

Katz, E., & Lazarsfeld, P. F. (1955). *Personal influence: The part played by people in the flow of mass communications*. Transaction Publishers.

Kelly, J., Barash, V., Alexanyan, K., Etling, B., Faris, R., Gasser, U., & Palfrey, J. (2012). *Mapping Russian Twitter* (No. 2012-3). Berkman Center Research Publication. http://cyber.law.harvard.edu/publications/2012/mappingrussiantwitter

Lewis, R. (2018). *Alternative influence: Broadcasting the reactionary right on YouTube*. Data & Society. https://datasociety.net/library/alternative-influence

Litvinenko, A. (2012). Role of social media in political mobilization in Russia. In P. Parycek & N. Edelmann (Eds.), *CeDEM 12 Conference for E-Democracy and Open Government* (pp. 181–188). Austrian Institute of Technology; Bundesrechenzentrum.

Litvinenko, A. (2021). YouTube as alternative television in Russia: Political videos during the presidential election campaign 2018. *Social Media + Society*, *7*(1), 1–9. https://doi.org/10.1177/2056305120984455

Lokot, T. (2021). *Beyond the protest square: Digital media and augmented dissent*. Rowman & Littlefield.

Nechai, V., & Goncharov, D. (2017). Russian anti-corruption protests: How Russian Twitter sees it? In D. Alexandrov, A. Boukhanovsky, A. Chugunov, Y. Kabanov, & O. Koltsova (Eds.), *DTGS 2017: Digital transformation and global society* (Vol 745, pp. 270–281). Springer. https://doi.org/10.1007/978-3-319-69784-0_23

Noble, S. U. (2018). *Algorithms of oppression*. New York University Press.

Online Freedoms Project. (2021). Svoboda interneta 2021: Tsarstvo tsenzury. [The freedom of internet: The kingdom of censorship].

Papacharissi, Z. (2014). *Affective publics: Sentiment, technology, and politics*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199999736.001.0001

Reuter, O. J., & Szakonyi, D. (2013). Online social media and political awareness in authoritarian regimes. *British Journal of Political Science*, *45*(1), 29–51. https://doi.org/10.1017/S0007123413000203

Rieder, B. (2015). YouTube data tools [Computer Software]. https://tools.digitalmethods.net/netvizz/youtube

Rogers, E. M. (1962). *Diffusion of innovations* (4th ed.). The Free Press.

Rogers, R. (2018). Digital methods for cross-platform analysis. In J. Burgess, A. Marwick, & T. Poell (Eds.), *The SAGE handbook of social media* (pp. 91–108). SAGE. https://doi.org/10.4135/9781473984066.n6

Spaiser, V., Chadefaux, T., Donnay, K., Russmann, F., & Helbing, D. (2017). Communication power struggles on social media: A case study of the 2011–12 Russian protests. *Journal of Information Technology & Politics*, *14*(2), 132–153.

Sumiala, J. M., & Tikka, M. (2013). Broadcast yourself-global news! A netnography of the "flotilla" news on YouTube. *Communication, Culture & Critique*, *6*(2), 318–335. https://doi.org/10.1111/cccr.12008

Toepfl, F. (2020). Comparing authoritarian publics: The benefits and risks of three types of publics for autocrats. *Communication Theory*, *30*(2), 105–125. https://doi.org/10.1093/ct/qtz015

Tufekci, Z. (2018, March 10). YouTube, the great radicalizer. *The New York Times*. https://www.nytimes.com/2018/03/10/opinion/sunday/youtube-politics-radical.html

Walter, S., & Brüggemann, M. (2020). Opportunity makes opinion leaders: Analyzing the role of first-hand information in opinion leadership in social media networks. *Information, Communication & Society*, *23*(2), 267–287. https://doi.org/10.1080/1369118X.2018.1500622

White, S., & McAllister, I. (2014). Did Russia (nearly) have a Facebook revolution in 2011? Social media's challenge to authoritarianism. *Politics*, *34*(1), 72–84. https://doi.org/10.1111/1467-9256.12037

Yapparova, L., & Dmitriev, D. (2021, May 19). Your name is on some FSB officers' list. https://meduza.io/en/feature/2021/05/19/your-name-is-on-some-fsb-officer-s-list

Yavlinsky.ru. (2021). Bez putinizma i populisma [Without "putinism" and populism]. https://www.yavlinsky.ru/article/bez-putinizma-i-populizma

YouTube Creators. (n.d.). *Let's celebrate your hard work*. https://www.youtube.com/creators/how-things-work/get-involved/awards

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Article

The Limits of Social Media Mobilization: How Protest Movements Adapt to Social Media Logic

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Abstract
The emergence of social networking sites offers protest movements new ways to mobilize for action and draw attention to their issues. However, relying on social media also creates challenges, as social media follow their own principles. If protest movements want to be visible in news feeds, they have to adapt to so-called social media logic, as originally postulated in mediatization research. The principles of social media have been conceptualized. However, there is a lack of empirical research on how political actors perceive and orient to this logic, how they learn about it, and the consequences for mobilization (i.e., communicating protest issues as well as taking protest action). As protest movements are an integral part of modern democracies, use social media somewhat intensively, and usually build on a fluid network structure that allows us to examine adaptation processes in greater detail, they are particularly suitable for addressing these questions. Semi-structured interviews with activists organizing protest actions or managing social media accounts from 29 movement organizations in Germany (N = 33) revealed that protest movements have internalized social media logic and paid attention to not only the design but also the timing of posts to suit algorithms. The protest organizations generally built on their experience with social media. The degree to which they followed these principles was based on available resources. Limits of this adaptation arose, for example, if sensitive or negative content rarely produced likes or, increasingly, personalization evoked a presumed hierarchy within the movements.

Keywords
activism; mediatization; mobilization; protest movements; social media

Issue
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1. Introduction

Protest movements, such as Fridays For Future and Black Lives Matter, are an integral part of modern democracies, as they are considered a driving force for social change (Della Porta & Diani, 2015). Since the Arab Spring, social media are regarded as conducive to protest mobilization (Tufekci & Wilson, 2012). Activists use social media not only to draw attention to their issues (Quan-Haase et al., 2021) but also to mobilize supporters for protest actions (Chadwick & Dennis, 2017; Lee et al., 2017). Numerous studies have suggested a positive relation between the use of social media and protest behavior (Jost et al., 2018; Masías et al., 2018). Thus, it is not particularly surprising that many movement organizations use social media intensively (Belotti et al., 2022; Billard, 2020; Wong & Wright, 2020).

However, if movement organizations want to generate awareness, recruit members, and mobilize for protest actions through social media, they have to adapt to the inherent logic of social media (Hutchinson, 2021). Such adaption processes in media logics, in general, were originally postulated in the mediatization approach (Schulz, 2004; Strömbäck & Esser, 2014). Looking at the extensive research on the mediatization of politics, it is striking that numerous studies have traced adaption

processes to journalistic media logic (Blumler & Esser, 2019; Fawzi, 2018). Comparatively few studies have focused on social media (Figenschou, 2020; Jost, 2022). In addition, less is known about the adaption of media logics at the meso-level (examining organizations instead of individual actors; Donges & Jarren, 2014) and the underlying processes that guide such an adaption. In this regard, protest movements seem to be very suitable for investigation, as they partly use social media intensively. Furthermore, they are usually less institutionalized (i.e., have a loose network structure). This allows researchers to shed more light on strategic considerations in such adaption processes as if they follow a bottom-up, rather than top-down, development process. In analyzing social media content, particularly on Twitter, some studies have aimed to identify selected social media strategies of prominent protest movements (Boulianne et al., 2020; Edrington, 2022; Sorce, 2022). However, it remains vague how these strategies are based on perceived social media logic and what consequences this might imply for mobilization (i.e., communicating protest issues and taking protest action).

To answer these questions, this article explored the use of different social media platforms and experiences with social media based on 33 semi-structured interviews with activists from 29 movement organizations in Germany that focused on a set of protest issues similar to historical protest clusters (e.g., the environment, labor, and feminism). Results showed that protest movements are in part strongly oriented toward the logic of social media (for example, by using postings that are more visual, humorous, and designed to encourage interaction). Activists' understanding of the underlying mechanisms was mostly derived from their experiences with social media. The interviews also revealed the consequences and limits of this adaption—for example, that professional photos of protest actions (should) serve as content or that sensitive topics simply did not lend themselves to generating likes.

2. Social Media Logic in Light of Protest Mobilization

Social media are widely considered to offer huge power in mobilization, at least since the Arab Spring (Tufekci & Wilson, 2012). Numerous studies have confirmed a positive correlation between the use of social media and participation in protests (Boulianne, 2015; Jost et al., 2018; Kruikemeier & Shehata, 2017; Masías et al., 2018). These studies highlight the role social media can play in mobilizing for protest action, which makes platforms such as Facebook, Twitter, and Instagram particularly promising for protest movements. To ensure that movement organizations are noticed on social networking sites by like-minded others, the organizations have to adapt to the affordances that social media set: the so-called social media logic (van Dijck & Poell, 2013) or network media logic (Klinger & Svensson, 2014).

2.1. Social Media Logic as "New Media Logic"

Based on the idea of the mediatization of society (e.g., politics) and its ascribed adaption of social areas or actors to media logic, researchers have long been interested in the question of what forms "media logic" (Hjarvard, 2018). Altheide and Snow (1979, p. 294) defined media logic as "a form of communication and the process through which media transmit and communicate information," resulting in a type of "institutionalized…interpretative schema" (Altheide, 2014, p. 22) that is taken for granted and guides social interaction. Although there are differences between the types of media (e.g., television vs. newspapers) and media outlets (e.g., quality press vs. tabloids) in the way they produce such schema, these principles are seen as "a basic underlying conceptual logic which applies to every mediated communication" (Tsuriel et al., 2021, p. 1984). With the recent emergence of new digital communication technologies, however, the paradigm of a single media logic underwent a shift, and the concept of media logic was transformed into two concepts: "mass media logic" and "social/network media logic" (Klinger & Svensson, 2014; van Dijck & Poell, 2013).

In comparing social media logic to mass media logic, van Dijck and Poell (2013) pointed to four dimensions that characterize social media logic. Social media are guided by an automated process that follows hidden algorithms that arise as a result of users' behavior rather than through the human editorial process (*programmability*). However, mass media logic and social media logic follow the idea of generating public attention (*popularity*). Unlike mass media, social media are said to generate equal attention for all users. Today, we know that underlying algorithms manage this process, which, in turn, are controlled by popularity cues (Porten-Cheé et al., 2018) and therefore favor visual, emotionalizing, and negative content (Jost, 2022; Larsson, 2021). Furthermore, these algorithms form *connectivity* between users and users and between users and content, although in an automated technical rather than personal way. Additionally, regarding the amount of data generated and used, social media provide deeper insights into audiences and users (*datafication*). Similar to the concept of social media logic (van Dijck & Poell, 2013) is the concept of network media logic (Klinger & Svensson, 2014). However, there are three major differences based on the production, distribution, and use of information. Network media logic is characterized by inexpensive information selection and content generation driven by the audience's individual preferences. Lay users not only create new content but also distribute it to like-minded others. Moreover, interaction among users during reception matters even more than in light of mass media logic feeding underlying algorithms and therefore increasing public attention. However, although social media logic has been widely conceptualized, there is still a lack of empirical evidence

regarding how such social media logic is recognized or perceived by users.

2.2. Adapting to Social Media Logic

Given the idea of social media logic, research on political communication and journalism has examined the extent to which political actors (Jost, 2022) and journalists (Tsuriel et al., 2021) adapt to social media logic. Research on the penetration of social media logic in news production revealed that journalists, in particular, working for social media news feeds are aware of the mass and social media logics and often struggle to balance them (Tsuriel et al., 2021). They had a strong orientation toward news factors such as emotionalization and surprise, which are perceived to match their users' preferences and generate more visibility within the news feed created by the algorithm (Lischka, 2021). Looking at the style of headlines, Welbers and Opgenhaffen (2019, p. 58) also detected a "shift towards a more subjective and positive style of communication." Such adaption processes appear to be continuing to evolve, as well as the emergence of new platforms such as TikTok (Vázquez-Herrero et al., 2022).

Regarding the communication practices of political actors, studies have shown that politicians also aim to adapt social media logic. In a long-term content analysis of Facebook posts from 2010 to 2015, Jost (2022) showed that politicians used message features that had previously been demonstrated to increase the number of interactions (i.e., emotionalized messages or directly addressing followers in posts). Regarding platforms that feature hashtags such as Twitter, studies have revealed an increase in use, pointing to the idea that politicians strongly adapt to the idea of connectivity (Enli & Simonsen, 2018). In contrast, Kelm et al. (2019) showed that the social media activities of German politicians were nearly constant between 2012 and 2016, contesting the idea that social media logic gained prominence in politicians' perceptions. Furthermore, their social media activities appeared to be independent of their perceived social media influence, pointing to the assumption that adaption processes might be used specifically for election campaigns. This perceived "power of likes" was emphasized by Verdegem and D'heer (2018) during election campaigns. As one of the few studies in this field, Figenschou (2020) examined how social media are learned and integrated into the public relations activities of government organizations. A top-down process became apparent, which was complicated by the fact that, until then, government organizations had concentrated more on dealing with news media.

Only a few studies have examined how movement organizations use social media in this regard. Johansson and Scaramuzzino (2019), for example, found that movement organizations today aim to personalize their campaigns to emphasize their presence in online environments. Building on such trends, local Fridays For Future organizations frequently used Thunberg's postings on their local accounts (Sorce, 2022). In the case of the Fridays For Future movement, Belotti et al. (2022) pointed to the broader strategies that activists followed in bridging online and offline settings. Furthermore, Boulianne et al. (2020) emphasized the global perspective on the organizations' tweets, which were mainly about sharing information and therefore, also documented local events across the globe. In addition, Black Lives Matter organizations tried to play on identity-building strategies in their tweets (e.g., by highlighting common values or creating a common enemy), as Edrington (2022) showed. However, this strategy was not noticeable in the interaction rates of their followers. As these few studies mostly examined single prominent movement organizations and focused on single platforms, we cannot conclude how protest movements in general follow the logic of social media or how they learn and internalize these principles.

2.3. Consequences of Adapting to Social Media Logic

In addition to the questions of how and to what extent (political) actors adapt to (social) media logic, research on the mediatization approach broadly discusses the consequences arising from such adaption processes in particular in light of mass media logics (Esser & Matthes, 2013). Because adapting to (mass) media logics usually involves a certain amount of effort invested in media activities (Donges & Jarren, 2014; Reunanen et al., 2010), it has long been discussed that adapting mass media logics might disturb or replace core (political) activities such as decision-making (Fawzi, 2018; Mazzoleni & Schulz, 1999; Meyer, 2009). A similar debate could be held regarding social media. However, researchers have broadly confirmed that adaption to media logic is visible in the communication practices of politicians (Blumler & Esser, 2019) or political parties (Donges & Jarren, 2014). However, less is known about whether the orientation toward media logics might also affect other activities, such as decision-making (Landerer, 2015; Viehmann, 2020) or, in this case, communicating protests and mobilizing for action in the streets.

From a theoretical perspective, adapting to social media logic implies being confronted with some of the challenges of social networking sites: Communicating on an emotional and personal level might trigger hate speech (Ziegele et al., 2014). At the same time, personal communication, in particular, can raise questions concerning personal privacy and data protection among activists (Cable, 2017). Moreover, following social media principles might also increase the risk of ending up in echo chambers, as like-minded others are usually addressed by underlying algorithms (Bright et al., 2020). Considering the relatively small amount of empirical research on adaption to social media logics (Figenschou, 2020; Jost, 2022), it is not surprising that we know hardly anything about the consequences of such an

adaption process for protest mobilization. Özkula (2021) pointed to two major challenges in the adaption processes examined by the nongovernmental organization Amnesty International. The first is an internal struggle, as activists face network structures being replaced by a hierarchy that had moved in. The second is that the use of social media forces activists to form new action repertoires driven by the idea of connective action. As a by-product of the Fridays For Future's personalization strategy, identification, and leadership were changed, as Sorce (2022) found.

3. Research Questions and Method

Contemporary media systems provide protest movements with a wide range of options for drawing attention to their activities. As social media are often considered to drive mobilization, their use seems very promising for protest movements. Several case studies have shed light on how prominent movement organizations use social media (Edrington, 2022; Sorce, 2022). However, less is known about how these strategies are built on a perceived social media logic and the consequences. Thus, this article first addresses the extent to which activists representing movement organizations perceive and orient toward a social media logic for mobilization (RQ1). To further enrich mediatization research, which has focused on the adaption of mass media logic and examines processes at the micro-level, this article then examines how activists and movement organizations learn about social media logic (RQ2). Moreover, the article sheds light on the consequences of adapting to social media logic for mobilization (i.e., communicating protest issues and taking protest action; RQ3).

To address these questions, we conducted 33 semi-structured interviews with 38 activists in Germany. This method allowed us to dive into participants' perceptions and (strategic) thoughts (Loosen, 2014). Moreover, a qualitative approach provides the opportunity to examine the mechanism for adapting social media logic and explore the consequences (addressed in RQ2 and RQ3), which have seldom been investigated in mediatization research. Sampling was based on theoretical considerations and aimed at achieving maximum variation. Various issues, organizational, and protest characteristics were taken into account (see Table 1 in the Supplementary File). The protest movements selected varied concerning the issues they addressed, but a set that is similar to (historical) protest clusters in Germany was created (e.g., environment, labor, and feminism; Rucht, 2001). In addition to these issues, their organizational structure was considered. Organizations that are active at the local, national, or even international level or claimed to be active at these levels were considered. Furthermore, sampling was based on the organizations' protest activities. Organizations that frequently arranged protest events (up to every week) and organizations that had events once or twice a year were considered. As movements are commonly defined as "organized and sustained effort of a collectivity of interrelated individuals, groups, and organizations" (Neidhardt & Rucht, 1991, p. 450), we sampled 29 organizations that claim to belong to 15 larger protest movements. All had organized at least one protest action (e.g., a demonstration or petition) within the past few years. The organizations were contacted through e-mail or their social media accounts, and an interview with an activist who was a member of the organizing team or in charge of media-related tasks (e.g., managing social media accounts) was requested.

The interviews were conducted between September 2, 2021, and May 10, 2022, mainly online and one-to-one due to Covid-19 constraints. In some cases, activists were asked to be interviewed in groups of three to four. Interviewees were mostly activists with an organizational role who, on average, had been active in the group for four years and were, on average, 42 years old. Among them were 21 women, 16 men, and one non-binary person. The interviews followed a guidebook that focused on the use of different social media platforms, scenarios for promoting topics and events on social media, specific experiences, and global assessments related to social media. The interviews lasted, on average, one hour and 21 minutes and were recorded with two recording devices, transcribed, and anonymized.

Analysis of the transcribed interviews was conducted using MAXQDA software. To examine the strategies more closely and to further explore perceived social media logic, adaption processes, and challenges, in the first step, one-third of the interviews were randomly selected and open-coded. Based on the codes developed in this process and codes derived from previous research on mediatization processes (e.g., Donges & Jarren, 2014), a qualitative content analysis of the remaining material was conducted following Kuckartz's (2016) suggestions. All the material was first coded with superordinate main codes. Then, subcodes were inductively developed based on the main codes. Finally, the entire material was coded again according to the subcodes.

4. Results

4.1. Perception and Orientation Toward Social Media Logic

Examining the perceived social media logic and which protest movements oriented to it (RQ1), the interviews showed that most of the organizations had a clear understanding of how to communicate their issues on social media platforms to mobilize supporters (i.e., using visual content, fewer words, emotional statements, concise messages, personal stories, and prominent faces). Although none of the activists interviewed regarded themselves as experts, they knew a lot about what is required for mobilizing on social media platforms:

> That's where my knowledge ends somewhat….What I have noticed is that the channels should be used regularly, and that information should be sent to consumers on a regular basis. And not just now and then…there are times when it should be better to post, so as to bring news higher up in the newsfeed and so on. But I don't have that much experience. (Extinction Rebellion Berlin, organizer)

To stand out among the supposedly familiar features of social media, some activists used the strategy of relying on humorous content (e.g., memes):

> So, we already have guidelines that we follow, goals that we pursue, and how we get there. And one of them is that we want to be humorous because we also have the feeling that people often talk very seriously about problems, especially on social media. (Deutsche Wohnen & Co. Enteignen, social media manager)

In the composition of the messages, from the activists' point of view, it was very important to remain authentic, which manifested in a professional appearance (particularly with visual content) but with a personal tone: "I think a good hashtag is important. To find that…it has to be personal, it has to be authentic, just personal and authentic" (#IchBinHanna, organizer).

Among the platforms, some activists considered different design features for mobilization (e.g., in terms of the use of hashtags and emojis or the length of the posts). However, their social media work rarely differed across platforms; instead, they mostly shared similar content on the networks, which was usually due to a lack of resources: "Because our resources are limited, we've basically always posted the same thing on all three platforms" (Deutsche Wohnen & Co. Enteignen, social media manager). The main way to generate visibility on social media was through continuous posting. The timing of the posts was also seen as crucial (as illustrated in the first quote). At the same time, it was important to communicate interactively with users (i.e., to moderate their own pages and accounts). However, many of the groups were limited in carrying out such ongoing social media mobilization due to a lack of time or personnel:

> Well, as soon as you get over a certain number of followers, the account alone is a lot of work, and we all do it completely on a voluntary basis. So, none of us gets paid for it, and all of us have another job. (CatCallsOfHannover, social media manager)

There were differences due to the overall sizes of the movement organizations. Larger, established organizations (e.g., Fridays For Future) were in a slightly better position than smaller newer ones (e.g., Animal Rebellion), as the burden could be shouldered by more than one person. Although most groups were very aware of what it takes to get attention when mobilizing through social media, many of the activists still saw the underlying algorithms of the platforms as a mystery: "I tried to understand Twitter…because somehow it didn't make sense at all how it all works and what happens there and what now appears in my timeline and on my homepage" (Darmstadt unbefristet, organizer).

4.2. Learning About Social Media Logic

Usually, only a few people within the movement organizations were in charge of social media efforts. In some cases, there were separate teams within the groups. Otherwise, the task was carried out by single activists who functioned as experts. Their knowledge of social media logic (RQ2) rarely stemmed from a professional background: "I had already done social media before and naturally passed on a lot of knowledge" (Deutsche Wohnen & Co. Enteignen, social media manager). To some extent, protest movements, particularly those with young members, benefited from the daily experience that activists had gained. Groups that addressed broad topics relevant to a large part of society also had an advantage, as they were also more likely to attract professional social media managers or at least interested individuals as members: "The more people who participate, the more likely it is that there will be people who are somehow social media-interested" (Animal Rebellion München, organizer). However, as several activists had little personal exposure to social media activities before their political engagement, learning by doing was more common:

> We did that a few times, that we addressed [a politician] directly, and he then also answered, a discussion arose….And once we also organized that many people do that at the same time. And that also worked out really well…and then, of course, you have a debate on Twitter. (ausgestrahlt, organizer)

Learning was also based on direct feedback from users. However, the experiences were often reflected on or intuitively judged together within the movement or the team. More rarely, the activists also analyzed data: "We look and measure whether we are in social media, of course we already look at which post has which outreach" (Land schafft Verbindung Rheinhessen, organizer). One reason was that only a few had professional experience and were not familiar with the analysis tools and possibilities. The groups also sought to share their experiences regarding social media activities with other organizations (at least in the same range of topics). Particularly in the field of environmental movements, single organizations offer cross-organizational workshops in which activists share experiences and teach social media strategies: "Fortunately, there is also more and more information available. For example, I think Ende Gelände [protest movement against coal mining] has an info channel

on Telegram….They also offer social media training, for example" (Animal Rebellion München, organizer). Internal training also took place, particularly in large movement organizations (e.g., Fridays For Future). Those mostly prominent protest movements, in turn, act as role models for many smaller movement organizations: "For example, Fridays For Future does a lot via messenger services" (ausgestrahlt, organizer).

4.3. Consequences of Adapting to Social Media Logic for (Communicating) Protest Action

Building on the perception of social media logic and learning about it, we asked about the consequences this adaption process might have for mobilizing (i.e., communicating protest issues and taking protest action; RQ3). Due to the organizations' orientation toward social media principles, some of the organizations have built strong interactions between organizing protest actions and communicating via social media platforms. There were often informal exchanges between the working groups, particularly in the large movement organizations. When specific protest actions were planned, attention was paid not only to creating strong images that were suitable for social media content but also to ensuring that these images were perceived as being as professional as possible: "The information we really want to get across and of course the quality of photos and videos is really important….We always try to have professional photographers with us who take good photos" (Animal Rebellion München, organizer). Particularly in the case of movement organizations that practice civil disobedience, there were challenges. Sharing substantial information with the community quickly and transparently sometimes clashed with the timing of social media activities:

> In the case of civil disobedience, you have to be a bit careful, because otherwise….By now, we no longer have a puppy status….That's why you can't go on a broad discussion about all kinds of plans; that's just not possible….Then you have this Telegram channel, then you see this announcement that something will take place and maybe already a date, but just no place at all yet. (Extinction Rebellion Berlin, organizer)

Limits in adapting to social media logic also arose in communications regarding protest issues. Often, activists saw using the brevity required or joining trends in social media to maintain visibility as challenging. Personalization trends also ran counter to protecting the privacy of individual activists or the group, and, in some cases, caused debates within the movement:

> On social media, the speech of Luisa landed, who was somehow not directly involved in the planning…Luisa was then used again for this, because it is simply…so Luisa's face is somehow associated with Fridays For Future Germany. But internationally there was criticism from BIPOC [Black, Indigenous, and People of Color] people and also from others that it verges on white saviourism…yes, so there is still a bit of stress inside. (Fridays For Future Mainz, organizer)

As social media typically call for interaction (likes and shares) to be visible on feeds, movement organizations had to generate such user engagement. This not only required considerable resources but also exposed activists more often to hate speech. This raised the question of the extent to which they accepted this to remain visible: "And on a very technical level, of course, it's like the algorithm, it doesn't care if people comment on us to abuse us or to support us. That's why we often let it run because the algorithm likes that" (Deutsche Wohnen & Co. Enteignen, social media manager). From the activists' point of view, following the platforms' rules also entailed the risk of acting even more strongly in echo chambers: "But, yes, it's really like that, you have to avoid it becoming a bit of an echo chamber" (Bundesverband Lebensrecht, organizer). In particular, groups that addressed sensitive topics, such as experiences of discrimination, also perceived it as a barrier to achieving likes and shares for negative postings, and thus explicitly turned away from this social media strategy: "They're highly personal stories that we post there and that's why we would never instrumentalize that in a way that we would say 'oh my god, physical assaults get more likes, we need to post more physical assaults' " (CatCallsOfHannover, social media manager). Social media's structure also allowed groups to network and support each other across organizations. In this regard, protest movements were encouraged to make their networks as public as possible. However, and even more than in the offline context, this entailed the risk of being undermined by opponents or other groups:

> That went really fast. We had a lot of members, then at some point, I turned the open group into a closed one. Because I thought, oh, if all the right-wingers now dial in there and then start abusing us, so it's better that you have to register. You now also have to answer three questions. We now also look at the profiles before we accept someone. Not only the profiles but also their friend lists. (Omas gegen Rechts Deutschland, organizer)

5. Discussion and Conclusion

As many studies have assumed that social media have great potential to mobilize for protest actions (Jost et al., 2018; Masías et al., 2018), it seems to be highly promising for protest movements to communicate their concerns and organize protest actions through social media. At the same time, social media have their own logic and thus pose specific demands (Klinger & Svensson, 2014; van Dijck & Poell, 2013). Thus, if protest movements want to generate attention on these platforms,

they must adapt to the platforms' logic, in the sense of the mediatization paradigm. However, despite extensive research on mediatization, less is known about how far protest movements orient toward these functional principles to mobilize supporters, how this adaption process takes place, and the challenges of adapting to this social media logic. We sought to answer these questions using semi-structured interviews with activists from 29 different movement organizations in Germany regarding their issues, organizational level, and protest activities.

The results indicated that the activists internalized the structures and mechanisms of social media deeply and adapted their strategies to the needs of the platforms, for example, by posting short, emotional, highly visualized messages to mobilize supporters (RQ1), confirming, for instance, the results for politicians' social media adaption that Jost (2022) found. However, the degree to which the activists followed these principles varied—not only but mostly depending on the available resources (i.e., know-how, time, and staff). Due to a lack of resources, movement organizations often used the same content on their pages and accounts, although in some cases they perceived differences in the social media logic between the platforms or used them differently. This problem is linked to the discussion of the concept of social media logic: Is this truly an overall logic that applies equally to all platforms, or is it a matter of different platform-specific logics? From a theoretical point of view, it can be argued that the underlying principles of social media are similar (e.g., all networks are concerned with the necessary interaction rates, which algorithms use as the basis for generating feeds). However, the specific form and mode of this social media logic seem to be conditioned by platform-specific features and affordances (e.g., when the algorithm prioritizes image content; Bucher & Helmond, 2017; Hase et al., 2022). These different features must be considered more strongly in a conceptual way to provide more empirical evidence. Furthermore, some of the described social media design guidelines (e.g., personalization) closely match the selection criteria (news values) of mass media logic, which raises the question for future research and conceptual development to what extent there are links between the two logics and to what extent they are empirically reflected in the perceptions of users or recipients.

Regarding the question of how these functional logics are internalized (RQ2), the interviews showed that some activists introduced professional know-how into the protest movements. More often, however, it was (still) the case that social media logic was learned during the process of doing. Due to the network structure of movement organizations, it is not surprising that there are clear differences compared to Figenschou's (2020) findings on the adoption processes within government organizations. Rather than a top-down process, joint development emerged within the movement organizations. Protest movements with young members in particular benefited as the activists have more frequent contact with such platforms in everyday life (Belotti et al., 2022) and, therefore, pick up mechanisms more quickly. This finding raises the question of whether a kind of digital divide is emerging (Chen, 2017). As protest is considered a meaningful form of political participation (van Deth, 2014), this development is worrying.

The exploratory interviews also revealed the consequences and limits of the adaption of social media logic for mobilization (RQ3). For some groups, the orientation toward social media logic was closely intertwined with the organization of street protests. This was exemplified by images that were produced specifically for this purpose, sometimes very professionally, or by close coordination between the action and social media teams regarding the timing of the event or the publication of corresponding information. This also resulted in significant additional efforts for protest movements in some cases. The limits of social media logic also arose in the communication of protest issues. From the activists' point of view, complex, and sensitive issues in particular were not only difficult to communicate but also generated less resonance in the networks (i.e., likes and shares), which could be seen as a disadvantage in terms of visibility. In addition, the strong personalization concept of the platforms was in part contrary to the grassroots or network character of most movement organizations, which often leads to internal discussions. These results confirm Özkula's (2021) findings. Further research is needed to better understand the (strategic) considerations in dealing with these challenges, as well as to examine the extent to which these problems occur equally across the movement landscape and what other mediating factors play a role.

Although protest movements strongly internalized social media logic, they have not fully adapted to it. Many of the groups tended to perceive themselves as self-critical and not particularly professionalized. Although some groups had sophisticated social media strategies, others seemed to feel overwhelmed by their opportunities or were still learning how to use social media. The extent to which protest movements oriented toward social media logic was decided in light of target groups, existing know-how, available resources (time and staff), and the experiences that movement organizations had gained in dealing with social media.

The present results are too heterogeneous to conclude to what extent and how protest movements can and should use social media for their own purposes. The use of social media should not only be seen as an opportunity for mobilization. In many of the movement organizations interviewed, dealing with social media seems to be part of their own development process. Against this backdrop, movement organizations should network and cooperate more closely with one another to share experiences and lessons learned. From a practical perspective, tools that evaluate the organizations' social media activities should be used, which rarely occurs due to a lack of resources or knowledge. Based on such an

evaluation, it would be possible for activists to adapt more adequately to the functional principles of social media platforms. Another question that arose and is discussed within organizations is whether it makes sense for protest movements to adapt more to social media logic. This point must be discussed critically, even in light of the potential consequences and limitations. It is also relevant to question to what extent social media actually represent a suitable bypassing tool for protest movements if it also reveals a dependency on functional logics and algorithms. Protest movements need to assess the extent to which they rely on social media in view of their goals, target groups, and concerns.

Although the explorative approach of this article offers insights into the considerations of protest movements in dealing with social media, this approach had limitations. In all cases, activists who had a general organizational role in organizing protest events or managing social media accounts were recruited for the interviewees, as these individuals usually possess an overall perspective and are able to provide more information on strategic considerations. In their role, these activists often represent their movement organization. Nevertheless, the network-like structure of the organizations in many cases and internal discussions within the movement organizations indicated in the results suggest that individual statements may not fully represent the entire organization. As the control of social media accounts is mostly in the hands of individual activists, the lines between personal and organizational communication are blurred. The fact that activists spoke plainly about their (nonexistent) knowledge or challenges with social media contrasts the possible effects of social desirability. However, it also seems possible that the activists downgraded their strategic calculations due to the interview environment; they were sitting in front of communication scholars. As protest as a form of political participation is usually formed by (political) culture (Verba et al., 1995), taking a national perspective on German movement organizations raises the concluding question of which political and digital culture may also shape the results.

In conclusion, this article provided interviews that shed detailed light on activists' views on using social media and adapting to so-called social media logic to mobilize supporters. Many studies have highlighted the opportunities of using social media to promote protest and thus advocate orientations toward social media logic. However, it became apparent that protest movements internalized the functional logic well as they had learned quickly from their experiences with social media. However, unrestricted adaptation to the algorithms has its limits. These challenges could be further explored to estimate the extent to which protest movements benefit from social media.

Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

Altheide, D. L. (2014). *Media edge: Media logic and social reality*. Peter Lang. https://doi.org/10.3726/978-1-4539-1401-4

Altheide, D. L., & Snow, R. P. (1979). *Media logic*. SAGE.

Belotti, F., Donato, S., Bussoletti, A., & Comunello, F. (2022). Youth activism for climate on and beyond social media: Insights from FridaysForFuture–Rome. *The International Journal of Press/Politics*, *27*(3), 718–737. https://doi.org/10.1177/19401612211072776

Billard, T. J. (2020). Movement–media relations in the hybrid media system: A case study from the U.S. transgender rights movement. *The International Journal of Press/Politics*, *26*(2), 341–361. https://doi.org/10.1177/1940161220968525

Blumler, J. G., & Esser, F. (2019). Mediatization as a combination of push and pull forces: Examples during the 2015 UK general election campaign. *Journalism*, *20*(7), 855–872. https://doi.org/10.1177/1464884918754850

Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information Communication and Society*, *18*(5), 524–538. https://doi.org/10.1080/1369118X.2015.1008542

Boulianne, S., Lalancette, M., & Ilkiw, D. (2020). "School Strike 4 Climate": Social media and the international youth protest on climate change. *Media and Communication*, *8*(2), 208–218. https://doi.org/10.17645/mac.v8i2.2768

Bright, J., Marchal, N., Ganesh, B., & Rudinac, S. (2020). *Echo chambers exist! (But they're full of opposing views)*. arXiv. https://doi.org/10.48550/arXiv.2001.11461

Bucher, T., & Helmond, A. (2017). The affordances of social media platforms. In J. Burgess, A. Marwick, & T. Poell (Eds.), *The SAGE handbook of social media* (pp. 233–253). SAGE.

Cable, J. (2017). Communication sciences and the study of social movements. In C. Roggeband & B. Klandermans (Eds.), *Handbook of social movements across disciplines* (pp. 185–201). Springer.

Chadwick, A., & Dennis, J. (2017). Social media, professional media and mobilisation in contemporary Britain: Explaining the strengths and weaknesses of the citizens' movement 38 degrees. *Political Studies*, *65*(1), 42–60. https://doi.org/10.1177/0032321716631350

Chen, G. M. (2017). Social media: From digital divide to empowerment. In C. P. Campbell (Ed.), *The Routledge companion to media and race* (pp. 117–125). Routledge.

Della Porta, D., & Diani, M. (Eds.). (2015). *The Oxford handbook of social movements*. Oxford University Press.

Donges, P., & Jarren, O. (2014). Mediatization of political organizations: Changing parties and interest groups? In F. Esser & J. Strömbäck (Eds.), *Mediatizations of politics: Understanding the transformation of Western democracies* (pp. 181–199). Palgrave Macmillan.

Edrington, C. L. (2022). Social movements and identification: An examination of how Black Lives Matter and March for Our Lives use identification strategies on Twitter to build relationships. *Journalism & Mass Communication Quarterly*, *99*(3), 643–659. https://doi.org/10.1177/10776990221106994

Enli, G., & Simonsen, C.-A. (2018). "Social media logic" meets professional norms: Twitter hashtags usage by journalists and politicians. *Information, Communication & Society*, *21*(8), 1081–1096. https://doi.org/10.1080/1369118X.2017.1301515

Esser, F., & Matthes, J. (2013). Mediatization effects on political news, political actors, political decisions, and political audiences. In H. Kriesi, D. Lavenex, F. Esser, J. Matthes, M. Bühlmann, & D. Bochsler (Eds.), *Democracy in the age of globalization and mediatization* (pp. 177–201). Palgrave Macmillan.

Fawzi, N. (2018). Beyond policy agenda-setting: Political actors' and journalists' perceptions of news media influence across all stages of the political process. *Information, Communication and Society*, *21*(8), 1134–1150. https://doi.org/10.1080/1369118X.2017.1301524

Figenschou, T. U. (2020). Social bureaucracy? The integration of social media into government communication. *Communications*, *45*(s1), 513–534. https://doi.org/10.1515/commun-2019-2074

Hase, V., Boczek, K., & Scharkow, M. (2022). Adapting to affordances and audiences? A cross-platform, multi-modal analysis of the platformization of news on Facebook, Instagram, TikTok, and Twitter. *Digital Journalism*. Advance online publication. https://doi.org/10.1080/21670811.2022.2128389

Hjarvard, S. (2018). The logics of the media and the mediatized conditions of social interaction. In C. Thimm, M. Anastasiadis, & J. Einspänner-Pflock (Eds.), *Media logic(s) revisited* (pp. 63–84). Springer. https://doi.org/10.1007/978-3-319-65756-1_4

Hutchinson, J. (2021). Micro-platformization for digital activism on social media. *Information, Communication & Society*, *24*(1), 35–51. https://doi.org/10.1080/1369118X.2019.1629612

Johansson, H., & Scaramuzzino, G. (2019). The logics of digital advocacy: Between acts of political influence and presence. *New Media & Society*, *21*(7), 1528–1545. https://doi.org/10.1177/1461444818822488

Jost, J. T., Barberá, P., Bonneau, R., Langer, M., Metzger, M., Nagler, J., Sterling, J., & Tucker, J. A. (2018). How social media facilitates political protest: Information, motivation, and social networks. *Political Psychology*, *39*(11), 85–118. https://doi.org/10.1111/pops.12478

Jost, P. (2022). How politicians adapt to new media logic. A longitudinal perspective on accommodation to user-engagement on Facebook. *Journal of Information Technology & Politics*, *20*(2), 184–197. https://doi.org/10.1080/19331681.2022.2076271

Kelm, O., Dohle, M., & Bernhard, U. (2019). Politicians' self-reported social media activities and perceptions: Results from four surveys among German parliamentarians. *Social Media + Society*, *5*(2). https://doi.org/10.1177/2056305119837679

Klinger, U., & Svensson, J. (2014). The emergence of network media logic in political communication: A theoretical approach. *New Media & Society*, *17*(8), 1241–1257. https://doi.org/10.1177/1461444814522952

Kruikemeier, S., & Shehata, A. (2017). News media use and political engagement among adolescents: An analysis of virtuous circles using panel data. *Political Communication*, *34*(2), 221–242. https://doi.org/10.1080/10584609.2016.1174760

Kuckartz, U. (2016). *Qualitative Inhaltsanalyse: Methoden, Praxis, Computerunterstützung. Grundlagentexte Methoden* [Qualitative content analysis: Methods, practice, computer support. Basic texts methods]. Beltz Juventa.

Landerer, N. (2015). *Mass media and political decision-making: Analyzing mediatization in Switzerland*. Nomos; Bloomsbury.

Larsson, A. O. (2021). The rise of Instagram as a tool for political communication: A longitudinal study of European political parties and their followers. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448211034158

Lee, F. L., Chen, H.-T., & Chan, M. (2017). Social media use and university students' participation in a large-scale protest campaign: The case of Hong Kong's Umbrella Movement. *Telematics and Informatics*, *34*(2), 457–469. https://doi.org/10.1016/j.tele.2016.08.005

Lischka, J. A. (2021). Logics in social media news making: How social media editors marry the Facebook logic with journalistic standards. *Journalism: Theory, Practice & Criticism*, *22*(2), 430–447. https://doi.org/10.1177/1464884918788472

Loosen, W. (2014). Das Leitfadeninterview—Eine unterschätzte Methode [The semi-structured interview—An underestimated method]. In S. Averbeck-Lietz & M. Meyen (Eds.), *Handbuch nicht standardisierte Methoden in der Kommunikationswissenschaft* [Handbook of non-standard methods in communication science] (pp. 1–15). Springer. https://doi.org/10.1007/978-3-658-05723-7_9-1

Masías, V. H., Hecking, T., & Hoppe, U. (2018). Social networking site usage and participation in protest activities in 17 Latin American countries. *Telematics*

and Informatics, *35*(7), 1809–1831. https://doi.org/10.1016/j.tele.2018.05.010

Mazzoleni, G., & Schulz, W. (1999). "Mediatization" of politics: A challenge for democracy? *Political Communication*, *16*(3), 247–261. https://doi.org/10.1080/105846099198613

Meyer, C. O. (2009). Does European Union politics become mediatized? The case of the European Commission. *Journal of European Public Policy*, *16*(7), 1047–1064. https://doi.org/10.1080/13501760903226849

Neidhardt, F., & Rucht, D. (1991). The analysis of social movements: The state of the art and some perspectives for further research. In D. Rucht (Eds.), *Research on social movements: The state of the art in Western Europe and the USA* (pp. 421–464). Westview Press.

Özkula, S. M. (2021). The unmaking of collective action: Changing organizing logics in civil society organizations through social media activism culture. *International Journal of Communication*, *15*, 1984–2002. https://ijoc.org/index.php/ijoc/article/view/15930

Porten-Cheé, P., Haßler, J., Jost, P., Eilders, C., & Maurer, M. (2018). Popularity cues in online media: Theoretical and methodological perspectives. *Studies in Communication and Media*, *7*(2), 80–102. https://doi.org/10.5771/2192-4007-2018-2-80

Quan-Haase, A., Mendes, K., Ho, D., Lake, O., Nau, C., & Pieber, D. (2021). Mapping #MeToo: A synthesis review of digital feminist research across social media platforms. *New Media & Society*, *23*(6), 1700–1720. https://doi.org/10.1177/14614448209844457

Reunanen, E., Kunelius, R., & Noppari, E. (2010). Mediatization in context: Consensus culture, media and decision making in the 21st century, the case of Finland. *Communications*, *35*(3), 287–307. https://doi.org/10.1515/COMM.2010.016

Rucht, D. (Ed.). (2001). *Protest in der Bundesrepublik: Strukturen und Entwicklungen* [Protest in the Federal Republic: Structures and developments]. Campus Verlag.

Schulz, W. (2004). Reconstructing mediatization as an analytical concept. *European Journal of Communication*, *19*(1), 87–101. https://doi.org/10.1177/0267323104040696

Sorce, G. (2022). The "Greta effect": Networked mobilization and leader identification among Fridays for Future protesters. *Media and Communication*, *10*(2), 18–28. https://doi.org/10.17645/mac.v10i2.5060

Strömbäck, J., & Esser, F. (2014). Mediatization of politics: Towards a theoretical framework. In F. Esser & J. Strömbäck (Eds.), *Mediatizations of politics: Understanding the transformation of Western democracies* (pp. 3–28). Palgrave Macmillan.

Tsuriel, K., Dvir Gvirsman, S., Ziv, L., Afriat-Aviv, H., & Ivan, L. (2021). Servant of two masters: How social media editors balance between mass media logic and social media logic. *Journalism: Theory, Practice & Criticism*, *22*(8), 1983–2000. https://doi.org/10.1177/1464884919849417

Tufekci, Z., & Wilson, C. (2012). Social media and the decision to participate in political protest: Observations from Tahrir Square. *Journal of Communication*, *62*(2), 363–379. https://doi.org/10.1111/j.1460-2466.2012.01629.x

van Deth, J. W. (2014). A conceptual map of political participation. *Acta Politica*, *49*(3), 349–367. https://doi.org/10.1057/ap. 2014.6

van Dijck, J., & Poell, T. (2013). Understanding social media logic. *Media and Communication*, *1*(1), 2–14. https://doi.org/10.17645/mac.v1i1.70

Vázquez-Herrero, J., Negreira-Rey, M.-C., & López-García, X. (2022). Let's dance the news! How the news media are adapting to the logic of TikTok. *Journalism: Theory, Practice & Criticism*, *23*(8), 1717–1735. https://doi.org/10.1177/1464884920969092

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.

Verdegem, P., & D'heer, E. (2018). Social media logic and its impact on political communication during election times. In J. Schwanholz, T. Graham, & P.-T. Stoll (Eds.), *Managing democracy in the digital age* (pp. 119–135). Springer. https://doi.org/10.1007/978-3-319-61708-4_7

Viehmann, C. (2020). *Korsett und Machtressource: Die Medienöffentlichkeit in Verhandlungen von gesellschaftlichen Entscheidern* [Corset and power resource: The media public sphere in negotiations of social decision-makers]. Springer. https://doi.org/10.1007/978-3-658-32009-6

Welbers, K., & Opgenhaffen, M. (2019). Presenting news on social media. *Digital Journalism*, *7*(1), 45–62. https://doi.org/10.1080/21670811.2018.1493939

Wong, S. C., & Wright, S. (2020). Hybrid mediation opportunity structure? A case study of Hong Kong's Anti-National Education Movement. *New Media & Society*, *22*(10), 1741–1762. https://doi.org/10.1177/1461444819879509

Ziegele, M., Breiner, T., & Quiring, O. (2014). What creates interactivity in online news discussions? An exploratory analysis of discussion factors in user comments on news items. *Journal of Communication*, *64*(6), 1111–1138. https://doi.org/10.1111/jcom.12123

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Article

Stuck With the Algorithm: Algorithmic Consciousness and Repertoire in Fridays for Future's Data Contention

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Abstract
By focusing on the transnational youth climate movement Fridays for Future, this article explores how activists understand algorithms and how they try to use them in their digital campaigns. A qualitative case study, this article provides insights from nine virtual in-depth semi-structured interviews with organizers in social media roles from Fridays for Future country collectives across the globe, giving youth activists the opportunity to tell stories about their understandings and experiences in working in datafied spaces. Four central themes emerge via a three-step qualitative data analysis: algorithmic consciousness (understanding, functions, issues, pitfalls, and misinterpretations), algorithm as stake (contentious importance, tactical politics), algorithm as repertoire (role in activism, algorithmic campaigning), and data contention (data analysis, digital contentious tactics, uncritical uses). The interviews show that activists are stuck with the algorithm in two ways: They have to engage with them but are often unsure how. In that sense, activists frame algorithms as a stakeholder in their campaign but are often unclear on how they work. While organizers recognize algorithmic dependency on campaign success, they lack specific mobilization strategies, which prevents them from leveraging algorithms as a contentious tactic. Data contention includes conducting analytics and tailoring strategies to platforms; yet, datafied spaces are used largely uncritically. This article prompts scholars to go beyond textual analyses of digital activism and conduct research that centers on the experiences and practices of activists in dealing with algorithms and data as structural conditions for digital activism.

Keywords
algorithmic activism; data contention; environmental justice; Fridays for Future; social media mobilization; youth climate activism; virtual interviews

Issue
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1. Platforms in Environmental Activism

Fridays for Future (FFF) has made it to the global political stage, emerging as one of the most important actors in contemporary environmental activism. FFF's mobilizing power also shows across the movement's social media: A cursory look at the central hub FFF International reveals nearly 500,000 followers on Instagram and country collectives across Europe have a collective follower count of over 330,000 (Sorce & Dumitrica, 2022). Since FFF has successfully mobilized youth who are also considered "digital natives" (Nasrin & Fisher, 2022), studies have begun to study the movement's activism with a focus on FFF's engagement with the digital.

Boulianne et al. (2020) have examined the Twitter network during the 2019 Global Climate Strike, arguing that the movement has successfully leveraged the platform to create a trending topic. Chen et al. (2022) subsequently analyzed five million tweets with FFF hashtags and found that the platform is not only used to mobilize but also to frame issues or culprits and make political demands. In the context of the Covid-19 pandemic, recent studies show how the assembly restrictions have affected the movement's flagship action. Haßler et al. (2021) focused on FFF Germany's use of the hashtag #FridaysForFuture on Twitter, showcasing that tweeting decreased and movement messages began to deviate. At a larger comparative scale, the study by Sorce

and Dumitrica (2022) typologizes how the pandemic has created a forced digitalized repertoire for the movement around digital contentious actions, online information and education, digital community engagement, and online partnership development. This, they argue, has also shifted the internal dynamics of the movement, as contention decreased and collective identity work increased.

What becomes evident from this brief overview is that existing studies on FFF's digital activism focus mainly on textual evidence, analyzing hashtag activism (Boulianne et al., 2020; Chen et al., 2022; Haßler et al., 2021) or protest communication patterns on social media (Sorce & Dumitrica, 2021). Research that engages youth organizers' personal perspectives on digital activism or experiences with platforms as sites of political mobilization is still scarce. As Cotter (2019) explains, social media users often adapt their posting practices to what they think the platform algorithm will do with it, without necessarily knowing its inner workings. The understanding of activists around the affordances and technological architectures of platforms directly mediates their ability to use them as tools and sites for digital contention. Textual analyses cannot yield insights into these cognitive processes or reveal intentions behind particular movement practices. While FFF is a particular case of a transnational youth movement, other environmental collectives engage with datafied spaces in similar ways, having to find ways to manage platforms and leverage digital media for their political goals.

In employing a qualitative approach, the main purpose of this study is to find out more about what FFF activists do with data, how they understand the effects of algorithmic mediation on their political work, and how they deal with the affordances and logics of platforms in their digital activism. Today, algorithms and datafication play a key role in digital campaign design, affecting how activists engage with digital followers and how they develop digital actions for political mobilization. Using the transnational youth climate movement FFF as a case of a contemporary movement with a strong digital presence, this study builds on nine virtual in-depth semi-structured interviews with organizers in social media roles from country FFF collectives across the globe. A three-step coding process reveals four central themes: Algorithmic Consciousness, Algorithm as Stake, Algorithm as Repertoire, and Data Contention. The interviews yield that there are substantial differences in how activists imagine algorithms, both on a technical level and with respect to their impact on campaigns. Though activists are aware of issues such as exposure and visibility and understand their contentious importance, precise functions are often seen as elusive. With respect to the employment of algorithms as an activist tool, activists recognize that their campaign success depends on measurable outcomes, such as growing followers and optimizing content. Yet, instrumentalizing platform affordances—such as triggering the algorithm—are often left up to chance. Leveraging post analytics and optimizing posting strategies show the most promise as a form of Data Contention; indeed, all collectives have developed tactics that work for the specific platforms they employ. Yet, the conversations with organizers also demonstrate an overall uncritical usage of datafied spaces, including an ignorance towards the commodification of their own data production.

Knowing more about data practices and the influence of algorithms on campaigns is crucial to nuance assumptions about activist intentions in political mobilization. As this study will demonstrate, organizers are stuck with the algorithm in two ways. First, algorithms are built into platform architectures and cannot be evaded completely—They have become key considerations for all activists who use social media for political mobilization. Second, organizers' lack of knowledge of the intricacies of platform algorithms has them running up against the limits of digital activism. Using social media for political mobilization takes more than adding activist content to platforms. Speaking with youth activists about campaign design and online tactics provides much-needed insights into the experiences of doing activism in datafied spaces. While FFF is a particular case of a transnational movement, digital organizers in other contexts often reach the same dead ends. As such, the study contributes not only to research on this particular movement but can also inform future studies at the intersection of critical data studies and social movement research.

2. Data and Algorithms in Activism

Digital platforms and datafied spaces have long become political arenas for civil society, including social movement actors. Here, activists and organizers are confronted with the structures and dynamics of data and must find ways for productive engagement. While hashtag campaigns (Gerbaudo, 2012) or cloud protesting (Milan, 2015a) have become common tactics for digital contention, activist action repertoires have become increasingly digitalized (Theocharis et al., 2015), transforming the very logics of mobilization and collective action. In the case of FFF, social media became the main site for activism during the Covid-19 lockdown periods across Europe (Sorce & Dumitrica, 2022). Alongside these digital developments, activist collectives employing platforms have begun to harness the power of data in their efforts (Milan, 2015b).

Theorists often speak of "data politics" (Ruppert et al., 2017) as the meta-level domain to capture the interactions between power and knowledge in the context of platforms. For contemporary social movements, datafied spaces become battlegrounds where activists conceptualize, launch, and manage digital contentious actions, while (potential) adherents can assemble, participate, and protest. "Data activism," however, goes beyond "connective action" (Bennet & Segerberg, 2013),

in that it leverages the platform architectures and its codes for social justice. This includes both *reactive* data activism to circumvent data threats and *proactive* data activism that actively (re)appropriates and employs data (Milan & van der Velden, 2016, emphasis in the original). Correspondingly, Lehtiniemi and Ruckenstein (2019) draw out the potential of new forms of civic and political engagement around data by arguing that data activists share both a technological (solution-oriented) and socio-critical (human control) imaginary of their data activism, which can sometimes come into conflict.

Beraldo and Milan (2019, p. 2) bring these perspectives together, arguing for a theoretical framework around the "contentious politics of data," which denotes "the multiplicity of bottom-up, transformative initiatives interfering with and/or hijacking dominant, top-down processes of datafication, by contesting existing power relations and narratives and/or by re-appropriating data practices and infrastructure for purposes distinct from the intended."

In conjunction with this particular framing of data activism, activists' active engagement with data becomes a repertoire in its own right. Beraldo and Milan (2019, p. 6) distinguish between "data as stakes" (identifying data as objects for activism and designing contention or tactics around data) and "data-enabled activism" (putting data to use as contentious action). A key factor of data activism, then, concerns the interaction between algorithms and activism.

In the context of social movements, Galis and Neumayer (2016, p. 2) call the interplay between algorithms and social media a "complicated marriage." Activists must engage with commercial platforms such as Facebook and Instagram to reach their adherents, mobilize sympathizers to join the cause, and offer avenues for participation. In that sense, the mainstream success of social movements cannot exclude mainstream social media. These platforms are based on algorithmic architectures that filter content, sort data flows, and rank interactions into hierarchies. Thus, algorithms become an essential part of the power of platforms (Bucher, 2018). Indeed, Velkova and Kaun (2021, p. 535) call activist campaigns operating within datafied spaces and algorithmic frameworks "complicit." Maly (2019) studies how right-wing activists have leveraged algorithms in the perpetuation of their cause and theorizes a new subset of data activism, which he terms "algorithmic activism." The term refers to the theoretical or practical knowledge about algorithmic systems as "proxies for human judgment" (Maly, 2019, p. 12). This includes, for instance, knowing how to trigger a social media algorithm to enhance reach and interaction with a given post in order to manufacture virality (Maly & Beekmans, 2018). Within the context of a pro-social online campaign, Velkova and Kaun (2021, p. 536) point to the engagement of activists with algorithms alongside "repair," i.e., the potential of mending (some of) the damage that algorithms do. In these cases, activists "repurpose [algorithmic] power to pursue social justice and political transformation" (Treré, 2018, p. 173).

Treré and Bonini (2022, p. 2) pick up this theoretical thread and illuminate how algorithmic politics as an activist practice becomes "the latest addition to the contention repertoire" within the larger ecosystem of data politics. They typologize three types of algorithmic activism: *algorithmic amplification* (the integration of algorithms into activist repertoires), *algorithmic evasion* (the circumvention of algorithmic censorship), and *algorithmic hijacking* (the exploitation or appropriation of data structures). The authors illustrate their ideal types by highlighting algorithmic strategies and tactics in recent (albeit scarce) social movement scholarship while pointing to the dynamic nature of algorithmic activist practices. However, we still know relatively little about how activists understand datafied platforms and how they actually engage with algorithms in social media campaigns. The present study considers recent theoretical offers (Beraldo & Milan, 2019; Treré & Bonini, 2022) as a prompt for empirical work and applies it in the context of one of the most mediatized contemporary social movements—the transnational youth climate movement FFF.

3. Methodology

The main scope of this study around the contentious politics of data in contemporary activism emerges from an epistemological curiosity in finding out more about what activists do with data. This pairs with an axiological impetus that seeks to underscore the role of human agency in the handling and remediation of data (Beraldo & Milan, 2019), which context with how activists deal with the affordances and logics of platforms in their digital activism. Scholars working in the area of data activism—employing, for instance, text-based research—can run the risk of reading digital media practices as purposeful activist strategies without bringing into question two important aspects: activist capacity (e.g., technological skill) and activist knowledge (e.g., platform architectures, codes, etc.). Hence, the objectives of data practices as a form of social movement contention or even repertoire are not always clear. As Treré (2018) aptly illustrates through his fieldwork in Mexico and Spain, speaking with activists about their intentions and background is necessary for understanding the effects of algorithmic mediation on digital contention.

In this spirit, the present study builds on semi-structured virtual interviews with youth activists in the global FFF movement. A case study design enabled me to zoom in on a particular movement and show how data and algorithms mediate the efforts of a highly digitalized collective. Yet, FFF is also a representative case of youth activism and the insights from this research have the potential to "illuminate a larger empirical reality" around the importance of algorithms and data in contemporary social movements (Snow & Trom, 2002,

p. 148). As an important methodological consideration, the recruitment of interviewees sought to provide a multitude of perspectives, another quality criterion of case studies (Snow & Trom, 2002, p. 149). Despite the popularity and political force of FFF in Europe, it was important for the research design to invite organizers at the margins of the transnational youth climate movement and include the experiences of activists in Africa, Asia, and Latin America. To accomplish this, I began by creating an initial interview of country collectives with a focus on their social media engagement, including activity on platforms such as Instagram, Facebook, and Twitter. I eliminated collectives that were only marginally active or did not employ social media regularly. Using the map function on the central hub (www.fridaysforfuture.org), I gathered relevant contact information and contacted 27 collectives who met our criteria. During recruitment for study participants, I reached out to country collectives via email and direct message on social media, explaining the basic scope of the study and asking to be connected to organizers in social media roles. In the end, 11 country organizers agreed to be interviewed though only nine interviews materialized. These included activists from Austria, Germany, India, Israel, Russia, Uganda, Uruguay, the US, and the international FFF Digital team (see Figure 1).

The participants in the study were all either the main officer or part of the larger digital media teams, and all were between 19 and 30 years old (see Table 1). This skews a bit older than the target demographic of the FFF movement; however, six participants recount that they have been involved in their respective collectives for over three years. Two interviewees were pursuing formal degrees in media or information technology (FFF Germany, FFF Austria), while others had professional experience working in marketing contexts (FFF Uganda, FFF India). The remaining interviewees were mainly self-taught and assumed roles in digital organizing either by personal interest or by assignment. These varying degrees of technological expertise and digital media literacy made the sample rather heterogeneous, an observation that echoes the fluctuating data practices and platform engagement across the collectives.

As this case study was carried out amid the Covid-19 pandemic, the qualitative semi-structured interviews were conducted via the videoconferencing platform Zoom (for an overview of opportunities and drawbacks, see Oliffe et al., 2021). Qualitative interviews enable scholars to gather information that cannot be obtained through textual artefacts, giving participants an opportunity to explain their viewpoints and experiences, while validating external observations by the researcher and others (see also Chapter 7 of Lindlof & Taylor, 2018). Since the virtual interviews marked the first in-person interaction with the recruited participants, semi-structured interviews provided a comfortable framework for both the interviewer and interviewee. The original interview guide included nine questions, largely non-directive, such as: How would you, in your own words, describe a social media algorithm? These sought to prompt participants to elaborate their understanding of datafied spaces as a baseline to discuss specific organizing and mobilization practices, including strategic ways of leveraging algorithms as part of their digital activist repertoire. These questions were not supposed to quiz participants on their technical knowledge but rather allow them to speak to their understandings of platform architectures and affordances to learn more

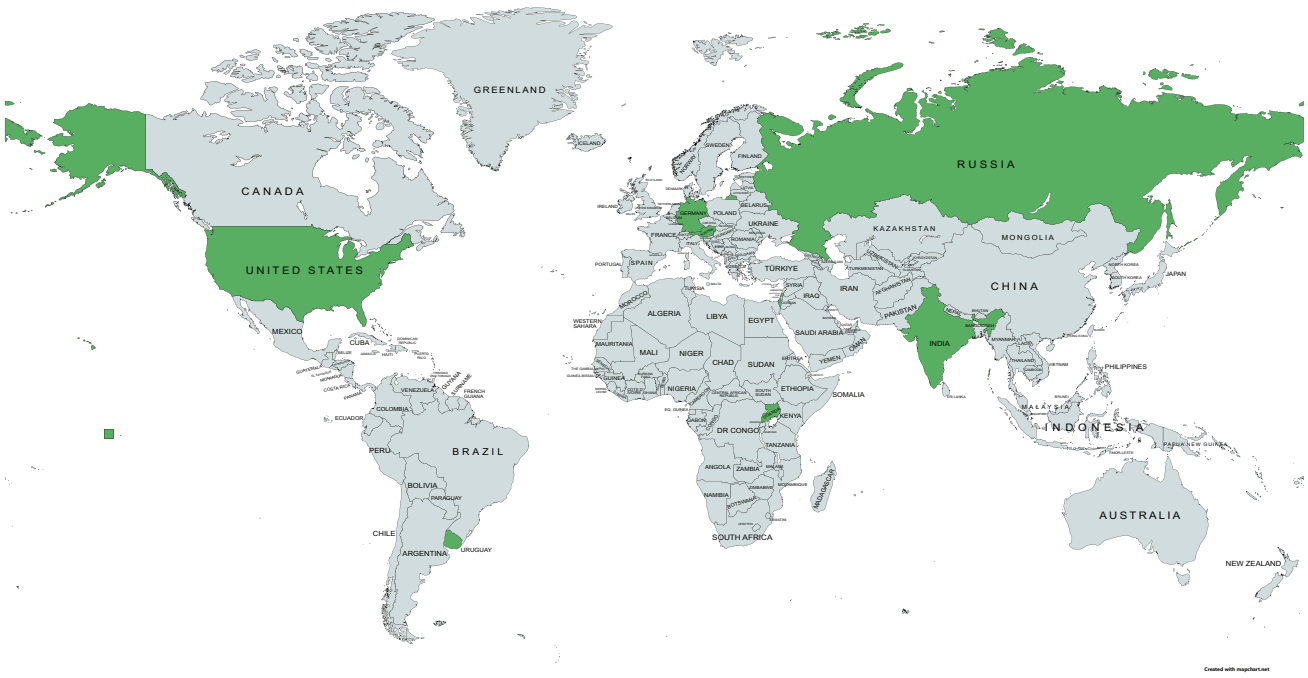

Figure 1. FFF country collectives represented in this study.

Table 1. Overview of participants.

Country collective	Digital platforms used	Organizing team	Gender
1. FFF Russia	Facebook, Twitter, Instagram, VK	Social media team	Female
2. FFF India	Facebook, Twitter, Instagram	Social media team	Female
3. FFF Digital	Facebook, Twitter, Instagram	Social media research team	Male
4. FFF Uganda	Facebook, Twitter, Instagram	Social media management	Male
5. FFF Israel	Facebook, Twitter, Instagram, TikTok	Digital team	Female
6. FFF Austria	Facebook, Twitter, Instagram, LinkedIn	Channel management	Male
7. FFF Germany	Facebook, Twitter, Instagram	Web team	Male
8. FFF Uruguay	Facebook, Twitter, Instagram, TikTok, Spotify	Marketing team	Male
9. FFF US	Facebook, Twitter, Instagram	Digital team	Female

Note: With the exception of FFF Uganda, all collectives have since created TikTok accounts.

about how organizers adapt their activist practices to their ideas about platform logics.

The guide also featured some more structured questions that offered interviewees a specific frame to think within (how do algorithms influence an ongoing FFF campaign?), while also asking about mobilization practices (what do you do to make your content more visible and gain a broader reach?). Since textual analyses often ascribe intention to particular digital activist gestures, these question types were important to understand the design behind particular campaigns. In line with iterative qualitative principles, the interview guide was continuously fine-tuned during the data-gathering phase. This allowed for the inclusion of important emergent themes. To keep with the conversational character of interviews, follow-up questions sometimes engaged a fun fact or emoted response during interviews: "You mentioned that the FFF Israel's Instagram looked 'a mess' last year. Can you tell me a little bit more about that?" Such questions often prompted more detailed insights into both the use of platforms as well as specific practices that involved the handling of data.

The nine virtual interviews were conducted in English and lasted between 28 and 46 minutes, yielding approximately 314 minutes of analyzable data. All interviews were recorded, transcribed verbatim, and subsequently imported into the qualitative research software MAXQDA. A first inductive "open coding" procedure sorted utterances into 24 emergent themes that stayed relatively close to the transcriptions and paid attention to repetition, recurrence, and spoken emphasis; Owen (1984) terms the latter "forcefulness." A second "axial coding" served to cluster related utterances into 12 "distinct thematic categories in preparation for selective coding" (Williams & Moser, 2019, p. 50). Guided by the epistemological interest, the main research question, and informed by relevant literature (Beraldo & Milan, 2019; Treré & Bonini, 2022), a third and final coding round interlinked the conceptual evidence of utterances to form four higher-order categories that captured the main themes of the interviews (see Figure 2).

As illustrated in Figure 2, the final themes involved cognitive structures and ideas about algorithms, the role of platform architectures, the effects of data structuration on digital activism, and the practices and strategies of employing data and algorithms as contentious tools.

4. Findings and Discussion

After a short introduction round, the first question set served to comprehend how the country collectives were set up internally. Knowing more about the organigram of each collective was imperative to understand what segment the "digital" falls under, what platforms they use, and how they manage them. Interestingly, the internal coordination of digital media teams across the sample was handled differently by all collectives. For instance, FFF US deeply identifies with grassroots organizing principles; here, everyone in the leadership team can post to all social media as long as it follows some basic guidelines (e.g., use their flagship hashtag #ClimateJustice). FFF Austria has similar ideals about account access, though the collective divides their web team by platform, handled by so-called "channel managers." Indeed, most country collectives had a platform-based division within their social media team, i.e., one officer (or small group) was in charge of Instagram while another managed Twitter. The reason for this is articulated through global audience targeting. Notably, this was the case with the overarching FFF Digital hub, where:

> All three social media—Twitter, Instagram, and Facebook—are basically handled by a different user. I think Facebook is handled by…I think someone from Bangladesh and Instagram is handled by someone from Ireland and…I don't know about Twitter, who handles that account. (FFF Digital)

Time coordination and optimal post management are named as key factors as to why accounts are managed in different locations. This practice begs questions about message coherency and internal movement hierarchies, as the most popular social media accounts with the largest follower base (in this case, Instagram) get administered in the Global North. Gerbaudo (2017) names social media teams "digital vanguards," fighting at the

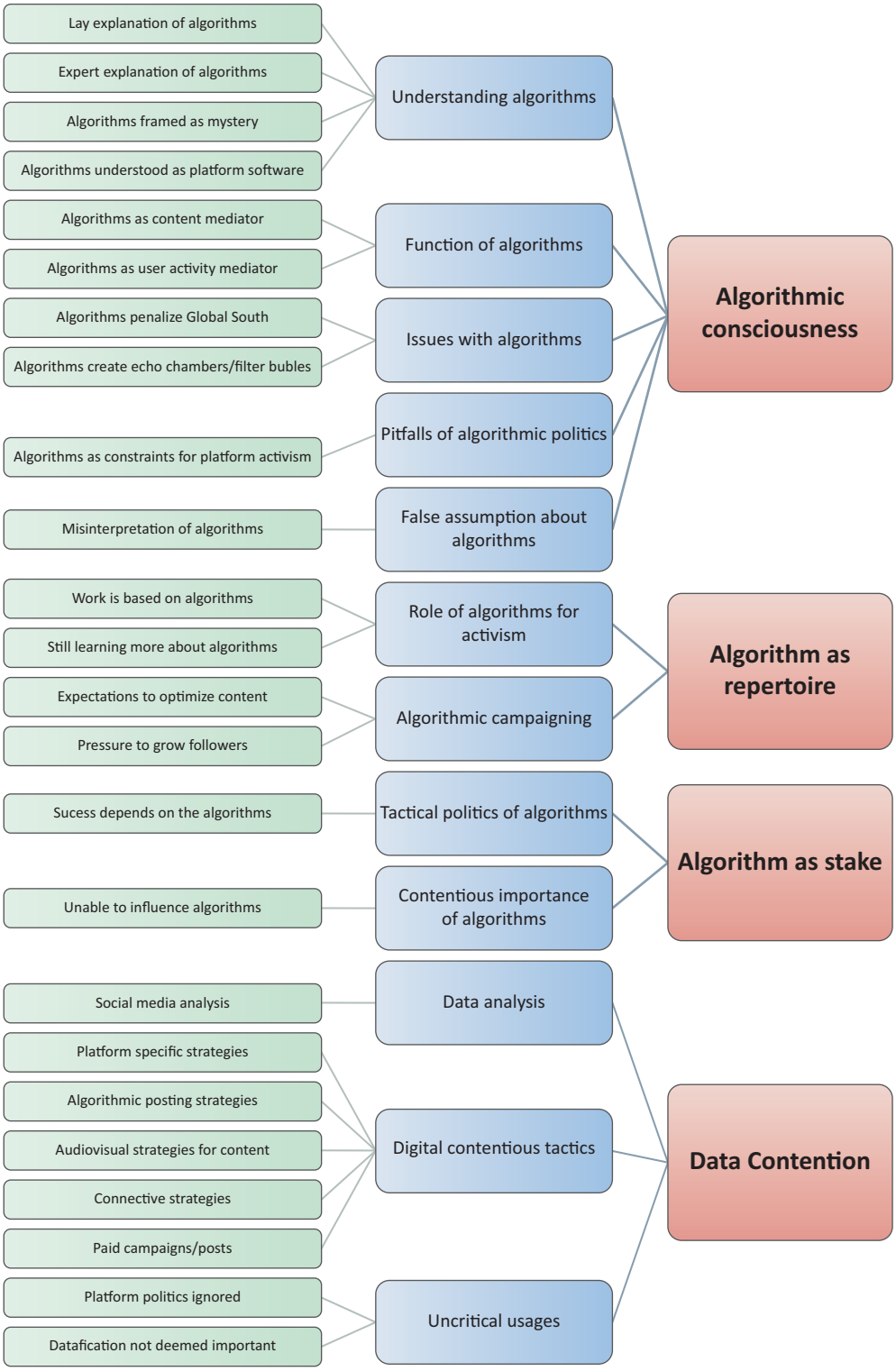

Figure 2. Flow chart of three-step thematic coding procedure.

virtual front of political contention, who share power and embrace an open and horizontal organizational structure. The conversations with FFF social media organizers contrast this argument: FFF Germany and FFF Russia could not even speak to the data practices of their colleagues as they only meet within their platform-specific team. This compartmentalization of protest media ecologies bears associated limits in leveraging digital communication as a contentious tool.

4.1. Algorithmic Consciousness

During the conversations, social media were frequently named *the* key arenas to "manage followers" (FFF India),

"get the word out to the kids" (FFF US), and "share news about the climate emergency" (FFF Russia). A key part of the interview then concerned the question of algorithms in digital organizing. Before initiating a conversation about how algorithms were employed as a contentious tool, it was important to get a sense of how digital organizers across collectives understood algorithms. Importantly, this part of the conversation was not a quiz on technical knowledge but designed to allow organizers to explain what they believe algorithms do. FFF India downplays their own knowledge while offering a fairly accurate lay explanation:

> I don't know much about them but…an algorithm is like a set of instructions which determines the reach of your content and how other people will interact with it and how the app or the website or the program will display content.

FFF Germany offers a quite technical definition: "From a technical perspective, it ranks signals…so, like on Facebook, the algorithm prioritizes people an account interacts with frequently and pairs that information with how many people—people in your network—have already interacted with a post." FFF Austria articulates more generally: Algorithms are "highly influenced by early interactions with content pieces." However, the remaining six collectives really struggled to articulate what algorithms are and why they become important for platform use. Utterances such as "oh, I…I'm not an expert by any means. I just know that we have to be cautious about what we upload in order for it to reach a large audience" (FFF Israel) or "if users engaged with us before then [the algorithm] will probably push us to them again….Yeah. I think that's about where my understanding of the algorithm stops" (FFF US) illustrate this. FFF Russia points to the puzzling and murky nature of platform algorithms, noting that "they feel quite random and mysterious." In that sense, the conversations about what algorithms do provide us with crucial insights into platform consciousness and literacy, two vital conditions for effective digital campaigning.

Alongside the elusiveness of algorithms, two organizers identify issues they associate with algorithmic content mediation on social media. FFF US explains:

> We move around in a general echo chamber. Like, because of the bubbles of the algorithm creates….Yeah, I feel like we are preaching to the choir a lot, cause a lot of the other groups that follow us are FFF groups or people who are already involved.

FFF Uganda runs up against an opposite problem, pointing to the discrimination of algorithms against data from the Global South that renders their content less visible: "We are in Africa…most of our content are [sic] not shared widely compared to those in Europe. That's the biggest challenge." This recognition relates closely to arguments about data colonialism and the privileging of user activity in the Global North (Segura & Waisbord, 2019) and underscores that data power is unevenly distributed across the globe (Kennedy & Moss, 2015).

FFF organizers across the sample spoke of ways in which algorithms impede their digital activism. It becomes evident that activists have been trained by platform logics and understand algorithmic limitations within platform language: reach, likes, followers, engagement, etc. Making content visible to relevant audiences and growing this network is a self-defined core task for all collectives. However, it is important to note that there are some key differences between FFF social media organizers and data activists in other movements: FFF youth activists are not hackers or IT specialists (Lehtiniemi & Ruckenstein, 2019) and mainly operate within the provided frameworks and affordances of commercial platforms, such as Facebook and Instagram.

Algorithmic politics are understood within FFF activists' frameworks of what algorithms do, which is why Algorithmic Consciousness becomes such an important aspect of analyzing digital organizing. In particular, the visibility of FFF's digital actions and their recognition across the wider digital publics are frequently named as two key objectives. However, this process is understood quite linearly. In line with Bucher's (2018) observation that *visibility* becomes a key condition of platform logics, FFF activists are very concerned with how algorithms structure their campaigns, including their circulation and longevity. This also dovetails with Cotter's (2019) observation that influencers on Instagram adapt their posting practices to what they think the platform algorithm will do with it, without necessarily understanding its intricacies. In turn, lay users' algorithmic imaginaries get built up from everyday encounters with platform architectures. Visibility then becomes boiled down to account and post engagement, including followers, likes, and comments.

An important distinction, however, needs to be made between visibility and *recognition*. The latter goes beyond platform metrics and considers the values of platform activity in the larger network. In the context of social movements, algorithmic recognition is thus closely tied to digital mobilization, where (potential) adherents engage with the key messages and develop a need to participate. From an organizer perspective, this relates to what Velkova and Kaun (2021) call a form of algorithmic repair practice, where datafied spaces become sites of dissent. However, algorithmic activism is constrained by elusive platform architectures that are difficult for digital organizers to fully grasp.

In sum, the conversations with FFF digital organizers inform the emergence of Algorithmic Consciousness as a necessary prerequisite for employing algorithms as a contentious tool. This includes understandings of algorithms and imaginaries about their functions but also issues that derive from algorithmic mediation, including pitfalls of algorithmic politics and ideas about visibility and

recognition. For the specific case of FFF, the takeaways around Algorithmic Consciousness in data activism also nuance sweeping assumptions about digital activism by youth, who are largely considered digital natives. Nasrin and Fisher (2022, p. 1302) call the FFF movement in the US context a "movement that is peopled by digital natives who are fluent in digital platforms, technologies, and communication." Putting this statement into conversation with FFF US's limited understanding of algorithms featured above illustrates the confines of text-based hashtag activism analyses and underscores the importance of research that engages activists' intentions and testimony of their abilities in using these tools. In that sense, Algorithmic Consciousness also calls into question how far simple hashtag campaigns for protest events "count" as algorithmic activism.

4.2. Algorithm as Stake

Algorithms are part of the architecture of platforms and FFF organizers are—despite their varying conceptual ideas—aware of this. As such, algorithms become of contentious importance. Beraldo and Milan (2019, p. 2) use *stakes* to define how data become "issues/objects of political struggle in their own right," noting that social movements must claim data and engage it as a site of activism. Treré and Bonini (2022, p. 2) take this up as Algorithm as Stake in the visualization of their conceptual framework (though do not elaborate further), nodding to the central role that algorithms occupy in datafied spaces and their implications in the context of social movements. Algorithm as Stake is perhaps best summarized by FFF Uruguay: "We—as a society and also as activists—respect the algorithm and things that the algorithm would like in the posts, so we try to mimic this to engage more people."

FFF organizers in the sample explain the struggle to claim algorithms for their cause around two metrics, reach and follower count. The contentious importance of algorithms is illustrated poignantly by FFF US:

> I mean…the deciding factor is that we can't really influence them. Social media is our main—sometimes only way—of getting the message out. And where [social media] send that…outside of maybe buying targeted ads…that is completely up to the algorithm. So, our reach is defined by the algorithm.

This testimony relates to the notion of *agency* in the sense that an algorithm is often framed as a "thief" who robs activists of their control to spread their own messages. It also appears that the social power of people "do[ing] things to algorithms" (Bucher, 2018, p. 117) also needs to be understood in its geopolitical context. FFF Uganda shares a fairly grim outlook when one of their Facebook posts in the "Rise Up" campaign did not get noticed much: "At the end of the day you feel like you're not really…you feel like your voice is not being heard." At the same time, algorithms might aid the visibility of a cause and can also be useful in reaching new users. FFF Russia explains: "This one influencer who is also like eco-friendly and is also friends with us, just did a repost of our post and we gained all of the followers back. She has like 100 k followers or something."

The stories across the interviews reveal that algorithms media digital campaign success and that social media organizers are aware of their contentious importance; yet, organizers are mostly unsure how to employ them for their cause. In that sense, they are somewhat stuck with the algorithm, and it remains debatable whether the "user's 'reflexive ability' to make the algorithms work to their own needs" (Treré & Bonini, 2022, p. 4) truly unfolds in FFF's context, where youth activists try to work within algorithmic spaces.

4.3. Algorithm as Repertoire

The specific role of algorithms for activism is closely tied to the tactics in algorithmic campaigning by FFF organizers. Treré and Bonini (2022, p. 6) define "algorithm-enabled activism" as its own "repertoire" within the larger context of data activism, which includes "the creativity, the resourcefulness, and the difficulties that activists face while coping with opaque decisions taken by an algorithm." Here, algorithms are understood as engrained in the fabric of contemporary protest movements. By adapting and re-purposing algorithms in the context of their own cause, they become practices that organizers can employ in their platform campaigns.

FFF Germany explains an incident where a social media algorithm boosted their content. A meme post on Facebook involving minions (the yellow, animated cartoon characters) was very successful because it "triggered the algorithm of Parents [for Future]," so while the web team did not fully know why it was popular, they realized that it became visible to marginal audiences more closely related with the demographic of the Parents for Future account. Etter and Albu (2020, p. 75) understand this as algorithmic "interlinking," where existing and new followers can connect on movement-related information. FFF Germany explains accordingly: "So in general, we try to do it in a way that is good for the algorithm." FFF India echoes the point on interaction: "You just have to figure out what type of content suits which app and get your teammates and the people you know…the maximum people from the outside to interact with it so it will grow."

As Maly and Beekmans (2018) explain, to manufacture virality through algorithmic manipulation, activists need to know how to trigger an algorithm. In the case of the minions' meme, the "algorithmic amplification" of activist campaign material is based on the experience of organizers, much of which is trial and error (Treré & Bonini, 2022, p. 9). This data practice artificially augments content and makes it visible to more users in the larger platform network. Here, FFF Israel

attempts an explanation of how they employ Algorithms as Repertoire:

> We just have our rules of the way we work that are based on…tricks about the algorithm….We try to stay trendy, on TikTok and Twitter especially….We've been doing it for a very long time, so it came a second nature to work with the algorithm.

This articulation is admittedly still relatively vague, and FFF Israel struggled to provide a concrete example to illustrate this statement.

Since social media organizers are expected to optimize content and grow followers, FFF's digital campaigns are deeply tied to algorithms; however, most collectives still need to learn more about them to instrumentalize them for their efforts. Thus, FFF is again stuck with the algorithm. Collectively, the interviews show that in the context of transnational youth climate activism, Algorithms as Repertoire is not yet a key factor of social media in political mobilization. FFF's contentious data practices mostly work within platform affordances: Social media analysis, platform-specific strategies for content, or even paying for boosted posts are more accessible to activists than leveraging platform codes for social justice goals.

4.4. Data Contention

Across the sample, questions about algorithmic awareness kept prompting stories about social media analysis, i.e., the ways in which organizers gauge their content reception and follower interactions in order to improve their activist tactics. In the context of social movement organizations, Karpf (2018) calls this "analytic activism." For two collectives, data analysis is done sporadically and not systematically. FFF US notes: "We look at likes and views at the moment and that's the level of analysis that we have because we don't have capacity." FFF Uruguay tells a similar story: "I'm not a marketing agent so I really don't know how to, but if a picture got 1,000 likes or retweets, I look at the characteristics of that post and try to replicate it." The extent to which data analysis is used also depends on the affordances provided by platforms. The commercialized structure of Instagram, for instance, allows account holders to view the in-app "insights" feature. FFF India explains that they check app analytics, which has a user-friendly design, but the metrics are difficult to translate for the activists:

> So now I know the reach of my Insta[gram] page has gone down by 20 people but what does that actually mean? And how do I use those insights to actively improve my performance? That is still a mystery to me.

FFF Austria has by far the most sophisticated approach, largely credited to the external support the collective receives from "Austrian social media and software development agencies" that provide the group with performance marketing and data analysis expertise. While this labor is "donated" as part of these agencies' pledges for environmental impact, Çalışkan and McGregor (2019) chart the emergence of activist consulting firms and the implications of these partnerships for grassroots collectives, arguing that such collaborations enact a neoliberal governmentality. It is due to this borrowed expertise that FFF Austria is able to make sense of Data Contention beyond any other collective in this study. They were the only collective that uses software (Fanpage Karma) to analyze social media, which yields key performance indicators such as productivity (posts per day), growth (percentage per week), engagement (total and individual posts), and gross reach. These are then logged and discussed in FFF Austria's weekly team meeting to further fine-tune their social media mobilization tactics.

Whether professionalized or more amateurish, all FFF collectives have learned to use some level of data analysis to develop platform-specific posting strategies. FFF India explains:

> On Twitter it's better to use hashtags in every tweet…and Instagram, you just have to put the hashtags in the comment but it's better if you put out reels. On Facebook especially, we would use fewer images and the focus will be more on the text.

These platform-specific practices were echoed by five other collectives in the sample, yielding posting conventions that have emerged through both platform affordances and usages.

When content runs the risk of being drowned out by the platform's algorithm (e.g., on the occasion of elections or other public events with higher user traffic), some collectives resort to paid content, including individual posts and larger campaigns. FFF Germany explains: "Last year we got 20,000 [euros] from an NGO and with Covid-19, we did everything online, so we increased our social media budget and bought ads on Facebook and Instagram to grow our reach." They elaborate that this was "of course, much simpler than growing organic content." Indeed, it is a tactic that FFF India hopes to make use of in the future: "We haven't turned to monetization…I mean, ads, because we don't have the funds to do that." It seems that most activists working in the datafied realm remain quite ambiguous toward platform politics.

The pressures to optimize content and gain visibility in datafied spaces have also led FFF Austria to capitalize on the popularity of the movement: "Whenever it is productive for a campaign, we work with influencers and celebrities." These "greenfluencers," as Knupfer et al. (2023) explain, use partnerships with popular collectives such as FFF as low-effort (digital) activism. Such commercialized tactics beg questions about the authenticity of social movements, a tension that not only activists but also influencers have to negotiate (see also Van Driel

& Dumitrica, 2021). FFF Uganda has a simpler strategy: "If maybe people can help you amplify your post, people who have been following you…then also tag them."

The final part of the interview guide sought to generate ideas about Data Contention in relation to platform politics. In particular, I was interested in hearing more about issues of platformed activism, such as datafication or data ethics. FFF Germany tells a story from a few years back: "At the time, there were very heated internal discussions about whether we wanted to give Facebook money or not. Because it's a very bad company." When it comes to commercialized aspects of digital activism, including the monetization of data through platform activity by FFF accounts, participants sometimes exuded a sense of internal conflict but quickly rationalized their practices. For FFF Germany, the tone has since changed and Facebook is indeed one of the platforms the national collective invests in the most.

The uncritical platform usages of FFF, including the disregard of data politics is perhaps best summarized by FFF Israel's response to the question of whether they actively thought about the datafication of their activism on social media: "Hm, not really, no." FFF Austria justifies: "For us, social media is the strongest channel for mobilization. That means that social media is extremely important to us in the entire movement." In glossing over the impacts of profit-driven platforms and turning a blind eye towards the (re)uses of activist-produced data, FFF social media organizers echo Galis and Neumayer's (2016) observations that activists simply accept the commercial structures of social media. Perhaps this consent is the baseline of Algorithms as Repertoire when it comes to digital activism on platforms such as Facebook or Instagram.

5. Conclusions

This study sought to provide insights into what FFF activists do with data, how they understand the effects of algorithmic mediation on their political work, and how they deal with the affordances and logics of platforms in their digital activism. Theoretically, it builds on recent conceptualizations in critical data studies in the context of social movements (Beraldo & Milan, 2019; Treré & Bonini, 2022). While many existing studies in the area focus on textual data (e.g., network analyses, hashtag analyses, social media content analyses), this study employs a qualitative case study design with virtual, semi-structured interviews to provide knowledge on digital activism from the activist perspective. Four central themes emerge via a three-step qualitative data analysis (see Figure 2): Algorithmic Consciousness (understanding, functions, issues, pitfalls and misinterpretations), Algorithm as Stake (contentious importance, tactical politics), Algorithm as Repertoire (role in activism, algorithmic campaigning), and Data Contention (data analysis, digital contentious tactics, uncritical uses).

As a central contribution, the study offers empirical evidence rooted in the experiences and practices of FFF activists in social media organizing roles. It also adds depth to recent theorizing around Data Contention and algorithmic activism, showcasing how digital activists get stuck with the algorithm as a platform structure they have to deal with, and one that they have not quite figured out to employ meaningfully as a contentious tool. From the qualitative data, the categorization of Algorithmm as Repertoire emerges as a useful concept, though it also sees limits in applied contexts. In particular, the capacity of organizers to navigate and use platforms in more sophisticated, data-driven ways needs to be a more central concern. Here, the empirical data generated a rich account of the struggles surrounding Algorithmic Consciousness, which is often assumed rather than articulated. From a theoretical standpoint, activists' stories about the contentious importance of algorithms and the associated tactical politics provide an illustration of Algorithms as Stake. Particular posting strategies and social media analysis emerge as pillars of Data Contention, though uncritical uses of datafied platforms remain an issue.

The cross-cultural context of the study provides valuable comparative insights but also bears a set of limitations. Social movement case studies that focus on a particular case such as FFF can run the risk of attributing findings to other movements. While this study does not claim any generalizability, it can inform related activist contexts in two important ways: First, the conversations with FFF activists show that text-based research often misses important factors that affect campaign design, execution, reach, and reception. Second, it is often assumed that youth activists are digital natives who know how to manipulate platforms. The insight from the interviews demonstrates, however, that many activists feel quite unsure about the intricacies of datafied spaces, building their digital actions around imaginations of how these spaces function both technically and socially. The individual collectives within the wider transnational FFF activist network differ in their technical skill and overall resource availability; yet, it is remarkable how similarly participants responded when asked to speak to their understandings of algorithms, data, and platforms. A key constraint of this study is that the virtual interviews were conducted without prior knowledge of the participants and English was not the native language of any organizer besides the officer from FFF US. This language barrier might have contributed to some misinterpretations of questions and potentially posed hurdles for participants.

We need more nuanced accounts of digital activist practices. Future studies could apply the four themes generated in this study as a typology for further qualitative inquiry and study the algorithmic capacity and changing campaign strategies by different social movements. For instance, scholars might want to consider the ethnographic work of local activist collectives using social media for political mobilization to dig deeper into data organizing and algorithm-enabled activism.

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Conflict of Interests

The author declares no conflict of interests.

References

Bennett, W. L., & Segerberg, A. (2013). *The logic of connective action: Digital media and the personalization of contentious politics*. Cambridge University Press.

Beraldo, D., & Milan, S. (2019). From data politics to the contentious politics of data. *Big Data & Society*, *6*(2). https://doi.org/10.1177/2053951719885967

Boulianne, S., Lalancette, M., & Ilkiw, D. (2020). "School Strike 4 Climate": Social media and the international youth protest on climate change. *Media and Communication*, *8*(2), 208–218.

Bucher, T. (2018). *If…then: Algorithmic power and politics*. Oxford University Press.

Çalışkan, G., & McGregor, A. J. (2019). "You can change the world. We're just here to help": Activist consultancy firms as forms of neoliberal governmentality. *Globalizations*, *16*(5), 625–643.

Chen, K., Molder, A. L., Duan, Z., Boulianne, S., Eckart, C., Mallari, P., & Yang, D. (2022). How climate movement actors and news media frame climate change and strike: Evidence from analyzing Twitter and news media discourse from 2018 to 2021. *The International Journal of Press/Politics*, *28*(2), 384–413. https://doi.org/10.1177/19401612221106405

Cotter, K. (2019). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society*, *21*(4), 895–913.

Etter, M., & Albu, O. B. (2021). Activists in the dark: Social media algorithms and collective action in two social movement organizations. *Organization*, *28*(1), 68–91.

Galis, V., & Neumayer, C. (2016). Laying claim to social media by activists: A cyber-material détournement. *Social Media + Society*, *2*(3). https://doi.org/10.1177/2056305116664360

Gerbaudo, P. (2012). *Tweets and the streets: Social media and contemporary activism*. Pluto Press.

Gerbaudo, P. (2017). Social media teams as digital vanguards: The question of leadership in the management of key Facebook and Twitter accounts of Occupy Wall Street, Indignados and UK Uncut. *Information, Communication & Society*, *20*(2), 185–202.

Haßler, J., Wurst, A.-K., Jungblut, M., & Schlosser, K. (2021). Influence of the pandemic lockdown on Fridays for Future's hashtag activism. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448211026575

Karpf, D. (2018). Analytic activism and its limitations. *Social Media + Society*, *4*(1). https://doi.org/10.1177/2056305117750718

Kennedy, H., & Moss, G. (2015). Known or knowing publics? Social media data mining and the question of public agency. *Big Data & Society*, *2*(2). https://doi.org/10.1177/2053951715611145

Knupfer, H., Neureiter, A., & Matthes, J. (2023). From social media diet to public riot? Engagement with "greenfluencers" and young social media users' environmental activism. *Computers in Human Behavior*, *139*, Article 107527.

Lehtiniemi, T., & Ruckenstein, M. (2019). The social imaginaries of data activism. *Big Data & Society*, *6*(1). https://doi.org/10.1177/2053951718821146

Lindlof, T. R., & Taylor, B. C. (2018). *Qualitative communication research methods* (4th ed.). SAGE.

Maly, I. (2019). New right metapolitics and the algorithmic activism of Schild & Vrienden. *Social Media + Society*, *5*(2). https://doi.org/10.1177/2056305119856700

Maly, I., & Beekmans, I. (2018, March 19). Research report: Analyzing Facebook's guidelines for publishers. *Diggit Magazine*. https://www.diggitmagazine.com/working-papers/research-report-diggitday-facebook-experiment

Milan, S. (2015a). From social movements to cloud protesting: The evolution of collective identity. *Information, Communication & Society*, *18*(8), 887–900.

Milan, S. (2015b). When algorithms shape collective action: Social media and the dynamics of cloud protesting. *Social Media + Society*, *1*(2). https://doi.org/10.1177/2056305115622481

Milan, S., & van der Velden, L. (2016). The alternative epistemologies of data activism. *Digital Culture & Society*, *2*(2), 57–74.

Nasrin, S., & Fisher, D. R. (2022). Understanding collective identity in virtual spaces: A study of the youth climate movement. *American Behavioral Scientist*, *66*(9), 1286–1308.

Oliffe, J. L., Kelly, M. T., Gonzalez Montaner, G., & Yu Ko, W. F. (2021). Zoom interviews: Benefits and concessions. *International Journal of Qualitative Methods*, *20*. https://doi.org/10.1177/16094069211053522

Owen, W. F. (1984). Interpretive themes in relational communication. *Quarterly Journal of Speech*, *70*, 274–287.

Ruppert, E., Isin, E., & Bigo, D. (2017). Data politics. *Big Data & Society*, *4*(2). https://doi.org/10.1177/2053951717717749

Segura, M. S., & Waisbord, S. (2019). Between data capitalism and data citizenship. *Television & New Media*, *20*(4), 412–419.

Snow, D. A., & Trom, D. (2002). The case study and the study of social movements. In B. Klandermans & S. Staggenborg (Eds)., *Methods of social movement research* (pp. 146–172). University of Minnesota Press.

Sorce, G., & Dumitrica, D. (2021). #FightEveryCrisis: Pandemic shifts in Fridays for Future's protest communication frames. *Environmental Communication*, *17*(3), 263–275. https://doi.org/10.1080/17524032.2021.1948435

Sorce, G., & Dumitrica, D. (2022). From school strikes to webinars: Mapping the forced digitalization of Fridays for Future's activism during the Covid-19 pandemic. *Convergence: The International Journal of Research into New Media Technologies*, *29*(3), 570–585. https://doi.org/10.1177/13548565221148112

Theocharis, Y., Lowe, W., van Deth, J. W., & García-Albacete, G. (2015). Using Twitter to mobilize protest action: Online mobilization patterns and action repertoires in the Occupy Wall Street, Indignados, and Aganaktismenoi movements. *Information, Communication & Society*, *18*(2), 202–220. https://doi.org/10.1080/1369118x.2014.948035

Treré, E. (2018). *Hybrid media activism: Ecologies, imaginaries, algorithms*. Routledge.

Treré, E., & Bonini, T. (2022). Amplification, evasion, hijacking: Algorithms as repertoire for social movements and the struggle for visibility. *Social Movement Studies*. Advance online publication. https://doi.org/10.1080/14742837.2022.2143345

Van Driel, L., & Dumitrica, D. (2021). Selling brands while staying "authentic:" The professionalization of Instagram influencers. *Convergence: The International Journal of Research into New Media Technologies*, *27*(1), 66–84.

Velkova, J., & Kaun, A. (2021). Algorithmic resistance: Media practices and the politics of repair. *Information, Communication & Society*, *24*(4), 523–540.

Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, *15*(1), 45–55.

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Article

Fridays for Future and Mondays for Memes: How Climate Crisis Memes Mobilize Social Media Users

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Abstract
Modern protest movements rely on digital activism on social media, which serves as a conduit for mobilization. In the social media landscape, internet memes have emerged as a popular practice of expressing political protest. Although it is known that social media facilitates mobilization, researchers have neglected how distinct types of content affect mobilization. Moreover, research regarding users' perspectives on mobilization through memes is lacking. To close these research gaps, this study investigates memes in the context of climate protest mobilization. Based on the four-step model of mobilization, a survey of users who create and share memes related to the Fridays for Future movement on social media (*N* = 325) revealed that the prosumption of climate crisis memes increases users' issue involvement and strengthens their online networks. These factors serve as crucial mediators in the relationship between users' prosumption of climate crisis memes and political participation. The results suggest that mobilization through memes is effective at raising awareness of political issues and strengthening online discussion networks, which means that it has strategic potential for protest movements. By looking at memes from the perspective of their creators and examining a specific type of social media content, this study contributes to the literature on digital mobilization.

Keywords
activism; climate crisis; Fridays for Future; internet memes; mobilization; political participation; prosumption; protest movements; social media

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1. Introduction

Digital activism is a crucial pillar of modern protest movements. In this context, social media serves as an important communication channel by allowing users to quickly and easily share information and mobilize others. It enables people to connect with others who share their opinions and facilitates the creation of virtual communities that can amplify a movement's messages and spark public debate. Research on protest movements, such as the Arab Spring or Black Lives Matter, has highlighted the potential of internet memes for the expression of political opinions, digitally networked participation, and mobilization via social media (Moreno-Almeida, 2021; Williams, 2020). In addition, memes make up a significant portion of visual communication about climate change on social media (Mooseder et al., 2023). The term meme describes cultural units that are transferred between humans by imitation (Dawkins, 1976). Internet memes refer to digital units that are created and shared via social media based on imitation and adaptation (Shifman, 2014). Memes are highly relevant to and intertwined with the political sphere because they can contribute to political advocacy, grassroots action, the

expression of political opinions, and public discussion (Shifman, 2014).

One global movement that relies significantly on mobilization and participation via social media is Fridays for Future (FFF). Social media plays a significant role in the FFF movement in various countries and regions all over the world. This movement's broad social media presence is important for its actions, as social media serves as a central source of information and is crucial for the mobilization of supporters. Moreover, the FFF initiator Greta Thunberg and other activists use social media to foster mobilization and build a collective identity (Brünker et al., 2019). The iconicity of Greta Thunberg, who is often portrayed as courageous and heroic, has supported both the memeification of FFF-related communication and the use of memes by the movement itself (Olesen, 2022). However, in addition, to support and advocacy, her strong presence on social media has also led to controversial discussions, contentious debates, and hostile follow-up communication, which have mobilized both FFF supporters and opponents (Murphy, 2021). For example, the social media campaign Mondays for Memes by FFF Germany illustrates the idea of mobilization through memes (see Figure 1).

Generally, there is a broad consensus that social media facilitates mobilization (Boulianne et al., 2020). However, researchers have neglected how specific types of content on social media, such as memes, affect mobilization. Other than a recent study by Zhang and Pinto (2021), the mobilization potential of memes has been demonstrated only through single case studies at the meso level. Given the popularity of memes and their frequent presence in online political discourses, it is important to consider their potential for mobilizing social media users. To address these research gaps in the literature, we investigated the role of internet memes in the climate protest mobilization process. More specifically, we conducted a quantitative online survey of social media users who create and share memes in the contexts of FFF and climate protest. Based on the four-step model of mobilization (Klandermans & Oegema, 1987), we examined the crucial procedural steps of mobilization and the significance of memes for participatory outcomes.

The goal of this study was twofold. First, by empirically examining the role of memes in the mobilization process, we aimed to contribute to the research on activism and mobilization by focusing on a specific type of content on social media. Second, our goal was to expand the horizon of political internet meme studies because there is "little published research that examines memes in the context of their audiences" (Huntington, 2020, p. 195). By looking at memes from the perspective of their creators and examining their potential for micro-mobilization (Nekmat & Ismail, 2019), we wanted to provide a more holistic understanding of a phenomenon that is becoming more and more popular among users and activist movements.

2. Literature Review

2.1. The Significance of Internet Memes in Online Political Discourses

Memes exist in various forms, such as pieces of information or specific cultural practices. Although the concept originated in the field of evolutionary biology (Dawkins, 1976), internet memes have become particularly

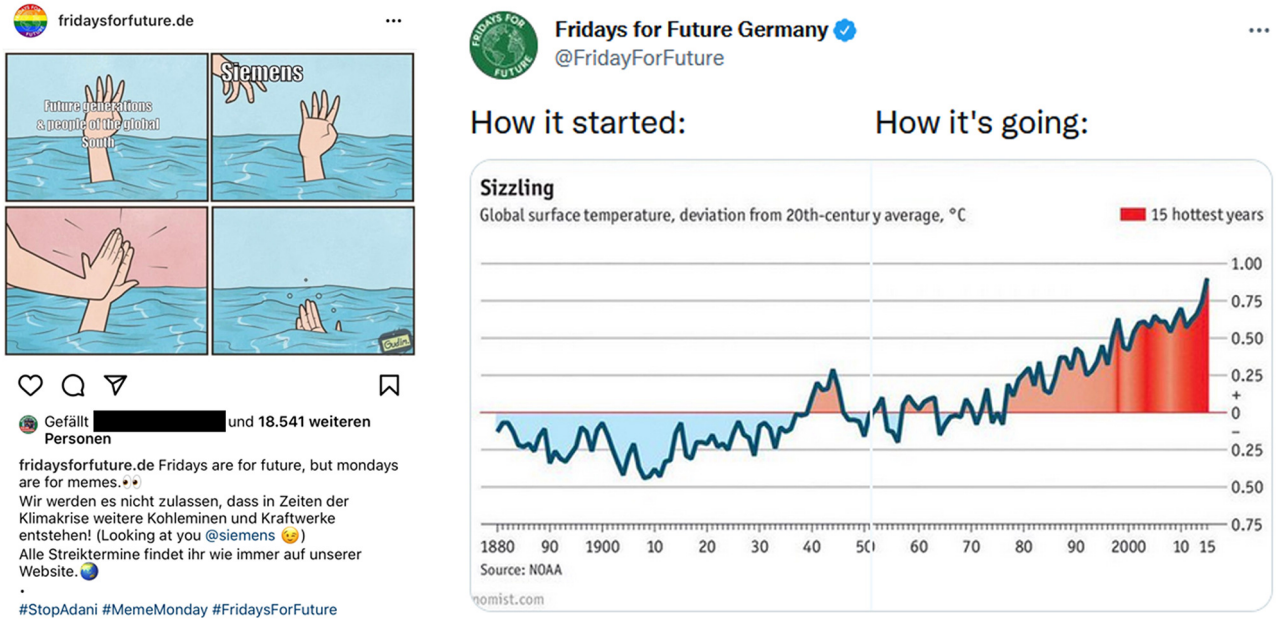

Figure 1. Memes created and shared by FFF Germany. Sources: Fridays for Future Deutschland (2020, left); Fridays for Future Germany (2020, right).

relevant to digital culture. Internet memes can be defined as "(a) a group of digital items sharing common characteristics of content, form, and/or stance, which (b) were created with awareness of each other, and (c) were circulated, imitated, and/or transformed via the Internet by many users" (Shifman, 2014, p. 41). Internet memes spread through imitation and are individually adapted when transmitted. Consequently, memes rely on the process of prosumption—that is, an interconnected process of production and consumption (Yamamoto et al., 2020). Prosumption occurs in various forms on the internet and plays a highly distinct role in the dissemination logic of memes. In the meme context, users act as prosumers because the processes of production and consumption are continuously intertwined due to the imitational character of memes. Meme production encompasses the creation of new meme adaptations as well as the recontextualization and exchange of previous adaptations. Although consuming a meme does not automatically lead to the production of further adaptations (e.g., in the cases of incidental exposure, passive use, and lurking), a meme's diffusion always relies on the previous consumption of existing adaptations.

Internet memes appear in different formats and genres, but the most common form involves image macros that use adaptable patterns of images superimposed with customized text. Meme generators offer low-threshold opportunities to produce and share image macros as well as GIFs and video memes (Moreno-Almeida, 2021). From a genre perspective, political memes have emerged as companions to political events, decisions, and discourses (Johann & Bülow, 2019). Political memes serve as a means of persuasion and expression of grassroots actions. In addition, they are used as forms of individual and collective expressions of opinions and identities (Johann, 2022; Shifman, 2014).

The relevance and effectiveness of political memes are rooted in their affective nature because emotions are also central to politics. Functioning as a kind of "politics-emotion nexus" (Demertzis, 2013, p. 265), political memes serve numerous purposes, such as reacting to political events, fortifying political identities and hostilities, or influencing the general discourse (Dean, 2019). Focusing on the emotional connection between memes and politics, we argue that memes and participation in the online climate crisis discourse are a perfect match. Research has shown that emotions significantly affect climate activism and people's views on the climate crisis because emotions are connected to a sense of agency and efficacy, which triggers decisions and actions (e.g., Brosch, 2021). Moreover, in the specific context of the FFF, there is evidence that emotions play a critical role in this movement's mobilization of people and that the use of emotion on social media is an important factor in the success of the movement (Brünker et al., 2019). Therefore, we argue that climate crisis memes have mobilizational potential.

2.2. Mobilization Through Internet Memes

A large body of research suggests that the prosumption of political information is related to participatory outcomes (Boulianne et al., 2020; Yamamoto et al., 2020). This link has been confirmed for the prosumption of political memes in general (Johann, 2022) and for climate crisis memes in particular (Zhang & Pinto, 2021). Given the broad empirical evidence, we argue that the prosumption of political information is not merely a conceptual component of political participation but functions as the spark that ignites participatory outcomes. Therefore, meme prosumption can be seen as a form of political expression that "is conceptually distinct from political participation in the way that political talk is distinct from political action" (Gil de Zúñiga et al., 2014, p. 614). Another baseline assumption is that the relationship between expression and participation is characterized by complex dynamics in which mobilization functions as a bridging concept.

Understanding mobilization as a "process of increasing the readiness to act collectively" (Gamson, 1975, p. 15), we argue that different conceptual components of mobilization serve as mediators in the relationship between the prosumption of climate-crisis and FFF-related memes and the political participation of users. Political participation refers to the opportunities available for citizens to influence political decision-making (Vissers & Stolle, 2014). Political participation encompasses traditional and institutionalized forms of participation, such as voting, campaigning, civic engagement, and protest, as well as individualistic forms that are closely linked to the rise of new forms of political expression and engagement on social media, such as political consumerism, digitally networked participation, and creative forms of participation (Theocharis, 2015; Theocharis & de Moor, 2021). Thus, we argue that meme prosumption in the sense of "sharing political content or using social media to mobilize others for political purposes" (Theocharis & van Deth, 2018, p. 19) can be treated as a conceptual starting point for empirically investigating the mediating role of mobilization in the relationship between meme usage and participatory outcomes.

There are several approaches to conceptualizing mobilization. In this study, we followed Boulianne et al. (2020) in transferring the four-step model of mobilization (Klandermans & Oegema, 1987) into the social media context. The four-step model is a framework for understanding how individuals become actively involved in social and political movements. This model describes four steps in the mobilization process that individuals must pass through on their way to participating in collective action: (a) mobilization potential, (b) recruitment networks, (c) motivation to participate, and (d) barriers to participation. In addition to adapting this theoretical framework to the specific context of memes, we used a case study approach (Boulianne et al., 2020;

Klandermans & Oegema, 1987) to explore how the prosumption of memes affects the cognitive processes that initiate individual mobilization and participation processes. In our study, these steps served as mediators in explaining political participation. Note that these steps do not have to be implemented one after another; rather, they overlap and occur in parallel (Klandermans & Oegema, 1987; Oegema & Klandermans, 1994; Walgrave & Manssens, 2000).

2.2.1. Mobilization Potential

Mobilization potential refers to individuals who can be activated by a movement. For this to happen, people need to have a positive stance toward the movement, support its positions (Klandermans & Oegema, 1987), and "agree with the goals" (Boulianne et al., 2020, p. 644) of the movement. Although it can be expected that protest movements, such as the FFF, primarily mobilize their supporters (Norris et al., 2005), online communication and social media have led to a more diverse structure of protesters (Walgrave et al., 2011, 2022). Therefore, it is also possible that not all mobilized participants support the FFF's positions. Memes can also serve as a means of expressing criticism and counter-positions. In this regard, we expected that users' issue involvement would function as an important conduit for deploying a movement's mobilization potential (Nekmat & Ismail, 2019). Issue involvement refers to the degree to which an attitudinal issue is perceived to be of individual importance (Petty & Cacioppo, 1979). Because political memes address salient societal topics and serve as vehicles for individual opinions and criticism, climate crisis memes can raise users' awareness of climate change discourse and climate activism. Consequently, the prosumption of such memes can enhance users' issue involvement and the degree to which users perceive social media as an effective outlet for climate activism.

Research has shown that the general use of social media is positively related to using social media for activism (Valenzuela, 2013), which predicts political participation (Chen et al., 2015). In addition, there is evidence that political content has a certain degree of agenda-setting potential by increasing the salience of a political issue on the public agenda (Boukes, 2019). Moreover, incidental exposure to political information, which is the most common way in which users encounter political memes on social media (McLoughlin & Southern, 2021), is likely to increase the perceived importance of the presented political topics (Feezell, 2018). Finally, there is evidence that issue involvement is positively related to participatory outcomes (Nekmat & Ismail, 2019). Therefore, we developed the following hypotheses regarding the mobilization potential of climate crisis memes:

> H1: Issue involvement mediates the relationship between the prosumption of climate crisis memes and users' political participation.

> H2: The use of social media for activism mediates the relationship between the prosumption of climate crisis memes and users' political participation.

2.2.2. Recruitment Networks

Recruitment networks are key in deploying mobilization potential. Movements need to activate their networks so that people can be targeted by mobilization attempts (Klandermans & Oegema, 1987). Users "need to be asked to participate" (Boulianne et al., 2020, p. 646). Previous studies have indicated that calls for participation that come from close ties have strong effects on political participation (Nekmat et al., 2015). Moreover, receiving messages with political content from friends on social media is positively related to participatory outcomes (Baek, 2015). Researchers have also investigated the effects of discussion network size, concluding that size is positively related to political participation (Gil de Zúñiga et al., 2014). The active use of climate crisis memes in online political discourses can also make users more closely connected to their communities. This idea of network building can be linked to the connective action of memes in loosely organized online communities (Bennett & Segerberg, 2012). Consequently, we posed the following hypotheses:

> H3: Discussion network size mediates the relationship between the prosumption of climate crisis memes and users' political participation.

> H4: The extent to which users receive memes from friends and acquaintances mediates the relationship between the prosumption of climate crisis memes and users' political participation.

2.2.3. Motivation to Participate

The motivation to participate is "the social-psychological core" (Klandermans, 2004, p. 370) of the mobilization process. Participatory motivation strongly depends on individual expectations for the success of collective action (Klandermans & Oegema, 1987), which means that participatory efficacy is relevant to the success of mobilization. Participatory efficacy can be defined as "the belief that one can make a difference through one's contribution to the collective efforts aimed at achieving group goals" (van Zomeren et al., 2013, p. 619). Research on the use of political news on social media indicates that participatory efficacy mediates the relationship between consuming political news on social media and protest intention (Chan, 2017). Generally, participatory efficacy is positively related to participatory outcomes (Nekmat & Ismail, 2019); this finding also holds for pro-environmental behavior (Bamberg et al., 2015). Moreover, perceived political efficacy is a driver of collective political action, serving as a link between collective identity and behavior and participatory outcomes

(van Zomeren et al., 2008). Based on these considerations, we proposed the following hypothesis:

> H5: Perceived participatory efficacy mediates the relationship between the prosumption of climate crisis memes and users' political participation.

The perceived value of a collective good, which is often reflected in individual risk perception, is one construct that is closely linked to expectations of success and functions as a determinant of participatory motivation (Boulianne et al., 2020; Klandermans & Oegema, 1987). Although scholars have shown that in the context of a public health crisis, the use of social media is positively related to individual risk perceptions (Oh et al., 2021), Zhang and Pinto (2021) could not confirm similar effects in their study of climate crisis memes. However, as climate crisis memes often address the risks of the climate crisis, we expected that meme prosumption would be positively related to the perceived value of a collective good. Researchers have also found positive effects of the perception of the climate crisis risks on participatory outcomes (Lubell et al., 2007). Consequently, we posed the following hypothesis:

> H6: The perceived value of a collective good mediates the relationship between the prosumption of climate crisis memes and users' political participation.

2.2.4. Barriers to Participation

The model's fourth step refers to barriers to participation, which are closely linked to the perceived costs and benefits of participation (Boulianne et al., 2020; Klandermans & Oegema, 1987). More specifically, "motivation and barriers interact to activate participation" (Klandermans & Oegema, 1987, p. 520). Because the use of social media is strongly driven by specific motives and goals (Park et al., 2009), we argue that barriers to participation are mainly determined by the perceived benefits resulting from participatory actions. In this context, climate-crisis and FFF-related memes can serve as a starting point for political discussion for members of specific social networks, thus reducing barriers to participation (Boulianne et al., 2020; Klandermans, 1984). This assumption is reinforced by the fact that social media in general (Ekström & Shehata, 2018) and memes in particular (Johann, 2022) are regarded as low-threshold opportunities for political engagement and participation. Initial results in the context of collective action have shown that knowing other participants and having a strong collective identity were positively related to the perceived benefits of participation (Zhou & Wang, 2018). As memes carry both individual and collective identity cues, we expected perceived benefits to be reinforced by climate-crisis meme prosumption. Moreover, perceived benefits are also positively related to participatory outcomes (Ihm & Lee, 2021). Therefore, we developed the following hypothesis:

> H7: The perceived benefits of participation mediate the relationship between the prosumption of climate crisis memes and users' political participation.

3. Methods

3.1. Data Collection and Sample

We conducted an online survey from May 5 to June 5, 2021. The questionnaire was implemented using SoSciSurvey and was distributed among social media users on fringe web communities (e.g., Reddit) and content-sharing platforms (e.g., Twitter and Instagram). Both fringe web communities and content-sharing platforms constantly add memes to the climate crisis discourse (Treen et al., 2022; Zhang & Pinto, 2021). During the survey period, we invited users who produced climate-crisis and FFF-related memes to participate in the survey by directly contacting them or by posting the survey link in the comment sections. In addition, selected users were asked to forward the survey link to other producers of climate crisis and FFF-related memes. In this context, production refers to the creation of one's own meme adaptations and the recontextualization and sharing of existing meme adaptations. In general, it did not matter what stance the users adopted in their memes. Producers of critical and favorable memes had the same chance of being included in the sample. However, those who identified as supporters of the FFF dominated the sample (M = 4.09, SD = .94 on a 5-point scale; adapted from Chan, 2017). Given this circumstance, the results largely represent the mobilization process of FFF supporters.

In total, 370 users completed the questionnaire and provided informed consent (convenience sample). The respondents consisted of 183 male (49.46%) and 160 female (43.24%) users. Twenty-five users (6.76%) identified as non-binary. Two respondents (.54%) did not provide gender information. The respondents' ages ranged from 14 to 73 years (M = 26.52, SD = 15.30).

3.2. Measures

We measured meme prosumption by following Yamamoto et al. (2020). Respondents were asked to indicate on a 7-point scale (1 = *never or less than once every two weeks* to 7 = *twice or more daily*) how often they were "browsing political internet memes on social media" (BR), "contributing original political internet memes to social media" (CC), "commenting or rating political internet memes on social media" (CR), and "sharing political internet memes with others on social media" (SH). The following index (M = 10.88, SD = 4.71) represented weighted prosumption routines: $(\sqrt{BR \times CC} + \sqrt{BR \times CR} + \sqrt{BR \times SH})$.

Following Nekmat and Ismail (2019), to measure issue involvement ("in your life, you personally find issues related to global warming and the climate

crisis to be"), four items ("relevant/irrelevant," "important/unimportant," "valuable/worthless," and "significant/insignificant") were used along with a 7-point semantic differential scale (M = 6.59, SD = .74, ω = .93).

To measure the extent to which social media is used for activism, we adapted three items from Chen et al. (2015). The respondents were asked to rate on a 4-point scale (1 = *never* to 4 = *very frequently*) how often they engaged in the following activities: "Joining groups or pages on social media related to the Fridays for Future movement," "encouraging or recommending others to join groups or pages on social media related to the Fridays for Future movement," and "encouraging or recommending others to join a protest and demonstration." We used a summative index to consider social media activism behavior in further analysis (M = 2.47, SD = .91).

The sizes of users' discussion networks were measured using the following open-ended question (Gil de Zúñiga et al., 2014): "Please give an estimate of the number of people you talked to face-to-face or via phone calls, via the internet, including email, chat rooms, social media, and micro-blogging sites" (M = 156.04, SD = 944.11).

Two items adapted from Tang and Lee (2013) were used to measure the degree to which the respondents received memes from friends and acquaintances. The respondents were asked to rate on a 4-point scale (1 = *never* to 4 = *very frequently*) how often they received "memes on public affairs" and "memes on policy and political issues" on social media (M = 2.71, SD = .89, ω = .86).

Following Chan (2017), participatory efficacy was measured based on the following two items and a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*): "I have the ability to contribute to a collective action that influences the government" and "I have the ability to contribute to a collective action that influences society" (M = 3.80, SD = 1.00, ω = .77).

Using the operationalization of the perceived value of a collective good by Lubell et al. (2007), the respondents were asked to rate the following statements on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*): "Global warming and the climate crisis will have a noticeably negative impact on my health in the next 25 years," "global warming and the climate crisis will have a noticeably negative impact on my economic and financial situation in the next 25 years," and "global warming and the climate crisis will have a noticeably negative impact on the environment in which my family and I live." Moreover, the respondents were asked to evaluate on a 5-point scale (1 = *very little risk* to 5 = *very high risk*) the risks posed by global warming and the climate crisis for the following areas: "Public health in your country," "economic development in your country," and "impact on the environment in your country" (M = 4.45, SD = .66, ω = .80).

Six items adapted from Ihm and Lee (2021) were used to assess the perceived benefits of participation. The respondents were asked to express their agreement on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*) with the following statements: "Participation activities in Fridays for Future have an impact on whether environmentally friendly politics will gain traction in the legislature," "participation activities in Fridays for Future are helpful in shaping public opinion in favor of environmentally friendly politics," "participation activities in Fridays for Future are helpful in influencing the government and policy makers," "participation activities in Fridays for Future express the value of environmentally friendly politics," "participation activities in Fridays for Future will impact environmentally friendly politics," and "participation activities in Fridays for Future give me satisfaction" (M = 3.99, SD = .73, ω = .87).

To measure political participation, we chose a scale proposed by Theocharis and van Deth (2018). The items of this scale were not adapted to the climate and FFF context because we intended to capture the baseline relationship between meme prosumption and political participation, which has been described in the literature on memes as a "legitimate avenue to political participation" (Ross & Rivers, 2019, p. 976; see also Milner, 2013; Ross & Rivers, 2017; Shifman, 2014). The respondents were asked to indicate whether they participated in the following activities (1 = *yes* and 2 = *no*): "Voted in the last national election," "worked for a party or candidate," "contacted a politician or a state or government official about an issue or problem," "attended a meeting of a political party or other political organization," "donated money to a political party or other political organization," "worked for a political action group," "signed a petition," "joined a demonstration," "donated money to a social, humanitarian or charitable organization," "volunteered in a social, humanitarian or charitable organization," "boycotted certain products for political or ethical reasons," "deliberately bought certain products for political or ethical reasons," "volunteered for a community project," "posted or shared links on social media (Instagram, Twitter, Reddit, etc.) to political stories or articles for others to read," "commented on social media (Instagram, Twitter, Reddit, etc.) on political or social issues," and "encouraged other people to take action on a political or social issue using Instagram, Twitter or other social media platforms." In addition, the respondents were asked whether they had performed expressive actions and were given the opportunity to provide their examples: "During the last twelve months, have you been engaged in any such actions to express your political or social views or concerns?" We calculated a summative index for political participation behavior (M = 9.23, SD = 2.62).

4. Results

It is rare to find research that would holistically apply the four-step model of mobilization (Klandermans & Oegema, 1987) from the mobilized participants' perspective. Boulianne et al. (2020) used logistic regression

analyses to examine each step's influence on participatory outcomes. Similar studies on mobilization through social media have also mainly relied on regression and mediation analyses (e.g., Baek, 2015; Chen et al., 2015). Regarding the data analysis strategy of this study, it should be noted that the steps of the four-step model do not have to be performed in sequence; rather, they occur in parallel (Klandermans & Oegema, 1987; Oegema & Klandermans, 1994). Walgrave and Manssens (2000) even claimed that these steps represent stages at which potentially mobilized participants can exit the decision-making process, "stages which are not necessarily sequential" (p. 219). Therefore, we used structural equation modeling to test a parallel mediation model.

Correlation analyses were conducted for the main variables (see Table 1). Regarding incremental, descriptive, and inferential statistical fit measures, our model showed a good overall fit ($\chi^2(177) = 322.31$, *CFI* = .95, *TLI* = .94, *RMSEA* = .05 CI [.041, .059]). Post-hoc power analyses suggested a statistical power of >.99 based on RMSEA for our final sample size (N = 325; after excluding cases with missing values) and an alpha of .05 (Moshagen, 2022). We added a covariation between the perceived benefits of participation and participatory efficacy because the data strongly suggested a correlation (r = .45) between these two variables and because the items partly resembled each other (e.g., participatory efficacy: "I have the ability to contribute to a collective action that influences the government"; perceived benefits: "participation activities in Fridays for Future are helpful in influencing the government and policy makers"). Furthermore, we allowed the variables of network size, receiving memes, and prosumption to covary because bidirectionality was theoretically plausible and because the model produced robust results for both options.

First, the bivariate case revealed only a small positive relationship between the indices for prosumption and political participation (β = .12, p = .023). This was consistent with our overall mediation hypothesis, as we expected the relationship to be determined by more complex, indirect dynamics. The results further demonstrated that meme prosumption was positively related to issue involvement (β = .18, p = .002) and the perceived value of a collective good (β = .22, p = .001). Therefore, prosumption could be said to predominantly highlight the relevance and negative impacts of climate risks for individuals. As predicted, prosumption, network size, and receiving memes covaried, which indicated that prosumption involves larger online networks and a higher probability of receiving memes from this network. Furthermore, the analyses revealed that issue involvement (β = .13, p = .015), social media activism (β = .14, p = .003), and participatory efficacy (β = .22, p = .003) were positively related to political participation. Thus, individuals who are highly involved in climate issues have the impression that they can make a difference through their participation, while those already engaged in activism on social media are likelier to also engage in political participation. Moreover, network size had a medium-sized positive effect on political participation (β = .34, p < .001). Consequently, a mobilization effect for prosumption can be expected to occur due to heightened issue involvement and a larger discussion network size. The single paths are displayed in Table 2.

Taken together, the results supported the claims that issue involvement (H1 supported) and users' network sizes (H3 supported) mediate the relationship between climate-crisis meme prosumption and political participation (see Figure 2). However, we could not fully confirm the mediating role of the other factors, which provides several points for discussion.

5. Discussion and Conclusion

The goal of this study was to investigate the mobilizing power of climate crisis memes using the four-step model of mobilization (Klandermans & Oegema, 1987). The model divides the mobilization process into: (a) mobilization potential, (b) recruitment networks, (c) motivation to participate, and (d) barriers to participation. Based on the existing research on mobilization and political participation, we expected to encounter various

Table 1. Zero-order correlations of the studied variables (N = 325).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Involvement	—								
(2) Activism	.08	—							
(3) Collective good	.32***	.13*	—						
(4) Benefits	.19***	.40***	.16**	—					
(5) Efficacy	.14*	.28***	.09	.45***	—				
(6) Network size	–.04	.09	.01	.04	.11*	—			
(7) Receiving memes	.11*	.17**	.20***	.00	.08	.00	—		
(8) Prosumption	.18**	.06	.19**	–.02	.08	.02	.48***	—	
(9) Participation	.20***	.32***	.17**	.25***	.34***	.10	.20***	.11*	—

Notes: *** p < .001; ** p < .01; * p < .05.

Table 2. Path coefficients of the structural equation model (*N* = 325).

	Prosumption[1]				Political participation[2]			
Mediator	*b*	*SE*	*β*	*p*	*b*	*SE*	*β*	*p*
Involvement	.025	.008	.178	.002	.472	.195	.125	.015
Activism	.010	.011	.055	.325	.395	.135	.143	.003
Collective good	.019	.005	.222	.001	.288	.339	.046	.396
Benefits	−.007	.010	−.039	.516	.095	.211	.031	.653
Efficacy	.015	.014	.066	.279	.512	.171	.216	.003
Network size					.526	.078	.341	.000
Receiving memes					.208	.159	.072	.192

Notes: [1] Prosumption is the independent variable, and the rows represent the dependent variables; [2] political participation is the dependent variable, and the rows represent the independent variables.

mediating factors in memetic mobilization. Although previous research has shown that producing, consuming, and creatively using political information on social media positively affects political participation (Boulianne et al., 2020; Tang & Lee, 2013), our study showed that prosuming climate crisis memes does not automatically lead to participatory outcomes. Instead, due to the complex nature of mobilization, political participation through memes involves various procedural avenues to participation.

Regarding the mobilization potential of climate crisis memes, the analysis showed that issue involvement is

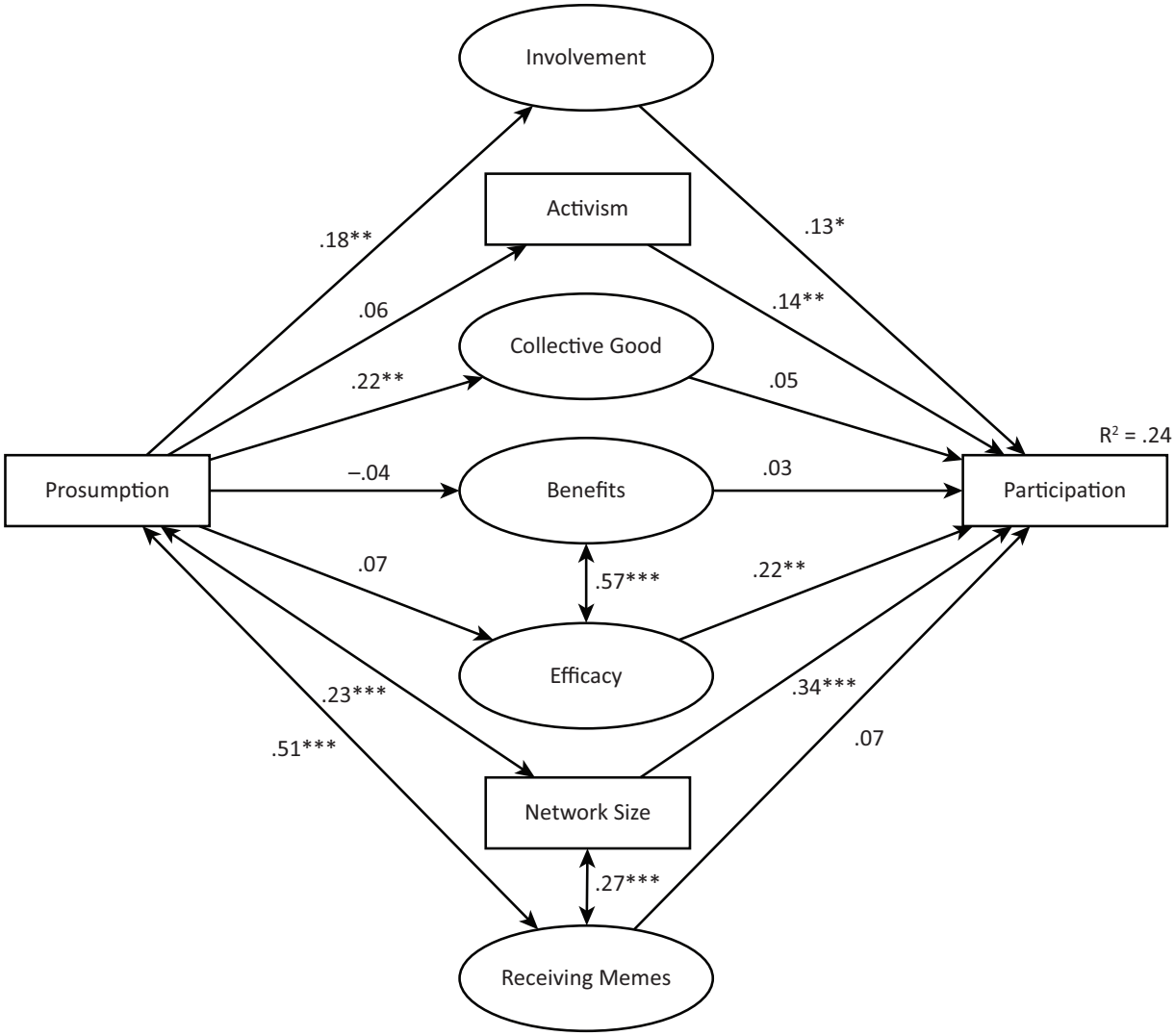

Figure 2. Final structural equation model (*N* = 325).

a crucial mediator in the mobilization process. Although users' actual engagement in politics profits from higher levels of perceived individual importance (Nekmat & Ismail, 2019), memes have the power to raise awareness regarding the political discourse on climate change. In this sense, the production and consumption of climate crisis memes lower the threshold for participation by highlighting the relevance of socio-political issues and fostering active user involvement. Although our respondents exhibited high levels of identification with the FFF, there was evidence of mobilization beyond established supporters to include diverse protesters related to the climate crisis and the FFF (Walgrave et al., 2011, 2022). Thus, the creative and often humorous process of spreading information about the climate crisis via memes has agenda-setting potential. Previous studies have shown that social media serves as an agenda-setter, particularly when users' political interest is low (Feezell, 2018). Our findings imply that climate crisis memes are not only contagious in terms of individual involvement but can also function as an effective strategic content format for both activist movements and counter-movements when it comes to drawing attention to their own topics and goals.

Regarding recruitment networks, our study highlighted that the prosumption of climate crisis memes was interrelated with users' online discussion network size and the extent to which users received memes from their friends and acquaintances. This is in line with previous findings from online participation research (Gil de Zúñiga et al., 2014; Yamamoto et al., 2020). Moreover, the size of the online discussion network proved to be a mediator when it comes to the relationship between meme prosumption and political participation. In contrast to our expectations, there was no direct relationship between receiving memes from friends and acquaintances and participatory outcomes. However, network size served as a further mediator. Based on these findings, recruitment networks are key when it comes to the mobilization power of memes. As shown by meme diffusion studies (Johann & Bülow, 2019), users' networks are crucial for meme dissemination in online political discourses. The same applies to the deployment of memes' mobilizational and participatory potential. The suggested covariations in our model showed that meme prosumption is not necessarily the starting point for user mobilization. Both the production and consumption of memes have the potential to build up online networks, which reinforces the collective nature of memes and demonstrates that a meme is greater than the sum of its parts. The extent to which users produce and share their own memes after being exposed to others' memes should be investigated in future studies to better understand how the amalgamation of production and consumption supports the establishment of meme networks and mobilizes loosely connected users. In addition, previous studies on the role of recruitment networks in activism have shown that supportive networks serve as pulling forces for individual participation (McAdam, 1986). Whereas our study has primarily examined the quantitative aspects of recruitment networks, future studies could help shed light on the qualitative aspects, such as being asked to participate by the network or the strength of particular network connections.

Our results further suggest that users' motivation to participate and their perceptions of participatory barriers do not play a crucial role in the mobilization process involving climate crisis memes. Although the prosumption of memes was positively related to the perception of the value of a collective good, we could not confirm further implications for participatory outcomes. Thus, climate crisis memes have the potential to shape individuals' risk perceptions (Oh et al., 2021) but do not sufficiently lower political engagement barriers.

Previous studies on digital activism in movements, such as the Arab Spring and Black Lives Matter, have hyped up the mobilizational power of internet memes at the meso level (Moreno-Almeida, 2021; Williams, 2020). This study provides empirical evidence at the micro level—that is, in the context of memes' audiences (Huntington, 2020)—that the prosumption of memes does, indeed, precede political participation. However, by looking at the mediating role of the four-step model of mobilization (Klandermans & Oegema, 1987), we identified crucial factors that lead to participatory outcomes, confirming the significance of memes for micro-mobilization (Nekmat & Ismail, 2019). Using the example of memes related to the FFF movement and the climate crisis discourse, our study showed that memes have the potential to mobilize social media users by raising awareness of the political issues behind the memes. From a more structural perspective, memes offer an extraordinary opportunity for building up and strengthening recruitment networks, which is an important factor not only for meme diffusion but also for users' political participation.

This study has several limitations, mainly rooted in its methodological approach, which provides opportunities for future research. First, the sample size was rather small, based on self-selection, and followed a cross-sectional approach. Therefore, we could not derive representative or causal claims. In particular, small effect sizes (<.15) must be treated with caution because they do not achieve the appropriate statistical power (>.80). Future studies should aim for larger samples and longitudinal designs to transfer the findings to more robust path models. Second, the meme prosumption variable amalgamated individual consumption and production routines, which may confound the results. Nevertheless, we believe that in memetic communication, production, and consumption are deeply intertwined, which is reflected in Shifman's (2014) definition emphasizing that memes are constructed with "awareness of each other" (p. 41). Therefore, future studies should delve deeper into the process of meme production because very little is known about how users approach memetic

discourses and reconcile collectivity and individualism in their meme adaptations.

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Conflict of Interests

The authors declare no conflict of interests.

References

Baek, Y. M. (2015). Political mobilization through social network sites: The mobilizing power of political messages received from SNS friends. *Computers in Human Behavior*, *44*, 12–19. http://doi.org/10.1016/j.chb.2014.11.021

Bamberg, S., Rees, J., & Seebauer, S. (2015). Collective climate action: Determinants of participation intention in community-based pro-environmental initiatives. *Journal of Environmental Psychology*, *43*, 155–165. https://doi.org/10.1016/j.jenvp. 2015.06.006

Bennett, L. W., & Segerberg, A. (2012). The logic of connective action. *Information, Communication & Society*, *15*(5), 739–768. https://doi.org/10.1080/1369118X.2012.670661

Boukes, M. (2019). Agenda-setting with satire: How political satire increased TTIP's saliency on the public, media, and political agenda. *Political Communication*, *36*(3), 426–451. https://doi.org/10.1080/10584609.2018.1498816

Boulianne, S., Koc-Michalska, K., & Bimber, B. (2020). Mobilizing media: Comparing TV and social media effects on protest mobilization. *Information, Communication & Society*, *23*(5), 642–664. https://doi.org/10.1080/1369118X.2020.1713847

Brosch, T. (2021). Affect and emotions as drivers of climate change perception and action: A review. *Current Opinion in Behavioral Sciences*, *42*, 15–21. https://doi.org/10.1016/j.cobeha.2021.02.001

Brünker, F., Deitelhoff, F., & Mirbabaie, M. (2019). Collective identity formation on Instagram: Investigating the social movement Fridays for Future. *Proceedings of the Australasian Conference on Information Systems*, *2019*, 304–310. https://doi.org/10.48550/arXiv.1912.05123

Chan, M. (2017). Media use and the social identity model of collective action: Examining the roles of online alternative news and social media news. *Journalism & Mass Communication Quarterly*, *94*(3), 663–681. https://doi.org/10.1177/1077699016638837

Chen, H. T., Ping, S., & Chen, G. (2015). Far from reach but near at hand: The role of social media for cross-national mobilization. *Computers in Human Behavior*, *53*, 443–451. https://doi.org/10.1016/j.chb.2015.05.052

Dawkins, R. (1976). *The selfish gene*. Oxford University Press.

Dean, J. (2019). Sorted for memes and gifs: Visual media and everyday digital politics. *Political Studies Review*, *17*(3), 255–266. https://doi.org/10.1177/1478929918807483

Demertzis, N. (2013). *Emotions in politics. The affect dimension in political tension*. Palgrave Macmillan. https://doi.org/10.1057/9781137025661

Ekström, M., & Shehata, A. (2018). Social media, porous boundaries, and the development of online political engagement among young citizens. *New Media & Society*, *20*(2), 740–759. https://doi.org/10.1177/1461444816670325

Feezell, J. T. (2018). Agenda setting through social media: The importance of incidental news exposure and social filtering in the digital era. *Political Research Quarterly*, *71*(2), 482–494. https://doi.org/10.1177/1065912917744895

Fridays for Future Deutschland. [@fridaysforfuture.de]. (2020, January 20). *Fridays are for future, but mondays are for memes* [Photo]. Instagram. https://www.instagram.com/p/B7jOkq-iT0Y

Fridays for Future Germany. [@FridayForFuture]. (2020, October 9). *How it started: How it's going:* [Photo]. Twitter. https://twitter.com/FridayForFuture/status/1314561809421078538

Gamson, W. A. (1975). *The strategy of social protest*. Dorsey Press.

Gil de Zúñiga, H., Molyneux, L., & Zheng, P. (2014). Social media, political expression, and political participation: Panel analysis of lagged and concurrent relationships. *Journal of Communication*, *64*(4), 612–634. https://doi.org/https://doi.org/10.1111/jcom.12103

Huntington, H. E. (2020). Partisan cues and internet memes: Early evidence for motivated skepticism in audience message processing of spreadable political media. *Atlantic Journal of Communication*, *28*(3), 194–208. https://doi.org/10.1080/15456870.2019.1614589

Ihm, J., & Lee, S. (2021). How perceived costs and benefits of initial social media participation affect subsequent community-based participation. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *32*, 1320–1331. https://doi.org/10.1007/s11266-020-00200-1

Johann, M. (2022). Political participation in transition: Internet memes as a form of political expression in social media. *Studies in Communication Sciences*, *22*(1), 149–164. https://doi.org/10.24434/j.scoms.2022.01.3005

Johann, M., & Bülow, L. (2019). One does not simply create a meme: Conditions for the diffusion of internet memes. *International Journal of Communication*, *13*, 1720–1742.

Klandermans, B. (1984). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review*, *49*(5), 583–600. https://doi.org/10.2307/2095417

Klandermans, B. (2004). The demand and supply of participation: Social-psychological correlates of participation in social movements. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.), *The Blackwell companion to social movements* (pp. 360–379). Wiley. https://doi.org/10.1002/9780470999103.ch16

Klandermans, B., & Oegema, D. (1987). Potentials, networks, motivations, and barriers: Steps towards participation in social movements. *American Sociological Review*, *52*(4), 519–531. https://doi.org/10.2307/2095297

Lubell, M., Zahran, S., & Vedlitz, A. (2007). Collective action and citizen responses to global warming. *Political Behavior*, *29*(3), 391–413. https://doi.org/10.1007/s11109-006-9025-2

McAdam, D. (1986). Recruitment to high-risk activism: The case of Freedom Summer. *American Journal of Sociology*, *92*(1), 64–90. https://doi.org/10.1086/228463

McLoughlin, L., & Southern, R. (2021). By any memes necessary? Small political acts, incidental exposure and memes during the 2017 UK general election. *The British Journal of Politics and International Relations*, *23*(1), 60–84. https://doi.org/10.1177/1369148120930594

Milner, R. M. (2013). Pop polyvocality: Internet memes, public participation, and the Occupy Wall Street movement. *International Journal of Communication*, *7*, 2357–2390.

Mooseder, A., Brantner, C., Zamith, R., & Pfeffer, J. (2023). (Social) media logics and visualizing climate change: 10 years of #climatechange images on Twitter. *Social Media + Society*, *9*(1), 1–14. https://doi.org/10.1177/20563051231164310

Moreno-Almeida, C. (2021). Memes as snapshots of participation: The role of digital amateur activists in authoritarian regimes. *New Media & Society*, *23*(6), 1545–1566. https://doi.org/10.1177/1461444820912722

Moshagen, M. (2022). R package "semPower" (Version 1.2.0) [Computer software]. https://cran.r-project.org/web/packages/semPower/semPower.pdf

Murphy, P. D. (2021). Speaking for the youth, speaking for the planet: Greta Thunberg and the representational politics of eco-celebrity. *Popular Communication*, *19*(3), 193–206. https://doi.org/10.1080/15405702.2021.1913493

Nekmat, E., Gower, K. K., Gonzenbach, W. J., & Flanagin, A. J. (2015). Source effects in the micro-mobilization of collective action via social media. *Information, Communication & Society*, *18*(9), 1076–1091. https://doi.org/10.1080/1369118X.2015.1018301

Nekmat, E., & Ismail, I. (2019). Issue-based micromobilization on social media: Mediated pathways linking issue involvement and self-network opinion congruity to expressive support. *Computers in Human Behavior*, *101*, 51–59. https://doi.org/10.1016/j.chb.2019.07.008

Norris, P., Walgrave, S., & Van Aelst, P. (2005). Who demonstrates? Antistate rebels, conventional participants, or everyone? *Comparative Politics*, *37*(2), 189–205. https://doi.org/10.2307/20072882

Oegema, D., & Klandermans, K. (1994). Why social movement sympathizers don't participate: Erosion and non-conversion of support. *American Sociological Review Association*, *59*(5), 703–722. https://doi.org/10.2307/2096444

Oh, S. H., Lee, S. Y., & Han, C. (2021). The effects of social media use on preventive behaviors during infectious disease outbreaks: The mediating role of self-relevant emotions and public risk perception. *Health Communication*, *36*(8), 972–981. https://doi.org/10.1080/10410236.2020.1724639

Olesen, T. (2022). Greta Thunberg's iconicity: Performance and co-performance in the social media ecology. *New Media & Society*, *24*(6), 1325–1342. https://doi.org/10.1177/1461444820975416

Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *Cyberpsychology & Behavior*, *12*(6), 729–733. https://doi.org/10.1089/cpb.2009.0003

Petty, R. E., & Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, *37*(10), 1915–1926. https://doi.org/10.1037/0022-3514.37.10.1915

Ross, A. S., & Rivers, D. J. (2017). Digital cultures of political participation: Internet memes and the discursive delegitimization of the 2016 U.S. presidential candidates. *Discourse, Context & Media*, *16*, 1–11. https://doi.org/10.1016/j.dcm.2017.01.001

Ross, A. S., & Rivers, D. J. (2019). Internet memes, media frames, and the conflicting logics of climate change discourse. *Environmental Communication*, *13*(7), 975–994. https://doi.org/10.1080/17524032.2018.1560347

Shifman, L. (2014). *Memes in digital culture*. MIT Press. https://doi.org/10.7551/mitpress/9429.001.0001

Tang, G., & Lee, F. L. F. (2013). Facebook use and political participation: The impact of exposure to shared political information, connections with public political actors, and network structural heterogeneity. *Social Science Computer Review*, *31*(6), 763–773. https://doi.org/10.1177/0894439313490625

Theocharis, Y. (2015). The conceptualization of digitally networked participation. *Social Media + Society*, *1*(2), 1–14. https://doi.org/10.1177/2056305115610140

Theocharis, Y., & de Moor, J. (2021). Creative participation and the expansion of political engagement. In *Oxford research encyclopedia of politics*. Oxford University Press. https://doi.org/10.1093/acrefore/

9780190228637.013.1972

Theocharis, Y., & van Deth, J. W. (2018). *Political participation in a changing world: Conceptual and empirical challenges in the study of citizen engagement*. Routledge. https://doi.org/10.4324/9780203728673

Treen, K., Williams, H., O'Neill, S., & Coan, T. G. (2022). Discussion of climate change on Reddit: Polarized discourse or deliberative debate? *Environmental Communication*, *16*(5), 680–698. https://doi.org/10.1080/17524032.2022.2050776

Valenzuela, S. (2013). Unpacking the use of social media for protest behavior: The roles of information, opinion expression, and activism. *American Behavioral Scientist*, *57*(7), 920–942. https://doi.org/10.1177/0002764213479375

van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, *134*(4), 504–535. https://doi.org/10/c6hxh7

van Zomeren, M., Saguy, T., & Schellhaas, F. M. H. (2013). Believing in "making a difference" to collective efforts: Participative efficacy beliefs as a unique predictor of collective action. *Group Processes & Intergroup Relations*, *16*(5), 618–634. https://doi.org/10.1177/1368430212467476

Vissers, S., & Stolle, D. (2014). The internet and new modes of political participation: Online versus offline participation. *Information, Communication & Society*, *17*(8), 937–955. https://doi.org/10.1080/1369118x.2013.867356

Walgrave, S., Bennett, W., Van Laer, J., & Breunig, C. (2011). Multiple engagements and network bridging in contentious politics: Digital media use of protest participants. *Mobilization: An International Quarterly*, *16*(3), 325–349. https://doi.org/10.17813/maiq.16.3.b0780274322458wk

Walgrave, S., & Manssens, J. (2000). The making of the white march: The mass media as a mobilizing alternative to movement organizations. *Mobilization: An International Quarterly*, *5*(2), 217–239. https://doi.org/10.17813/maiq.5.2.l2263725765g0177

Walgrave, S., Wouters, R., & Ketelaars, P. (2022). Mobilizing usual versus unusual protesters. Information channel openness and persuasion tie strength in 71 demonstrations in nine countries. *The Sociological Quarterly*, *63*(1), 48–73. https://doi.org/10.1080/00380253.2021.1899086

Williams, A. (2020). Black memes matter: #LivingWhile Black with Becky and Karen. *Social Media + Society*, *6*(4), 1–14. https://doi.org/10.1177%2F2056305120981047

Yamamoto, M., Nah, S., & Bae, S. Y. (2020). Social media prosumption and online political participation: An examination of online communication processes. *New Media & Society*, *22*(10), 1885–1902. https://doi.org/10.1177/1461444819886295

Zhang, B., & Pinto, J. (2021). Changing the world one meme at a time: The effects of climate change memes on civic engagement intentions. *Environmental Communication*, *15*(6), 749–764. https://doi.org/10.1080/17524032.2021.1894197

Zhou, M., & Wang, H. (2018). The role of rationality in motivating participation in social movements: The case of anti-Japanese demonstrations in China. *Rationality and Society*, *30*(1), 155–186. https://doi.org/10.1177/1043463117754078

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Article

Instaworthy? Examining the Effects of (Targeted) Civic Education Ads on Instagram

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Abstract
The last few years have witnessed a growing societal and scholarly interest in the potential of online political microtargeting to affect election outcomes in favor of parties and candidates. It has often been rightly pointed out that political microtargeting can pose risks to electoral integrity in democracies. But can political microtargeting also benefit democratic functioning? Very little is known about the potential of political microtargeting to affect citizens' attitudes towards politics and increase their civic participation. To address this paucity, this article presents a preregistered online experiment conducted in Germany among young adults (*N* = 445), examining whether (targeted) civic education ads on Instagram increase political interest, efficacy, and civic participation. An innovative methodological approach to studying political microtargeting is deployed, exposing respondents to civic education ads in a mock Instagram feed, personalized in real-time based on individual preferences. We find no direct evidence of (targeted) civic education ads, leading us to believe that (targeted) ads do not unconditionally affect political interest, efficacy, or civic participation.

Keywords
civic education; civic participation; Instagram; online advertisements; political microtargeting

Issue
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1. Instaworthy? Examining the Effects of (Targeted) Civic Education Ads on Instagram

Political campaigning has undergone major changes throughout the last decade. Social media play a central role in election campaigns (Boulianne, 2020; Dimitrova & Matthes, 2018), and targeted ads have become a standard feature (Baldwin-Philippi, 2017; Chester & Montgomery, 2017). Over the past few years, online political microtargeting (PMT) has received a considerable amount of critical attention. After it became known that PMT had been employed in the Brexit "vote leave" and Trump 2016 presidential campaign, its potential to jeopardize the integrity of elections was widely lamented, and PMT was said to be a major contributor to the electoral victories (e.g., Cadwalladr, 2017; Grassegger & Krogerus, 2017). But PMT has not only been used in the US or UK but also in Germany—In the European elections in 2019, a total of 1.5 million euros was spent on PMT (Jaursch, 2020).

A growing body of scientific research has responded to the need to investigate the effects of PMT and evidence finds that targeting ads indeed increases the likelihood to vote for a certain party or candidate and strengthens party ties (e.g., Krotzek, 2019; Lavigne, 2020; Zarouali et al., 2020). However, little is known about the effects of PMT beyond its potential to influence election outcomes in favor of the advertised candidates and parties. The question of if and how PMT can benefit democratic functioning, for instance by educating citizens about civic duties in democracies, has attracted very little attention. Limited research has been carried

out on the effects of online civic education and even less on the effects of targeted civic education. Zuiderveen Borgesius et al. (2018) argue that PMT could be beneficial to democracy by reaching citizens who opt out of traditional news media, strengthening their political interest, and mobilizing them to politically participate.

An important segment of society that uses social media as a source of news content on the internet (55%) are the 18- to 24-year-olds. Although they often see posts from traditional news providers, 39% of youths indicated social media as the most important source of news (Hölig et al., 2022). Seeing that they get a significant amount of information through social media platforms like Instagram, it can be expected to influence the way they learn about politics, how their opinions and attitudes are formed, and if and how they will engage in political processes. This idea is supported by previous research that found more overall significant effects of social media consumption on political engagement among young adults compared to general population samples (Boulianne & Theocharis, 2020).

This study, therefore, sets out to empirically investigate whether PMT is effective in increasing political engagement and participation likelihood of young citizens (18–25 years old), whose political preferences and political behavior are still developing (Neundorf & Smets, 2017). We believe that seeing online ads can boost both political participation and institutions can thus use PMT to successfully mobilize citizens.

To this end, a pre-registered online survey experiment was conducted investigating two main research questions, namely (a) whether civic education ads on Instagram can increase political engagement and civic participation among young citizens between 18 and 25 years old, and (b) whether this effect can be amplified by targeting the ads based on political issue preference. An innovative methodological approach is used, generating a personalized mock Instagram feed based on respondents' preferences in real-time, which has never been done before. Respondents are exposed to either no civic education ads, three neutrally framed civic education ads, or three civic education ads tailored and targeted toward their political issue preference assessed pre-treatment.

2. Targeted Political Ads and Civic Participation: State of the Art and Expectations

This article examines the effects of online PMT. PMT is a type of online behavioral advertising in which data about people's personal information and online behavior is collected for the sake of displaying targeted political advertisements to them (Zuiderveen Borgesius et al., 2018). Turow et al. (2012) outline two characteristics of microtargeted political ads: They are (a) targeted to individuals of a certain population (choices about whom to target, how, when, and why are being made based on data analysis) and (b) tailored to individuals based on, for instance, their socio-demographics, location, interests, and values. The last few years have witnessed a growing scholarly interest in PMT (Bodó et al., 2017). Message targeting and tailoring have been often used in persuasive communication and have proven to be a successful strategy (Matz et al., 2017).

Empirical evidence on the use and effects of PMT is growing (e.g., Hager, 2019). In previous work, several authors have pointed out the risks of PMT. According to them, these reach from, for instance, privacy invasions (Bennett, 2015), opacity and subterfuge of voters (Tufekci, 2014), manipulation, political polarization, and spread of disinformation (Gorton, 2016; Susser et al., 2019). Zuiderveen Borgesius et al. (2018), however, argue that certain aspects of PMT can also be beneficial to democracy. Specifically, it is suggested that PMT could be used to mobilize voters to cast their vote or other forms of political engagement, such as political interest and political knowledge, and political participation of citizens. Ads can be specifically tailored to people's interests and values and thus might be perceived as more relevant. According to the authors, there is a window of opportunity to reach citizens who opt out of traditional media, such as young citizens, via targeted political ads on social media. Targeted information can then be used to mobilize citizens into political or civic action, ranging from behaviors (such as participation and turnout) to political engagement (such as political interest).

The strategy of targeting political ads is closely related to the theory behind the elaboration likelihood model (ELM). In their landmark article, Petty and Cacioppo (1986) established the ELM, which argues that persuasive messages are processed with different levels of thought (elaboration). Central route processing occurs when motivation and ability to process the message are high, while peripheral route processing occurs when motivation and ability to process the message are low. The personal relevance of a message is the most important predictor of cognitive elaboration. As the personal relevance of the message increases, the intensity and/or complexity of processing increases. Attitude changes that result from central route processing are more persistent over time and more predictive of behavior. This finding has been transferred to an online setting by Tam and Ho (2005), who have been able to show that online advertorial content matched to individual preferences heightens elaboration and increases the likelihood to accept an advertised offer.

The few empirical analyses on PMT that have been conducted tended to focus on the effects of ad congruence on voters' attitudes and voting intentions toward individual candidates and political parties. Therein, it has been demonstrated that citizens are more strongly persuaded by targeted political ads that are congruent with their personality traits, as such ads positively affect citizens' attitudes and voting intentions towards both individual candidates (Krotzek, 2019) and political parties

(Zarouali et al., 2020), and reinforce party ties (Lavigne, 2020), thus confirming the ELM.

When discussing the implications of their results, scholars often point to threats of PMT, such as subliminal persuasion of voters by political elites. Interestingly, less attention has been devoted to the beneficial impact of PMT on democratic functioning, investigating its potential to increase voter turnout, political interest, or even political participation of citizens. One such study is a field experiment by Haenschen and Jennings (2019), who examine the effect of banner ads related to a municipal election in Texas, targeted at millennial voters. They argue that this generation often abstains from voting because they (a) cannot find reliable sources of information and (b) are not incentivized to do so through their peers. They find that banner ads, strategically displayed to this age group and containing messages targeted towards this group's interests (suggesting a credible source and inducing a social norm of voting), impacted the voting turnout of millennials, but only in competitive districts. But it remains a question whether PMT can, through distributing civic education messages, increase political engagement beyond voting turnout.

In general, much of the literature on civic education centers around offline forms of civic education, as part of secondary education. Recent studies, for instance, examined the effects of civic education embedded in schools on pro-democratic attitudes (e.g., Feddes et al., 2019) and civic participation (e.g., Bowyer & Kahne, 2020). Significantly less is known about the effects of online civic education (on social media). One recent experimental study by Finkel et al. (2021) suggests that online civic education in the form of educational videos, in the new democracy of Tunisia, reduces authoritarian nostalgia, increases democracy support, political efficacy, and the likelihood to engage in campaign-related political behavior, but further work is required to build on this finding.

The overarching aim of civic education in democracies is the development of civic competence (Peterson et al., 2010). Civic education refers to all consciously planned and organized, continuous and targeted measures by educational institutions, to equip adolescents and adults with the prerequisites that are necessary for civic participation in democratic societies (Andersen, Bogumil, et al., 2021). Multiple studies have demonstrated that civic education in a classroom setting can strengthen political interest (e.g., Galston, 2007), political efficacy (e.g., Martens & Gainous, 2013), and political participation (e.g., Galston, 2004; Kahne et al., 2007). Besides, as mentioned above, two recent studies have demonstrated that online civic education content has similar beneficial effects on democratic citizenship (Finkel et al., 2021; Haenschen & Jennings, 2019), but research on this matter is still in its infancy.

According to traditional political socialization theory, the impressionable years that shape citizens' political preferences and behaviors go beyond school age and lay between the ages of 17 to 25 (Neundorf & Smets, 2017; Niemi & Jennings, 1991). Political preferences and political behavior of this age group are still developing and therefore make this age group susceptible to external influences (Neundorf & Smets, 2017), for instance to media effects (Andersen, Ohme, et al., 2021). Young citizens increasingly opt out of traditional news media, such as TV and newspapers, and instead use social media as a source of political content (Hölig et al., 2020). Therefore, social media such as Instagram, hold great potential for educational institutions (e.g., agencies for civic education) to promote political engagement, which encompasses, among others, political interest, efficacy (Andersen, Ohme, et al., 2021), and civic participation among young citizens. Furthermore, Instagram is also seen as a political marketing platform (Muñoz & Towner, 2017, p. 291). It is not only used by a lot of people, in particular younger citizens, but it is also a very visual platform that can be used for *branding* (Brands et al., 2021). In our case, that would mean more awareness of agencies that promote civic engagement. Once aware of the agency and the issues, people might be more likely to be mobilized into political action or become politically interested. Furthermore, Instagram is seen as an aesthetic platform and uses visually attractive images that draw attention (Pereira Caldeira, 2021). Taken together, this effect could be amplified by placing targeted and therefore more relevant civic education content in the form of ads (Zuiderveen Borgesius et al., 2018). An important side note is that although Instagram is quite popular among young adults, in Germany, in the case under study, "only" 27.7% of youngsters between 18 and 24 used Instagram (Statista, 2022), meaning that there is still 70% of young people that is not on Instagram. Moreover, it is not clear that those that are active on Instagram also actually see political ads on their Instagram feed. This article, however, aims to provide a first insight into how political online ads on social media sites can boost civic education, and we think that using a mock Instagram feed serves this explorative purpose well.

Drawing on Petty and Cacioppo's (1986) ELM and Tam and Ho's (2005) online application of the model, we argue that targeted civic education ads which are personalized to political issue preference will be more relevant to the individual. Therefore, the ads will more likely be processed at the central route, which again increases the likelihood that people's attitudes (political interest and efficacy) and future behaviors (mobilized into civic participation) will be affected, compared to untargeted civic education ads. This article specifically examines if online civic education ads on Instagram can positively affect political engagement (i.e., interest and efficacy) of young citizens in an established democracy (Germany), and whether this effect can be amplified through microtargeting.

We will include general political interest based on the work of scholars who have established a significant effect of civic education on general political interest

(e.g., Galston, 2007), and who have demonstrated that political interest continues to grow in young adulthood up to the age of 25, after which it remains stable (e.g., Neundorf et al., 2013). We will furthermore examine the effect of (targeted) civic education ads on issue-specific political interest since it has been noted that the political interest of young people often centers around political issues (e.g., Soler-i-Martí, 2015), and because the ads will be targeted based on pre-assessed preference for certain political issues. Because of the context of this study, the Covid-19 pandemic, we focus on online forms of civic participation. Recent studies in the field of political participation (e.g., Andersen, Ohme, et al., 2021; Gibson & Cantijoch, 2013) have acknowledged that technological changes have enabled new forms of participation (such as liking a politician's social media page, signing online petitions, etc.), that go beyond traditional activities such as taking part in physical demonstrations. During the Covid-19 pandemic, these are realistic forms that can easily be executed from home and do not require physical action. Lastly, the effect of (targeted) civic education ads on political efficacy will be examined. Political efficacy is composed of two forms (i.e., internal and external political efficacy) that relate to different concepts. External political efficacy relates to an individual's perception about how the political system responds to their demands, whereas internal political efficacy relates to perceived competence to politically participate (e.g., Craig et al., 1990; Morrell, 2005). We focus on internal political efficacy, as the ads are designed to increase the recipients' competence to politically participate (Ads 1 and 2), by incorporating several suggestions about ways to politically participate online, as well as their confidence (Ad 3), by emphasizing that they can make a difference by participating.

Based on the theoretical framework and current gaps in the literature, we test the following preregistered hypotheses:

- Civic education effect: Compared to respondents exposed to a feed without civic education ads, respondents exposed to a feed including neutral (untargeted) civic education ads are subsequently more likely to engage in civic participation practices (H1a), display higher levels of general political interest (H1b), issue specific political interest (H1c), and display higher levels of internal political efficacy (H1d).
- Targeting effect: Compared to respondents exposed to a feed including neutral (untargeted) civic education ads, respondents exposed to a feed including targeted civic education ads are subsequently more likely to engage in civic participation practices (H2a), display higher levels of general political interest (H2b), issue specific political interest (H2c), and display higher levels of internal political efficacy (H2d).

Neundorf et al. (2016) find that civic education in schools can compensate for inequalities that result from differences in family socioeconomic status and the frequency of student–parental political discussions regarding political engagement in adult life. But although civic education is a central mission of schools in Germany, it is implemented very differently in different types of secondary schools. A study by Achour and Wagner (2019) has shown that students at grammar schools (*Gymnasien*), which are typically attended by students of higher socioeconomic status, not only receive more extensive civic education but also rate it as more diverse and participatory compared to students of other types of schools. The authors argue that such differences in students' access to (high-quality) civic education solidify inequalities because students are not being equally prepared to participate in democracy. Based on Achour and Wagner's (2019) and Neundorf et al.'s (2016) findings, we argue that (targeted) online civic education especially affects citizens who are less aware of the possibilities to politically participate, because they have received less and poorer-quality civic education in school and/or have not experienced parental political socialization. Among more politically knowledgeable people, we expect a ceiling effect to occur, as the information provided in the civic education ads is not new to them. We, therefore, arrive at the following moderation hypotheses, which can be classified as a contingent convergent positive moderation effect (Holbert & Park, 2020), as shown in Figure A1 of the Supplementary Material:

- Moderation of the civic education effects: The civic education effects (H1a, H1b, H1c, and H1d) are conditional on respondents' level of political knowledge, in the sense that there is a ceiling effect for respondents with higher levels of political knowledge. The higher a respondent's level of political knowledge, the smaller the civic education effect becomes in increasing respondents' civic participation (H3a), general political interest (H3b), issue-specific political interest (H3c), and internal political efficacy (H3d).

3. Method

To test these hypotheses, we conducted a pre-registered online survey experiment among German Instagram users between 18 and 25 years old for one week (27/05/2021–4/06/2021). To maximize this study's external validity, we embedded the experimental treatment ([targeted] civic education ads) within a personalized mock Instagram feed, which was generated in real-time based on participants' previously made choices. We decided to focus on Instagram as a social media platform seeing that Twitter did not allow ads and Facebook is less popular among young people. It is nevertheless important we furthermore utilized the information gathered pre-treatment to tailor the civic education ads

based on participants' preferences for certain political issues. The sample was randomly divided into three groups, namely the control group, which was exposed to a mock Instagram feed containing no civic education ads; the untargeted treatment group, which received a mock Instagram feed containing neutral civic education ads; and the targeted treatment group, which was exposed to a mock Instagram feed including targeted civic education ads, tailored to their personal political issue preference.

This study was pre-registered via OSF (see https://osf.io/rjnf3/?view_only=675a8a3753d1419db49fd4e67049562c). All deviations from the original pre-analysis plan are either highlighted in this section or in the supplementary files. We also tested whether the targeting effect is mediated by ad liking, perceived relevance, and targeting recognition to better understand the underlying mechanisms of targeting. Due to an error in the timing of the manipulation check, these variables cannot be used in our study.

3.1. Sample

Political socialization theory hypothesizes the height of one's impressionable or formative years to be situated between the ages 17 to 25 (Neundorf & Smets, 2017; Niemi & Jennings, 1991), which led us to focus on this age group. Using the services of the panel research company Dynata, a total of 445 German Instagram users between the ages of 18 to 25 were successfully recruited. Respondents that did not pass the attention check were excluded from the sample. As each treatment group contained at least 130 respondents ($n_{control}$ = 146, $n_{untargeted}$ = 150, $n_{targeted}$ = 149), the sample fulfils the size criteria specified in the pre-registration of this study to reach a statistical power of 80%, assuming a moderate effect size of d = 0.35. The final sample had a mean age of 21.49 (SD = 2.20). Furthermore, the sample consisted of 284 (64%) females, 158 (36%) males, and three (<1%) respondents that identified as neither female nor male; 68.8% of respondents had a technical or general university entrance qualification or higher. In terms of political ideology, the sample was more oriented towards the left of the political left–right spectrum. On an 11-point left-right scale (min = 0, max = 10, M = 4.39, SD = 2.17), 48.1% of respondents placed themselves left of the center (x < 5), while 25.8% of respondents placed themselves directly in the center (x = 5). Lastly, more than 80% of the final sample reported using Instagram daily, and less than 8% reported their Instagram usage to be once a week or less.

3.2. Procedure

Guiding the development of the final experimental design, we first conducted a pilot study among 89 German-speaking respondents aged 16–25, with the main goal of optimizing the quality of the feed and experimental treatment. The pilot study led to no major changes to the research design.

The final survey consisted of four steps. First, we collected a range of pre-treatment measures, including political issue preferences, to which the civic education ads were tailored in the targeted treatment group. The following two steps aimed to replicate respondents' user experience on Instagram. First, respondents were asked to "follow" a range of preselected Instagram channels, to enable generating a personalized mock Instagram feed in the following step, in which respondents in the treatment groups were exposed to the experimental treatment. In the final step, we assessed a series of post-treatment measures, including the main dependent variables. An overview of the survey procedure is provided in Figure 1. Example screenshots of the civic education ads can be found in the Supplementary Material (Figure A2).

Prior to recruitment, the potential respondents were asked to participate using their smartphones, to aim for a similar user experience compared to Instagram. After introducing participants to the survey and receiving their consent, the following variables were assessed: age, gender, education, political issue preference, social media use, and need for cognition. We kept the number of politically focused variables in this step as small as possible, to prevent priming respondents on political matters prior to the experimental treatment. As the forthcoming targeting of the targeted treatment group was based on participants' responses to the political issue preference question, this question needed to be included in this step of the survey. Respondents were asked to rank five political issues (climate, poverty, racial injustice, migration, and gender equality) based on how important they personally perceived each issue to be. The issues were selected based on a thorough analysis of the most relevant political issues among the target population (Calmbach et al., 2020; Horton & de Haan, 2019; Prellberg, 2019). To distract from the actual purpose of the study prior to the experimental treatment, we also assessed respondents' social media use habits and need for cognition.

In the next step, respondents were presented with a total of 50 actual Instagram channels and asked to choose the seven channels which they were most likely to follow in real life. This enabled building a mock Instagram feed in the following step which closely replicated respondents' personal real-life experiences on Instagram. The list of Instagram channels consisted of mostly well-known Instagram channels, brands, or personalities and was compiled with the goal of covering a broad range of interests within the target population. The pilot study, including 89 respondents aged 16–25, revealed that each channel was selected at least once and that respondents were generally satisfied with the preselection of channels. About 81% of respondents in the pilot study agreed with the statement "the channels available for selection were sufficient."

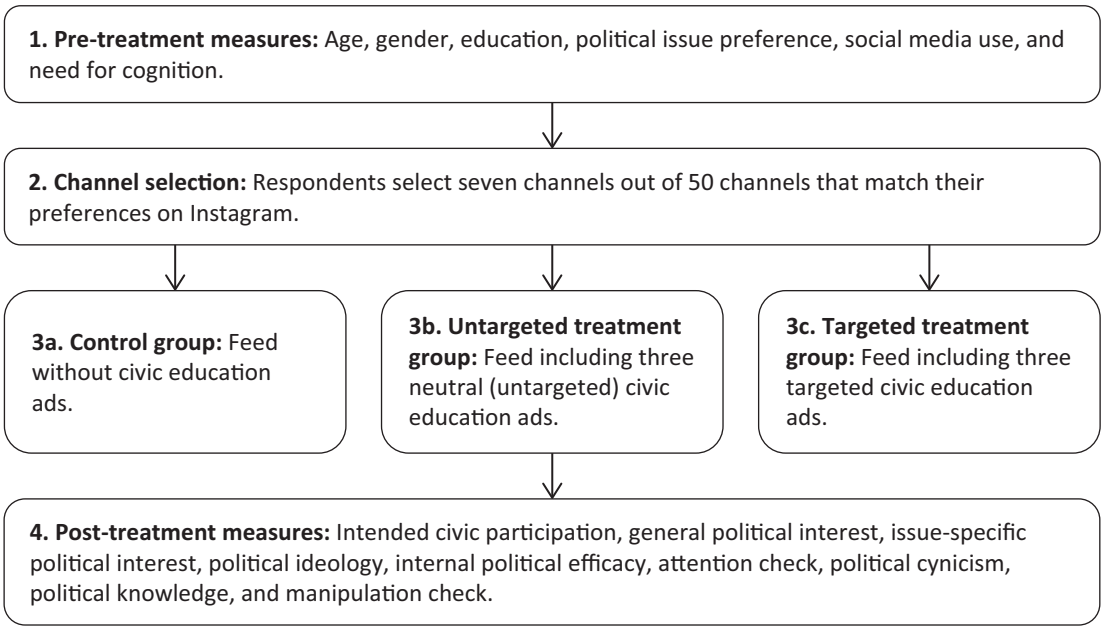

Figure 1. Flow diagram of the procedure.

Subsequently, a personalized mock Instagram feed was automatically generated by displaying a series of posts in random order and vertically arranged, to enable respondents to "scroll" through the feed on their smartphones as they would in a real-life setting. Using a timer, respondents had to stay on the mock feed for two minutes before they could continue to the questions. Most respondents only stayed for the mandatory two minutes on the feed with a few exceptions (n = 4). Seeing that all respondents had to take some time to scroll through the feed, we do not expect an effect of exposure to the ads. For each channel selected, two posts were displayed, along with, in the treatment groups, three fictional sponsored posts (ads) by the German Federal Agency for Civic Education (Bundeszentrale für politische Bildung, or bpb, for short), containing civic education messages. The German Federal Agency for Civic Education is an organization affiliated with the Federal Ministry of the Interior and is responsible for promoting civic education among German citizens. Consequently, respondents in the control group saw 14 posts and respondents in the experimental groups saw 17 posts in total. Respondents were randomly assigned to the control group, the untargeted treatment group, or the targeted treatment group. In the pilot study, 94% of the respondents thought that the mock Instagram feed was realistic and 93% generally liked their feed. About 94% of respondents in the pilot study agreed with the statement "the Instagram feed was realistic," and about 93% of respondents in the pilot study agreed with the statement "I liked the Instagram feed."

The sponsored posts displayed to the two treatment groups were identical in their content, layout, and design and only varied in their framing, which was either neutral for the untargeted treatment group or, in the targeted treatment group, framed towards each respondent's personal issue preference as indicated in the political issue preference question. Therefore, a total of six versions (one neutral, five framed towards political issues) of each of the three civic education ads were created. The first ad suggested several forms of online civic participation to engage in via social media, the second ad called upon signing, sharing, and creating online petitions, and the third ad aimed to motivate and strengthen political engagement. In the pilot study, 91,84% of respondents thought that the ads provided useful suggestions for ways to politically participate (online).

The manipulation check, asking all respondents whether their feed included posts from channels that they did not select prior to the generation of the feed (answer options: "yes," "no," "I don't know"), indicated that treatment groups noticed the sponsored posts (ads), as they were significantly more likely (M = 0.60, SD = 0.49) than the control group (M = 0.21, SD = 0.41) to respond to the manipulation check with "yes," $t(443) = -8.46$, p = .000, 95% CI ([0.30, 0.49]).

After exposing respondents to their personalized mock Instagram feeds, the dependent variables, additional variables as well as attention and manipulation checks were assessed. The questions were asked in the following order: civic participation, general political interest, issue-specific interest, political ideology, internal political efficacy (item battery includes attention check), political cynicism, political knowledge, and manipulation check.

The dependent variable "intended civic participation" was measured by taking the respondent's mean of the answers to eight questions about civic participation actions in relation to their previously indicated preferred topic (M = 4.01, SD = 1.36, Cronbach's α = 0.89).

To measure general political interest, we asked respondents to indicate their general political interest ("How interested are you in political matters in general") on a seven-point Likert scale ranging from 1 (*not at all*) to 7 (*very strong*; M = 4.50, SD = 1.56). To measure respondents' top issue interest, we assessed respondents' interest (on the same scale as before) in the issue previously ranked as their *top issue* ("How interested are you in [topic]," M = 5.71, SD = 1.41). The fourth dependent variable, internal efficacy, was measured by asking respondents about their ability to understand important political issues and their confidence to take an active part in discussions about political issues (Beierlein et al., 2014). These items were combined by averaging the responses (M = 4.50, SD = 1.48, Cronbach's α = 0.81, r = 0.68).

To test the moderation hypothesis (H3), or thus political knowledge, respondents were asked to indicate the party affiliation of five members of the German parliament with different degrees of popularity (Angela Merkel, Heiko Maas, Sahra Wagenknecht, Horst Seehofer, and Aminata Touré), of which only an image was provided. The political knowledge variable was calculated by counting the correct answers to the five knowledge questions (M = 1.96, SD = 1.29, H = 0.39).

3.3. Analytical Strategy

We tested the main treatment effects (H1 and H2) through ordinary least square linear regression models predicting (a) intended civic participation, (b) general political interest, (c) top issue interest, and (d) internal efficacy, through dummy independent variables indicating the three experimental groups, the untargeted treatment condition being the omitted (baseline) category. The untargeted treatment group was selected as the baseline category to enable a more accessible interpretation of the results with regard to the two main hypotheses. We furthermore tested whether political knowledge moderates the civic education effect (H3) through a linear regression model predicting the four dependent variables through a dummy variable to indicate the untargeted treatment effect (untargeted treatment group compared to the control group), the variable "political knowledge," and their interaction (untargeted treatment * political knowledge).

4. Results

First, we look at how being exposed to untargeted (H1) or targeted (H2) civic education ads affect (a) civic participation, (b) general political interest, (c) issue-specific political interest, and (d) internal political efficacy. Table 1 shows the results of H1 and H2. As the untargeted treatment group was defined as the baseline category, it is possible to determine whether the hypotheses can be confirmed by the data solely through the regression coefficients displayed in the table.

The first hypothesis that respondents in the untargeted treatment condition—compared to the control group that received no ads—display higher levels of intended civic participation (H1a), general political interest (H1b), top issue interest (H1c), and internal efficacy (H1d) cannot be confirmed. As can be seen in Table 1, the data shows no significant effect of the civic education messages (control group compared to untargeted group) on either of the four dependent variables. H1 is thus not supported.

Furthermore, we expected that respondents in the targeted treatment group condition—compared to the untargeted treatment group—display higher levels of intended civic participation (H2a), general political interest (H2b), top issue interest (H2c), and internal efficacy (H2d). As the results of the civic education effect, the hypothesized targeting effect was not significant. Therefore, none of the hypothesized main treatment effects (H1 and H2) were supported. We also ran the model as a series of pairwise comparisons. This gave no different significant effects compared to the complete model. This finding suggests that being exposed

Table 1. Results of the linear regression analyses explaining the dependent variables (intended civic participation, general political interest, top issue interest, and internal efficacy) through the randomly assigned experimental groups (N = 445).

	Intended civic participation (a)	General political interest (b)	Top issue interest (c)	Internal efficacy (d)
Experimental Group (Ref.: Untargeted)				
Control	−0.29	−0.00	−0.02	−0.08
	(0.16)	(0.18)	(0.16)	(0.17)
Targeted	0.01	0.22	0.14	0.08
	(0.16)	(0.18)	(0.16)	(0.17)
Constant	4.10***	4.43***	5.67***	4.50***
	(0.11)	(0.13)	(0.11)	(0.12)
R^2	0.010	0.005	0.003	0.002
F	2.30	1.03	0.57	0.41

Notes: Values are unstandardized coefficients; standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

to civic education ads, even when they are specially tailored to one's political preferences, has no significant effect. Previous studies did find a positive effect on voting turnout of millennials but focused on banner ads (Haenschen & Jennings, 2019).

4.1. Moderation of the Civic Education Effect

Next, we hypothesized (H3) that the civic education effects are conditional on respondents' level of political knowledge, in the sense that there is a ceiling effect for respondents with higher levels of political knowledge. The higher a respondent's level of political knowledge, the smaller the civic education effect becomes in increasing respondents' intended civic participation (H3a), general political interest (H3b), issue-specific political interest (H3c), and internal political efficacy (H3d). We thus expect the effect of civic education ads to be larger for respondents with lower levels of political knowledge.

The interaction term in Table 2, however, suggests no significant interaction effects of the civic education treatment and political knowledge on any of the four dependent variables were found. This result thus indicates that there is no significantly different effect for participants with different levels of political knowledge.

5. Discussion

The purpose of this study was to determine (a) whether civic education ads on Instagram increase political engagement and (intended) civic participation among young citizens and (b) whether targeting these ads on political issue preferences increases this effect. We did not find a significant effect of exposure to untargeted or targeted civic education ads on Instagram on intended civic participation, general political interest, top-issue interest, or internal efficacy. Both neutral civic education ads, as well as ads that are specifically tailored to the participants, did not create a significant change in our dependent variables. This is in line with previous work that shows that the mobilization effects of digital political ads in an election campaign context may be more modest (Aggarwal et al., 2023; Coppock et al., 2022) or more dependent on specific circumstances (Haenschen, 2022). We also expected that youngsters with less knowledge about politics would be more receptive to the information in the ads. We did not find support for the conditional role of political knowledge, indicating that in this study civic education ads do not seem to influence those who had low political knowledge. In sum, while (targeted) civic education ads might hold great potential in reaching specific groups of voters and mobilizing them into (intended) political action and activating engagement (interest and efficacy), this study has not found evidence to support this.

The present study is among the first to examine the effectiveness of targeted and general civic education ads on Instagram and therefore delivers important insights into whether targeting on social media can be used in a way that is beneficial to the functioning of democracies. Our findings suggest that the impact of civic education ads on Instagram might be limited which has important implications for civic education organizations and advocacy organizations aiming to promote political engagement and mobilize participation among young adults. Much of the literature on political targeting is rather pessimistic in nature. It focuses on the manipulation of citizens, discouraging voters, ignoring groups of voters, or sending voters different pieces of information by not giving a full picture (Bayer, 2020; Zuiderveen Borgesius et al., 2018). Other scholars pointed to the more beneficial use of targeting, for instance, Bayer (2020, pp. 9–10) argues that:

> It could be exceptionally effective in transmitting useful messages to citizens on…social values with which

Table 2. Results of the linear regression analyses explaining the dependent variables (intended civic participation, general political interest, top issue interest, and internal efficacy) through the treatment effect (untargeted compared to control group), political knowledge, and the interaction of the treatment effect and political knowledge (n = 296).

	Intended civic participation (a)	General political interest (b)	Top issue interest (c)	Internal efficacy (d)
Untargeted treatment group (Ref.: Control group)	0.01 (0.16)	0.22 (0.18)	0.14 (0.16)	0.08 (0.17)
Political knowledge	0.04 (0.09)	0.37*** (0.10)	−0.01 (0.09)	0.35*** (0.09)
Untargeted treatment group × political knowledge	0.06 (0.13)	0.08 (0.13)	0.08 (0.13)	0.03 (0.13)
Constant	3.74*** (0.21)	3.72*** (0.22)	5.66*** (0.21)	3.74*** (0.21)
R^2	0.016	0.118	0.003	0.101
F	1.63	13.01	0.27	10.99

Notes: Values are unstandardized coefficients; standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

it can greatly benefit society. In this perspective, data-driven political micro-targeting has the potential to increase the level of political literacy and the functioning of deliberative democracy, by incentivizing deliberative discussion among those voters who are interested and who feel involved.

This study provides little evidence for this optimistic view. The lack of effects could therefore signify that young adults care less about the ads that they see on Instagram. The external validity of the experiment design is high. The mock Instagram feed had the same look and feel as a real Instagram feed and seeing that respondents could pick the seven accounts they would also potentially follow on their real Instagram, we have come very close to recreating a very realistic setting. In this light, we argue that it might be that being on the social media platform very often, most young adults are constantly seeing (targeted) ads. They could have just become so accustomed to it they simply scrolled past them without giving them any attention. Additionally, it might also be that civic education is a topic that just does not appeal to young adults, even if it is about a theme that they themselves indicated they considered important, especially if it aligns with their own beliefs. Moreover, the ads were, in Instagram norms, quite dense in information and not as attractive compared to other visual content. This might also have contributed to the respondents just scrolling past without taking the effort to read the text. Research has shown that the attention span of young adults on social media sites is very limited and expecting the respondents to read multiple sentences might have been too optimistic. In addition, Instagram is in its very nature a platform that is highly focused on visuals. We tried to make our ads visually appealing by working with bright colors and images that would get the attention of the respondents, but it is very much possible that our ads could not compete with the other posts on the feed that featured cute dogs, celebrities, or delicious food. This might also have contributed to respondents just scrolling past the ad. The basic features of a civic education ad may generally be difficult to reconcile with the requirements of a good Instagram post. Civic education ads, and by extension other ads with a substantive political message, are always going to have a certain density that may not be suitable for the fast pace of Instagram. Seeing that this study is the first to assess the influence of civic education ads on Instagram, our results suggest that distributing civic education messages through Instagram might be less effective.

Although this study provides valuable insights, there are some important limitations that could also be relevant for future research. First, this study was conducted among German young adults, so it is difficult to assess whether our findings are context specific. The German context is similar to most other Western European countries in terms of Instagram use and political context, so we expect that our results are generalizable to other Western European countries. Our findings are in line with previous research that found either no or small effects of political elites' use of PMT, but more research that focuses on civic education and PMT in other countries could give a better insight into our findings. Until now, most research has focused more on the political elite's use of targeted ads, while many other organizations, such as governmental bodies and NGOs, use targeted ads to mobilize and inform citizens. We argue that more insight is needed into governmental and other organizations' use of targeted ads.

Second, we measured the effect of civic education ads by displaying participants (except those in the control group) to ads in between posts of Instagram pages they liked at the beginning of the experiment. In our design, three ads were shown in between 14 posts on the Instagram pages that participants liked. In real life, the ratio between ads and "normal" posts is more equal. Almost after every two posts, ads are shown on Instagram. Therefore, it is possible that respondents did not notice the (targeted) ads. Furthermore, respondents in the control condition have been exposed to 14 posts, whereas respondents in the experimental conditions have been exposed to 17 posts. Future studies building on this work should rule out this possibility methodologically, by making the ads more present on the mock Instagram feed.

A third limitation is that the political issues provided to respondents, and on which the ads were ultimately targeted, were issues that rather appeal to more left-leaning individuals. However, to remain within a practically reasonable scope, we had to select those political issues that would be most relevant to the target population, which also tends to be more left-leaning. Furthermore, the exploratory analysis revealed that more right-leaning respondents did not dislike the ads more because of the political issues mentioned in the targeted ads, but for a different reason. Therefore, future research might want to (a) explore why more right-leaning citizens are more opposed to civic education messages and (b) find a way to make online civic education more appealing to a broader audience.

The mock Instagram feed we used in this study approaches the real Instagram feed very closely and future research could use this design as well. Research into PMT is still very limited so there are many avenues that could be pursued in future research. Civic education ads are a very specific form of political ads. Future research could focus on other variants to further distinguish if and when PMT can be successful. The ELM has been supported by previous research in other fields of communication but evidence in the field of political communication is lacking. Politics adds another complex layer to the already complicated field of persuasive communication. Only by further researching PMT can we make a realistic assessment of the potential benefits and threats of this strategy that might (or maybe only in a very limited way) change the way political campaigning will evolve.

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Conflict of Interests

The author declares no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited). This study was pre-registered via OSF (see https://osf.io/rjnf3/?view_only=675a8a3753d1419db49fd4e67049562c).

References

Achour, S., & Wagner, S. (2019). *„Wer hat, dem wird gegeben." Politische Bildung an Schulen—Bestandsaufnahme, Rückschlüsse und Handlungsempfehlungen* ["Whoever has, will be given." Political education in schools - inventory, conclusions and recommendations for action]. Friedrich-Ebert-Stiftung. https://www.polsoz.fu-berlin.de/polwiss/forschung/sozialkunde/politikdidaktik/Aktuelles/FES-Studie-Politische-Bildung-an-Schulen.pdf

Aggarwal, M., Allen, J., Coppock, A., Frankowski, D., Messing, S., Zhang, K., Barnes, J., Beasley, A., Hantman, H., & Zheng, S. (2023). A 2 million-person, campaign-wide field experiment shows how digital advertising affects voter turnout. *Nature Human Behaviour*, *7*, 332–341. https://doi.org/10.1038/s41562-022-01487-4

Andersen, K., Ohme, J., Bjarnøe, C., Bordacconi, M. J., Albæk, E., & de Vreese, C. (2021). *Generational gaps in political media use and civic engagement: From baby boomers to Generation Z* (1st ed.). Routledge. https://doi.org/10.4324/9781003111498

Andersen, U., Bogumil, J., Marschall, S., & Woyke, W. (Eds.). (2021). *Handwörterbuch des politischen Systems der Bundesrepublik Deutschland* [Dictionary of the political system in Germany]. Springer. https://doi.org/10.1007/978-3-658-23666-3

Baldwin-Philippi, J. (2017). The myths of data-driven campaigning. *Political Communication*, *34*(4), 627–633.

Bayer, J. (2020). Double harm to voters: Data-driven micro-targeting and democratic public discourse. *Internet Policy Review*, *9*(1). https://doi.org/10.14763/2020.1.1460

Beierlein, C., Kemper, C. J., Kovaleva, A., & Rammstedt, B. (2014). *Political efficacy kurzskala (PEKS)* [Political efficacy short scale]. ZIS. https://doi.org/10.6102/ZIS34

Bennett, C. J. (2015). Trends in voter surveillance in Western societies: Privacy intrusions and democratic implications. *Surveillance & Society*, *13*(3/4), 370–384. https://doi.org/10.24908/ss.v13i3/4.5373

Bodó, B., Helberger, N., & de Vreese, C. H. (2017). Political micro-targeting: A Manchurian candidate or just a dark horse? *Internet Policy Review*, *6*(4). https://doi.org/10.14763/2017.4.776

Boulianne, S. (2020). Twenty years of digital media effects on civic and political participation. *Communication Research*, *47*(7), 947–966.

Boulianne, S., & Theocharis, Y. (2020). Young people, digital media, and engagement: A meta-analysis of research. *Social Science Computer Review*, *38*(2), 111–127.

Bowyer, B., & Kahne, J. (2020). The digital dimensions of civic education: Assessing the effects of learning opportunities. *Journal of Applied Developmental Psychology*, *69*, Article 101162. https://doi.org/10.1016/j.appdev.2020.101162

Brands, C., Kruikemeier, S., & Trilling, D. (2021). Insta(nt)famous? Visual self-presentation and the use of masculine and feminine issues by female politicians on Instagram. *Information, Communication & Society*, *24*(14), 2016–2036. https://doi.org/10.1080/1369118X.2021.1962942

Cadwalladr, C. (2017, May 7). The great British Brexit robbery: How our democracy was hijacked. *The Guardian*. http://davelevy.info/wp-content/uploads/2015/03/great-british-brexit-robbery.pdf

Calmbach, M., Flaig, B., Edwards, J., Möller-Slawinski, H., Borchard, I., & Schleer, C. (2020). *SINUS-Jugendstudie 2020: Wie ticken Jugendliche?* [SINUS Youth Study 2020: What makes young people tick]. Bundeszentrale für politische Bildung.

Chester, J., & Montgomery, K. C. (2017). The role of digital marketing in political campaigns. *Internet Policy Review*, *6*(4). https://doi.org/10.14763/2017.4.773

Coppock, A., Green, D. P., & Porter, E. (2022). Does digital advertising affect vote choice? Evidence from a randomized field experiment. *Research & Politics*, *9*(1). https://doi.org/10.1177/20531680221076901

Craig, S. C., Niemi, R. G., & Silver, G. E. (1990). Political efficacy and trust: A report on the NES pilot study items. *Political Behavior*, *12*(3), 289–314. https://doi.org/10.1007/BF00992337

Dimitrova, D. V., & Matthes, J. (2018). Social media in political campaigning around the world: Theoretical and methodological challenges. *Journalism & Mass Communication Quarterly*, *95*(2), 333–342.

Feddes, A. R., Huijzer, A., van Ooijen, I., & Doosje, B. (2019). Fortress of democracy: Engaging youngsters in democracy results in more support for the political system. *Peace and Conflict: Journal of Peace Psychology*, *25*(2), 158–164. https://doi.org/10.1037/pac0000380

Finkel, S., Neundorf, A., & Rascon Ramirez, E. G. (2021). *Can online civic education induce democratic citizen-*

ship? Experimental evidence from a new democracy. SSRN. https://doi.org/10.2139/ssrn.3778600

Galston, W. A. (2004). Civic education and political participation. *Phi Delta Kappan*, *85*(1), 29–33. https://doi.org/10.1177/003172170308500108

Galston, W. A. (2007). Civic knowledge, civic education, and civic engagement: A summary of recent research. *International Journal of Public Administration*, *30*(6/7), 623–642. https://doi.org/10.1080/01900690701215888

Gibson, R., & Cantijoch, M. (2013). Conceptualizing and measuring participation in the age of the internet: Is online political engagement really different to offline? *The Journal of Politics*, *75*(3), 701–716. https://doi.org/10.1017/S0022381613000431

Gorton, W. A. (2016). Manipulating citizens: How political campaigns' use of behavioral social science harms democracy. *New Political Science*, *38*(1), 61–80. https://doi.org/10.1080/07393148.2015.1125119

Grassegger, H., & Krogerus, M. (2017, January 28). The data that turned the world upside down: How Cambridge Analytica used your Facebook data to help the Donald Trump campaign in the 2016 election. *Vice*. https://www.vice.com/en/article/mg9vvn/how-our-likes-helped-trump-win

Haenschen, K. (2022). The conditional effects of microtargeted Facebook advertisements on voter turnout. *Political Behavior*. Advance online publication. https://doi.org/10.1007/s11109-022-09781-7

Haenschen, K., & Jennings, J. (2019). Mobilizing millennial voters with targeted internet advertisements: A field experiment. *Political Communication*, *36*(3), 357–375. https://doi.org/10.1080/10584609.2018.1548530

Hager, A. (2019). Do online ads influence vote choice? *Political Communication*, *36*(3), 376–393. https://dx.doi.org/10.1080/10584609.2018.1548529

Holbert, R. L., & Park, E. (2020). Conceptualizing, organizing, and positing moderation in communication research. *Communication Theory*, *30*(3), 227–246. https://doi.org/10.1093/ct/qtz006

Hölig, S., Behre, J., & Schulz, W. (2022). *Reuters Institute digital news report 2022: Ergebnisse für Deutschland* [Reuters Institute digital news report 2022: Results for Germany]. Hans-Bredow-Institut. https://doi.org/10.21241/ssoar.79565

Hölig, S., Hasebrink, U., & Behre, J. (2020). *Reuters Institute digital news report 2020: Ergebnisse für Deutschland* [Reuters Institute digital news report 2020: Results for Germany]. Hans-Bredow-Institut. https://doi.org/10.21241/SSOAR.71725

Horton, B., & de Haan, L. (2019). *Common futures conversations youth survey 2019*. Chatham House. https://www.chathamhouse.org/2019/07/common-futures-conversations

Jaursch, J. (2020). *Rules for fair digital campaigning what risks are associated with online political advertising and what reforms are necessary in Germany*. Stiftung Neue Verantwortung. https://www.stiftung-nv.de/sites/default/files/rules_for_fair_digital_campaigning.pdf

Kahne, J., Middaugh, E., & Croddy, M. (2007). The California survey of civic education. *Social Studies Review*, *46*(2), 10.

Krotzek, L. J. (2019). Inside the voter's mind: The effect of psychometric microtargeting on feelings toward and propensity to vote for a candidate. *International Journal of Communication*, *13*, 3609–3629.

Lavigne, M. (2020). Strengthening ties: The influence of microtargeting on partisan attitudes and the vote. *Party Politics*, *27*(5), 965–976. https://doi.org/10.1177/1354068820918387

Martens, A. M., & Gainous, J. (2013). Civic education and democratic capacity: How do teachers teach and what works? *Social Science Quarterly*, *94*(4), 956–976. https://doi.org/10.1111/j.1540-6237.2012.00864.x

Matz, S. C., Kosinski, M., Nave, G., & Stillwell, D. J. (2017). Psychological targeting as an effective approach to digital mass persuasion. *Proceedings of the National Academy of Sciences*, *114*(48), 12714–12719.

Morrell, M. E. (2005). Deliberation, democratic decision-making and internal political efficacy. *Political Behavior*, *27*(1), 49–69. https://doi.org/10.1007/s11109-005-3076-7

Muñoz, C. L., & Towner, T. L. (2017). The image is the message: Instagram marketing and the 2016 presidential primary season. *Journal of Political Marketing*, *16*(3/4), 290–318.

Neundorf, A., Niemi, R. G., & Smets, K. (2016). The compensation effect of civic education on political engagement: How civics classes make up for missing parental socialization. *Political Behavior*, *38*(4), 921–949. https://doi.org/10.1007/s11109-016-9341-0

Neundorf, A., & Smets, K. (2017). *Political socialization and the making of citizens* (Vol. 1). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199935307.013.98

Neundorf, A., Smets, K., & García-Albacete, G. M. (2013). Homemade citizens: The development of political interest during adolescence and young adulthood. *Acta Politica*, *48*(1), 92–116. https://doi.org/10.1057/ap. 2012.23

Niemi, R. G., & Jennings, M. K. (1991). Issues and inheritance in the formation of party identification. *American Journal of Political Science*, *35*(4), 970–988. https://doi.org/10.2307/2111502

Pereira Caldeira, A. S. (2021). "It's not just Instagram models": Exploring the gendered political potential of young women's Instagram use. *Media and Communication*, *9*(2), 5–15. https://doi.org/10.17645/mac.v9i2.3731

Peterson, P., Baker, E., McGaw, B. (2010). *International encyclopedia of education*. https://www.

sciencedirect.com/referencework/9780080448947/international-encyclopedia-of-education
Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In R. E. Petty & J. T. Cacioppo (Eds.), *Communication and persuasion* (pp. 1–24). Springer. https://doi.org/10.1007/978-1-4612-4964-1_1
Prellberg, M. (2019). *Junges Europa 2019: So denken Menschen zwischen 16 und 26 Jahren* [Young Europe 2019: This is how people between the ages of 16 and 26 think]. TUI Stiftung. https://www.tui-stiftung.de/wp-content/uploads/2019/06/TUI-Stiftung-Jugendstudie-JUNGES-EUROPA-2019-DE-aktuell.pdf
Soler-i-Martí, R. (2015). Youth political involvement update: Measuring the role of cause-oriented political interest in young people's activism. *Journal of Youth Studies*, *18*(3), 396–416. https://doi.org/10.1080/13676261.2014.963538
Statistica. (2022). Distribution of Instagram users in Germany as of August 2022, by age group. https://www.statista.com/statistics/1018019/instagram-users-germany
Susser, D., Roessler, B., & Nissenbaum, H. (2019). Technology, autonomy, and manipulation. *Internet Policy Review*, *8*(2). https://doi.org/10.14763/2019.2.1410
Tam, K. Y., & Ho, S. Y. (2005). Web personalization as a persuasion strategy: An elaboration likelihood model perspective. *Information Systems Research*, *16*(3), 271–291. https://doi.org/10.1287/isre.1050.0058
Tufekci, Z. (2014). Engineering the public: Big data, surveillance, and computational politics. *First Monday*, *19*(7). https://doi.org/10.5210/fm.v19i7.4901
Turow, J., Delli Carpini, M. X., Draper, N. A., & Howard-Williams, R. (2012*). Americans roundly reject tailored political advertising* (Departmental Paper No. 7–2012). Annenberg School for Communication, University of Pennsylvania. http://repository.upenn.edu/asc_papers/398
Zarouali, B., Dobber, T., De Pauw, G., & de Vreese, C. (2020). Using a personality-profiling algorithm to investigate political microtargeting: Assessing the persuasion effects of personality-tailored ads on social media. *Communication Research*, *49*(8), 1066–1091. https://doi.org/10.1177/0093650220961965
Zuiderveen Borgesius, F. J., Möller, J., Kruikemeier, S., Ó Fathaigh, R., Irion, K., Dobber, T., Bodo, B., & De Vreese, C. (2018). Online political microtargeting: Promises and threats for democracy. *Utrecht Law Review*, *14*(1), 82–96. https://doi.org/10.18352/ulr.420

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Article

Is Personality Key? Persuasive Effects of Prior Attitudes and Personality in Political Microtargeting

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Abstract
Messages that are designed to match a recipient's personality, as enabled by microtargeting, have been found to influence political reasoning and even voting intentions. We extended these findings by adding prior attitudes to a microtargeting setting. Specifically, we examined what role different microtargeting approaches play in political reasoning by conducting an online experiment with a 2 (extraverted vs. introverted communication) × 2 (attitude-congruent vs. attitude-incongruent statement) between-subject design (N = 368). In line with the assumptions of the theory of motivated reasoning, attitude position matching emerged as an effective microtargeting strategy, and attitude strength moderated the effect of attitude congruency on recipients' evaluations of political ads. While extraverted messages had no direct effect, that was unrelated to attitude congruency, recipients' level of extraversion moderated the effect of extraverted communication on their evaluation of an ad. Interestingly, the intention to vote was significantly higher when an attitude-incongruent statement was phrased in an introverted rather than an extraverted manner, suggesting that information that challenges prior attitudes might be more persuasive when it is delivered in a more temperate way. In sum, the study indicates that matching message with personality alone might not be the most effective microtargeting approach within democratic societies.

Keywords
extraversion; motivated reasoning; political attitudes; political microtargeting; personality traits

Issue
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1. Introduction

In the run-up to democratic elections, political campaigns represent a means to disseminate ideas and information (Brady et al., 2006). Informing the public about candidates, parties, and their political positions is an important task prior to elections, enabling voters to make conscious voting decisions. Indeed, the perception of feeling politically informed has been shown to affect political participation, for instance by mobilizing people to cast their vote in an election (Moeller et al., 2014). Due to the ever-growing digitalization of the media landscape, political campaigns are becoming increasingly diverse (Dobber et al., 2017). Social media offer a wide range of possibilities to spread information and interact on a personal level (Ohme, 2019). One such possibility is online political microtargeting (OPM), a communication strategy that consists of forming small groups and sending them personalized messages (Papakyriakopoulos et al., 2018).

The marketing firm Cambridge Analytica claimed to have found a way to categorize potential voters into micro-groups, which were used for highly personalized advertising on Facebook during Trump's 2016 US presidential election campaign, the UK Brexit campaign, and other political contexts (Heawood, 2018). This personalized microtargeting strategy was purportedly based on research on the prediction of personal attributes.

Kosinski et al. (2013) found that highly personal information such as ethnic background, sexual orientation, partisanship, and even personality traits could be derived from online data (e.g., Facebook likes). Following this revelation, discussion arose among journalists, politicians, and scientists about how to deal with the potential threat of OPM to democracies. Despite some legal regulations, OPM on social media is still permitted (Witzleb & Paterson, 2021) and the potential impact of OPM based on personality predictions currently remains unclear.

Recent findings suggest that OPM which matches the message style with the recipient's personality traits (extraversion or introversion) might even influence voting decisions (Zarouali et al., 2020). While these findings indicate that personality matching may be a highly persuasive tool, so far, this has only been demonstrated for ads that endorse the recipient's prior preferences. Moreover, it has not yet been considered that campaigns using big data techniques have many different options besides personality matching to assess and address relevant target groups. Theoretical models of political reasoning view prior attitudes as a relevant factor with regard to information processing (Lodge & Taber, 2013). Based on the theory of motivated reasoning, people are motivated to come to conclusions that fit their prior beliefs (Kunda, 1990), meaning that the processing of political information differs depending on whether the information challenges existing attitudes or confirms them.

If one is to assume potential manipulation of the electorate through OPM, it is important to understand whether ads that challenge recipients' attitudes might influence their political evaluations by bringing about a shift towards parties or candidates to whom recipients were previously opposed. Additionally, targeted advertising on social media also entails the potential to address, inform, and mobilize citizens who have a low interest in politics and might therefore not be reached through traditional media (Zuiderveen Borgesius et al., 2018). As OPM research has focused on the personalization of political advertising due to the advancement of big data (e.g., Zarouali et al., 2020), we wish to extend previous findings by examining what role different factors of microtargeting strategies might play within political campaigns, focusing on the personality trait extraversion and including the position and strength of prior attitudes. In contrast to defining target groups based on bivariate attitude positions when grouping individuals according to personality traits, a cut-off value is necessary to determine whether an individual should be assigned to a particular trait group. Therefore, the present study refrains from dividing participants based on their level of extraversion when analyzing the influence of personality matching regarding message-recipient fit. Rather, we use participants' level of extraversion as a moderator to evaluate the degree of matching. Hence, we applied a controlled experimental setting in order to gain a first understanding of the influences of prior attitudes and personality traits within campaign messages.

2. Theoretical Background

2.1. Political Reasoning and Prior Attitudes

Processes of political reasoning cannot be described without first considering the existing attitudes that an individual holds. According to the theory of motivated reasoning, people are motivated to both come to accurate conclusions and to confirm their prior beliefs (Kunda, 1990). While the motivation for accuracy may serve as a rational approach, the motivation for confirmation of prior beliefs means that incoming information is evaluated differently depending on the individual's prior attitudes. Thus, people are motivated to evaluate information more positively when it is in line with their own views and more negatively when it contradicts their own views. This confirmation bias can undermine the motivation to come to reasonable conclusions (Kunda, 1990).

The question of how existing attitudes influence the reception and processing of information, as well as the resulting behavior, is highly relevant, especially when studying persuasion in the sense of attitude change. Research on OPM has demonstrated that matching a political party's advertising to people's personality traits through social media enhances their subsequent evaluations of the message and of the political party itself if the recipient is already in favor of that political party (e.g., Zarouali et al., 2020). However, it remains unclear how persuasive personality trait matching might be when the message opposes the individual's existing political views. To determine whether OPM may have a manipulative impact on the electorate, research on the perception of counter-attitudinal advertising is needed. Taber et al. (2009) found that information that is congruent with existing beliefs is evaluated more strongly and thus receives more acceptance. Moreover, the authors reported that arguments that challenged participants' prior attitudes were evaluated more critically than attitude-congruent arguments, and this "attitude congruence bias" (Taber et al., 2009, p. 153) was moderated by attitude strength.

Lodge and Taber (2013) theoretically derived conscious and unconscious processes to describe the formation and deliberation of political views, including "motivated bias" (p. 38), positing that the processing of new information is affected by the motivation to preserve prior beliefs. The authors suggested that this "will often occur outside of awareness" (Taber & Lodge, 2016, p. 62), meaning the path of information processing is laid unconsciously. Such findings lead to the hypothesis that political evaluation is not merely rational but is rather influenced by prior attitude positions and attitude strengths (Taber et al., 2009). In line with Krosnick and Petty (1995), attitude position and attitude strength can be seen as two dimensions, meaning that people can take extreme positions without being strongly involved.

In an eye-tracking study, van Strien et al. (2016) examined how prior attitudes bias the evaluation not

only of arguments but also of the information source. In their experiment, participants spent less time looking at attitude-incongruent information than at attitude-congruent information. Moreover, the results revealed a positive association of attitude strength with recalled arguments and with perceived source credibility. These findings support the hypothesis of a motivated bias and also highlight the persuasive potential of prior attitudes and their strength with regard to political information (e.g., within advertisements), parties or candidates, and even voting intentions.

While previous research focused on targeting factors such as personality traits within attitude-congruent settings (Zarouali et al., 2020), the present study includes both attitude-congruent and attitude-incongruent statements. As such, we assess OPM that is not solely focused on personality traits but rather includes recipients' political opinions. We propose that matching people's prior attitude positions will increase the persuasive appeal of OPM. In line with recent studies, we investigate participants' evaluations of each argument (ad evaluation), the political party (party evaluation), and behavioral intention (voting intention), and add a manipulation of attitude (in-)congruency:

> H1: Within the attitude-congruent groups (vs. the attitude-incongruent groups), the (H1a) ad evaluation, (H1b) party evaluation, and (H1c) intention to vote for the party is significantly higher.

Empirical findings suggest a relation between prior attitudes, attitude strength, and subsequent evaluations (van Strien et al., 2016). Taber et al. (2009) found a moderating role of attitude strength in political processing, insofar as "attitude strength moderates all forms of bias" (p. 153). We, therefore, hypothesize a similar role of attitude strength in the context of OPM, and suggest that the stronger a recipient's attitude, the greater its moderating impact on attitude congruency effects:

> H2: The effect of attitude congruency on (H2a) ad evaluation, (H2b) party evaluation, and (H2c) intention to vote is moderated by attitude strength, meaning the stronger the prior attitude, the higher the moderating effect.

2.2. Personality Traits and Politics

The five-factor model of personality is a fundamental approach to describe and assess five different personality traits (neuroticism, agreeableness, conscientiousness, openness, and extraversion; McCrae & Costa, 1987). Schoen and Schumann (2007) investigated the effects of personality traits on attitudes towards parties and vote choice in Germany, and confirmed that personality traits indirectly affected partisan attitudes and voting behavior. With regard to personality traits and communication, Oreg and Sverdlik (2013) found an association between the perceived personality of a sender and the sender's persuasiveness in conversations. Specifically, their findings revealed a higher persuasive effect when the sender was perceived as more extraverted, meaning that high extraversion was associated with high persuasiveness. In line with this, Argyris et al. (2021) showed that the perceived extraversion of online influencers had a positive effect on recipients' purchase intentions.

In accordance with previous findings that extraverted messages seem to be more persuasive than introverted messages (Argyris et al., 2021), we assume a greater persuasive effect of a high (compared to low) extraverted message on ad evaluation, party evaluation, and voting intention:

> H3: Within the extraverted messages groups, the (H3a) ad evaluation, (H3b) party evaluation, and (H3c) intention to vote is significantly higher than in the introverted messaging groups.

2.3. Online Political Campaigning and Persuasion

The evolution of data tracking has led to the ability to specify target groups in even greater detail and to address these groups directly while reducing scatter loss and thus increasing the reach and effectiveness of campaigns (Witzleb & Paterson, 2021). Segmentation of potential target groups often results from market research among readers or viewers of different media or programs in order to find optimal placements for ads (Tynan & Drayton, 1987). The advance of big data analysis has led to so-called microtargeting, which can be implemented within different segmentation strategies depending on campaign goals or available data.

Recent research has revealed that social media data has the potential not only to yield direct information based on online behavior (e.g., likes) but also personal information (e.g., partisanship) and even personality traits. Kosinski et al. (2013) used Facebook likes, which are easily accessible, to predict psychodemographic profiles. While dichotomous variables were predicted quite accurately, personality predictions were only moderately correlated with the actual values. Nevertheless, these findings might be used to address prior political attitudes and personality traits within microtargeted campaigns. Subsequent studies on microtargeting found that online communication that matched messages reflecting extraversion and openness to recipients' personality were more persuasive (Matz et al., 2017). This persuasive appeal of microtargeted ads that match recipients' personality was also found with respect to political content. Zarouali et al. (2020) derived participants' personality traits from behavioral data and then targeted them with personality-congruent political ads. The results provided evidence for the persuasive effect of advertising using personality-congruent extraverted or introverted messages. However, their setting only included attitude-congruent stimuli. Meaning, a positive effect

of personality-congruent ads among so-called "persuadables" (Zarouali et al., 2020, p. 20) on voting intention and party evaluation could be found for parties, that fit participants' broader political orientation. Thus, those need to be replicated in more balanced samples and include personality-incongruent messages.

Therefore, we hypothesize that social media ads that are created to match people's level of extraversion have a more persuasive appeal regarding evaluations of the message, the sender, and even regarding voting intention within attitude-congruent communication. However, in contrast to defining target groups based on attitudes (i.e., agreement or disagreement with a statement), grouping based on dimensional variables such as personality traits requires a cut-off value in order to assign an individual to a personality group. To avoid using such cut-off values, we decided to test the assumed personality congruence by using participants' degrees of extraversion as a moderator:

> H4: The (H4a) ad evaluation, (H4b) party evaluation, and (H4c) intention to vote, depending on whether the statement is attitude-congruent or not, is moderated by the receivers' level of extraversion.

In terms of matching communication style and recipients' personality, research has found the extraversion–introversion dimension to be effective. For instance, Moon (2002) demonstrated that highly extraverted recipients are influenced more by highly extraverted messages in comparison to the incongruency of message and recipients' personality. Regarding election campaigns, Van Steenburg and Guzmán (2019) reported mediating effects of a political candidate's brand image and voters' self-brand image on voting intention, indicating that theoretical implications of self-congruency are transferable to politics. Positive effects of congruency between self-reported personality and perceived personality of politicians were also found for the traits of the Big Five (Caprara & Zimbardo, 2004).

In line with the findings regarding the direct effects of extraverted messages, as well as the findings that personality congruency moderates persuasive effects (Argyris et al., 2021), we hypothesize similar effects in OPM regarding ad and party evaluation and intention to vote:

> H5: The effect of messages that are designed to match the level of extraversion (high/low) on the (H5a) ad evaluation, (H5b) party evaluation, and (H5c) the intention to vote for it, is moderated by the receivers' level of extraversion.

3. Method

3.1. Open Science

To test our hypotheses, we conducted an online experiment using a 2 (extraverted vs. introverted communication) × 2 (attitude-congruent vs. attitude-incongruent statement) between-subject design. The study was preregistered on the Open Science Framework prior to data collection and approved by our department's ethics committee. The description of measures and the numbering of the hypotheses has been partially modified with regard to the theoretical framework. Specifically, we added ad evaluations to the hypotheses and changed the order of hypotheses to fit with the line of argument. Additional material such as stimulus materials can also be found in the supplementary materials.

3.2. Stimulus Material

The personalized manipulation of text framing was based on the descriptions of introverted-extraverted messages reported in previous research (Moon, 2002; Zarouali et al., 2020). Accordingly, the introverted ads included weaker language consisting of questions and suggestions whereas extraverted ads used stronger, more confident, and dominant language. Statements were adjusted to match the experimental conditions (pro-con attitude position, extraverted–introverted message style). To serve as the sender of the ad, we created a fictional, hypothetically neutral political party, Demokratie Neu Denken (Rethink Democracy), to ensure that participants had no prior attitudes towards the party. In Germany's multiparty democracy, it is not uncommon for new, previously unknown parties to appear in elections. We chose Facebook, which is the most commonly used social media platform throughout different adult age groups and is used for political advertising. The party name and logo were also evaluated in our pre-test. The overall topic was environmental policies, as this had featured in all larger German party programs for the upcoming Federal election of 2021. In total, 36 ads regarding nine statements were created and pretested to evaluate the perceived level of extraversion. The selected statements (four conditions for each of the three statements) were about coal-fired power stations, bicycle-friendly streets, and afforestation. We chose to implement three ads to replicate a campaigning context, assuming repeated reception of political advertising.

3.3. Measures

"Extraversion" was measured using eight items from the 40-item German scale of the Big Five (Hartig et al., 2003); e.g., "I make friends easily"; α = .86). Items were rated on a 5-point Likert scale from 1 = *I totally disagree* to 5 = *I totally agree* (M = 3.1, SD = .8). "Attitude strength" was assessed based on the procedure described by Taber et al. (2009). For each political statement, participants answered four questions (e.g., "how much do you personally care?") on a 6-point Likert scale from 1 = *not at all* to 6 = *very much* (M = 3.8, SD = 1). Internal consistency was measured for each statement, and was found to be good for the topics coal-fired power stations (α = .88;

M = 3.8, *SD* = 1.3) and bicycle-friendly streets (*α* = .90; *M* = 4.2, *SD* = 1.3), and excellent for afforestation (*α* = .93; *M* = 3.6, *SD* = 1.4). "Attitude position" was assessed for the experimental manipulation using one item ("how much do you agree with the statement?") rated on a 6-point Likert scale from 1 = *not at all* to 6 = *very much*, and implemented as a covariate using the mean score of the three statements (*M* = 3.3, *SD* = .8). "Ad evaluation" was measured with four items based on previous research on advertising evaluations. Participants indicated how trustworthy (Ohanian, 1990), pleasant, good, and appealing (MacKenzie & Lutz, 1989) they found each of the three ads on a bipolar semantic differential scale (e.g., 1 = *bad* to 5 = *good*; *M* = 3.2, *SD* = .8). Internal consistency was good for the ad on coal-fired power stations (*α* = .88; *M* = 2.8, *SD* = 1.1) and excellent for bicycle-friendly streets (*α* = .92; *M* = 3.1, *SD* = 1.1) and afforestation (*α* = .94; *M* = 3.8, *SD* = 1). "Party evaluation" was rated by a direct indication of selected traits (Ohanian, 1990; Olivola & Todorov, 2010; van Strien et al., 2016). To assess the perception of the political party, participants indicated how trustworthy, credible, competent, and sympathetic they found the sending party to be on a bipolar semantic differential scale (e.g., 1 = *not trustworthy* to 5 = *very trustworthy*; *M* = 2.8, *SD* = .9). Reliability was excellent (*α* = .95). "Voting intention" for the party was assessed using one item based on the study by Zarouali et al. (2020): "Please indicate how likely it is that you would vote for the party Demokratie Neu Denken," rated on a 5-point Likert scale ranging from 1 = *very unlikely* to 5 = *very likely* (*M* = 2, *SD* = 1.1). "Political interest" was measured as a control variable following Dubois and Blank (2018), with one item asking "how interested are you generally in politics?" rated on a 5-point Likert scale from 1 = *not at all* to 5 = *very much* (*M* = 3.6, *SD* = 1.2).

To control for the assumingly unknown, fictional political party, the sender of the microtargeted ad, the participants were asked whether they knew the party (answers: *yes*/*no*). A manipulation check was also implemented regarding congruency of the ads shown and the prior attitudes, where participants were asked whether they agreed with the statements overall (*yes*, *no*, *not sure*). Moreover, as a further quality check, we asked whether participants understood the statement for each ad (*yes*/*no*).

3.4. Procedure

First, participants answered questions regarding sociodemographic characteristics and their social media usage. Next, they were randomly assigned to one of the four experimental groups. Participants were shown 10 statements regarding environmental policies and indicated their attitude position and strength for each statement. Three statements were later used within the stimulus ads, either depicting attitude-congruent or incongruent statements, depending on the experimental condition. Following this, political interest and the personality trait extraversion were assessed. Three microtargeted ads were shown, while attitude congruency was manipulated on the fly based on the prior attitude position (approval = 1–3; disapproval = 4–6), the personalization towards introversion and extraversion was only based on the randomly assigned group. Each stimulus was rated regarding ad evaluation and understanding. Finally, participants indicated their evaluation of the sending party and their intention to vote for the sending party. The overall control questions regarding prior knowledge of the party and attitude congruency were answered before participants were debriefed.

3.5. Sample

A total of 404 participants were recruited via the online panel provider respondi.com (incentivized participants) and the online platform surveycircle.de (no incentive, reciprocity principle). We removed 18 participants who failed the quality checks (16 wrongly indicated prior awareness of the party and two did not understand the content of all three ads). Although 81 participants did not answer the attitude congruency control question according to the manipulation, we did not exclude these participants. As one of the theoretical models that led to our hypotheses differentiates unconscious and conscious processes and depicts effects of prior attitudes only on the former (Lodge & Taber, 2013), we argue that the manipulation must not have been perceived consciously. The final data set consisted of 368 participants (194 females, 1 diverse) aged between 20 and 69 years (*M* = 44.7, *SD* = 15). In terms of highest educational attainment, the majority of participants had a secondary school certificate (40.3%), a university degree (30.4%), or a university entrance qualification (22.8%). Furthermore, 47.8% of participants were employees, 17.4% were students, and 14.4% were retired. All participants indicated using at least two social media platforms. Facebook (99.2%) was used most frequently, followed by YouTube (93.7%) and Instagram (66.8%).

4. Results

Unless mentioned otherwise, we used mean scores to test our hypotheses. Statistical analyses were conducted using IBM SPSS Statistics and the PROCESS tool (Hayes, 2017) for moderation analysis. Prerequisites for the main analysis were met and are reported in the Supplementary Files.

4.1. Attitude Congruency and Extraversion

We hypothesized that ad evaluation, party evaluation, and voting intention would be higher when ads matched participants' prior attitude position (H1) and were communicated in an extraverted rather than introverted manner (H3). To test these group differences,

a MANCOVA was conducted. Political interest, attitude position, and the moderating variables attitude strength and level of extraversion were included as covariates. The dependent variable ad evaluation, $F(3, 360) = 44.39$, $p < .001$, partial $\eta^2 = .270$, differed significantly between all groups. The results of the Bonferroni-corrected post-hoc analysis regarding the mean differences in ad evaluation (H1a, H3a) between all manipulation groups are shown in Table 1.

Regarding all group differences, the ad evaluation was significantly more positive following attitude-congruent ads compared to attitude-incongruent ads (H1a), thus supporting our hypothesis. The assumed differences following the reception of extraverted messages (H3a) compared to introverted messages were only found when there were also differences in attitude congruency; therefore, this hypothesis was rejected. Furthermore, party evaluation differed significantly between the manipulation groups, $F(3, 360) = 8.49$, $p < .001$, partial $\eta^2 = .066$. Pairwise comparisons using Bonferroni-corrected post-hoc analysis are shown in Table 2.

Party evaluation was significantly more positive following attitude-congruent ads compared to attitude-incongruent ads. The only exception was found for the introverted message, which showed no significant difference when confirming or challenging prior attitudes. Therefore, H1b was accepted. The assumed differences following the reception of extraverted messages in comparison to introverted messages (H3b) were again only found when there were also differences in attitude congruency; this hypothesis was therefore rejected.

Finally, there were significant differences between the manipulation groups regarding voting intention, $F(3, 360) = 9.71$, $p < .001$, partial $\eta^2 = .075$. The results of the Bonferroni-corrected post-hoc analyses are shown in Table 3.

Attitude-congruent or attitude-incongruent messages (H1c) were followed by significantly higher voting intentions when the message was extraverted but not when it was introverted (H3c). Accordingly, H1c was accepted, as attitude-congruent microtargeted ads led to a higher intention to vote for the sending party. Interestingly, there was also a significant difference between extraversion and introversion for incongruency, insofar as voting intention was higher when the attitude incongruency came with an introverted messaging style. Even though, there was a significant difference between extraverted and introverted message style (and attitude incongruent), other than expected the introverted message led to a higher intention to vote. Therefore, H3c was not confirmed.

4.2. Moderation by Attitude Strength

In H2, we assumed that attitude strength would moderate the effect of attitude congruency on ad evaluation, party evaluation, and voting intention. To test this hypothesis, we conducted a moderation analysis using dummy coding, including political interest and

Table 1. Pairwise comparison of ad evaluation between manipulation groups.

				95% *CI*	
(I) Manipulation group	(J) Manipulation group	*MD* (I–J)	*SE*	*LL*	*UL*
Extraversion/congruent	Extraversion/incongruent	.9*	.1	.65	1.18
	Introversion/congruent	.1	.1	−.20	.34
	Introversion/incongruent	.8*	.1	.50	1.05
Extraversion/incongruent	Introversion/congruent	−.8*	.1	−1.10	−.58
	Introversion/incongruent	−.1	.1	−.40	.13
Introversion/congruent	Introversion/incongruent	.7*	.1	.44	.98

Notes: *MD* = mean difference; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit; * $p < .05$.

Table 2. Pairwise comparison of party evaluation between manipulation groups.

				95% *CI*	
(I) Manipulation group	(J) Manipulation group	*MD* (I–J)	*SE*	*LL*	*UL*
Extraversion/congruent	Extraversion/incongruent	.6*	.1	.23	.92
	Introversion/congruent	.1	.1	−.26	.44
	Introversion/incongruent	.4*	.1	.04	.74
Extraversion/incongruent	Introversion/congruent	−.5*	.1	−.82	−.15
	Introversion/incongruent	−.2	.1	−.53	.16
Introversion/congruent	Introversion/incongruent	.3	.1	.24	1.03

Notes: *MD* = mean difference; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit; * $p < .05$.

Table 3. Pairwise comparison of voting intention between manipulation groups.

(I) Manipulation group	(J) Manipulation group	*MD* (I–J)	*SE*	95% *CI*	
				LL	*UL*
Extraversion/congruent	Extraversion/incongruent	.6*	.2	−.49	.31
	Introversion/congruent	−.1	.2	−.22	.60
	Introversion/incongruent	.2	.2	−.02	.88
Extraversion/incongruent	Introversion/congruent	−.7*	.2	−1.11	−.34
	Introversion/incongruent	−.5*	.2	−.84	−.05
Introversion/congruent	Introversion/incongruent	.3	.2	−.13	.68

Notes: *MD* = mean difference; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit; *p < .05.

attitude position as covariates, and with bootstrapping (5,000 samples). The overall model was significant, $F(5, 362) = 32.46$, $p < .001$, predicting 30.93% of the variance. The interaction was significant, with a CI of 95%, $\Delta R^2 = 1.80\%$, $F(1, 362) = 7.87$, $p = .005$. The visual inspection of the regression slopes (Figure 1) shows that attitude strength moderated the effect on ad evaluation, insofar as the stronger the prior attitude, the more positive the evaluation of the ad in the attitude-congruent groups and the more negative the evaluation of the ad in the attitude-incongruent groups.

A second moderation analysis with the dependent variable party evaluation (H2b) was implemented following the same setup. The overall model was significant, $F(5, 362) = 7.30$, $p < .001$, predicting 9.18% of the variance. There was no significant interaction effect, $\Delta R^2 = .48\%$, $F(1, 362) = 1.43$, $p = .233$, meaning that attitude strength did not moderate the effect of attitude congruency on party evaluation. The test of the hypothesized moderation effect on voting intention (H2c) revealed an overall significant model, $F(5, 362) = 8.60$, $p < .001$, predicting 10.64% of the variance, but no significant interaction, $\Delta R^2 = .04\%$, $F(1, 362) = 1.20$, $p = .275$. Therefore, H2 can partly be accepted: The stronger the prior attitude, the more positive the evaluation of the congruent ad, and the less positive the evaluation of the incongruent ad. However, there was no moderating effect of attitude strength on party evaluation and voting intention, as stronger attitudes did not result in higher evaluations of the party and higher voting intentions in the case of attitude congruency or lower party evaluations and voting intentions in the case of attitude incongruency.

4.3. Moderation by Extraversion

H4 focused on recipients' level of extraversion. Again, we used dummy coding to compare the attitude congruency manipulation. A moderation analysis was conducted with the dependent variable ad evaluation, the moderator extraversion, and the covariates political interest and attitude position (H4a). The overall model was significant, $F(5, 362) = 31.84$, $p < .001$, predicting 29.10% of the variance, but the interaction was not significant, $\Delta R^2 = .01\%$, $F(1, 362) = .44$, $p = .501$. Thus, extraversion did not moderate the effect of attitude congruency on ad evaluation.

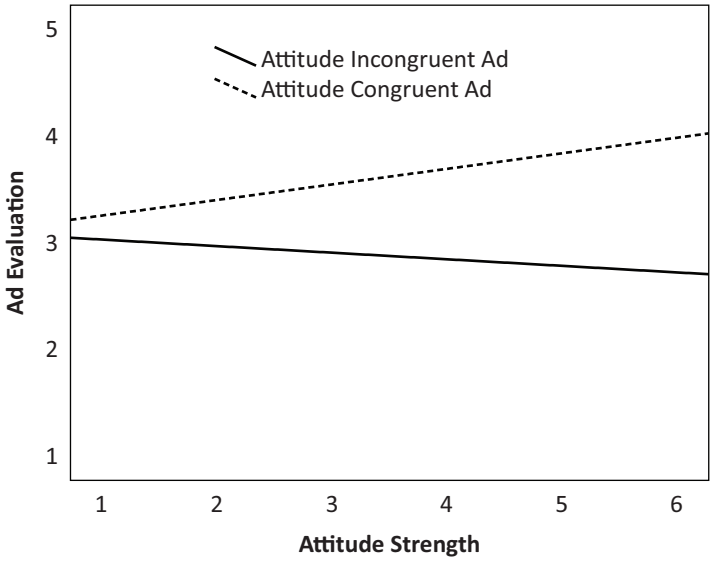

Figure 1. Regression slopes of the moderating effect of attitude strength.

The moderation analysis with the dependent variable party evaluation (H4b) was implemented following the same setup. The overall model was significant, $F(5, 362) = 7.92$, $p < .001$, predicting 9.46% of the variance, but there was no significant interaction, $\Delta R^2 = .01\%$, $F(1,362) = .39$, $p = .531$, meaning that extraversion did not moderate the effect of attitude congruency on party evaluation.

When testing whether extraversion moderated the effect of attitude congruency on voting intention (H4c), we found an overall significant model, $F(5, 362) = 8.70$, $p < .001$, predicting 9.48% of the variance, but no significant interaction, $\Delta R^2 = .01\%$, $F(1, 362) = .39$, $p = .530$. Therefore, extraversion did not moderate the effect of attitude congruency on voting intention and H4c was rejected.

Finally, we tested whether the level of extraversion moderated the effect of personalized messages on ad evaluation (H5a). The interaction was significant $F(5, 362) = 3.53$, $p = .004$, predicting 5.41% of the variance. Thus, the results showed that the level of extraversion significantly moderated the effect of personalized messages on ad evaluation, $\Delta R^2 = 1.75\%$, $F(1, 362) = 7.17$, $p = .008$. The moderating effect is visualized in Figure 2.

An overall model regarding party evaluation (H5b), $F(5, 362) = 2.98$, $p = .012$, predicted 4.03% of the variance, and voting intention (H5c), $F(5, 362) = 5.85$, $p < .001$, predicted 6.85% of the variance. Neither the interaction party evaluation, $\Delta R^2 = .27\%$, $F(1, 362) = 1.12$, $p = .292$, nor voting intention, $\Delta R^2 = .55\%$, $F(1, 362) = 2.05$, $p = .154$ was significant. Therefore, the H5 was partially supported, as we found a moderating effect of recipients' level of extraversion insofar as the higher the recipients' extraversion, the higher the effect of the extraverted message on ad evaluation, and the lower the recipient's extraversion, the higher the effect of the introverted message on the ad evaluation.

5. Discussion

The present study investigated the effects of microtargeting based on prior attitudes and personality traits on political reasoning. Specifically, we sought to gain a better understanding of how personalization strategies regarding extraversion and attitudes affect political reasoning by considering the theory of motivated reasoning (Kunda, 1990) and examined how such strategies might mobilize citizens to participate in an election by casting their vote. Therefore, we not only investigated extraverted and introverted messages as well as recipients' prior attitudes as a manipulation, but also examined recipients' level of extraversion as a moderating variable regarding ad and party evaluations as well as voting intention. Our aim was to enrich current findings on microtargeting by analyzing how persuasive messages are perceived to be when they match (or do not match) recipients' prior attitudes. Moreover, as extraversion is commonly measured as a metric construct, we wished to determine how this personality trait moderates the persuasive effects of different communication styles, in order to answer the question of what role different microtargeting strategies play within political campaigns.

5.1. Prior Attitudes and Attitude Strength

H1 focused on the different effects of attitude congruency and attitude strength. The results indicated that matching messages with prior attitudes constitutes an effective persuasive strategy. In line with our assumptions, based on the theory of motivated reasoning (Kunda, 1990), a political advertisement and the sending party were perceived more positively when the advertisement was in line with recipients' prior attitudes. As proposed by this theory, our finding can be explained by the motivation to come to a certain conclusion and

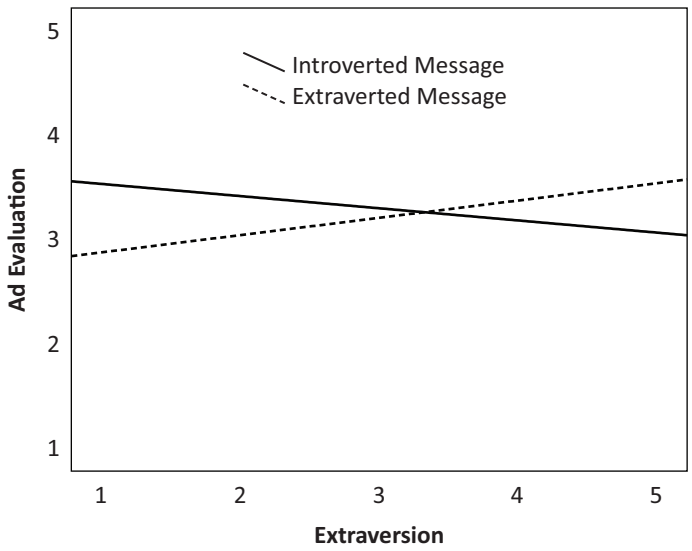

Figure 2. Regression slopes of the moderating effect of extraversion on ad evaluation.

avoid cognitive dissonance (Festinger, 1962). Our results confirm empirical findings (Lodge & Taber, 2013; Taber et al., 2009) that arguments (in our case microtargeted ads) are evaluated more positively when they match prior attitudes. When attitudes were challenged, we found less positive evaluations of ads and of the sending party, and a lower intention to vote for the party. Therefore, we were able to demonstrate that motivated bias might also occur in an OPM setting.

Additionally, our findings confirmed a moderating effect of recipients' prior attitude strength on ad evaluation. Accordingly, recipients with stronger prior attitudes evaluated an online political ad more positively when it was attitude-congruent, and in recipients with weaker prior attitudes, an online political ad with an attitude-incongruent message had a lower impact on the ad evaluation. This confirms previous research (Taber et al., 2009) showing that arguments are evaluated differently depending on the strength of prior beliefs, and updates the context of politically motivated reasoning to the social media advertising scenario of OPM. However, in terms of the overarching evaluation of the party and voting intention, we did not find the hypothesized moderating impact of attitude strength, meaning that while the attitude towards the information stimuli was affected, the attitude towards the sender and the behavioral intention to vote were not. One explanation for this might lie in the elaboration likelihood model (Petty & Cacioppo, 1986) when incoming information is processed via the peripheral route. Thus, the strength of the attitude affects the direct ad evaluation but not the following overall evaluation of the party or even the intention to vote.

In summary, our results add to the current understanding of the effects of new media on political campaigning and voter mobilization, as they underline the potential to engage citizens by targeting them with messages that are relevant to them. As outlined by Haller and Kruschinski (2020), OPM could thus be implemented in such a way that it mobilizes less politically interested persons and consequently increases political participation. In particular, smaller parties with fewer resources could benefit from OPM by communicating their positions more efficiently. Likewise, the presented findings underline a major concern regarding social media campaigning, which is the strategic exclusion of people with opposing views. As such, targeting strategies could also be misused by political actors and our findings emphasize the need for further political communication research in order to analyze political campaign practices.

5.2. Extraversion

When analyzing the effects of extraversion, we did not find that the extraverted communication resulted in a higher level of persuasiveness. Thus, our results are in contrast to previous findings that extraversion is more persuasive than introversion (Argyris et al., 2021; Oreg & Sverdlik, 2013). However, the previous studies used individual people as senders of the information, whereas we focused on party communication. It may be the case that direct effects of personality are bound to human senders like political candidates, who represent a party and therefore shape the image of the party and thus the voting intention (Balmas & Sheafer, 2010).

In terms of the behavioral intention to vote, however, it emerged that information that was incongruent with recipients' prior attitudes led to a higher intention to vote for the party when the message was introverted rather than extraverted. The lower intention to vote for a party that does not reflect one's own opinion and communicates its message more strongly might be explained by the notion of reactance (Brehm, 1966), which occurs when people feel pressured to change their behavior, and has previously been found regarding online election campaigns (Marcinkowski & Došenović, 2021). Given that the intention to vote refers to an individual's behavioral intention, the extraverted counter-attitudinal message might be viewed as restricting individual freedom more strongly than introverted communication. Transferring this to political manipulation of the electorate might mean that weaker, more introverted communication may carry more potential for manipulation compared to a strong, extraverted persuasive appeal.

With regard to recipients' personality, the hypothesized moderating impact of recipients' extraversion on the effect of attitude-congruent messaging on the political reasoning variable was not found. This appears to contrast with previous research findings that advertising among a receptive audience influences political opinions and even votes (Zarouali et al., 2020). However, our experimental design differed from past research in one crucial aspect: Our targeting approach did not focus on recipients' extraversion or introversion, but rather on their approval or disapproval of the message. This implies that within a setting that addresses specific content of which an individual approves, a personalized message brings no additional persuasive effect. Nevertheless, when only considering the extraversion manipulation, the moderation analysis revealed a moderating effect on recipients' level of extraversion insofar as the higher a recipient's extraversion, the more positive the ad evaluation when seeing an extraverted message, and vice versa when confronted with introverted communication, which is in line with previous findings (e.g., Argyris et al., 2021; Zarouali et al., 2020).

Overall, personality-focused OPM appeared to have no direct persuasive appeal, whereas attitude congruency did. The inspection of group differences revealed that the extraversion manipulation had no significant effects on political reasoning, except for when recipients were confronted with attitude-incongruent information. Moreover, the moderating effects of attitude strength or extraversion did not pertain to the party evaluation or voting intention, but rather only referred to the ad evaluations. While this may provide support for the

assumption that political evaluations and votes might be immune to persuasive appeals, previous research found that repeated exposure did lead to changes in attitudes (Moreland & Zajonc, 1982). As our study included only three ads, which were shown once, we cannot derive any conclusions about the persuasive effects of micro-targeted ads with which recipients are confronted, for instance, throughout an entire campaign period.

5.3. Limitations and Further Research

As already indicated above, several limitations of this study need to be considered. This study included a set of three stimuli that were shown once, whereas advertising and political campaigns repeatedly use the same or similar arguments throughout campaign periods. While we chose an experimental setting that reduces the influence of confounding variables, this comes at the expense of external validity. Therefore, future settings should include long-term effects and more applied approaches, for instance using field studies, when investigating party evaluations and voting intentions. Moreover, the usage of different topics within the stimuli requires critical reflection. For instance, there may be an association between introversion and topics of the political left such as environmental policies (Schoen & Schumann, 2007). Therefore, future research should address different political topics. Additionally, while the stimuli were pretested to ensure a valid representation of extraversion and introversion within the messages, in order to create authentic-looking Facebook ads we needed to vary the wording between the personalization conditions. To ensure the validity of our findings, further research is needed.

Our results suggest that a target group's prior attitudes represent a major factor for political persuasion. Interestingly, our manipulation check revealed that some participants did not evaluate the ad content in accordance with the initially assessed attitude. This may indicate either that participants had little conscious awareness of their existing beliefs (Lodge & Taber, 2013) or that the manipulation was not precise (e.g., participants were not given the option to indicate no position). Therefore, further research is needed to replicate our results. Furthermore, as we only hypothesized moderating effects of attitude strength and extraversion level on the dependent variables, we cannot derive an underlying structure, which combines all measured constructs, from our results. Based on the present findings as well as previous research, future studies could aim to derive and combine hypotheses that can be analyzed within a structural equation model.

6. Conclusions

Reaching citizens with political campaigns, to engage them in open discourse, is an important part of democracies. Our findings support the assumption that information is filtered through existing beliefs, meaning that we evaluate the sender positively when our attitudes are encouraged and negatively when they are challenged. But if OPM refrains from public discourse by avoiding those who disagree or even spreading misleading information to match differing attitude positions, campaigning becomes problematic. Our findings underline the potential to (mis-)use OPM to create persuasive campaigns. While the idea that attitudes and decisions can be manipulated by targeting personality is still an important concern that needs to be addressed, there may be a more pressing concern: Matching with individuals' prior attitudes, which might be derived from their social media data, seems to be not only a more practical but also a more persuasive method of political campaigning. Thus, when monitoring parties' or other political actors' communication on social media, research and public discourse might need to focus more on contradictory statements from the same sender as well as misinformation.

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Conflict of Interests

We have no conflicts of interest to declare.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

Argyris, Y. A., Muqaddam, A., & Miller, S. (2021). The effects of the visual presentation of an influencer's extroversion on perceived credibility and purchase intentions: Moderated by personality matching with the audience. *Journal of Retailing and Consumer Services*, *59*, Article 102347. https://doi.org/10.1016/j.jretconser.2020.102347

Balmas, M., & Sheafer, T. (2010). Candidate image in election campaigns: Attribute agenda setting, affective priming, and voting intentions. *International Journal of Public Opinion Research*, *22*(2), 204–229. https://doi.org/10.1093/ijpor/edq009

Brady, H. E., Johnston, R., & Sides, J. (2006). The study of political campaigns. In H. E. Brady & R. Johnston (Eds.), *Capturing campaign effects* (pp. 1–26). University of Michigan Press.

Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press.

Caprara, G. V., & Zimbardo, P. G. (2004). Personalizing politics: A congruency model of political preference.

American Psychologist, *59*(7), 581–594. https://doi.org/10.1037/0003-066X.59.7.581

Dobber, T., Trilling, D., Helberger, N., & de Vreese, C. H. (2017). Two crates of beer and 40 pizzas: The adoption of innovative political behavioural targeting techniques. *Internet Policy Review*, *6*(4), 1–25. https://doi.org/10.14763/2017.4.777

Dubois, E., & Blank, G. (2018). The echo chamber is overstated: The moderating effect of political interest and diverse media. *Information, Communication and Society*, *21*(5), 729–745. https://doi.org/10.1080/1369118X.2018.1428656

Festinger, L. (1962). Cognitive dissonance. *Scientific American*, *207*(4), 93–106. https://doi.org/10.2307/24936719

Haller, A., & Kruschinski, S. (2020). Politisches Microtargeting. Eine normative Analyse von datenbasierten Strategien gezielter Wähler_innenansprache [Political microtargeting. A normative analysis of data-driven voter targeting strategies]. *Communicatio Socialis*, *53*(4), 519–530. https://doi.org/10.5771/0010-3497-2020-4-519

Hartig, J., Jude, N., & Rauch, W. (2003). Entwicklung und Erprobung eines deutschen Big-Five-Fragebogens auf Basis des International Personality Item Pools (IPIP40) [Development and testing of a German Big Five questionnaire based on the International Personality Item Pool]. *Arbeiten Aus Dem Institut Für Psychologie Der Johann Wolfgang Goethe-Universität*, *1*.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.

Heawood, J. (2018). Pseudo-public political speech: Democratic implications of the Cambridge Analytica scandal. *Information Polity*, *23*(4), 429–434. https://doi.org/10.3233/IP-180009

Kosinski, M., Stillwell, D., & Graepel, T. (2013). Private traits and attributes are predictable from digital records of human behavior. *Proceedings of the National Academy of Sciences*, *110*(15), 5802–5805. https://doi.org/10.1073/pnas.1218772110

Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 1–24). Erlbaum Associates.

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*(3), 480–498. https://doi.org/10.1037/0033-2909.108.3.480

Lodge, M., & Taber, C. S. (2013). The John Q. public model of political information processing. In M. Lodge & C. S. Taber (Eds.), *The rationalizing voter* (pp. 28–73). Cambridge University Press. https://doi.org/10.1017/CBO9781139032490

MacKenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, *53*(2), 48–65. https://doi.org/10.2307/1251413

Marcinkowski, F., & Došenović, P. (2021). From incidental exposure to intentional avoidance: Psychological reactance to political communication during the 2017 German national election campaign. *New Media & Society*, *23*(3), 457–478. https://doi.org/10.1177/1461444820902104

Matz, S. C., Kosinski, M., Nave, G., & Stillwell, D. J. (2017). Psychological targeting as an effective approach to digital mass persuasion. *Proceedings of the National Academy of Sciences of the United States of America*, *114*(48), 12714–12719. https://doi.org/10.1073/pnas.1710966114

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*(1), 81–90. https://doi.org/10.1037/0022-3514.52.1.81

Moeller, J., de Vreese, C. H., Esser, F., & Kunz, R. (2014). Pathway to political participation: The influence of online and offline news media on internal efficacy and turnout of first-time voters. *American Behavioral Scientist*, *58*(5), 689–700. https://doi.org/10.1177/0002764213515220

Moon, Y. (2002). Personalization and personality: Some effects of customizing message style based on consumer personality. *Journal of Consumer Psychology*, *12*(4), 313–325. https://doi.org/10.1016/S1057-*7408*(16)30083-3

Moreland, R. L., & Zajonc, R. B. (1982). Exposure effects in person perception: Familiarity, similarity, and attraction. *Journal of Experimental Social Psychology*, *18*(5), 395–415. https://doi.org/10.1016/0022-*1031*(82)90062-2

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, *19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Ohme, J. (2019). When digital natives enter the electorate: Political social media use among first-time voters and its effects on campaign participation. *Journal of Information Technology and Politics*, *16*(2), 119–136. https://doi.org/10.1080/19331681.2019.1613279

Olivola, C. Y., & Todorov, A. (2010). Elected in 100 milliseconds: Appearance-based trait inferences and voting. *Journal of Nonverbal Behavior*, *34*, 83–110. https://doi.org/10.1007/s10919-009-0082-1

Oreg, S., & Sverdlik, N. (2013). Source personality and persuasiveness: Big five predispositions to being persuasive and the role of message involvement. *Journal of Personality*, *82*(3), 250–264. https://doi.org/10.1111/JOPY.12049

Papakyriakopoulos, O., Hegelich, S., Shahrezaye, M., & Medina Serrano, J. C. (2018). Social media and microtargeting: Political data processing and the consequences for Germany. *Big Data and Society*, *5*(2). https://doi.org/10.1177/2053951718811844

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in experimental psychology* (pp. 123–205). Academic Press. https://doi.org/10.1016/S0065-2601(08)60214-2

Schoen, H., & Schumann, S. (2007). Personality traits, partisan attitudes, and voting behavior. Evidence from Germany. *Political Psychology*, *28*(4), 471–498. https://doi.org/10.1111/j.1467-9221.2007.00582.x

Taber, C. S., Cann, D., & Kucsova, S. (2009). The motivated processing of political arguments. *Political Behavior*, *31*(2), 137–155. https://doi.org/10.1007/s11109-008-9075-8

Taber, C. S., & Lodge, M. (2016). The illusion of choice in democratic politics: The unconscious impact of motivated political reasoning. *Political Psychology*, *37*, 61–85. https://doi.org/10.1111/pops.12321

Tynan, A. C., & Drayton, J. (1987). Market segmentation. *Journal of Marketing Management*, *2*(3), 301–335. https://doi.org/10.1080/0267257X.1987.9964020

Van Steenburg, E., & Guzmán, F. (2019). The influence of political candidate brands during the 2012 and 2016 US presidential elections. *European Journal of Marketing*, *53*(12), 2629–2656. https://doi.org/10.1108/EJM-06-2018-0399

van Strien, J. L. H., Kammerer, Y., Brand-Gruwel, S., & Boshuizen, H. P. A. (2016). How attitude strength biases information processing and evaluation on the web. *Computers in Human Behavior*, *60*, 245–252. https://doi.org/10.1016/j.chb.2016.02.057

Witzleb, N., & Paterson, M. (2021). Micro-targeting in political campaigns: Political promise and democratic risk. In U. Kohl & J. Eisler (Eds.), *Data-driven personalisation in markets, politics and law* (pp. 223–240). Cambridge University Press. https://doi.org/.10.1017/9781108891325.017

Zarouali, B., Dobber, T., De Pauw, G., & de Vreese, C. H. (2020). Using a personality-profiling algorithm to investigate Political microtargeting: Assessing the persuasion effects of personality-tailored ads on Social media. *Communication Research*, *49*(8), 1066–1091. https://doi.org/10.1177/0093650220961965

Zuiderveen Borgesius, F. J., Möller, J., Kruikemeier, S., Fathaigh, R., Irion, K., Dobber, T., Bodo, B., & de Vreese, C. H. (2018). Online political microtargeting: Promises and threats for democracy. *Utrecht Law Review*, *14*(1), 82–96. https://doi.org/10.18352/ulr.420

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Article

Datafication Markers: Curation and User Network Effects on Mobilization and Polarization During Elections

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Abstract
Social media platforms are crucial sources of political information during election campaigns, with datafication processes underlying the algorithmic curation of newsfeeds. Recognizing the role of individuals in shaping datafication processes and leveraging the metaphor of news attraction, we study the impact of user curation and networks on mobilization and polarization. In a two-wave online panel survey (n = 943) conducted during the 2021 German federal elections, we investigate the influence of self-reported user decisions, such as following politicians, curating their newsfeed, and being part of politically interested networks, on changes in five democratic key variables: vote choice certainty, campaign participation, turnout, issue reinforcement, and affective polarization. Our findings indicate a mobilizing rather than polarizing effect of algorithmic election news exposure and highlight the relevance of users' political networks on algorithmic platforms.

Keywords
algorithmic platforms; datafication; election campaigns; mobilization; polarization

Issue
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1. Introduction

The political landscape has evolved with the emergence of social media platforms as relevant sources for political communication and information, prompting a fundamental shift in election campaigns. Social media companies rely on datafication, which involves collecting, aggregating, and analyzing user data, to algorithmically curate newsfeed content (Poell et al., 2019; van Dijck, 2014). This process produces specific data footprints based on user behavior and network connections that determine their attractiveness to different types of algorithmically curated content, including news (Thorson, 2020). In the context of elections, algorithmic news exposure on social media platforms can influence voter mobilization, campaign engagement, and, ultimately, voting decisions (e.g., Geers et al., 2017; Ohme, 2019; Suk et al., 2022). Moreover, social media platforms polarizing effects have garnered significant public attention in recent years, as they may affect people's attitudes toward political issues and the perception of other voters (Allcott et al., 2020; Cinelli et al., 2021).

While some studies have examined the relationship between a curated news diet and democratic key variables (Bode, 2016; Bos et al., 2022), little is known about how individual users' curation and networks relate to mobilization and polarization. By leveraging algorithmic attraction as a heuristic for understanding how users' behavior may impact algorithmic news exposure, we investigate whether users' (self-reported) curation and networks—which we treat as markers of subsequent datafication processes—are related to changes

in attitudes and behavior during the 2021 German *Bundestagswahl* (federal election).

Specifically, we examine the relationship between receiving election-related information on social media and: (a) vote choice certainty, campaign participation, and turnout (mobilization hypothesis; Oser & Boulianne, 2020); and (b) attitude reinforcement and affective polarization (reinforcing spiral hypothesis; Slater, 2007). We also examine whether this relationship is conditional on three datafication markers: users' following decisions, curation behavior, and network consistency. Our results indicate a stronger mobilizing than the polarizing effect of algorithmic election news exposure and data footprints.

2. Datafication and Algorithmic News Exposure

News exposure on social media platforms is influenced not only by individual user choices but also by news organizations, peers, and algorithms (Thorson & Wells, 2016). On the one hand, users' movements through social media environments generate digital behavioral traces that platforms such as Facebook, Instagram, and TikTok use for datafication (van Dijck, 2014). These platforms aggregate, combine, and correlate these traces, based on which they infer users' preferences for topics, stances, and other users (Thorson et al., 2021; van Dijck, 2014). These datafication processes create a symbolic "data footprint" of each user—a backend representation of the user's inferred preferences which determine their future exposure to content.

Data footprints are key to algorithmic curation, which aims to create a pleasant and engaging user experience, thus prolonging the time users spend on the platform. As Thorson et al. (2021) explain, individual engagement with content, such as reading, watching, or liking news on social media, increases the likelihood of future exposure to similar content. For instance, following local politicians may improve the odds of being informed about political developments in a citizen's precinct, while engaging with content on a specific political topic (e.g., climate change) leads to more of it being shown in the future (e.g., Twitter, 2023).

At the same time, an individual's data footprint is also marked by the networks this user is part of. For example, having a politically-active network of friends on these platforms increases the chance of seeing content that aligns with political standpoints of network ties, often congruent with users' attitudes (Ahmed & Gil-Lopez, 2022; Lee & Kim, 2017). Thus, previous engagement with and curation of political content as well as embeddedness in specific networks, not only determines whether people see political information on social media platforms but also the type of content they are exposed to. Thorson (2020) proposes algorithmic attractiveness as a heuristic for accounting for the interplay between users' choices, datafication processes across digital platforms, and news publishers' and other political actors' dissemination practices (p. 1068).

In this study, we view news exposure as a system (Thorson, 2020; Weeks & Lane, 2020) and analyze its agentic component by examining users' (self-reported) curation and networks, which we treat as—markers of subsequent datafication processes—that contribute to the algorithmic loop, determining a user's attractiveness to news and exposure to specific political content (e.g., Marquart et al., 2020a). In turn, algorithmic news exposure can impact mobilization and polarization. This is especially true during election cycles when political content is typically more prevalent in most citizens' news diets.

3. The Mobilizing Role of Algorithmic News Exposure in Election Campaigns

Informed citizens are critical for successful election campaigns (Downs, 1957). To make informed voting decisions, citizens need information on the issues discussed, candidates', and parties' political stances. Algorithmic platforms, tailoring news to individual users' interests, are believed to play a vital role in mobilizing key variables during campaigns. One function of news exposure is to increase vote choice certainty, the subjective confidence in deciding which candidate or party to vote for (Alvarez & Franklin, 1994). Election news exposure can help form a more certain voting intention, especially among younger voters (Colwell Quarles, 1979; O'Keefe & Liu, 1980). Although vote choice certainty cannot be "mobilized," it can be stimulated. Recent research has partly confirmed that exposure to algorithmic campaign news increases vote choice certainty, mediated by campaign participation activity (Ohme et al., 2018). Therefore, we aim to test whether algorithmic election news exposure during an election campaign predicts higher vote choice certainty over time.

While parties and candidates aim to influence voter decisions (Marquart et al., 2020b), voter engagement in election campaigns can take various forms, such as contacting politicians, discussing election topics in personal networks, volunteering for candidates, or attending campaign events (Holt et al., 2013; Ohme, 2019). Studies have found that social media use during election periods has a mobilizing effect on young citizens and the general population (Holt et al., 2013; Kushin & Yamamoto, 2010), and in comparison with non-algorithmic news (Andersen et al., 2020). Thus, we test for the relationship between the extent of algorithmic news exposure during the election campaign and voters' campaign participation over time.

High turnout is crucial for parties in election campaigns. Nevertheless, in recent years, turnout among younger citizens in European countries has declined (Moeller et al., 2018). The link between media use and turnout has been constantly investigated, with research suggesting a mobilizing effect (Oser & Boulianne, 2020). However, comprehensive analyses have produced mixed results, particularly for online communication (Marquart

et al., 2020b). In national elections, studies have consistently found a positive relationship between social media use (i.e., algorithmic election news exposure) and turnout (Bond et al., 2012; Moeller et al., 2018). Therefore, we investigate the relationship between the extent of algorithmic news exposure during an election campaign and the turnout decision over time (Figure 1):

> RQ1: Is the exposure to election news on social media platforms during the campaign period positively related to a change in levels of (a) vote choice certainty,(b) campaign participation, and (c) turnout in the 2021 German *Bundestagswahl*?

4. The Polarizing Role of Algorithmic News Exposure in Election Campaigns

Besides possibly mobilizing citizens to participate in elections, algorithmic election news exposure may also have a polarizing effect on an attitudinal and affective level. Concerning the former, people prefer consuming information that aligns with their prior attitudes (e.g., Tyler et al., 2022). Thus, social media platforms create a basic prerequisite for attitude maintenance and can drive attitudes to become more extreme by algorithmic curation that feeds on and into inferred interests and prior attitudes (Cinelli et al., 2021; Ohme, 2021).

The Reinforcing Spirals Model (Slater, 2007) posits that selective exposure to congenial information reinforces issue-specific attitudes, leading to more extreme opinions over time and shaping subsequent information selection (Slater, 2015). Additionally, users' preference for ideologically homogeneous social networks reinforces these attitudes and drives social news curation (Cota et al., 2019; Feezell et al., 2021). During elections, when the opposing ideology becomes more salient in public discourse, citizens may retreat to their in-group to protect their social identity (Slater, 2015). Prior research indicates that repeated selective exposure (Song & Boomgaarden, 2017; Stroud, 2010) and exposure to algorithmic news on social media platforms (Ohme, 2021) are linked to more extreme political attitudes.

Polarizing effects can also occur on the affective level. Affective polarization is related to issue-specific positions but primarily concerns negative attitudes toward opponents (Finkel et al., 2020; Groenendyk, 2018; Iyengar et al., 2012). Scholars have attributed the rise in partisan hostility to the emergence of partisanship as a significant social identity that aligns societal divisions and conflicts, in a process called sorting (Iyengar et al., 2012; Mason, 2016; Törnberg, 2022). The idea of algorithmic sorting stems from studies on the US-American electorate, where partisanship has expanded beyond politics and into a broader "culture war" (Hetherington et al., 2018), leading to an increase in the number of topics linked to politics but a decrease in their diversity (Törnberg, 2022).

The effect of media use on affective polarization depends on the partisan nature of the content presented, but its direction remains inconclusive. Studies have shown that exposure to counter-attitudinal content, such as out-party news sources (Garrett et al., 2014) and opposing political views (Bail, 2021), actually intensifies affective polarization. This may be because our perception and interpretation of content heavily depend on our perception of the messenger, leading to people we dislike having little to no influence on us (Törnberg, 2022). Others show that exposure to pro-attitudinal news can increase hostility toward the political opponent (Garrett et al., 2014; Wojcieszak et al., 2020). Social media use, however, can also decrease polarization by exposing users to information from ideologically distant social ties (Barberá, 2015). For example, news exposure on Facebook during the US 2016 elections attenuated attitudes towards political opposition, indicating that a greater share of ideologically coherent news in one's news diet on algorithmic platforms can increase negative affect on partisans of opposing parties (Beam et al., 2018).

To investigate this process in the German context, we ask:

> RQ2: Is the exposure to election news on social media platforms during the campaign period positively related to levels of (a) attitude reinforcement and (b) affective polarization during the 2021 German *Bundestagswahl* campaign?

5. The Moderating Role of Data Footprints

The heuristic of algorithmic attraction (Thorson, 2020) suggests that datafication markers of politically interested individuals are related to a higher frequency of news exposure on platforms. Building on that, we argue that datafication and algorithmic curation not only change whether people get election news on social media platforms but also what kind of news they get. Attitudinally and affectively coherent and appealing algorithmic news may be responsible for mobilization (the extent to which users engage with an election campaign and feel confident in their vote and turnout decision) while simultaneously reinforcing existing attitudes and affective polarization. However, there is limited research examining the effect of individual behavior on these platforms and user agency in the processes of mobilization and polarization. Some evidence suggests that conscious shaping of datafication markers can qualify the mobilizing potential of algorithmic news exposure during an election campaign (see Figure 1).

For instance, Marquart et al. (2020b) found that following politicians on social media platforms increased election news in young citizens' diets, leading to more civic messaging and participation. Likewise, a user's personal network on social media can have mobilizing effects. Strong ties on Facebook mobilize protest

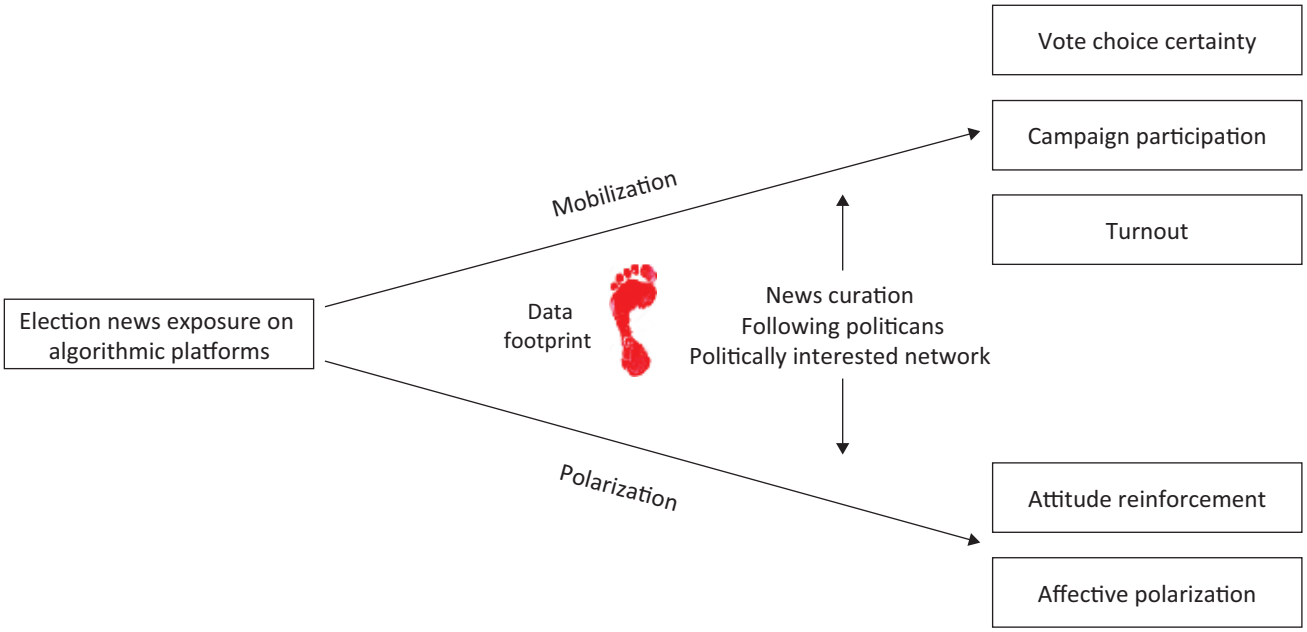

Figure 1. Analytical model of direct and indirect mobilization and polarization. Notes: The displayed model illustrates the relationship between data footprints, (a) algorithmic selection processes, and (b) the effects of news exposure, as analyzed in this study; for ease of illustration, we combine (a) and (b) in this model; chronologically (not displayed here), data footprints form before algorithmic news exposure and are dynamic and subject to change based on user behavior.

participation while observing friends' political behavior increases users' political activities (Bäck et al., 2021; Valenzuela et al., 2018). Studies indicate that information that aligns with citizens' political attitudes can mobilize political activity, increasing outspokenness among network members in homogeneous political networks (e.g., Wojcieszak et al., 2016; Zhu et al., 2017). However, reducing the number of opposing viewpoints through news curation and the following of specific politicians may lead to algorithmic curation that supports existing viewpoints, thereby reinforcing existing attitudes (see Allcott et al., 2020; Lee et al., 2018). Such homogeneous information mobilizes political participation (e.g., Lee et al., 2018; Mutz, 2002; Ohme, 2021). At the same time, a highly politically curated network can also contribute to greater political animosity (Bos et al., 2022; Merten, 2021; see Figure 1). As research investigating the outcomes of algorithmic news effects is sparse, we ask:

> RQ3: Is the direct relationship between exposure to election news on social media platforms and vote choice certainty, campaign participation, turnout, attitude reinforcement, and affective polarization during the 2021 German *Bundestagswahl* moderated by (a) the number of followed politicians, (b) news curation behavior, and (c) politically interested friends in users' network?

6. Method

To explore the proposed relationships, we rely on a two-wave panel online survey executed by a survey company (Dynata) a few weeks before and one week after the German federal elections on 26 September 2021.

6.1. Sample

Conducted from 26 August to 13 September 2021, the first survey was completed by 2621 respondents. After removing 403 "speeders" (completion time two/three below the soft launch median), 186 participants who failed both incorporated attention checks, 16 respondents with non-serious responses to open questions, and six who straight-lined two long batteries, the sample for the first wave consisted of 2009 respondents. Of these, 1,131 responded to the second survey conducted from 27 September to 1 October 2021. After applying the same quality checks, the sample was reduced to 1029 respondents. Respondents who indicated they had voted early by mail were excluded, which left us with a final sample of n = 943 participants. Respondents were sampled with a soft quota on age, gender, state, and education. As a result of systemic attrition and extensive quality criteria, the final sample is not representative and is around eight years older and more highly educated than the German population.

6.2. Measures

We provide the descriptives of all measures used in the analysis in Table 1. Where these combine multiple variables, single-variable descriptives are provided in the text.

6.2.1. Independent Variables

To assess exposure to political information on algorithmic platforms, we asked respondents to report on how many days in the past week they had been exposed to political information on five popular social media platforms, namely Facebook (M_{w2} = 1.33; SD_{w2} = 2.34), Twitter (M_{w2} = .40; SD_{w2} = 1.38), Instagram (M_{w2} = .58; SD_{w2} = 1.63), TikTok (M_{w2} = .17; SD_{w2} = .89), and YouTube (M_{w2} = .76; SD_{w2} = 1.86). We then formed a sum score to be used as our independent variable. Though we recognize the limitations of survey approaches to assessing news exposure, there is merit in letting people decide what they perceive and memorize as news exposure instead of inferring their news exposure based on tracking data in the same way that platforms do (Moe & Ytre-Arne, 2022).

6.2.2. Moderating Variables

The moderating variables were all measured at Wave 1 and treated as more stable than dynamic markers to fuel datafication processes, as user profiles that inform algorithmic selection processes built up over longer periods. We, therefore, asked about the general frequencies of the following perceived user behaviors.

News curation was measured using a sum score of two items asking participants how often, in general, they: (a) followed accounts or reacted to news content, political organizations, or individuals to see more of the respective content (M_{w1} = .59; SD_{w1} = 1; Min = 0; Max = 5); and (b) unfollowed/refrained from interacting with such content to see less of it (M_{w1} = .60; SD_{w1} = 1.07). We combined these two types of actions, as we were interested in the agency users exert on algorithmic curation processes in general.

Following politicians was measured by asking participants to estimate how many accounts of German politicians they followed in ordinal steps ranging from (0) *no accounts* to (6) *more than 100 accounts*.

To assess respondents' politically interested network, we asked them to indicate the proportion of their network they perceive to be politically interested, ranging from 0–100 (M_{w2} = 31.37; SD_{w2} = 29.02). We acknowledge that this is a tendency measure and, as such, not intended to reflect actual political interest among network contacts. Thus, it may be biased towards the active network that respondents perceive. However, since active network contacts are likely to have a greater impact on algorithmic curation and have a higher likelihood of being perceived by users, they can serve as a proxy for how likely it is that network contacts engage with political content.

6.2.3. Dependent Variables

To measure turnout, in Wave 2, participants were asked to indicate whether or not they had cast a vote in the elections. Multiple response choices for non-voters (with different reasons for not voting) and a question framing focusing on non-voters were used to minimize social desirability effects. Still, 90.7% indicated they had voted in the German elections, almost 15% more than the overall turnout. To estimate the change in turnout, we rely on a 4-point scale measuring the intention to vote in the upcoming elections in Wave 1. Those who indicated an intention to vote with definitely and probably were grouped (92.3%) to represent the (probable) voters.

Table 1. Descriptive statistics.

Statistic	*n*	Mean$_{W1}$	SD_{W1}	M_{W2}	SD_{W2}	Min	Max
Algorithmic news exposure	943	—	—	4.06	6.54	0	42
News curation	943	1.19	1.81	—	—	0	10
Politicians in network	943	.50	1.23	—	—	0	6
Politicians interested network	943	31.37	29.02	—	—	0	100
Turnout	943	—	—	.91	.29	0	1
Voting intention	943	.92	.27	—	—	0	1
Campaign participation	938	5.56	7.27	5.39	7.64	0	54
Vote choice certainty	813	6.13	1.28	5.98	1.42	1	7
Attitude reinforcement	943	—	—	.23*	.42	0	1
Affective polarization	931	2.89	0.98	3	.9	0	4.95
Age	943	53.57	13.31	—	—	18	75
Gender	943	1.51	.50	—	—	1	3
Traditional news exposure	943	—	—	4.05	1.81	0	6
Political interest	943	3.79	.81	—	—	1	5
Education	943	4.81	1.72	—	—	1	8

Note: * A change from Wave 1 to Wave 2 was calculated in a single measurement.

Campaign participation was measured using nine items on a 7-point ordinal scale (*not at all–daily*), asking how often participants had participated in campaign-related activities in the last month, such as volunteering for a political candidate or a political party. The items were combined to a sum score (Table 1).

Vote choice certainty was measured with one item assessing the certainty regarding one's perspective and casted vote on a 7-point Likert scale ranging from *very uncertain* to *very certain* (Table 1).

To assess attitude reinforcement, we asked participants in both waves to what extent they support or oppose measures to combat climate change on an 11-point Likert scale (M_{w1} = 8.50; SD_{w1} = 2.75; M_{w2} = 8.41; SD_{w2} = 2.80). We chose the issue of climate change as it was very salient in societal debates and the party manifestos before the elections, relative to other topics. An attitude was considered reinforced when it moved closer towards the endpoint of the scales in Wave 2, but not if it crossed the scale's midpoint, moved away from the closer pole of the scale, or stayed the same (see Ohme, 2021, for a similar approach). Based on the change between Waves 1 and 2, a combined measure was created (Table 1).

Affective polarization scores were measured following Wagner (2021). This approach looks at the spread of respondents' party-like-dislike scores, allowing us to measure affective polarization in multi-party contexts. A proposed weighting of parties by their vote share had to be disregarded due to data restrictions. However, in the context of the 2021 election with relatively similar-sized parties, the impact of this decision should be relatively small (M_{w1} = 2.89; SD_{w1} = .98; M_{w2} = 3; SD_{w2} = .90).

6.2.4. Controls

We additionally measured age, gender, political interest (1 = *not at all politically interested*, 5 = *very politically interested*), news exposure in traditional news media (0 = *not at all*, 6 = *daily*), and education (based on an ascending, German education scale) to be used as controls in all of our models.

6.3. Analytical strategy

We use cross-sectional analysis to model direct relationships and lagged dependent variable models to explore the main and interaction effects on change in outcome variables. To isolate the change between the two waves, we held constant the respective Wave 1 variables for all Wave 2 dependent variables, except for the attitude reinforcement variable, which is already constructed as a change between the two waves (see details below). For each outcome variable, we estimated one model to test the main effects of algorithmic election news exposure, news curation, the number of political friends, and the number of politician accounts followed, and three models for the respective interaction effects. In the results section, we present an overview of the modeled relationships (Table 2), while the full regression model tables can be found in the Supplementary File.

Table 2. Effect directions and significance across all models.

Excluding lagged dependent variable					
	Campaign participation	Turnout	Vote choice certainty	Attitude reinforcement	Affective polarization
Direct effect algorithmic exposure	+*	0**	0	0	0
Direct effect curation	+	0	+	0	0
Exposure × curation	+	0	0	0	0
Direct effect political network	0	0	0	0	0
Exposure × political network	+	+	0	0	0
Direct effect following politicians	0	0	0	0	0
Exposure × following politicians	+	0	0	0	0
Including lagged dependent variable					
	Campaign participation	Turnout	Vote choice certainty	Attitude reinforcement	Affective polarization
Direct effect algorithmic exposure	+	0	0	0	0
Direct effect curation	+	0	+	0	0
Exposure × curation	+	0	0	0	0
Direct effect political network	0	0	0	0	0
Exposure × political network	0	0	0	0	0
Direct effect following politicians	0	0	0	0	0
Exposure × following politicians	+	0	0	0	0

Notes: * + = significant, positive effect; ** 0 = insignificant (p > .05). The top table represents the results of the multiple regression models using Wave 2 variables as dependent variables; the bottom table shows the results of our lagged dependent variable models.

7. Results

7.1. Mobilizing Effects

We find support for the direct relationship between algorithmic exposure and campaign participation (b = .36; p < .001, Table A1 from the Supplementary File). Campaign participation is also higher among citizens who engage in news curation behavior more frequently (b = 1.12; p < .001). Looking at the moderation with behavioral traces, there is evidence that people who use algorithmic election news more frequently and (a) curate their news diet more strongly (b = .06; p < .001), (b) have more politically interested friends in their network (b = .00; p < .001), (c) follow a greater number of politicians (b = .10; p < .001), and have a higher chance of participating in campaign activities. These models control for political interest, whereas higher levels were associated with higher campaign participation. When adding the lagged dependent variable of campaign participation on $t1$ to the models and thereby estimating the change during the campaign period (see Table A2 from the Supplementary File), we still find that algorithmic election news exposure (b = .22; p < .001) and news curation (b = .42; p < .001) can explain an increase of campaign participation over time. Moreover, we see that news curation positively moderates the effect of algorithmic media use (b = .03; p = .018). Hence, individuals who curate their news diet more strongly become more easily mobilized by algorithmic election news exposure to participate in the campaign. We find a similar result for the number of politicians followed: Individuals who follow a greater number of politicians become more strongly mobilized by algorithmic election news exposure to participate in the campaign activities (b = .04; p = .032). Nevertheless, there is no significant moderation effect for the estimated number of politically interested friends in people's networks (b = .00; p = .071).

Turning to vote choice certainty, we do not find a direct or indirect relationship between most of the studied variables, other than controls (see Table A3 from the Supplementary Files). Just because voters use platforms, follow politicians, or perceive their network as more politically interested does not make them more certain in their vote choice. This result remains the same when we examine the change in vote choice certainty over time (see Table A4 from the Supplementary Files). However, we do find that respondents with higher levels of news curation show lower levels of vote choice certainty in both models. The curation practices, hence, explain a negative slope in the change of vote choice certainty. This finding, however, is independent of the levels of exposure, which speaks for an association between the need to curate and certainty of what vote to cast. We note that the average vote choice certainty was high at both measurement times. Hence, there was little variation in change to explain.

Examining the turnout, we found no direct effect of algorithmic or traditional media use on self-reported voting behavior (Table A5 from the Supplementary File). However, algorithmic election news exposure was related to higher turnout for voters with a network perceived as more politically interested, as evidenced by the moderation analysis (b = 1; p = .019), while controlling for respondents' political interest. Thus, we observe a networked relationship on turnout at a cross-sectional level. However, when we include the self-reported turnout intention, which is the variable that comes closest to a lagged dependent variable for assessing auto-regressive effects (Table A6 from the Supplementary File), this relationship becomes insignificant (b = 1; p = .153). In this model, which predicts change between voting intention and actual turnout, we find no variable (studied or controlled) that predicts the change between the intention to turn out and actual, self-reported turnout.

7.2. Polarizing Effects

Turning to polarizing tendencies, we first look at direct, cross-sectional relationships for issue extremity concerning climate change. We find no significant direct relationship between exposure to algorithmic election news and more extreme attitudes on climate change issues (b = 1.02; p = .106; see Table A7 from the Supplementary File). By conventional standards of significance, we also observe no indirect relationship. The indirect effect of algorithmic exposure and the number of politicians has an error probability of 8.7%. (b = .98; p = .087; Table A7 from the Supplementary File). This can suggest that algorithmic media use and following more politicians on Facebook is associated with developing more extreme positions on political issues such as climate change. Because attitude reinforcement is constructed based on changes in issue positions over time, no additional auto-regressive analysis was conducted.

Concerning cross-sectional relationships for affective polarization (see Table A8 from the Supplementary File), we find no direct or moderated relationship between election news exposure and the three datafication markers examined. Interestingly, we find a direct relationship between traditional news media use and affective polarization. Users who rely on traditional channels have a higher tendency to dislike political opponents (b = .09; p < .001), particularly those who are more politically interested (b = .16; p < .001). When estimating the auto-regressive effects on affective polarization (see Table A9 from the Supplementary File), we again find no indication—direct or moderated—that algorithmic election news exposure influences hostile feelings against opposing parties. However, the change in affective polarization over the campaign period can be partly explained by a small yet significant relationship with traditional news exposure (b = .04; p = .005). Contrary to previous research, we find a media effect on polarization,

however, not from algorithmic platforms but from traditional modes of exposure.

8. Discussion

The present study tested the role that election news exposure on algorithmic platforms plays for five important outcome variables during an election campaign. We built on the metaphor of algorithmic attractiveness in platform news exposure (Thorson, 2020) and investigated its agentic component by analyzing users' (self-reported) curation and networks, which we treated as indicators of subsequent datafication processes shaping user's attractiveness to news, and guiding the processes of algorithmic curation and information exposure on social media platforms.

We found that users' data footprints, conceptualized as a symbolic representation of the user's inferred preferences based on (in this case, self-reported) datafication markers, can enhance mobilizing tendencies of news exposure on algorithmic platforms during election time, particularly for campaign participation and, to a lesser extent, for turnout. These findings align with prior research that has shown the mobilizing effects of algorithmic election news exposure on algorithmic platforms during election campaigns (Marquart et al., 2020b; Ohme, 2019). Furthermore, active news curation appears to increase participation in election-related activities throughout the campaign. Our failure to find similar effects on turnout may be due to the high levels of turnout intention and actual turnout in our sample. Nevertheless, our finding that a network perceived as more politically interested strengthens the relationship between election news exposure on algorithmic platforms and self-reported turnout aligns with previous research demonstrating that politically active networks are associated with the turnout, regardless of individual interest in politics (Bond et al., 2012).

Regarding attitude reinforcement and affective polarization, our findings contrast with previous research that suggested polarizing tendencies (Ohme, 2021). Instead, our findings align with Beam et al. (2018) in that algorithmic election news exposure did not reinforce attitudes towards one of the most salient and fought-over policy issues during the German *Bundestagswahlkampf* (climate change) and did not lead to the disliking of political opponents. This can be understood as good news for democracy, although we need to consider alternative explanations. For example, Törnberg (2022) argues that digital media engenders an all-encompassing polarization through algorithmic partisan sorting. However, the political situation in Germany is not as divided as in the US, where there is a strong sense of fundamental difference and mutual distrust—or even denial—of the other side's legitimacy (Iyengar et al., 2012; Mason, 2016). In turn, this may shape the quality of algorithmic news exposure in a way that reflects a wider array of cross-cutting conflicts, thereby preventing affective polarization. Therefore, future research should consider the partisanship structure in the political context being studied.

Our findings have two main implications. Firstly, we found no evidence that receiving news on algorithmic platforms during an election campaign reinforces existing attitudes or increases affective polarization. Although we did not analyze exposure to specific content, it seems that while some content received on digital platforms can set reinforcing spirals in motion (Garrett et al., 2014; Lee et al., 2018), looking at more general exposure patterns attenuates the potential danger attributed to social media platforms in stirring up political polarization (e.g., Feezell et al., 2021). Unexpectedly, our results suggest that traditional media use has a small auto-regressive effect on affective polarization, possibly indicating that digital platform news exposure's diversity, randomness, and malleability may be less responsible for polarizing tendencies among the electorate traditional media outlets with a partisan leaning, narrower information and arguments, fixed content, and less personalization. These explanations are speculative, and we suggest that future research remains attentive to such patterns.

Secondly, it is necessary to account for the active role of individual users in shaping their data footprints. Though limited, our evidence shows that news curation, perceived network contacts, and following politicians' accounts can influence mobilization through algorithmic election news exposure. This is one of the first indications that digital footprints, users' active behavioral decisions on digital platforms, are a meaningful input for datafication processes and that these inputs can mobilize. This speaks both for arguments concerning algorithmic dependency (Thorson, 2020; Thorson et al., 2021) and user agency (Marquart et al., 2020a) in constructing a media diet with a positive effect on democracy. However, we caution against overestimating the effect of news exposure and subsequent datafication processes based on the self-reported nature of our data. Additionally, our results suggest that stable traits such as political interest have a greater impact on mobilizing and polarizing outcomes. Although digital platforms may increase individual informedness, their impact on actual outcomes seems limited.

9. Limitations and Outlook

While we underline the importance of this study, we acknowledge its limitations and suggest that these should guide future research on algorithmic attractiveness based on users' self-reports. First, our results beg the question of whether datafication processes can be effectively studied with self-reported survey data. These processes are influenced by a vast number of individual user decisions, such as selections, reactions, and interactions that occur multiple times daily for most platform users. Thus, our approach to operationalizing data footprints via datafication markers is a basic attempt to estimate the outcomes of these processes, and we

operate on a superordinate and error-prone data level. It is unclear whether using digital trace data for such a study would yield more significant effects or null findings. However, our study can provide a foundation for future research to include users' digital trace data, such as screenshot data or data donation packages from platforms, to investigate these processes more granularly (e.g., Araujo et al., 2022; Yee et al., 2022).

Besides the granularity of social media use, self-reports are prone to other recall biases and other types of errors, for example, reverse causality claims. Despite efforts to circumvent this, the low variance in responses regarding voting intention and turnout, for example, may be due to social desirability. Moreover, some frequency measures relied on ordinal scales that may not accurately reflect the relative differences in variables such as campaign participation across individuals. Further, the distribution of some of our measures is not ideal for studying auto-regressive effects, as there was little change between assessments over time. This ceiling effect may cover some of the processes. Related to concrete measures, we were limited to the five most frequently used platforms in Germany at the time of the study. Future research should also study such platform differences and disentangle the relevance of footprints on these platforms.

Lastly, some limitations regarding the sample exist. While our sample has characteristics that are representative of the German population of over-18, it is not a fully representative sample. The extensive quality criteria we used may have led to the systematic exclusion of a subsample. Furthermore, our sample is more highly educated and older than the general German population, which may have contributed to the high scores on variables such as voting intention and the relatively low exposure to algorithmic news media. As a result, our sample is unlikely to fairly represent the behavior of younger citizens in Germany who are known to rely more heavily on algorithmic platforms for news exposure (e.g., Ohme, 2019). Thus, the results can be understood as a conservative test of the relationships.

10. Conclusion

Research and public attention increasingly focus on the algorithmic aspects of social media platforms and their impact on democratic variables such as electoral participation. Counter to dominant narratives suggesting that social media algorithms lead to divided societies and intergroup hostility; we find more evidence for a mobilizing than a polarizing effect of election news exposure on social media platforms. As such, our findings challenge the techno-deterministic view of individuals surrendered to opaque algorithms and speak to the traditional liberal understanding of an agentic individual. However, this interpretation comes with a grain (or a handful) of salt since individuals do not have equal capacities and resources needed to be agentic. Thus, we need to remain attentive to the inequalities that may be responsible for the fact that the processes we uncovered might work for some users but not all. Finally, we suggest remaining attentive to context-specific outcomes of algorithmic processes, such as the overall nature of partisanship in the studied population. In conclusion, this study presents a modest yet necessary operationalization of a popular metaphor concerning users' interactions with algorithms on social media platforms.

Conflict of Interests

The authors declare no conflict of interest.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors.

References

Ahmed, S., & Gil-Lopez, T. (2022). Incidental news exposure on social media and political participation gaps: Unraveling the role of education and social networks. *Telematics and Informatics*, *68*, Article 101764. https://doi.org/10.1016/j.tele.2021.101764

Allcott, H., Braghieri, L., Eichmeyer, S., & Gentzkow, M. (2020). The welfare effects of social media. *American Economic Review*, *110*(3), 629–676. https://doi.org/10.1257/aer.20190658

Alvarez, R. M., & Franklin, C. H. (1994). Uncertainty and political perceptions. *The Journal of Politics*, *56*(3), 671–688. https://doi.org/10.2307/2132187

Andersen, K., Ohme, J., Bjarnøe, C., Bordacconi, M. J., Albæk, E., & de Vreese, C. (2020). *Generational gaps in political media use and civic engagement*. Routledge. http://doi.org/10.4324/9781003111498

Araujo, T., Ausloos, J., van Atteveldt, W., Loecherbach, F., Moeller, J., Ohme, J., Trilling, D., van de Velde, B., de Vreese, C., & Welbers, K. (2022). OSD2F: An open-source data donation framework. *Computational Communication Research*, *4*(2), 372–387. https://doi.org/10.5117/CCR2022.2.001.ARAU

Bäck, H., Renström, E. A., & Sivén, D. (2021). The social network: How friends' online behavior and belongingness needs influence political activity. *Policy & Internet*, *13*(2), 209–232. https://doi.org/10.1002/poi3.240

Bail, C. (2021). *Breaking the social media prism*. Princeton University Press. https://doi.org/10.1515/9780691216508

Barberá, P. (2015). *How social media reduces mass political polarization: Evidence from Germany, Spain, and the US*. APSA. http://pablobarbera.com/static/barbera_polarization_APSA.pdf

Beam, M. A., Hutchens, M. J., & Hmielowski, J. D. (2018). Facebook news and (de)polarization: Reinforcing spirals in the 2016 US election. *Information, Commu-*

nication & Society, *21*(7), 940–958. https://doi.org/10.1080/1369118x.2018.1444783

Bode, L. (2016). Pruning the news feed: Unfriending and unfollowing political content on social media. *Research & Politics*, *3*(3), 1–8. https://doi.org/10.1177/2053168016661873

Bond, R. M., Fariss, C. J., Jones, J. J., Kramer, A. D. I., Marlow, C., Settle, J. E., & Fowler, J. H. (2012). A 61-million-person experiment in social influence and political mobilization. *Nature*, *489*(7415), 295–298. https://doi.org/10.1038/nature11421

Bos, L., Ohme, J., & Tsoulou-Malakoudi, A. (2022). *Curating political animosity? The relation of algorithmic news curation to ideological extremity and social and political intolerance*. Manuscript submitted for publication.

Cinelli, M., De Francisci Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences*, *118*(9), Article e2023301118. https://doi.org/10.1073/pnas.2023301118

Colwell Quarles, R. (1979). Mass media use and voting behavior: The accuracy of political perceptions among first-time and experienced voters. *Communication Research*, *6*(4), 407–436. https://doi.org/10.1177/009365027900600402

Cota, W., Ferreira, S. C., Pastor-Satorras, R., & Starnini, M. (2019). Quantifying echo chamber effects in information spreading over political communication networks. *EPJ Data Science*, *8*(1), Article 35. https://doi.org/10.1140/epjds/s13688-019-0213-9

Downs, A. (1957). *An economic theory of political action in a democracy*. Harper & Row.

Feezell, J. T., Wagner, J. K., & Conroy, M. (2021). Exploring the effects of algorithm-driven news sources on political behavior and polarization. *Computers in Human Behavior*, *116*, Article 106626. https://doi.org/10.1016/j.chb.2020.106626

Finkel, E. J., Bail, C. A., Cikara, M., Ditto, P. H., Iyengar, S., Klar, S., Mason, L., McGrath, M. C., Nyhan, B., Rand, D. G., Skitka, L. J., Tucker, J. A., Van Bavel, J. J., Wang, C. S., & Druckman, J. N. (2020). Political sectarianism in America. *Science*, *370*(6516), 533–536. https://doi.org/10.1126/science.abe1715

Garrett, R. K., Gvirsman, S. D., Johnson, B. K., Tsfati, Y., Neo, R., & Dal, A. (2014). Implications of pro- and counterattitudinal information exposure for affective polarization. *Human Communication Research*, *40*(3), 309–332. https://doi.org/10.1111/hcre.12028

Geers, S., Bos, L., & de Vreese, C. H. (2017). Informed switchers? How the impact of election news exposure on vote change depends on political information efficacy. *International Journal of Communication*, *11*, 1857–1878. https://ijoc.org/index.php/ijoc/article/view/6063

Groenendyk, E. (2018). Competing motives in a polarized electorate: Political responsiveness, identity defensiveness, and the rise of partisan antipathy. *Political Psychology*, *39*, 159–171. https://doi.org/10.1111/pops.12481

Hetherington, M. J., Weiler, J., & Merriman, S. (2018). *Prius or pickup? How the answers to four simple questions explain America's great divide*. Houghton Mifflin.

Holt, K., Shehata, A., Strömbäck, J., & Ljungberg, E. (2013). Age and the effects of news media attention and social media use on political interest and participation: Do social media function as leveller? *European Journal of Communication*, *28*(1), 19–34. https://doi.org/10.1177/0267323112465369

Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology. *Public Opinion Quarterly*, *76*(3), 405–431. https://doi.org/10.1093/poq/nfs038

Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students' use of online media and political decision making in the 2008 election. *Mass Communication and Society*, *13*(5), 608–630. https://doi.org/10.1080/15205436.2010.516863

Lee, C., Shin, J., & Hong, A. (2018). Does social media use really make people politically polarized? Direct and indirect effects of social media use on political polarization in South Korea. *Telematics and Informatics*, *35*(1), 245–254. https://doi.org/10.1016/j.tele.2017.11.005

Lee, J. K., & Kim, E. (2017). Incidental exposure to news: Predictors in the social media setting and effects on information gain online. *Computers in Human Behavior*, *75*, 1008–1015. https://doi.org/10.1016/j.chb.2017.02.018

Marquart, F., Goldberg, A. C., & de Vreese, C. H. (2020b). "This time I'm (not) voting": A comprehensive overview of campaign factors influencing turnout at European Parliament elections. *European Union Politics*, *21*(4), 680–705. https://doi.org/10.1177/1465116520943670

Marquart, F., Ohme, J., & Möller, J. (2020a). Following politicians on social media: Effects for political information, peer communication, and youth engagement. *Media and Communication*, *8*(2), 197–207. https://doi.org/10.17645/mac.v8i2.2764

Mason, L. (2016). A cross-cutting calm. *Public Opinion Quarterly*, *80*(S1), 351–377. https://doi.org/10.1093/poq/nfw001

Merten, L. (2021). Block, hide or follow—Personal news curation practices on social media. *Digital Journalism*, *9*(8), 1018–1039. https://doi.org/10.1080/21670811.2020.1829978

Moe, H., & Ytre-Arne, B. (2022). The democratic significance of everyday news use: Using diaries to understand public connection over time and beyond journalism. *Digital Journalism*, *10*(1), 43–61. https://doi.org/10.1080/21670811.2020.1850308

Moeller, J., Kühne, R., & de Vreese, C. (2018). Mobilizing youth in the 21st century: How digital media use fosters civic duty, information efficacy, and political participation. *Journal of Broadcasting & Electronic*

Media, *62*(3), 445–460. https://doi.org/10.1080/08838151.2018.1451866

Mutz, D. C. (2002). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, *46*(4), 838–855. https://doi.org/10.2307/3088437

Ohme, J. (2019). When digital natives enter the electorate: Political social media use among first-time voters and its effects on campaign participation. *Journal of Information Technology & Politics*, *16*(2), 119–136. https://doi.org/10.1080/19331681.2019.1613279

Ohme, J. (2021). Algorithmic social media use and its relationship to attitude reinforcement and issue-specific political participation—The case of the 2015 European immigration movements. *Journal of Information Technology & Politics*, *18*(1), 36–54. https://doi.org/10.1080/19331681.2020.1805085

Ohme, J., de Vreese, C. H., & Albaek, E. (2018). The uncertain first-time voter: Effects of political media exposure on young citizens' formation of vote choice in a digital media environment. *New Media & Society*, *20*(9), 3243–3265. https://doi.org/10.1177/1461444817745017

O'Keefe, G. J., & Liu, J. (1980). First-time voters: Do media matter? *Journal of Communication*, *30*(4), 122–129. https://doi.org/10.1111/j.1460-2466.1980.tb02024.x

Oser, J., & Boulianne, S. (2020). Reinforcement effects between digital media use and political participation: A meta-analysis of repeated-wave panel data. *Public Opinion Quarterly*, *84*(S1), 355–365. https://doi.org/10.1093/poq/nfaa017

Poell, T., Nieborg, D., & van Dijck, J. (2019). Platformisation. *Internet Policy Review*, *8*(4), 1–13. https://doi.org/10.14763/2019.4.1425

Slater, M. D. (2007). Reinforcing spirals: The mutual influence of media selectivity and media effects and their impact on individual behavior and social identity. *Communication Theory*, *17*(3), 281–303. https://doi.org/10.1111/j.1468-2885.2007.00296.x

Slater, M. D. (2015). Reinforcing spirals model: Conceptualizing the relationship between media content exposure and the development and maintenance of attitudes. *Media Psychology*, *18*(3), 370–395. https://doi.org/10.1080/15213269.2014.897236

Song, H., & Boomgaarden, H. G. (2017). Dynamic spirals put to test: An agent-based model of reinforcing spirals between selective exposure, interpersonal networks, and attitude polarization. *Journal of Communication*, *67*(2), 256–281. https://doi.org/10.1111/jcom.12288

Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, *60*(3), 556–576. https://doi.org/10.1111/j.1460-2466.2010.01497.x

Suk, J., Coppini, D., Muñiz, C., & Rojas, H. (2022). The more you know, the less you like: A comparative study of how news and political conversation shape political knowledge and affective polarization. *Communication and the Public*, *7*(1), 40–56. https://doi.org/10.1177/20570473211063237

Thorson, K. (2020). Attracting the news: Algorithms, platforms, and reframing incidental exposure. *Journalism*, *21*(8), 1067–1082. https://doi.org/10.1177/1464884920915352

Thorson, K., Cotter, K., Medeiros, M., & Pak, C. (2021). Algorithmic inference, political interest, and exposure to news and politics on Facebook. *Information Communication & Society*, *24*(2), 183–200. https://doi.org/10.1080/1369118X.2019.1642934

Thorson, K., & Wells, C. (2016). Curated flows: A framework for mapping media exposure in the digital age. *Communication Theory*, *26*(3), 309–328. https://doi.org/10.1111/comt.12087

Törnberg, P. (2022). How digital media drive affective polarization through partisan sorting. *Proceedings of the National Academy of Sciences*, *119*(42), Article e2207159119. https://doi.org/10.1073/pnas.2207159119

Twitter. (2023). *Twitter recommendation algorithm*. https://blog.twitter.com/engineering/en_us/topics/open-source/2023/twitter-recommendation-algorithm

Tyler, M., Grimmer, J., & Iyengar, S. (2022). Partisan enclaves and information bazaars: Mapping selective exposure to online news. *The Journal of Politics*, *84*(2), 1057–1073. https://doi.org/10.1086/716950

Valenzuela, S., Correa, T., & Gil de Zúñiga, H. (2018). Ties, likes, and tweets: Using strong and weak ties to explain differences in protest participation across Facebook and Twitter use. *Political Communication*, *35*(1), 117–134. https://doi.org/10.1080/10584609.2017.1334726

van Dijck, J. (2014). Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*, *12*(2), 197–208.

Wagner, M. (2021). Affective polarization in multiparty systems. *Electoral Studies*, *69*, Article 102199. https://doi.org/10.1016/j.electstud.2020.102199

Weeks, B. E., & Lane, D. S. (2020). The ecology of incidental exposure to news in digital media environments. *Journalism*, *21*(8), 1119–1135. https://doi.org/10.1177/1464884920915354

Wojcieszak, M., Bimber, B., Feldman, L., & Stroud, N. J. (2016). Partisan news and political participation: Exploring mediated relationships. *Political Communication*, *33*(2), 241–260. https://doi.org/10.1080/10584609.2015.1051608

Wojcieszak, M., Winter, S., & Yu, X. (2020). Social norms and selectivity: Effects of norms of open-mindedness on content selection and affective polarization. *Mass Communication and Society*, *23*(4), 455–483. https://doi.org/10.1080/15205436.2020.1714663

Yee, A. Z. H., Yu, R., Lim, S. S., Lim, K. H., Dinh, T. T. A., Loh, L., Hadianto, A., & Quizon, M. (2022). Screenlife capture: An open-source and user-friendly framework for collecting screenomes from Android

smartphones. *Behavior Research Methods*. Advance online publication. https://doi.org/10.3758/s13428-022-02006-z

Zhu, Q., Skoric, M., & Shen, F. (2017). I shield myself from thee: Selective avoidance on social media during political protests. *Political Communication*, *34*(1), 112–131. https://doi.org/10.1080/10584609.2016.1222471

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Article

Barriers to Participation in Polarized Online Discussions About Covid-19 and the Russo-Ukrainian War

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Abstract
Even though social networking sites create a unique online public space for the exchange of opinions, only a small share of citizens participate in online discussions. Moreover, research has depicted current online discussions as highly uncivil, hostile, and polarized, and the number of heated discussions has escalated in the last two years because of health, social, and security crises. This study investigates the perceived barriers to participation in Facebook discussions, focusing on two topics: the Covid-19 pandemic and the Russo-Ukrainian War. It explores the role that the negativity of these online discussions has on participation. To investigate the perspectives of users and their personal experiences with online discussions in times of crisis, we apply a qualitative research method and interviews with participants. We collected and analyzed 50 semi-structured interviews with Czech Facebook users who participated in discussions during the spring of 2021 (i.e., Covid-19) and the spring of 2022 (i.e., Russo-Ukrainian War). The results show that, after initial mobilization at the beginning of the pandemic, the crisis reinforced several crucial barriers to participation in discussions due to the perceived persistence of polarization (e.g., the spread of disinformation, the bipolar character of discussions, negative perception of opponents), which subsequently spread to other areas and issues. The data also implies that these barriers tend to demobilize less active participants, those who do not have strong opinions, and participants who think the subject matter is not worth the heated exchange of opinions.

Keywords
Covid-19; cross-cutting discussions; Facebook; incivility online; online discussions; opinion polarization; Russo-Ukrainian War

Issue
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1. Introduction

In recent years, political discussions have increasingly taken place online, which has inspired prolific research in the fields of political science and communication. This attention is not unjustified, because informal political talk is considered an essential pillar of a healthy democracy, allowing citizens to learn about and interact with matters of public concern, form and articulate opinions, and have more opportunities for political engagement (Conover & Searing, 2005; Dryzek, 2000; Gutmann & Thompson, 2004). Informal political talk is seen as important across different models of democratic citizenship, and it is particularly important from the standpoint of deliberative democracy because it may contribute to the enhancement of the public sphere. From this standpoint, political discussion is often judged based on its deliberative potential, which lies in the exchange of diverse opinions, critical thinking, re-evaluation of opinions, and orientation toward the public good (Mutz, 2006; Rossini & Stromer-Galley, 2019). Through informal political discussions, citizens are exposed to and contribute to raising

new topics and perspectives into the public sphere—being a precursor to more sophisticated forms of political engagement (Habermas, 1989). Even though online political discussions are perceived as a valuable form of political participation (Ohme, 2019), scholars have raised concerns about access and new barriers to the online public sphere, which might exclude some voices from the discussions (Habermas, 2022; Kennedy et al., 2021; Vochocová et al., 2016).

Much of the research on online political talk has been oriented by the normative principles of deliberation, such as reflexivity, openness for dialogue, reason-giving, and publicly oriented citizens (see Dahlberg, 2001; Habermas, 1984). But the reality of online discussion differs, and citizens do not strive for the fulfilment of the quality criteria of the public sphere (Rossini & Stromer-Galley, 2019). The lack of reflexive conversation between those who hold different opinions (Štětka & Vochocová, 2014) and the incivility characterized by disrespect is a relatively common part of the online political talk (Kim et al., 2021; Rossini, 2022). As such, scholars have argued that the value of online political talk should not be restricted to the elusive normative expectations of discursive quality because they may often be detached from the reality of counter-attitudinal opinion exchange (Rossini & Stromer-Galley, 2019).

Research suggests that people have different perceptions and reactions to uncivil and hostile political talk. Some people withdraw from such debates. Others find them engaging and entertaining (see Sydnor, 2019). While scholars have paid considerable attention to online political talk since the popularization of social media, the dynamics that underlie these conversations may have changed in recent years because heated discussions have escalated in light of health and security crises (Jiang et al., 2020; Zhu et al., 2022). In this context, instead of focusing on the perceived quality of online discussions from a normative standpoint, this study focuses on the discussion dynamics that may have a demobilizing effect on political participation. We examined Czechia-based online political discussions during two recent global crises: the Covid-19 pandemic and the Russo-Ukrainian War. Considering the polarizing nature of these two topics, we focus on people's experiences with engagement in contentious and heated discussions, that is, being exposed to disagreement and incivility. We focus primarily on Facebook discussions because Facebook is the most popular social networking site in Czechia.

Prior research on online discussions has mainly focused on quantitative approaches, such as content analysis to capture the content and character of interactions (Andersson, 2022; Numerato et al., 2019; Rossini, 2022), survey or experimental research to investigate the behavior of discussants (Kenski et al., 2017; Rösner et al., 2016), or research on the effect of discussions (Hwang et al., 2014). Less attention has been given to the qualitative methods that address the meanings and perspectives of users who engage in online discussion spaces. To provide a more nuanced account of people's experiences in online debates in times of crisis, we implemented a qualitative research design with semi-structured interviews. Qualitative interviews allow us to explore the experiences of the participants of online discussions and engage them more deeply in their reflections on their and others' past and current behavior and to access the changes within their behavior. Whereas attention is often paid to the drivers and factors that influence political participation (Ohme, 2019; Vochocová et al., 2016), we would like to shed light on the perception of the dynamics (e.g., the tone, content, heterogeneity of opinion expression) that discourage citizens from participation in the debate.

This research focuses on perceived discussion dynamics that have a demobilizing effect on participation in political discussions (i.e., barriers) in the context of two crises: the Covid-19 pandemic and the Russo-Ukrainian War. The uniqueness of these two highly disruptive and polarizing events enables us to examine the challenging dynamics of online political discussions during contentious times that may deter participation. Our study shows that, while participants seem to share some consensus when describing discursive dynamics that disincentivize them from participation (e.g., the conflict between the normative expectations regarding the quality of discussions, the reality of cross-cutting exchange), the context for these two crises has contributed to deepen divisions and further demobilize participation (e.g., the spread of disinformation, the divisive character of discussions, negative perception of opponents). This was particularly true during the pandemic because of the perceived ongoing polarization in the discussions, which subsequently spread to other areas and issues (including discussions about the Russo-Ukrainian War). After initial mobilization at the beginning of the pandemic, the growing polarization in public attitudes about the government response to the pandemic led participants to withdraw from debating these issues online—and that is particularly true for the less active discussants. This is concerning because the demobilizing effect may persist despite the eventual ends of these specific crises and their potential to increase opinion polarization. Ultimately, if citizens perceive cross-cutting discussions to be hostile and if it will lead them to refrain from participation, this could lead to the prevalence of more extreme—and potentially homogeneous—opinions online and contribute to the increased perceptions of polarization. Insofar as online discussions have the power to form opinions about current issues and insofar as social media are essential sources of information in crisis time (Van Aelst et al., 2021), it is crucial to understand how distinct discussion dynamics may demobilize citizens' participation. Further implications in the context of the online public sphere and deliberative democracy are discussed.

2. Theoretical Background

Scholarship in political communication has scrutinized how important events, such as the Covid-19 pandemic, may influence how citizens consume and engage with digital media and news. Research conducted at the beginning of the pandemic shows key changes in media practices and news consumption because of the initial need for information. Several research studies indicate that the overall consumption of news increased (Mihelj et al., 2021; Van Aelst et al., 2021), including online news and social media usage (Van Aelst et al., 2021). However, it seems that these changes were rather short-term, and the audience practices quickly returned to their previous states (Kormelink & Gunnewiek, 2022). Furthermore, research also revealed subsequent avoidance of media content about Covid-19, which proved to be a stressful and overwhelming topic (Mihelj et al., 2021).

Another factor that could reinforce the decrease in interest in the pandemic is the high level of polarization that developed around Covid-19, including divisive views related to vaccination and governmental measures (Jiang et al., 2020). Since the beginning of 2022, another global crisis has affected public debate in Czechia: the full-scale invasion of Ukraine by Russia. This conflict is particularly salient in Czechia because the country was significantly engaged in military aid and help to protect refugees, despite some opposition. The perception of the Russo-Ukrainian conflict might also be influenced by the long-lasting Russian propaganda within post-communist Czechia and the geographical and cultural closeness between Czechia and Ukraine. However, the first wave of solidarity was later affected by other concerns, like the economic difficulties faced by Czech citizens (Münich & Protivínský, 2023).

Both of the crises fueled divides in Czech society at different levels and are arguably the most controversial topics of the last two years. Unprecedented events and crises are likely to lead to polarized debates (see Hiaeshutter-Rice & Hawkins, 2022; Lee & Nerghes, 2018), mainly because people hold different opinions and may express themselves more harshly in light of heightened emotions by resorting to hate speech, threats, and attacks (Schudson, 1997). Hostile and uncivil communication and heterogeneous opinion exchange were previously recognized as patterns for online discussions that might discourage citizens from participation (see Sydnor, 2019; Vraga et al., 2015). As the importance of social media during crises is widely recognized (Malova, 2021), we focus on how citizens articulate and perceive the dynamics of online discussions that may disengage them from participating. We ask:

> RQ1: What discussion dynamics can demobilize participation in online debates during global crises?

Besides the role of crises, we also specifically address the barriers associated with cross-cutting discussions and emphasize the conflicts within opinion exchange. Cross-cutting discussions are based on various diverse opinion exchanges, where people are likely to experience exposure to disagreement (Lu & Lee, 2021). Participating in cross-cutting discussions is an important element of active democratic citizenship because it might help to develop critical thinking and raise awareness about diverging opinions, potentially leading to increased respect towards the other side (Mutz, 2006). However, there are concerns that cross-cutting conversations might result in uncertainties about political opinion and further demobilization (Chen & Lin, 2021). It might also lead to cutting ties due to disagreement (Choi, 2021) or an increase in polarization (Hwang et al., 2014), which is supported by perceived social distance and the prevalence of the feeling they have less in common with people who hold opposing views (Duggan & Smith, 2016). Moreover, the negative character of online debates based on disagreement leads to the discouragement of future conversations, which strengthens the polarizing effect of cross-cutting conversations (Marchal, 2022).

Willingness to participate in cross-cutting discussions—discussions in which participants are exposed to counter-attitudinal viewpoints—is shaped by individual-level characteristics, such as political interest (Lu & Lee, 2021), general active engagement in online political discussions (Heatherly et al., 2017), and conflict avoidance (Sydnor, 2019; Vraga et al., 2015). We do not know much about the aspects of heterogeneous conversations that may deter people from engaging in them. More generally, we do not know the extent to which such discussion dynamics may undermine people's perceptions of the value of those conversations. The role of disagreement in online political talk has been primarily examined through survey-based research (Choi, 2021) and little is known about how participants experience conversations where they are faced with counter-attitudinal opinions online. To better understand the extent to which cross-cutting discussions—and the associated polarizing dynamics—may pose barriers for people to participate in online political talk, we ask:

> RQ2: What role do cross-cutting discussions and their characteristics play in the unwillingness to participate in discussions on Facebook?

> RQ3: How are online cross-cutting discussions related to the perception of polarization among the public?

Online discussions are often described as problematic due to their negative attributes, such as incivility, which potentially trigger negative emotions (e.g., anger, frustration) that make it hard for some to participate (Chen, 2017; Sydnor, 2019). Incivility is commonly operationalized as expressions that violate social norms. It refers to rude or harsh opinion expressions (Rossini, 2022), like name-calling, aspersions, lying, vulgarity, and pejorative speech (Coe et al., 2014). However,

people's perceptions of incivility may differ for several reasons, such as personal characteristics (Bormann, 2022; Kenski et al., 2017), conflict orientation (Sydnor, 2019), and experiences with online discussions (Coe et al., 2014; Hmielowski et al., 2014). Moreover, incivility from like-minded groups tends to be evaluated as less uncivil than when it comes from "the other side." People are more tolerant when incivility is targeted at arguments instead of personal characteristics (Muddiman, 2017). Some warned that incivility may deepen the divide between people who hold different opinions and increase polarization (Anderson et al., 2014; Hwang et al., 2014). However, reactions to incivility also vary. For some, incivility might fuel negative feelings (see Rösner et al., 2016) and lead to unfriending (Goyanes et al., 2021). Others might find it to be an acceptable way to communicate (Sydnor, 2019). Much of this research has leveraged quantitative approaches, such as surveys and experiments, to investigate perceptions and effects. As such, we lack a more nuanced explanation for why incivility seems to come with the territory for some but is perceived as unacceptable by others. We are also interested in understanding how people experience and cope with incivility in online discussions. Concerning the possible effects of incivility on participants in discussions, we ask:

> RQ4: How does incivility affect active participation in discussions on Facebook?

3. Methods

We use qualitative semi-structured interviews and thematic analysis (Braun & Clarke, 2006; Brett & Wheeler, 2022), with a focus on identifying the individual experiences of users and their meanings.

3.1. Data Collection and Sample

Semi-structured interviews were collected in two crises. The first period (March–April 2021) covers a hard Covid-19 lockdown in Czechia. The interviews focused on online discussions about Covid-19 and were conducted mostly online (n = 20). The interviews in the second period (March–April 2022) focused on both the online discussions about the Russo-Ukrainian War, which started with an invasion on 24 February, and Covid-19 (n = 30). These were conducted both online and face-to-face (based on the preferences of participants). We used purposive sampling. The trained interviewers looked for research participants who were active in any online discussions on Facebook (including Facebook groups and private/public pages or personal/friends' Facebook wall) and had specific experience with active engagement (e.g., writing comments, reacting with the like/emoji button) in discussions about the two crisis topics. Participants were recruited via the snowball method by contacts retrieved by interviewers who verified selection criteria with potential participants. Although we did not provide any financial compensation, the response rate was relatively high (only five contacted participants refused to participate). This might be related to the character of the topic and the shared interest: active discussion engagement. The final sample included participants with various socio-demographic characteristics and levels of engagement. We aimed to intentionally involve people with various socio-demographic characteristics, because these may shape online political participation (see Kennedy et al., 2021; Vochocová et al., 2016). This allows us to capture different experiences with online discussions. Despite our focus on Facebook, many participants also had experience with discussions on other social network sites, especially Twitter. Interviews were conducted after informed consent and lasted approximately 60 minutes. Then they were transcribed and anonymized for analysis. The interview guide covers three sections: general use of social network sites, especially Facebook; engagement in online discussions and specific experiences with the discussions of crises topics; and perceptions of Facebook as a discussion environment and selective activities (e.g., unfriending, blocking, homogeneity of the network, negative/positive experiences with cross-cutting discussions).

The final sample (N = 50) varies with regard to the age of the participants from 21 to 74 (Mean = 35, Median = 29), gender (32% female), education level (prevalence of participants with higher education), residence (dominance of bigger cities with more than 100,000 inhabitants), marital status, and having children (32% declared to have at least one child), which seem to have an impact on political participation (Norris et al., 2004; see a detailed description of the data sample in the Supplementary Material). Participants also differed with respect to their communication strategies and their roles in the online discussions (e.g., correcting false information, enjoying conflict, conflict avoidance), their previous experiences with online discussions and history capturing the unique dynamic of various debates, and their attitudes about both crisis topics (e.g., pro-vaccine and anti-vaccine and pro-Russian/pro-Ukrainian). Although we did not ask participants explicitly about their attitudes, the sample varied in this regard. The subsequent analysis shows satisfactory theoretical saturation in the sample for different strategies for engaging in debates and the perceptions of discursive dynamics in online discussions.

3.2. Analysis

Anonymized data from the interviews were coded by four trained coders (including the two authors). ATLAS.ti was used for coding and data analysis. Intercoder reliability was ensured through weekly training sessions during the ongoing coding process. The codebook was built through careful review of the coded interviews and the repeated reading of each other's coded interviews.

Differences were discussed and solved within the team. Data were then inductively analyzed by implementing a process of thematic analysis (Braun & Clarke, 2006; Brett & Wheeler, 2022). We started with an initial reading of all of the interviews and recorded the emerging themes. Then, we developed coding frames based on 10 interviews and elaborated the frames by merging some codes and adding new sub-codes. We first focused on experiences with active participation in online discussions (e.g., perception of other discussants, emotions connected to discussions, characteristics of opinion exchange), challenges to participation, and the implications of the experiences for further participation (or attitudes). Subsequently, while analyzing the data, we developed themes that targeted the role of cross-cutting discussions and the perceived and experienced incivility in the participants' willingness to engage in discussions. All relevant segments related to those themes were captured via more nuanced sub-codes. We tracked the new codes and their descriptions, including systematic, repeated interview reading and re-coding. In the final analysis stage, we generated all of the information segments related to the chosen codes (or group codes) and focused primarily on the differences and similarities among participants and key themes.

Interviews were conducted according to ethical standards for qualitative interview research (Brett & Wheeler, 2022). Voice records were deleted and transcripts were stored with password protection, in accordance with the ethical code at Masaryk University. We avoided asking specific questions about sensitive political opinions and attitudes unless the participants wanted to share their views. Additionally, the protection of the participants and interviewers was guaranteed by the possibility to end the interview at any time and without any particular reason.

4. Results

4.1. The Main Barriers to Participation in Discussions on Facebook in Times of Crisis

To answer RQ1, we found that participants clearly noted the impact of both crises in how they perceive and the extent to which they are willing to participate in online discussions. Participants felt that the already fragmented social media environment became more polarized during the pandemic. Alžběta (female, 45) and Karel (male, 29) observed that the pandemic was capable of splitting groups that had had similar political opinions beforehand. The perceived opinion polarization experienced during (and after) the first year of the pandemic quickly spread to other political content. This led participants to avoid not only discussions regarding Covid-19 but also other topics (described as "polarizing" or "controversial"). This included the Russo-Ukrainian War, which had two extreme sides and the same dynamics (e.g., the people who were denying Covid-19 and, later the vaccines, were, based on participants' observations, most likely supporters of Russia): "Covid [discussions] have polarized society terribly. There's always been some consensus in those political discussions, but here there's no in-between. One is either a fanatical supporter of regulation or a fanatical opponent. There's rarely half-and-half" (Jaroslav, male, 40); "But the fact is that a lot of people, or a lot of people who were against the measures and were swearing at Covid fascism and so on, today are swearing at the Ukrainian fascist" (Adéla, female, 61).

The frustration with the dynamic of the discussions on these topics reflects that participants are not willing to listen to the other side. Some participants say they are exhausted by discussing these topics and unwilling to engage in discussions they describe as "pointless." Moreover, participants perceive these debates as extremely divided. Especially in discussions about the pandemic, participants perceived no room for a middle ground, with balanced opinions being pushed aside. Because extreme opinions were predominant, participants felt that balanced opinions were not endorsed (Jonáš, male, 30). These dynamics reinforce a withdrawal from discussions (Askay, 2015)—Cross-cutting discussions in times of crisis are perceived as aggressive due to extreme opinions, driving those in the middle to disengage:

> There are only opinions that I'm either extremely against or extremely for. There's no compromise, no middle ground anywhere. People aren't able to accept the other side's arguments at all. (Václav, male, 28)

> Because the loudest voices from the extremes are heard on social media. It often seems to me that even though 99% of the issues are some kind of spectrum and nothing is black and white, it's the black or the white that's being addressed on those social networks and there's nothing in between. (Oliver, male, 34)

Participants from the second round of interviews in the spring of 2022 admitted that in the case of Covid-19, especially when the pandemic started, there was considerably more motivation to get involved in the discussion, and they were quite mobilized. This is explained by the initial need to make sense of what was going on, which led people to spread the information they perceived as correct to help others and also to stop the spread of disinformation (e.g., Šimon, male, 22). But as the situation progressed, mobilization decreased due to growing negative experiences, a perceived decrease in the meaningfulness of the efforts, and the perceived value of the overall discussions—which was significantly affected by conspiratorial sources and disinformation. The avoidance of negative experiences in these debates was also explained in light of the stressful pandemic. Evženie (female, 52) tried to avoid conversations that could make her angry

because she felt frustrated that she was stuck at home for a long time. These negative discussions about the pandemic led many participants to intentionally avoid discussions about the war. Many of the participants expressed frustration with polarized discussions built on low-quality and questionable sources, fake news, and propaganda, which could lead to unfriending or blocking certain people and content:

> There's an awful lot of overlap between these groups, it seems to me, which I think is logical because it's going to be similar people who are susceptible to the propaganda that's just coming from the same (disinformation) channels as the Covid one before and the anti-Ukrainian one today. (Daniel, male, 22)

> I have to say, since the war started, I have unfortunately removed about six people from my friends because I couldn't take their covert aggression, ridicule, and contempt for people anymore. (Šárka, female, 38)

4.2. The Polarizing Role of Cross-Cutting Discussions in Unwillingness to Participate in Discussions on Facebook

With declining mobilization after the initial phase of the pandemic, we observed, regarding RQ2, that participants became increasingly unwilling to engage with opposing opinions and to participate in cross-cutting discussions, especially about controversial issues (e.g., #MeToo, migration). Most participants reported increasingly avoiding cross-cutting discussions about such topics, which often featured aggressive and emotional responses. Participants believe it is not a good idea to contribute to these conversations, either because they hold strong opinions (Jonáš, male, 30; Ondřej, male, 46), or because they wanted to avoid extreme and unpleasant discussions due to previous negative experiences:

> So those types of topics [e.g., a story about a brutally raped woman], I know that the majority of discussants in the Czech Republic will focus on the fact that those women are responsible for what happened to them, so I refuse to participate. This simply does not make any sense. (Lada, female, 23)

Besides the polarizing character of the discussed issues, barriers to participation in cross-cutting discussions are mainly rooted in participants' expectations of how counter-attitudinal opinion exchanges should look. Put simply, some participants have higher expectations to engage in polite opinion exchanges where the "best arguments" should prevail, with participants willing to change their views. For many, the inability to change the opinions of those on the other side demotivates them from engagement because they do not see the benefits of investing time and energy in discussions that are not productive. Besides changing others' opinions, some people mentioned that these discussions often lack rational opinion exchange and constructive dialogue. Thus, participants perceive cross-cutting discussions as unproductive because people talk across one another instead of engaging with divergent views:

> I won't expect this person to say, "Oh, Jesus, yes now I see the point. It is absolutely like you say." I know it won't happen, but from this discussion, you feel that the other person is unwilling to think and keeps telling his own story. (Filip, male, 30)

A critical factor is the perceived level of homogeneity or heterogeneity for the opinion in the discussions. Many participants (especially those less active in writing comments in online discussions and those less assertive in pushing their arguments forward and defending their opinions) feel discouraged from participating in discussions where their own opinions diverge from the predominant views. On the other hand, perceived alignment with majority opinions may encourage participants to share their views. However, some participants feel like homogeneous discussions are not productive and believe that heterogenous discussions are more meaningful for understanding others and seeing their point of view (Luboš, male, 30):

> When someone throws an opinion out there in their bubble, whether strongly held or as part of a trend, they have people who agree with it. There are maybe 60 responses in agreement. And you can just write something completely opposite. Well, they'll come down on you and put you down! (Čeněk, male, 56)

> There are two poles, but there are certainly also many people who just move between them or have some completely alternative, slightly different opinion that doesn't fit even on that one continuous scale. And it's actually interesting to read how those people think about it. (Jáchym, male, 24)

The perception of polarization (RQ3) is largely explained by an overall negative evaluation of those on the other side. This is especially true with respect to communicative skills, intellect, and media literacy. The negative perception of opponents is likely exacerbated by the abovementioned ongoing polarization, which seems to be both opinion- and ideology-driven, and more affectively based (Iyengar et al., 2012). Participants who apparently support governmental restrictions are labelled as "sheep" who follow rules without thinking or described as radicals who take the rules too seriously (Čeněk, male, 56; Jitka, female, 29). Also, the lack of lived experience with Ukrainian immigrants, for instance, tends to be used to undermine the opposing view. The communication strategies of those "on the other side" were described as not worthy of a conversation because they are unable to listen or lack critical thinking. Overall, their

argumentative skills and mental capacity are degraded: "Those people, you won't convince them. They just have their own perception of the world. I think that some of them are unable to absorb arguments that you try to explain them. It is beyond their mental capacity" (Jan, male, 60).

Participants also perceived those on the "other side" as being more vulgar (Jan, male, 60). This is noticeable when participants refer to their side as polite commenters and "they" as toxic and more aggressive participants (David, male, 25). Moreover, the negative perception of the "others" is often associated with the perceived inability of the opponents to use relevant or factual information (or even the intentional use of disinformation). The participants tend to describe their opponents as being less educated and unable to have critical discussions. Participants also refrain from participating in conversations when they feel other people are spreading disinformation. However, several participants made a clear distinction between false information, which they felt made sense to correct, and disinformation, which is too radical to engage. If there is a feeling that the other person's opinions may be changed, there is more motivation to get involved than to leave the discussion. Mutual antipathy based on negative prescribed characteristics between two opposing groups seemed to deepen the divide between people who hold different opinions:

> Even though the comment is civil, it's completely based on total bullshit because someone writes, "I'm sorry, but you want to support Bill Gates, who's here…" or [then they write] "Nazi Zelensky." And stuff like that. The ones that are completely confused by disinformation, those strike me as being over the edge. (Luboš, male, 30)

4.3. Incivility and Its Effects on Active Participation in Discussions on Facebook

Uncivil opinion expression represents a very significant barrier to participation for participants who expect the discussions to be polite (RQ4). For these participants, verbal attacks and antinormative intensity are seen as problematic in cross-cutting discussions, and that may lead participants to perceive other groups as being hostile or irrational. However, we note that participants who avoid uncivil discussions were typically less active in online discussions, which corroborates the argument that incivility may become normalized for those who more frequently participate (Hmielowski et al., 2014), but which may also deter others from engagement. Those who avoid uncivil discussions feel that it is pointless to be part of irrational discussions where people just shout at each other.

Participants shared various coping strategies when exposed to incivility. While some are discouraged from participating in discussions altogether, others responded by leaving the discussion, and some continue to read the comment thread without participating. Others admit to punching back by being hostile or aggressive in response. Most participants described a mix of these reactions. Additionally, different types of incivility matter according to participants' responses. Personal attacks are seen as the most harmful, especially ad hominem attacks that comment on other online discussions participants' hair style, body, or age, in alignment with prior findings (Muddiman, 2017). In the case of more serious attacks, such as racism, threats of violence, or attacks against human rights, many participants reacted by reporting the behavior. Whereas participants had different sensitivity toward various levels of incivility, racist, and serious violent threads were unanimously condemned:

> Instead of making an effort to foster argumentation, it will turn into personal attacks. So simply I wrote to this person that we will just stop, that I am not interested when he scolds me. So, bye! I finish it because it does not make any sense to continue in such a discussion. (Jonáš, male, 30)

> When he downloads pictures from a profile of kids of the other discussants and writes down threats, it is something that I really do not like. I always report it. (Bára, female, 25)

Incivility is not perceived as a universal incentive to demobilize. Another reaction to incivility is resilience, which refers to the ability to counter the presence of incivility in online discussions by ignoring it (see Humprecht et al., 2020), which is contrary to other strategies that include avoidance. Perceived resilience is—besides the character of incivility and the impact on readers' perception—also related to participants' experiences with online discussions. Some participants feel like they became less affected by personal attacks over time (Alžběta, female, 45) and that this resilience is justified by the importance of "not giving up" cross-cutting discussions. As noted by prior research, frequent discussants tend to be less affected by anti-normative discourse (Hmielowski et al., 2014). Patrik (male, 28) described how he persevered and strove for mutual understanding in debates. But when people use arguments without thinking (i.e., "verbal vomit"), he kept his distance. Others went a bit further and started to use uncivil attacks to react to previous vulgar comments addressed to them or other discussants, to defend their points of view. Only very few participants sometimes participated in heated discussions. There is a conclusive connection between the willingness to fight for other people's rights to protect them against others and sharing their point of view. Courage to enter the environment and be part of discussions that they considered hostile was supported by fuelling angry reactions and a tendency to not overlook it or leave it as it was (Jarmila, female, 45). Those who find it easier to cope with incivility tend to enjoy participating in heated conversations and are themselves uncivil.

An interesting perspective is captured by those who say that incivility is how some people communicate, which is quite rare and apparently helps overcome a decline in motivation to participate in uncivil conversations, and some participants feel resistant to vulgar attacks related to their personalities (Patrik, male, 28), but this is a minority perspective in our sample. For most participants, uncivil opinion expressions negatively affect the perception of those on the other side. Discussants who resort to vulgar and aggressive language are mostly described as less intelligent or educated ("It says something about their intellect"; Evženie, female, 52), seen as extremists who do not follow the informal norms of opinion exchange. The perception of lower education is justified by grammatical mistakes, the spread of disinformation, and argumentative errors. The perceived characteristics of those who resort to incivility strengthen the unwillingness of participants to engage with them.

5. Conclusions

The aim of this article was to examine and explain the perceived barriers to participation in online discussions on Facebook in Czechia during two major global crises. Our findings are related to the barriers perceived by people who are (or were) typically engaged in this type of discussion. As such, we are unable to speak about more general reasons for avoiding discussions.

We identified a rapid decrease in the willingness to participate in political discussions on Facebook as crises unfolded. After a boost in participation at the beginning of the pandemic, perhaps for similar reasons that led to an increased interest in news consumption (Van Aelst et al., 2021), the mobilization sharply declined over the course of the pandemic and was much lower in the Russo-Ukraine war. It is explained by participants as the reinforcement of the negative aspects of online discussions. While the first year of the pandemic in Czechia was characterized by an intense wave of solidarity and support (Buštíková & Baboš, 2020), the discussions on Facebook became increasingly perceived as more aggressive, uncivil, divided, and significantly affected by disinformation. These perceptions appear to be connected to several factors, such as the long-lasting crisis time and repeated negative experiences with opinion exchange in an online environment. Moreover, according to the study participants, these crucial barriers were first attributed to polarized discussions about Covid-19, and then the second crisis in 2022, the Russo-Ukrainian War, which only deepened the trends. The geographical closeness of the conflict to Czechia and its leading position within Europe with regards to Ukrainian refugees per capita (Münich & Protivínský, 2023) contribute to the sensitivity of the topic and the frustration about counter-attitudinal opinions, which were often contrasted to the lived experiences with refugees.

Perceived polarization experienced during the pandemic and the subsequent conflicts that penetrated other areas of society was apparent via the reinforced uncivil character of communication, criticism about the low quality of the discourse, and the negative evaluation of their opponents. Similar to the research of Hwang et al. (2014), we found a link between incivility and polarization based on the negative perception of "the others" (Iyengar et al., 2012). We identified a clear tendency for participants to delineate "us" versus "them" in several ways: their style of communication (e.g., vulgar), their communicative skills, intellect (such as following government measurements without critical reflection), education, lifestyle (e.g., profile pictures), and media literacy (e.g., quality of sources and disinformation). Remarkably, according to the study of Numerato et al. (2019), harsh criticism and the denunciation of opponents were already present in the vaccination debate on Facebook in 2016 (i.e., in the United States), several years before the pandemic. Importantly, the dynamics of villainizing the opposition could contribute to further dividing those who are on opposing sides of an argument (Hwang et al., 2014), which may lead to further withdrawal from controversial and polarized debates (Marchal, 2022).

Although incivility is considered to be problematic during heterogeneous debates, it does not represent a universal incentive to demobilize because a considerable group of users is resilient toward it. Several participants find uncivil discussions to be normal (see Sydnor, 2019), although this was a minority perspective in our sample. For many participants, incivility and perceived opinion polarization are seen as significant barriers to engaging in discussions, which possibly contribute to the demobilization of certain groups. This is particularly true for those who are less active in online discussions, less uncivil, less extreme, and have a more strict attitude toward normative ideals for discussions and their requirements for the participants and their behavior.

To sum up, the aforementioned barriers to participation became more apparent and problematic as both crises unfolded, and this was particularly consequential to discourage less active commenters from engaging in online debates. Subsequently, these contribute to further polarization in discussions (and society) because some voices might be systematically excluded from the online public sphere (Askay, 2015). An imbalance of shared opinions might have serious consequences, because opinions expressed online may impact others' perceptions of relevant issues. This is particularly relevant during crises characterized by uncertainties, fear, and a demand for relevant information. Our research also shows that, while the described barriers to participation seem to currently be more urgent for many participants, their effects can vary slightly for the different groups of users based on their personal characteristics. Results also need to be interpreted in the context of a particular platform, like Facebook, where users usually use their own identity and connect with people they know from real life. People's experiences may differ on

other social media platforms that have distinct affordances, such as a level of anonymity or social cues (see Rossini, 2022), and that might also shape the dynamic of opinion exchanges.

This study and its findings have limitations. Our inferences refer to perceived experiences reported by a limited sample of participants, and self-reports of prior experiences may also differ from actual behavior. Future work could combine qualitative interviews with a diary that could provide useful support for tracking political participation online (see Mihelj et al., 2021). Although we strived for variability in our sample, our findings are not representative of the population. The sample also lacks diversity in terms of representation of minority groups. Future research could address this gap and focus on participants who are part of racial minorities and who have personal experiences with more harmful comments, such as racism, which might bring a different perspective to the barriers to active engagement in online discussions. Lastly, disinformation appears to significantly affect participants' willingness to engage in political discussion, but prior research has not shed light on this relationship. Future work needs to further explore the relationship between the role of disinformation and political expression online.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014). The "nasty effect": Online incivility and risk perceptions of emerging technologies—Crude comments and concern. *Journal of Computer-Mediated Communication*, *19*(3), 373–387.

Andersson, M. (2022). "So many 'virologists' in this thread!" Impoliteness in Facebook discussions of the management of the pandemic of Covid-19 in Sweden—The tension between conformity and distinction. *Pragmatics*, *32*(4), 489–517.

Askay, D. A. (2015). Silence in the crowd: The spiral of silence contributing to the positive bias of opinions in an online review system. *New Media & Society*, *17*(11), 1811–1829.

Bormann, M. (2022). Perceptions and evaluations of incivility in public online discussions—Insights from focus groups with different online actors. *Frontiers in Political Science*, *4*, Article 812145.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Brett, B. M., & Wheeler, K. (2022). *How to do qualitative interviewing*. SAGE.

Buštíková, L., & Baboš, P. (2020). Best in Covid: Populists in the time of pandemic. *Politics and Governance*, *8*(4), 496–508.

Chen, G. M. (2017). *Online incivility and public debate: Nasty talk* (1st ed.). Palgrave Macmillan.

Chen, H. T., & Lin, J. S. (2021). Cross-cutting and like-minded discussion on social media: The moderating role of issue importance in the (de)mobilizing effect of political discussion on political participation. *Journal of Broadcasting & Electronic Media*, *65*(1), 135–156.

Choi, J. (2021). Cross-cutting scanning, integrating, and interacting: Dimensions of cross-cutting exposure on social media and political participation. *International Journal of Communication*, *15*, 1595–1616.

Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication*, *64*(4), 658–679.

Conover, P. J., & Searing, D. D. (2005). Studying "everyday political talk" in the deliberative system. *Acta Politica*, *40*(3), 269–283.

Dahlberg, L. (2001). The internet and democratic discourse: Exploring the prospects of online deliberative forums extending the public sphere. *Information, Communication & Society*, *4*(4), 615–633.

Dryzek, J. (2000). *Deliberative democracy and beyond*. Oxford University Press.

Duggan, M., & Smith, A. (2016). *The political environment on social media*. Pew Research Center. https://www.pewresearch.org/internet/2016/10/25/the-political-environment-on-social-media

Goyanes, M., Borah, P., & Gil de Zúñiga, H. (2021). Social media filtering and democracy: Effects of social media news use and uncivil political discussions on social media unfriending. *Computers in Human Behavior*, *120*, Article 106759.

Gutmann, A., & Thompson, D. (2004). *Why deliberative democracy?* Princeton University Press.

Habermas, J. (1984). *The theory of communicative action: Reason and the rationalization of society* (Vol. 1). Beacon Press.

Habermas, J. (1989). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. The MIT Press.

Habermas, J. (2022). Reflections and hypotheses on a further structural transformation of the political public sphere. *Theory, Culture & Society*, *39*(4), 145–171.

Heatherly, K. A., Lu, Y., & Lee, J. K. (2017). Filtering out the other side? Cross-cutting and like-minded discussions on social networking sites. *New Media & Society*, *19*(8), 1271–1289.

Hiaeshutter-Rice, D., & Hawkins, I. (2022). The language of extremism on social media: An examination of posts, comments, and themes on Reddit. *Frontiers in Political Science*, *4*, Article 805008.

Hmielowski, J. D., Hutchens, M. J., & Cicchirillo, V. J. (2014). Living in an age of online incivility: Examining the conditional indirect effects of online discussion on political flaming. *Information, Communication & Society*, *17*(10), 1196–1211.

Humprecht, E., Esser, F., & Van Aelst, P. (2020). Resilience to online disinformation: A framework for cross-national comparative research. *The International Journal of Press/Politics*, *25*(3), 493–516.

Hwang, H., & Kim, Y., & Huh, C. U. (2014). Seeing is believing: Effects of uncivil online debate on political polarization and expectations of deliberation. *Journal of Broadcasting and Electronic Media*, *58*(4), 621–633.

Iyengar, S., Gaurav, S., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, *76*(3), 405–431.

Jiang, J., Chen, E., Yan, S., Lerman, K., & Ferrara, E. (2020). Political polarization drives online conversations about Covid-19 in the United States. *Human Behaviour and Emerging Technologies*, *2*(3), 200–211.

Kennedy, R. D., Sokhey, A. E., Abernathy, C., Esterling, K. M., Lazer, D., Lee, A. S., Minozzi, W., & Neblo, M. A. (2021). Demographics and (equal?) voice: Assessing participation in online deliberative sessions. *Political Studies*, *69*(1), 66–88.

Kenski, K., Coe, K., & Rains, S. A. (2017). Perceptions of uncivil discourse online: An examination of types and predictors. *Communication Research*, *47*(6), 795–814.

Kim, J. W., Guess, A., Nyhan, B., & Reifler, J. (2021). The distorting prism of social media: How self-selection and exposure to incivility fuel online comment toxicity. *Journal of Communication*, *71*(6), 922–946.

Kormelink, T. G., & Gunnewiek, A. K. (2022). From "far away" to "shock" to "fatigue" to "back to normal": How young people experienced news during the first wave of the Covid-19 pandemic. *Journalism Studies*, *23*(5/6), 669–686.

Lee, J. S., & Nerghes, A. (2018). Refugee or migrant crisis? Labels, perceived agency, and sentiment polarity in online discussions. *Social Media + Society*, *4*(3). https://doi.org/10.1177/2056305118785638

Lu, Y., & Lee, J. K. (2021). Determinants of cross-cutting discussion on Facebook: Political interest, news consumption, and strong-tie heterogeneity. *New Media & Society*, *23*(1), 175–192.

Malova, E. (2021). Understanding online conversations about Covid-19 vaccine on Twitter: Vaccine hesitancy amid the public health crisis. *Communication Research Reports*, *38*(5), 346–356.

Marchal, N. (2022). "Be nice or leave me alone": An intergroup perspective on affective polarization in online political discussions. *Communication Research*, *49*(3), 376–398.

Mihelj, S., Kondor, K., & Štětka, V. (2021). Audience engagement with Covid-19 news: The impact of lockdown and live coverage, and the role of polarization. *Journalism Studies*, *23*(5/6), 569–587.

Muddiman, A. (2017). Personal and public levels of political incivility. *International Journal of Communication*, *11*, 3182–3202.

Münich, D., & Protivínský, T. (2023). *Vývoj postojů české veřejnosti k válečným uprchlíkům z Ukrajiny* [Evolution in Czech public attitudes towards war refugees from Ukraine]. IDEA. https://idea.cerge-ei.cz/studies/vyvoj-postoju-ceske-verejnosti-k-valecnym-uprchlikum-z-ukrajiny

Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*. Cambridge University Press.

Norris, P., Lovenduski, J., & Campbell, R. (2004). *Gender and political participation*. The Electoral Commission. http://image.guardian.co.uk/sys-files/Politics/documents/2004/04/29/Gender_report.pdf

Numerato, D., Vochocová, L., Štětka, V., & Macková, A. (2019). The vaccination debate in the "post-truth" era: Social media as sites of multi-layered reflexivity. *Social Health & Illness*, *41*, 82–97.

Ohme, J. (2019). Updating citizenship? The effects of digital media use on citizenship understanding and political participation. *Information, Communication & Society*, *22*(13), 1903–1928.

Rösner, L., Winter, S., & Krämer, N. C. (2016). Dangerous minds? Effects of uncivil online comments on aggressive cognitions, emotions, and behavior. *Computers in Human Behavior*, *58*, 461–470.

Rossini, P. (2022). Beyond incivility: Understanding patterns of uncivil and intolerant discourse in online political talk. *Communication Research*, *49*(3), 399–425.

Rossini, P., & Stromer-Galley, J. (2019). Citizen deliberation online. In E. Suhay, B. Grofman, & A. H. Trechsel (Eds.), *The Oxford handbook of electoral persuasion* (pp. 689–712). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190860806.013.14

Schudson, M. (1997). Why conversation is not the soul of democracy. *Critical Studies in Mass Communication*, *14*(4), 297–309.

Štětka, V., & Vochocová, L. (2014). A dialogue of the deaf, or communities of debate? The use of Facebook in the 2013 Czech parliamentary elections campaign. *Teorija in Praksa*, *51*(6), 1361–1380.

Sydnor, E. (2019). *Disrespectful democracy: The psychology of political incivility*. Columbia University Press.

Van Aelst, P., Toth, F., Castro, L., Štětka, V., Vreese, C. D., Aalberg, T., Cardenal, A. S., Corbu, N., Esser, F., Hopmann, D. N., Koc-Michalska, K., Matthes, J.,

Schemer, C., Sheafer, T., Splendore, S., Stanyer, J., Stępińska, A., Strömbäck, J., & Theocharis, Y. (2021). Does a crisis change news habits? A comparative study of the effects of Covid-19 on news media use in 17 European countries. *Digital Journalism*, *9*(9), 1208–1238.

Vochocová, L., Štětka, V., & Mazák, J. (2016). Good girls don't comment on politics? Gendered character of online political participation in the Czech Republic. *Information, Communication & Society*, *19*(10), 1321–1339.

Vraga, E. K., Thorson, K., Kligler-Vilenchik, N., & Gee, E. (2015). How individual sensitivities to disagreement shape youth political expression on Facebook. *Computers in Human Behavior*, *45*, 281–289.

Zhu, Y., Haq, E., Lee, L., Tyson, G., & Hui, P. (2022). *A Reddit dataset for the Russo-Ukrainian Conflict in 2022*. arXiv. https://doi.org/10.48550/arXiv.2206.05107

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